

COLDWATER TASK GROUP EXECUTIVE SUMMARY REPORT MARCH 2021



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. Four charges were addressed by the CWTG during 2020-2021: (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) Provide recommendations on Lake Trout Plan revision, and draft a new plan, within the scope of the FCGO for Lake Erie, for LEC review. 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 239 Lake Trout were collected in 52 standard assessment gill net lifts across the eastern basin of Lake Erie in 2020. Basinwide Lake Trout abundance was 3.8 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. Lake Trout ages 4, 5, and 10 were the dominate cohorts; Lake Trout older than age-10 continue to increase in abundance and comprised 36% of the total catch. Finger Lakes and Lake Champlain strains comprise most of the population. The Lake Erie Lake Trout population continues to be supported by binational stocking efforts; naturally reproduced Lake Trout remain below detectable levels in the Coldwater Assessment Survey (CWA) despite nearly 40 years of restoration efforts.

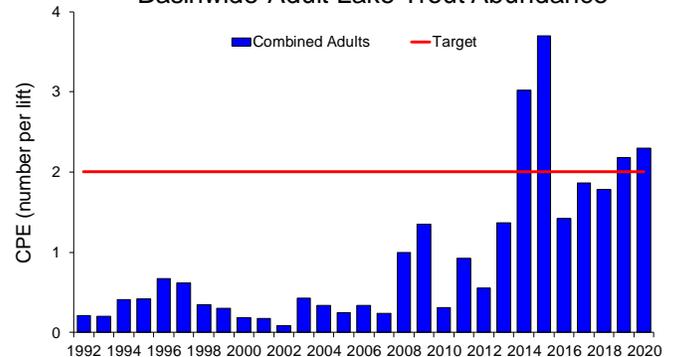
Lake Whitefish

Lake Whitefish harvest in 2020 was 191,556 pounds, distributed between Ontario (84%), Ohio (16%) and Pennsylvania (<1%). Harvest increased 67% from 2019 but was low compared to previous decades. Gill net fishery age composition ranged from ages 5 to 23. The 2015-year class (age 5) represented the majority of Lake Whitefish harvested in 2020. Gill net surveys caught Lake Whitefish from ages 0 to 17. Bottom trawl and gill net surveys forecast additional recruitment of age 3 Lake Whitefish from the 2018 cohort in 2021. Future contributions to fisheries from the 2019 and 2020 cohorts are expected to be less. Lake Whitefish status is showing some improvement with variable recruitment in recent years.

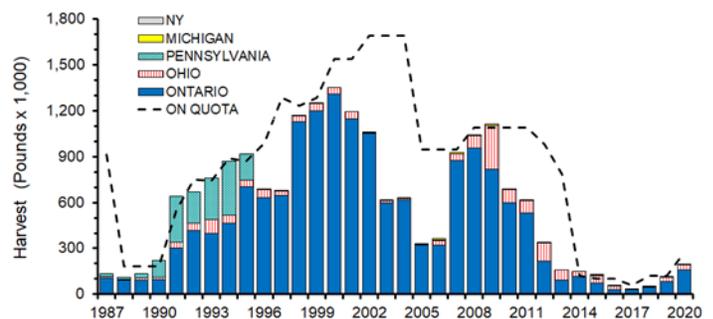
Burbot

Total commercial harvest of Burbot in 2020 was 1,814 pounds, all was incidental. Burbot abundance and biomass indices from annual CWA and Ontario Partnership Gillnet Assessment Surveys remained at very low levels. The catch rate in the CWA averaged 0.25 Burbot per lift and in the Ontario Partnership Assessment Survey averaged 0.21 Burbot per lift. Burbot in the CWA ranged in age from 3 to 21 and the mean age declined for a second consecutive year to 8.4 years. Burbot diets in 2020 were composed wholly of fish with Gizzard Shad and Rainbow Smelt the dominant prey items.

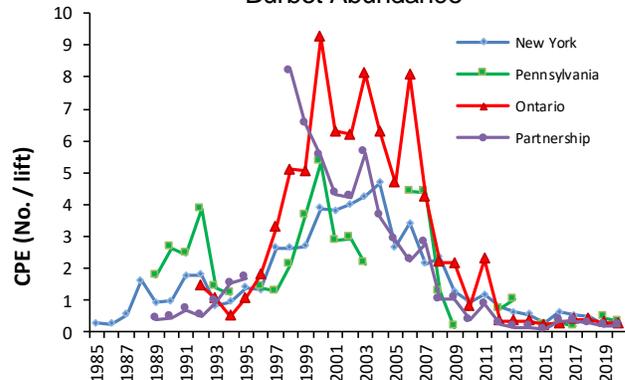
Basinwide Adult Lake Trout Abundance



Commercial Lake Whitefish Harvest

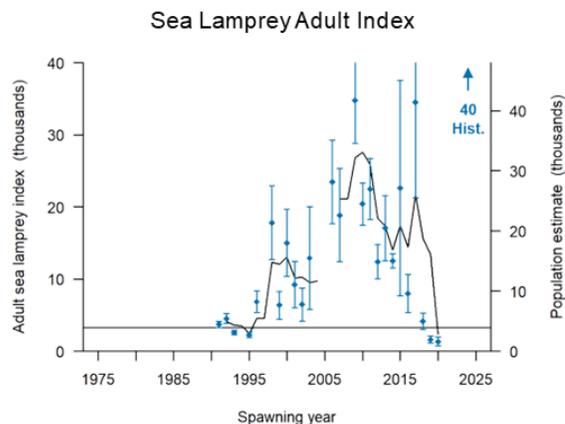


Burbot Abundance



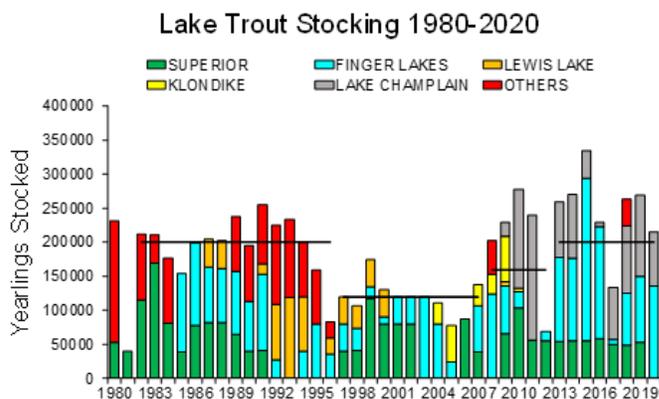
Sea Lamprey

The A1-A3 wounding rate on Lake Trout over 532 mm was 11.0 wounds per 100 fish in 2020. This was well above the target rate of 5.0 wounds per 100 fish. Wounding rates have been above target for 24 of the past 25 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 (1,300) represents a substantial decrease compared to recent years and was below the target population of 3,300 for the second consecutive year. Lampricide treatments were not completed in 2020 due to Covid-19 restrictions; five tributaries are scheduled for treatment in 2021. Comprehensive stream evaluations were not conducted in 2020 but are scheduled to resume in 2021, including extensive detection surveys around the basin to inventory all sources contributing to the Lake Erie population.



Lake Erie Salmonid Stocking

A total of 2,054,739 yearling salmonids were stocked in Lake Erie in 2020, which was about 8% below the long-term average (1990-2019). Lake Trout stocking was above targets for the seventh time in the past eight years. Due to COVID-19, Lake Trout stocking was limited to New York waters (119,175 yearling which was a mix of Finger Lakes (Seneca) and Lake Champlain strains and Pennsylvania waters (79,450 yearling Finger Lakes strain). An additional 41,030 fall fingerlings (Finger Lakes strain) were stocked into Cattaraugus Creek, NY by the USFWS in mid-October 2020. By species, there were 215,447 yearling Lake Trout stocked in all three basins of Lake Erie, 69,373 Brown Trout stocked in Pennsylvania waters, and 1,769,919 Rainbow/Steelhead Trout stocked across all four US jurisdictional waters.



Steelhead

All US agencies stocked yearling Rainbow Trout /steelhead in 2020; there were no Rainbow Trout stocked in Ontario waters. The summary of Rainbow Trout/ steelhead stocking in Lake Erie by jurisdictional waters for 2020 is: Pennsylvania (1,049,000 steelhead ; 59%), Ohio (469,265 steelhead; 27%), New York (138,530 steelhead; 48,750 domestic Rainbow Trout; 11%), and Michigan (64,374 steelhead; 4%). Total steelhead stocking in 2020 (1.770 million) was 4% below the long-term average. Annual stocking numbers have been consistently in the 1.7-2.0 million fish range since 1993. The 2020 estimated Rainbow/Steelhead Trout harvest from the summer open-water boat angler fishery totaled 3,910 fish by agencies reporting open lake boat angler creel data in 2020. Pennsylvania boat anglers harvested 3,575 Steelhead Trout, which is near the long-term average of 3,134 fish, but notably, the highest harvest estimate since 2010. New York boat anglers harvested an estimated 316 Steelhead Trout in 2020 about half the long-term average of 625 fish. Michigan open lake steelhead harvest remained negligible, with anglers harvesting an estimated 19 Steelhead Trout in 2020.

