COLDWATER TASK GROUP EXECUTIVE SUMMARY REPORT MARCH 2022



ake Erie Committee

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 2021-2022: (1) Report on the status of the cold-water fish community, (2) Participation in the Integrated Management of Sea Lamprey Process on Lake Erie, outline and prescribe the needs of the Lake Erie Sea Lamprey management program. (3) Maintenance of an electronic database of Lake Erie salmonid stocking information, (4) Finalize the Lake Trout Rehabilitation Plan, within the scope of the new FCO's for LEC approval by March 14, 2021. The complete report is available from the Great Lakes Fishery Commission's Lake Erie Coldwater Task Group website at http://www.glfc.org/lakecom/lec/CWTG.htm, or upon request from an LEC or CWTG representative.

Lake Trout

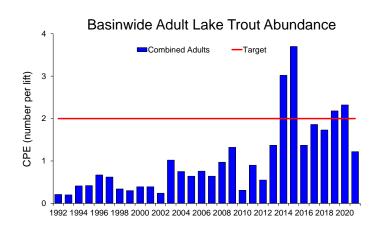
A total of 217 Lake Trout were collected in the Coldwater Assessment Survey in 2021. Adult (age 5+) catch rate declined to 1.2 adult fish/lift, below the target of 2.0 described in the 2021 Lake Trout Management Plan. No management plan actions were triggered since the threeyear average was at 1.9 adults fish/lift (near target). There were 25 age classes and five strains captured in 2021. Lake Trout ages 5,6,9 and 11 were the dominate cohorts; Lake Trout older than age-10 continue to increase in abundance and comprised 35% of the total catch. Finger Lakes and Lake Champlain strains comprise the majority of the population. The Partnership Survey caught 56 Lake Trout in 2021. The Partnership Survey catch rate of 0.92 fish/lift increased from 2020 (0.55 fish/lift) and remained above the time series mean (0.45 fish/lift).

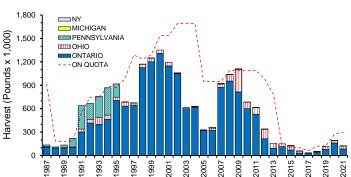
Lake Whitefish

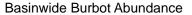
Lake Whitefish harvest in 2021 was 121,863 pounds, distributed between Ontario (69%), Ohio (31%) and New York (<1%). Harvest decreased 36% from 2020 and remains low compared to previous decades. Gill net fishery age composition ranged from ages 2 to 19 with the 2015-year class (age 6) representing the majority of the harvest. Assessment surveys caught Lake Whitefish from ages 1 to 19. Bottom trawl and gill net surveys forecast modest recruitment of age 3 Lake Whitefish from the 2019 cohort in 2022. Future contributions to fisheries from the 2020 and 2021 cohorts are expected to be less. Declines in Lake Whitefish abundance are apparent, with status that may vary regionally among stocks yet to be defined.

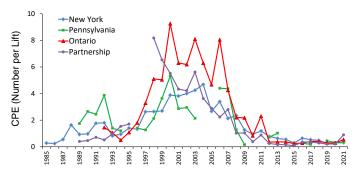
Burbot

Total commercial harvest of Burbot in Lake Erie in 2021 was 1,755 pounds. All was incidental. Burbot abundance and biomass indices from annual assessment Surveys remained at low levels but increased significantly in the Partnership Survey during 2021. The Burbot catch rate in the Interagency Coldwater Assessment Survey averaged 0.44 fish/lift and in the Ontario Partnership Survey averaged 0.9 fish/lift. Burbot in the Coldwater Assessment Survey ranged in age from 0 to 19 and mean age was 7.3 years. Round Goby was the dominant prey item in Burbot diets.









Commercial Lake Whitefish Harvest

Sea Lamprey

The A1-A3 wounding rate on Lake Trout over 532 mm was 3.4 wounds per 100 fish in 2021. This was below the target rate of 5.0 wounds per 100 fish for the second time in the previous 26 years. Large Lake Trout over 736 mm continue to be the preferred targets for Sea Lamprey in Lake Erie. The Index of Adult Sea Lamprey Abundance (450) represents a substantial decrease compared to recent years and was below the target population of 3,300 for the third consecutive year. Lampricide treatments were completed in Big Creek and Big Otter Creek. Larval Assessments were conducted in 31 tributaries (12 Canada, 19 U.S.). Eight tributaries were surveyed for new larval populations (6 Canada, 2 U.S.). No new populations were detected.

Lake Erie Salmonid Stocking

A total of 2,153,745 yearling salmonids were stocked in Lake Erie in 2021, which was slightly below the long-term average (1990-2020). Lake Trout stocking was above targets for the seventh time in the past eight years, and three different strains were stocked in 2021. By species, there were 255,338 yearling Lake Trout stocked in the east and central basins of Lake Erie, 46,607 Brown Trout stocked in Pennsylvania waters, and 1,851,800 Rainbow/Steelhead Trout stocked in 2021.

Steelhead

The summary of steelhead stocking in Lake Erie by jurisdictional waters for 2021 is: Pennsylvania (1,091,197; 60%), Ohio (498,972; 27%), New York (194,569; 11%), and Ontario (67,062; 4%). No steelhead were stocked by Michigan. Total steelhead stocking in 2021 (1.851 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 22,231 steelhead across New York, Pennsylvania and Ohio and near the long-term average harvest of 22,010. 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. Steelhead catch rates in the Partnership Survey (0.05 fish/lift) were low relative to the 23year time series.

Sea Lamprey Adult Index

