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. The complete report is available from the GLFC’s Lake Erie Committee Coldwater Task Group website at [http://www.glfc.org/lakecom/lec/CWTG.htm](http://www.glfc.org/lakecom/lec/CWTG.htm), or upon request from an LEC, Standing Technical Committee (STC), or CWTG representative.

Seven charges were addressed by the CWTG during 2008-2009: (1) Lake trout assessment in the eastern basin; (2) Lake whitefish fishery assessment and population biology; (3) Burbot fishery assessment and population biology; (4) Participation in sea lamprey assessment and control in the Lake Erie watershed; (5) Electronic database maintenance of Lake Erie salmonid stocking information; (6) Steelhead fishery assessment and population biology, and (7) Development of a lake herring management plan.

Lake Trout

A total of 731 lake trout were collected in 125 lifts across the eastern basin of Lake Erie in 2008. Young cohorts (ages 2-5) dominated catches with lake trout ages 9 and older only sporadically caught. Basin-wide abundance continues to increase, but remains well below the rehabilitation target of 8.0 fish/lift. Adult (age 5+) abundance increased to its highest level in the time series, but also remains well below target. Returns of Klondike strain lake trout remain strong through age-5, despite low stocking amounts. Klondike cohorts were smaller in lengths- and weights-at-age compared to lean lake trout strains.

Whitefish

The total harvest of lake whitefish in 2008 was 1,037,467 pounds. The 2008 lake whitefish harvest was taken mostly in Ontario (92%), with Ohio (8%) and Pennsylvania (<1%) accounting for the remainder. A portion of Ontario’s lake whitefish harvest was from gill nets targeting walleye and white bass. Ohio lake whitefish harvest was from trap nets primarily during late fall. Fishery and survey catch rates were among the highest recorded in recent time series from some sources. Five-year-old lake whitefish dominated fishery and survey catches across the lake in 2008, although some three-year-old fish began to show up in fishery and assessment gear. In addition to the dominant 2003 cohort, the 2001 year class and older fish were represented in fishery harvest. Lake whitefish caught in 2008 surveys consisted of fish up to age 12 in Ontario assessment surveys and up to age 23 in Ohio surveys. In 2009, 6-year-old lake whitefish are expected to dominate the harvest, with continued recruitment from the 2005, 2004 and 2001 year classes.

Burbot

Total commercial harvest of burbot in Lake Erie during 2008 was 1,707 pounds, the lowest harvest since 1988. Abundance and biomass of burbot as determined from annual coldwater gillnet assessments continued to decline following peaks in 2000 in Pennsylvania and Ontario and in 2004 in New York. Numeric abundance and biomass trends are similar in the Ontario Partnership Index Fishing Program. Increasing mean age since 1998, and dramatically decreased age-4 abundance after 2001 in Canadian waters of the eastern basin, indicates an aging burbot population exhibiting poor recruitment. Round gobies continue to be the dominant prey item in the burbot’s diet in eastern Lake Erie.
**Sea Lamprey**

The A1-A3 wounding rate on lake trout >532 mm was 6.2 wounds/100 fish in 2008. This was a 53% decline from the 2007 wounding rate and the lowest sea lamprey wounding rate in the last six years, but still higher than target level of 5 wounds/100 fish. Wounding rates have been above target for 12 of the past 13 years. Large lake trout over 736 mm continue to receive the highest percentage of the fresh wounds, but smaller lake trout in the 432-532 mm category also received a high percentage of fresh wounds. A4 wounding rates remain above average but continue to decline, dropping to 29.6 wounds/100 fish. The estimated number of spawning-phase sea lampreys was 2,400 in 2008, an 87% decline compared to the 2007 estimate. A two year experiment of back-to-back lampricide treatments in the nine major sea lamprey producing streams began in 2008. These same streams will be treated again in Fall 2009 to reduce the number of parasitic sea lampreys in Lake Erie to target levels.

**Spawning Sea Lamprey Abundance**

![Chart showing spawning sea lamprey abundance from 1980 to 2007.]

**Lake Erie Salmonid Stocking**

A total of 2,252,255 salmonids were stocked in Lake Erie in 2008. This was a 5.2% increase in the number of yearling salmonids stocked compared to 2007, but 2.2% lower than the long-term average from 1989-2007. By species, there were 202,751 lake trout stocked in New York and Ontario waters; 53,930 brown trout stocked in New York and Pennsylvania waters, and a total of 1,995,574 steelhead/rainbow trout stocked by all five jurisdictions.

**Salmonid Stocking**

![Chart showing salmonid stocking from 1989 to 2007.]

**Steelhead**

All agencies stocked yearling steelhead/rainbow trout in 2008. An analysis of rainbow trout/steelhead stocked in Lake Erie by jurisdictional waters for 2008 is as follows: Pennsylvania (1,157,968; 58%), Ohio (465,347; 23%), New York (269,800; 14%), Michigan (65,959; 3%) and Ontario (36,500; 2%). Overall steelhead stocking numbers (1.996 million in 2008) were 11% above the long-term average of 1.8 million yearlings. Stockings have been consistently in the 1.7-2.0 million range since 1993. The summer open lake fishery for steelhead was again evaluated by Ohio, Pennsylvania and New York. Open lake harvest was estimated at 5,431, summed for all reporting agencies. Open lake steelhead harvest dropped in all jurisdictions in 2008, representing the lowest recorded harvest in the 10-year time series. A similar trend is evident for open lake angler catch rates. Based on contemporary tributary creel surveys in New York, Pennsylvania and Ohio, the majority (>90%) of the fishery effort for steelhead remains in the tributaries and shore access areas from fall through spring.

**Cisco**

Cisco is considered extirpated in Lake Erie. However, they periodically are reported in the bycatch of Ontario commercial fishermen, most recently in March 2008 when two cisco, one age-7 male and one age-9 female, were caught in commercial nets in the central basin. Over 20 cisco have been reported in Lake Erie since 1996. Genetic testing of recent catches found them to be most related to the historic Lake Erie stock, indicating the possibility that a remnant Lake Erie stock still exists. Preparation of a cisco management plan began in fall 2007 with the goal of rehabilitating cisco in Lake Erie. The final draft on the plan is expected to be completed in fall 2009.