Created: Apr 22, 2015

Broad-scale Fisheries Monitoring Program Bulletin

LAKE TEMAGAMI - FMZ 11 - 2013-2017

Lake Temagami facts

Location: Joan

Surface area: 20714 ha

Maximum depth: 75.9 m

Average depth: 16.7 m

Water clarity: 6.7 m



✓ Fish netting

✓ Fish contaminants

✓ Zooplankton

Water chemistry

Bathymetry

✓ Water temperature/dissolved oxygen

Aquatic invasive species

Netting summary

Netting period: Aug 5 to Aug 12 2014

Number of nets set: 77

Number of fish species caught: 20



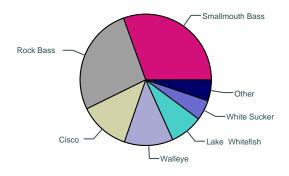
Fish populations were surveyed using large and small mesh nets to provide information on fish species present and their characteristics, such as growth, age, and abundance. The catch data (depicted in the chart below) show that 10 species were surveyed in large mesh nets. Additional fish species observed in small mesh nets were Bluntnose Minnow, Common Shiner, Emerald Shiner, Lake Chub, Logperch, Mimic Shiner, Mottled Sculpin, Pumpkinseed, Spottail Shiner, and Trout-perch.

Fish species	Total catch %	Maximum length (cm)	Minimum length (cm)	Average length (cm)
Smallmouth Bass	30	49.4	14.1	26.4
Rock Bass	27	21.7	7.4	13.4
Cisco	12	42.5	16.8	31.5
Walleye	12	81.5	18.1	36.6
Lake Whitefish	8	52.5	31.4	44.4
White Sucker	5	54.0	24.5	44.5
Lake Trout	4	105.4	17.0	48.0
Northern Pike	1	83.9	38.6	57.6
Burbot	< 1	35.5	28.7	32.1
Yellow Perch	< 1	16.9	16.9	16.9

About Broad-scale Fisheries Monitoring

The Broad-scale Fisheries Monitoring program collects information from representative lakes in fisheries management zones across the province to help biologists manage our fisheries effectively. This bulletin provides a snapshot of recent monitoring activities and netting results. The sampling approach allows us to measure and evaluate the health of Ontario's lakes and their fish communities, and track changes through time over broad areas of Ontario. To learn more about the sampling program visit *Methods for monitoring fish populations*.

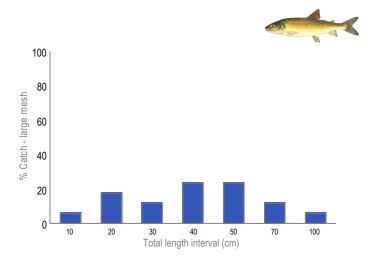
Proportion of fish caught in large mesh nets

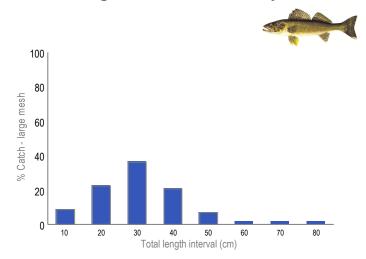


ontario.ca/fishing

Length distribution of Lake Trout

Length distribution of Walleye

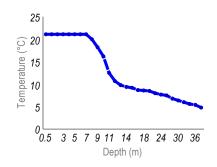




Catch results are presented in 10-cm length intervals, labelled with the lower limit (e.g., the "20 cm" interval represents fish between 20 cm and 29 cm). The size of Lake Trout ranged from 17 to 105.4 cm and the size of Walleye ranged from 18.1 to 81.5 cm in large mesh nets.

Water chemistry and temperature

Water temperature, oxygen levels, and water transparency were measured in August 2014. The graph shows the temperature of Lake Temagami with increasing depth. The temperature at the surface was 21.1 °C and declined to 4.8 °C at the bottom of the lake.



Aquatic invasive species

Field crews searched for aquatic invasive species. Samples are currently being processed to determine if any more new invasive species were detected through this sampling program. Any species new to Ontario or an invasive species that is a new record for a waterbody is reported to the Invading Species Hotline (www.invadingspecies.com).

Fish contaminants

Levels of contaminants in fish flesh (e.g., mercury, PCB's, mirex, organochlorine pesticides, and other organic chemicals) will be reported in the *Guide to Eating Ontario Sport Fish*.

For more information please contact Ministry of Natural Resources and Forestry at 1-800-667-1940, send an email to mnr.nric.mnr@ontario.ca, or visit www.ontario.ca/fishing.