Broad-scale Fisheries Monitoring Program Bulletin WHITE LAKE - FMZ 18 - 2008-2012

White Lake facts

- Location: DARLING
- Surface area: 2365 ha
- Maximum depth: 9.1 m
- Average depth: 2.1 m
- Water clarity: 3.8 m

Monitoring activities

- ✓ Fish netting
- ✓ Fish contaminants
- Zooplankton
- ✓ Water chemistry
- Bathymetry
- ✓ Water temperature/dissolved oxygen
- ✓ Aquatic invasive species

Netting summary

Netting period: Jul 28 to Aug 7 2008

Number of nets set: 31

Number of fish species caught: 12

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*.

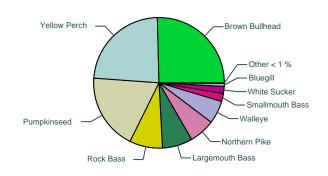
ontario.ca/fishing



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 11 species were surveyed in large mesh nets. An additional fish species observed in small mesh nets was Bluntnose Minnow.

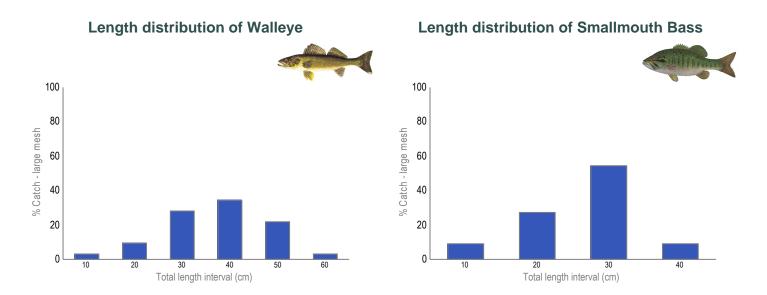
	Total catch	Maximum length	Minimum length	Average length
Fish species	%	(cm)	(cm)	(cm)
Brown Bullhead	25	40.0	14.0	29.9
Yellow Perch	23	29.0	13.0	19.8
Pumpkinseed	19	23.0	7.0	19.3
Rock Bass	8	22.0	6.0	15.2
Largemouth Bass	7	45.0	15.0	28.3
Northern Pike	6	67.0	17.0	45.9
Walleye	6	67.0	16.0	41.4
Smallmouth Bass	2	45.0	15.0	31.7
White Sucker	2	59.0	16.0	46.2
Bluegill	< 1	23.0	22.0	22.3
Golden Shiner	< 1	16.0	16.0	16.0

Proportion of fish caught in large mesh nets





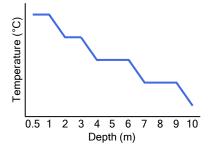




Catch results are presented in 10-cm length intervals, labelled with the lower limit (e.g., the "20 cm" interval represents fish between 20 cm and 29 cm). The size of Walleye ranged from 16 to 67 cm and the size of Smallmouth Bass ranged from 15 to 45 cm in large mesh nets.

Water chemistry and temperature

Water samples were collected in May 2008 and sent to the Ministry of Environment and Climate Change for analysis. Water temperature, oxygen levels, and water transparency were measured in July 2008. The graph shows the temperature of White Lake with increasing depth. The temperature at the surface was 23.5 degrees Celsius and declined to 23.1 degrees Celsius at the bottom of the lake.



Aquatic invasive species

Field crews searched for aquatic invasive species and spiny water flea were observed during monitoring. Zooplankton samples are being processed to determine if any new invasive species are present. 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.invasivespecies.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.