# **Broad-scale Fisheries Monitoring Program Bulletin** WHITE LAKE - FMZ 18 - 2013-2017

## White Lake facts

- Location: Bagot and McNab and Darling
- Surface area: 2365 ha
- Maximum depth: 9.1 m
- Average depth: 2.12 m
- Water clarity: 2.9 m

## **Monitoring activities**

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

### **Netting summary**

Netting period: Jul 2 to Jul 10 2014

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*.

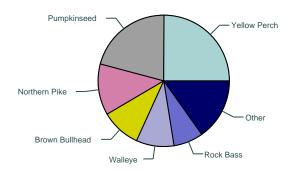
# ontario.ca/fishing



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 Pumpkinseed x Bluegill.

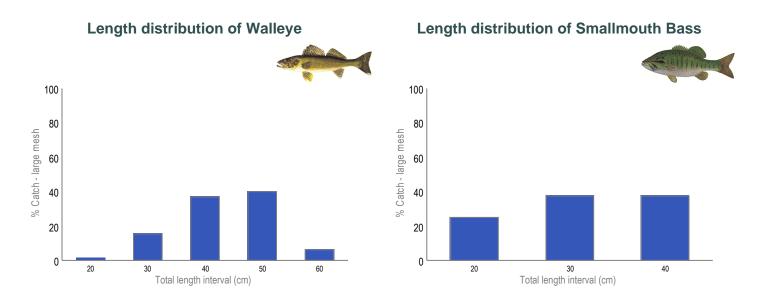
|                 | Total | Maximum | Minimum | Average |
|-----------------|-------|---------|---------|---------|
|                 | catch | length  | length  | length  |
| Fish species    | %     | (cm)    | (cm)    | (cm)    |
| Yellow Perch    | 25    | 31.1    | 12.6    | 22.3    |
| Pumpkinseed     | 21    | 24.5    | 9.1     | 20.2    |
| Northern Pike   | 13    | 80.5    | 25.9    | 48.7    |
| Brown Bullhead  | 10    | 40.1    | 18.6    | 31.5    |
| Walleye         | 9     | 62.5    | 25.4    | 47.5    |
| Rock Bass       | 7     | 25.1    | 9.4     | 15.4    |
| Largemouth Bass | 7     | 45.3    | 13.5    | 30.5    |
| Golden Shiner   | 7     | 18.9    | 11.6    | 15.7    |
| Smallmouth Bass | 1     | 43.9    | 25.0    | 36.3    |
| White Sucker    | < 1   | 46.5    | 44.5    | 45.5    |
| Bluegill        | < 1   | 18.1    | 18.1    | 18.1    |
|                 |       |         |         |         |

# Proportion of fish caught in large mesh nets





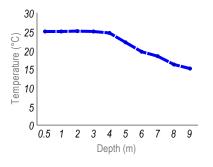




Catch results are presented in 10-cm length intervals, labelled with the lower limit (e.g., the "20 cm" interval represents fish between 20 cm and 29 cm). The size of Walleye ranged from 25.4 to 62.5 cm and the size of Smallmouth Bass ranged from 25 to 43.9 cm in large mesh nets.

### Water chemistry and temperature

Water temperature, oxygen levels, and water transparency were measured in July 2014. The graph shows the temperature of White Lake with increasing depth. The temperature at the surface was 25 °C and declined to 15.1 °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.