Broad-scale Monitoring Bulletin
SMOKY LAKE – ZONE 15

Smoky Lake Facts

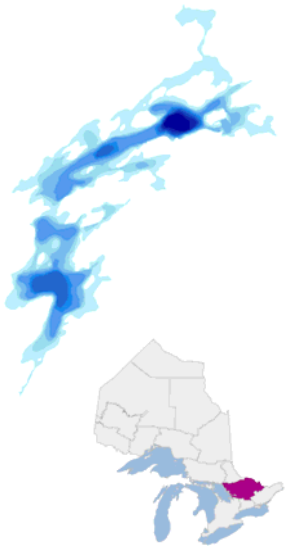
District of Parry Sound

Surface Area: 193 ha

Maximum Depth: 25 m

Average Depth: 5 m

Water Clarity: 4.3 m



Monitoring Activities

- ✓ Fish netting
- ✓ Fish contaminants
- ✓ Zooplankton
- ✓ Water chemistry
- ✓ Bathymetry
- ✓ Water temperature/dissolved oxygen
- ✓ Invasive Species

Netting Summary

Netting dates: July 25 – 28, 2011

Netting days: 4

Number of net sets: 22

Number of fish species caught: 14

About the Program

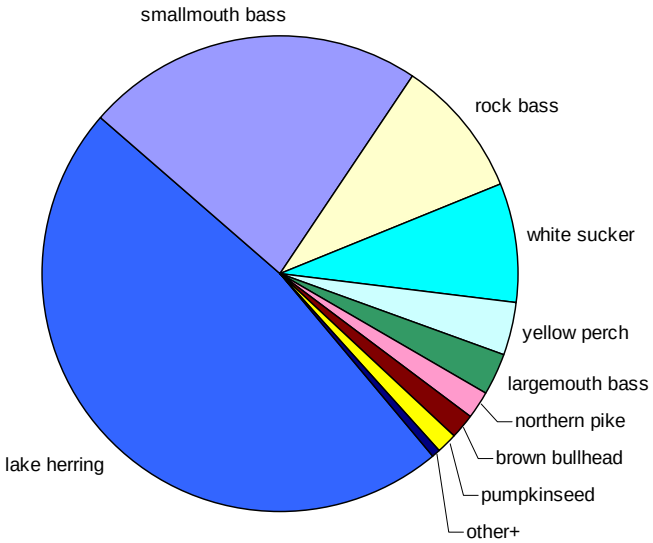
The Broad-scale Monitoring Program provides information for managing our fisheries effectively. This bulletin provides **a snapshot of the recent monitoring activities and netting results.** Netting is conducted using large and small mesh nets. Large mesh nets contribute information about fish species and small mesh nets describe the fish community. To learn more about the sampling program read *Broad-scale Monitoring Program: Monitoring the Health of Ontario Inland Lakes* or visit ontario.ca/fishing.

Fish Netting Results

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 below show that 10 species were surveyed in large mesh nets. Additional fish species observed in small mesh nets were bluntnose minnow, Iowa darter, spottail shiner, trout-perch.

Fish species	Total Catch %	Maximum Length cm	Minimum Length cm	Average Length cm
lake herring	48	22.9	17.1	18.9
smallmouth bass	23	51.7	20.5	36.2
rock bass	10	19.4	11.4	14.3
white sucker	8	56.3	21.0	38.9
yellow perch	3	18.5	15.7	17.7
largemouth bass	3	47.6	19.5	34.8
northern pike	2	74.5	67.5	71.0
brown bullhead	1	25.2	21.5	23.4
pumpkinseed	1	17.7	17.0	17.3
golden shiner[+]	<1	16.0	16.0	16.0

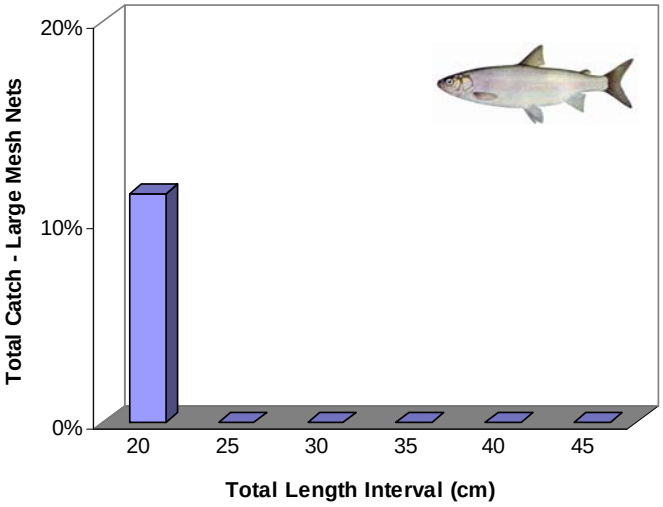
Proportion of Fish Caught in Large Mesh Nets



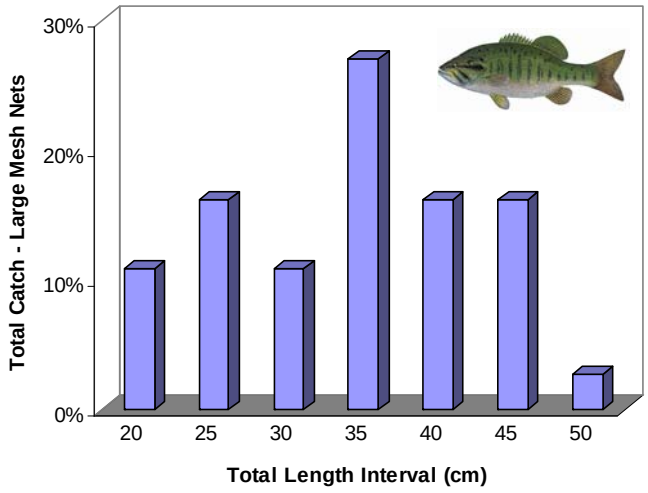
ontario.ca/fishing

Ontario

Length Distribution of Lake Herring



Length Distribution of Smallmouth Bass



20 cm = 20 to 25 cm, 25 cm = 25 to 30 cm, etc.

The size of lake herring ranged from 17 to 23 cm (from a total of 79 fish) and the size of smallmouth bass ranged from 21 to 52 cm (from a total of 38 fish) in large mesh nets.

Water Chemistry and Temperature

Water samples were collected in May 2011 and sent to the Ministry of Environment for analysis. Water temperature, oxygen levels and water transparency were measured in 2011. Smoky Lake is considered a cool-water lake that can support cool and warm-water fish species such as lake herring, northern pike and smallmouth bass.

Invasive Species

Invasive species were monitored using plankton nets and observations made by field crews. Historically, there have been no reported occurrences of invasive species in Smoky Lake. Samples are currently being processed to determine if any 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 Sport Fishing in Ontario* or visit ontario.ca/fishguide.

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