

*Natural. Valued. Protected.*

## Lake Fact Sheet – Parry Sound District Mary Lake

Location	
Official Name:..... Mary Lake	Local Names: .....
County/District:..... Muskoka	Geographic Twp:..... Stephenson, Brunel
Municipality:..... Town of Huntsville	MNR Admin. Area:..... Bracebridge
Lat./Long:..... 45.2458 N 79.2553 W	UTM (NAD83):..... 17 636921 5011740
Topographic Map (1:50,000):..... 31E03	Drainage Basin:..... North Muskoka River

Physical Features		
Surface Area (ha):..... 1061	Maximum Depth (m):..... 56	Mean Depth (m):..... 25
Elevation (m asl):..... 281	Perimeter (km):..... 20.5	Island Shoreline (km):..... 3.6
Volume (10 <sup>4</sup> m <sup>3</sup> ):..... 26525	Watershed (km <sup>2</sup> ):..... 1410 (excludes area of lake)	Water Clarity (m):..... 3.4

Land Use and Development	
Crown Land (%):.....0	Provincial Parks:.....none
Shoreline Development: .....	intense; urban, commercial, shoreline residential
Access:.....	public; boat launch at Port Sydney; navigation lock from Fairy Lake; marinas
Water Level Management: .....	regulated; water level is controlled by an MNR owned and operated dam at Port Sydney. ..... Water levels are governed by the Muskoka River Water Management Plan

Fish Species	
Major Fish Species:.....lake trout (S), lake whitefish (S), northern pike (I), smallmouth bass (I), largemouth bass, .....	walleye (I), burbot, brook trout (E), black crappie (I 2019)
Other Fish Species:.....pumpkinseed, trout-perch, white sucker, brown bullhead, golden shiner, rainbow smelt (I 1956), .....	yellow perch, bluntnose minnow, longnose sucker, rock bass (I 2008), Slimy Sculpin, Spottail Shiner
Other Species:.....	spiny water flea (I 1990)

Notes: E: extirpated, I: introduced – intentional or accidental, O: occasional, R: remnant, S: currently stocked, ?: status uncertain, 2009: year of first record or introduction if known, blank: presumed native

# Mary Lake

## Fisheries Management

*Fisheries Management Zone:* ..... 15

*Designation for Lake Trout Management:* ..... designated; put-grow-take; not at development capacity

The put-grow-take designation is provisional pending attempts to rehabilitate self-sustaining populations in the Huntsville Lakes system

*Fishing Regulation Exceptions* ..... no lake-specific exceptions

*Current Stocking:*

Lake trout; rehabilitation stocking is being attempted using lake trout eggs collected in Lake of Bays.....

Lake whitefish; rehabilitation stocking is being attempted using adult fish from Lake of Bays and fingerlings from Lake Simcoe

*Historic Stocking (last year stocked):*..... smallmouth bass (1920), walleye (1942), brook trout (1945), rainbow trout (1968)

*Contaminants (species tested):* ..... lake trout, smallmouth bass, rock bass, rainbow smelt

*Assessment:*

Completed Projects:

- 1961 lake survey
- 1968 fish community sampling
- 1970 lake survey
- 1975-77 lake trout spawning observations
- 1977 contaminant sampling
- 1987-93 lake trout spawning observations
- 1991 lake trout spawning observations
- 1993 Spring Littoral Index Netting (lake trout)
- 2003-11 Summer Profundal Index Netting (targets lake trout)
- 2008 lake trout spawning observations, shoal mapping and fry trapping
- 2009 Huntsville lakes management review
- 2009 adult whitefish transfer from Lake of Bays
- 2013 Broad-scale Monitoring (large and small mesh netting)

water chemistry profiles are collected on a regular basis

## Synopsis

The native fish community of Mary Lake was dominated by lake trout, lake whitefish cisco and brook trout. A long series of introductions of non-native species, intentional and otherwise have transformed the community. Lake trout are currently maintained by stocking; whitefish, cisco and brook trout are virtually extirpated and warm water species such as bass and pike are now abundant.

The walleye population is the most recent arrival. Recent observations and angler reports indicate a population is becoming established, presumable through downstream dispersal from a growing population in Lake Vernon and the other Huntsville Lakes It is expected that the population will expand, as the lake and river provide fairly good habitat for this species.

The creel survey conducted in the winter of 2008 found that fishing pressure is moderate. Summer effort is probably higher but has not been quantified.

# Mary Lake

A major review of fisheries management in the Huntsville Lakes, including Mary Lake, was done in 2009. A copy may be obtained on request from the Bracebridge MNR office. One of the recommendations of the report was to attempt to rehabilitate the cold water fish community. Beginning in 2009 lake trout eggs were collected in Lake of Bays. They will be reared to yearlings and re-stocked into Mary Lake. It is hoped that use of a local strain will improve the chance of successful natural reproduction. Also, in 2009 a re-introduction of lake whitefish began. This project includes stocking of fingerling whitefish of the Lake Simcoe strain and a transfer of adult fish from Lake of Bays.

As of 2011, three years of lake trout egg collections from Lake of Bays have occurred. In 2009 and 2010 the eggs were reared at the Haliburton Highlands Outdoors Association hatchery, to be stocked as yearlings. In 2011, fertilized eggs were stocked directly into Mary Lake.

From 2008 to 2011, adult lake whitefish were transferred live from Lake of Bays to Mary Lake in an attempt to re-establishing a self-sustaining population in Mary Lake. In the same years, fingerling whitefish, originating from eggs collected in Lake Simcoe, and reared at the White Lake Fish Culture Station, were also stocked. SPIN netting in 2011 captured several adult whitefish of Lake of Bays origin and one two year older whitefish of Lake Simcoe origin.

Mary Lake was sampled in 2013 as a “state”, lake for the Cycle 2 of the provincial Broad-scale Monitoring program. Results will be reported through that program. Two species not previously documented were captured; Slimy Sculpin and Spottail Shiner. Both species are thought to be native to the lake.

In 2019, a report was received that black crappie had been caught in the lake. The report wasn't verified but crappie are expected to colonize the lake from the Huntsville lakes, upstream, where they are known to be established.

Updated: 2019

Refer to Lake Fact Background Information document for explanation of content.

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