

*Natural. Valued. Protected.*

Lake Fact Sheet – Parry Sound District

# Otter Lake

Location:	
<b>MNR District:</b> .....	Parry Sound
<b>Geographic Township:</b> .....	Foley
<b>Municipal Township:</b> .....	Seguin
<b>Watershed:</b> .....	Boyne River
<b>Fisheries Mgmt Zone:</b> .....	15

Basin and Terrain Characteristics:	
<b>Lake Survey Year:</b> .....	1971
<b>Surface Area:</b> .....	506.8 hectares
<b>Maximum Depth:</b> .....	44.8 meters
<b>Mean Depth:</b> .....	10.8 meters
<b>Perimeter:</b> .....	38.0 km
<b>Island shoreline:</b> .....	6.6 km
<b>Littoral Zone:</b> .....	43%
<b>Shoreline Development:</b> ....	311 Cottages, 3 Resorts & 25 Residences (1992 data)
<b>Access Points:</b> .....	Road (Public)
<b>Water Level:</b> .....	Controlled (OMNR dam at Boyne River Outlet)
<b>Crown Land:</b> .....	5% Shoreline

Water Quality:	
<b>Secchi reading:</b>	Average 5.0 meters (depth to which an 8" black and white disc is visible)
<b>Colour:</b>	Colourless
<b>Alkalinity:</b>	5.0 – Level 3 Moderately Sensitive (MOE, 1989)
<b>pH:</b>	6.3 (1989)
<b>Total Phosphorus:</b>	2.8 ug/l (1989); 7.0 ug/l (1998)
<p><b>“Guide to eating fish”:</b> Fish in watersheds draining into Georgian Bay generally have high levels of mercury. This is due to natural, high background levels of mercury present in the watershed – not man-made contamination. A precautionary approach to fish consumption is recommended. We recommend you search the guide for an alternate large lake in your watershed (i.e. Oastler Lake) and apply those consumption guidelines to Otter Lake. Extra caution should be exercised by women of child-bearing age and for children.</p>	
<p>The <i>Guide to Eating Ontario Sport Fish</i> is available electronically at: <a href="http://www.ene.gov.on.ca">www.ene.gov.on.ca</a>.</p>	

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### Fisheries:

**Game Fish Species:** Smallmouth Bass, Northern Pike, Lake Trout, Yellow Perch, Black Crappie

**Other species present:** Rainbow Smelt, Cisco, White Sucker, Pumpkinseed, Rock Bass

#### Introduced Species:

Black Crappie – first documented in 1999. Probably originated from an unauthorized introduction.

It is uncertain, but quite likely, early Smallmouth Bass plantings may have been for introductory purposes.

**Stocking Record:** The lake is not currently being stocked.

2001 Rainbow Trout 4,000 yearling  
2000 Rainbow Trout 4,500 2.5 – 6”  
1998 Lake Trout 3,000 15 months AD clip  
1994 Lake Trout 3,000 yearling LV clip  
1992 Lake Trout 3,000 yearling RV clip  
1990 Lake Trout 3,000 yearling LP clip  
1989 Rainbow Trout 2,000 yearling no clip (private planting)  
1988 Lake Trout 1,500 yearling AD clip  
1987 Lake Trout 3,200 yearling AD clip  
1986 Lake Trout 2,000 yearling RP clip  
1984 Lake Trout 3,000 yearling LP clip  
1982 Lake Trout 2,400 yearling RV clip  
1979 Lake Trout 2,400 yearling LV clip  
1977 Lake Trout 3,000 26 months AD & RP clip  
1975 Lake Trout 1,400 27 months LV clip  
1974 Lake Trout 900 year 2 AD clip  
1966 Lake Trout 3,000 yearling  
1964 Lake Trout 2,000 yearling LP clip  
1962 Lake Trout 1,000 yearling  
1960 Lake Trout 2,000 1.5 years  
1958 Lake Trout 2,000 11 months  
1956 Lake Trout 2,000 fingerling  
1950 Smallmouth Bass 400 fingerling  
1949 Lake Trout 3,000 fingerling  
1948 Smallmouth Bass 10,000 fry  
1947 Smallmouth bass 500 fingerling  
1946 Smallmouth Bass 500 fingerling  
1944 Smallmouth Bass 5,000 fry  
1942 Smallmouth Bass 5,000 fry  
1941 Smallmouth Bass 5,000 fry  
1939 Walleye 750,000 fry

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### Summary of Fisheries Studies / Reports:

McIntyre, E. 2005. **Otter Lake – Lake Trout Spawning Assessment – Fall, 2005.**

In the fall of 2005, a lake trout spawning assessment survey was conducted on Otter Lake. The primary purpose of the survey was to ascertain the presence of spawning lake trout and whether or not natural fish are present within the spawning population. A secondary purpose was to assess the extent to which spawning lake trout may be utilizing spawning beds created in 2001.

The survey consisted of the setting of fine mesh gill nets for short duration after dark as well as visual observations using high intensity hand lanterns.

We captured four lake trout in spawning condition; three males and one female. One lake trout was a planted fish (1994 planting) and the other three were naturals.

To the best of our knowledge this survey provides the first documented capture of spawning lake trout in Otter Lake. Although our sample size is indeed meager, it does provide evidence of the existence of a spawning population and the presence of natural lake trout within it. We are cautiously encouraged that the nucleus of a 'founding population' for rehabilitative purposes is present in Otter Lake.

McIntyre, E. 2002. **Otter Lake lake trout spawning activity observations**, Fall 2002.

- Six lake trout spawning bed sites rehabilitated in 2001 were observed for spawning activity
- No lake trout were observed nor was there any evidence of spawning activity (no lake trout eggs observed; no 'cleaning' of spawning beds by swimming activity).

Buszynski, M. 2001. **Lake trout spawning bed creation – Otter Lake – August, 2001.** Annual CFIP report on lake trout spawning bed rehabilitation project.

- Six spawning sites created and / or rehabilitated through the deposition of 15 tons of granite cobble/rock.

McIntyre, E. 1999 Otter Lake "**Spot Check**" **Creel Report – Winter 1999**

- Surveyed on 9 days in Feb. and March of 1999
- Mean activity count 2.1 anglers; 57 angler hours surveyed
- Poor lake trout angling quality: EUC and EUH both 19.0 angler hours

MNR 1999 Raw Data: **Low intensity Winter Creel Survey, 1999.**

- Low fishing intensity: 1.7 anglers per activity count
- 57 angling hours of effort observed
- 3 lake trout caught and harvested (all planted); 1 northern pike caught and harvested

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McIntyre, E. 1999. **Spring littoral index netting report** for Otter Lake (Foley Geographic Twp.) 1999.

- Catch of 110 kg. comprised of northern pike (57%), cisco 24%, lake trout 17% and other species (smelt, crappie, perch, white sucker) less than 2%
- 10 lake trout caught; 9 planted, 1 natural
- lake trout probability off catch 27%
- lake trout CUE (no.)  $0.33 \pm 0.23$  ( $P < .05$ ) lake trout per net set
- lake trout CUE (wt.) 615 grams per net set
- above indices point to a low abundance of lake trout; negligible natural reproduction
- mean lake trout size: 1845 grams round wt., 53.5 cm total length, 49.1 cm fork length

McIntyre, E. 1997. Results of a **non-intensive, roving creel survey** conducted on Otter Lake (Foley Township) during the summer of 1996.

- Low fishing pressure: average 5 boats per count in morning strata; 4 in mid-day; 3.4 in afternoon
- 110 angling hrs sampled: 14 smallmouth bass caught / 1 harvested; 4 pike caught / 1 harvested; one largemouth caught and released; no lake trout caught.

Deary Environmental Consultants, 1990. Summary report for **lake trout (*Salvelinus namaycush*) assessment** of thirteen lakes in the Parry Sound District.

- 11 over-night gill net sets (summer time)
- caught: 14 lake trout (all planted); 12 cisco; and 12 rainbow smelt
- based on fin clip, age of lake trout ranged from 2 to 11 years; mean 5.1 years.

MNR, 1978. Summary of 1978 **winter creel census** on lake trout lakes by Ministry of Natural Resources personnel.

- Otter lake - checked 7 times
- 19.75 man hours of fishing effort surveyed
- 5 lake trout caught – all RP fin clip; all less than 16"

Thurston, L. 1977. Summary of two years (1976 - 77) of **lake trout assessment work** Parry Sound District

- 15 over-night gill net sets (June 22 - 29)
- caught 15 lake trout: 12 natural, 3 planted

Thurston, L. 1976. **Assessment of lake trout plantings** Parry Sound District

- 20 over-night gill net sets (May 5 - 12)
- caught 15 lake trout (11 planted & 4 naturals); 66 cisco; 73 white suckers; 170 smelt; 23 yellow perch; 54 northern pike; 7 rock bass; 1 smallmouth bass

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Thurston, L. 1975. **Summer and winter creel census** on selected lake trout lakes in the Parry Sound District 1974 - 75.

- Summer creel: (June - August) 11 sampling occasions
- angler hours surveyed
- catch: 4 northern pike, 4 smallmouth bass, 2 largemouth bass, 0 lake trout
- Winter creel (Jan - Mar) 5 sampling occasions
- rod hours of effort surveyed
- 1 natural lake trout caught

MOE 1975 The **Quality of Selected Waters** in The Township of Foley

- Water quality measurements for 1975

MNR 1961-1983 Raw Data: **Creel**

- not summarized

### Management Prescription:

Manage as a natural, self sustaining smallmouth bass, northern pike and lake trout fishery.

*(Note: In 2000, the management objective for lake trout changed from artificial, supplemental plantings of lake trout to managing for a natural, self-sustaining lake trout population. This change in management direction was a result of public input related to the Southcentral Lake Trout Review, which included Otter Lake. Lake trout plantings which are considered a deleterious stress on the natural population ceased in 1998. The following changes to sport fishing regulations were imposed in 2000 with the intention of promoting the natural rehabilitation of the lake trout population.)*

New lake trout regulations commenced in 2000:

- Open season: 3<sup>rd</sup> Sat. in May – Sept. 30<sup>th</sup> (i.e. winter closure to lake trout fishing)
- Protected slot size 40 – 55 cm. total length (lake trout in the slot are to be released)
- One line only for winter angling

Otherwise FMZ-15 regulations as presented for Map C (Central Ontario) as per Recreational Fishing Regulation Summary apply for all other species.

Addendum (2008):

- One line only for winter angling removed. Winter lake trout fishing closure made this regulation largely redundant.
- Otter Lake now in Fisheries Management Zone (FMZ) 15 (as opposed to old "Division")

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Refer to Lake Fact Sheet Interpretation document for explanation of content.

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Parry Sound Area office: (705) 746-4201  
Bracebridge Area office: (705) 645- 8747