

# 5 Facts about Bass in Lake Nipissing

## 1. Smallmouth and Largemouth Bass Biology

Smallmouth and largemouth bass thrive in warm water habitats of lakes and rivers. Smallmouth bass prefer clear, rocky waters with sandy bottoms while largemouth bass prefer shallower waters with an abundance of aquatic vegetation.

Smallmouth bass in Lake Nipissing typically reach 40 cm (16 inches) by five to seven years of age. Males reach sexual maturity between 3 and 5 years of age,

while females mature slightly later, between 4 and 6 years of age.



Largemouth bass grow slightly slower than smallmouth bass. They typically reach 40 cm (16 inches) by 6 to 8 years of age.

The diet of both smallmouth and largemouth bass changes over time and with growth. Zooplankton, small floating organisms, is the primary food of younger fish, while older bass feed mostly on other fish species and crayfish.

## 2. Status of Smallmouth and Largemouth Bass

Smallmouth and largemouth bass populations in Lake Nipissing are healthy. The fishing opportunities for both of these species could be expanded.

With only five per cent of fishing effort in open water for smallmouth bass and less than one per cent for largemouth bass, there is the opportunity to direct more fishing effort to these two species and away from the over-fished and already stressed walleye population.

In fact, the total harvest by recreational anglers of both bass species on Lake Nipissing is low at less than 5000 fish per year (Figure 1) when compared to other

species, such as yellow perch where an estimated 20,000 fish are harvested per year.

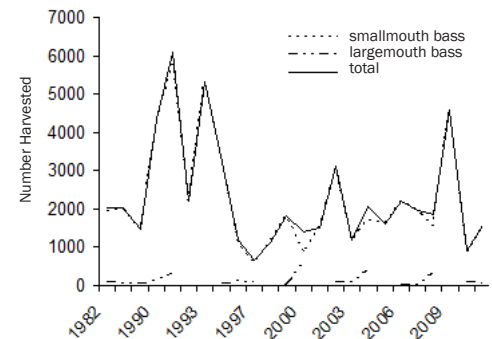


Figure 1: Harvest numbers of bass in Lake Nipissing

## 3. Value of Bass

Smallmouth and largemouth bass could play an expanded role in the Lake Nipissing fishery and become a more significant contributor to the local economy.

Lake Nipissing is the seventh most fished lake in Ontario, including the Great Lakes. It has been a premier fishing destination in northeastern Ontario for decades. However, the fishing effort by anglers for bass on the lake is relatively low.

In other parts of Ontario, smallmouth and largemouth bass are two of the most important species for the sport fishing and tourism industries. Despite this fact, average angling hours for bass on Lake Nipissing are estimated at only 10,000 hours per year, or 2.5 per cent of all angling effort on the lake. In comparison, recent angling effort targeting walleye is estimated at greater than 300,000 hours per year.

Proposed changes to the bass fishing regulations could make it possible for bass to make an even greater contribution to the local economy. Promoting bass fishing opportunities would benefit local tourist operators, while easing some of the pressure on the walleye fishery, allowing it to recover.

## 4. Managing the Bass Fishery

The government manages smallmouth and largemouth bass to maintain sustainable and robust populations, to support a high-quality recreational and tourism fishery and to diversify the fishing opportunities on the lake.

Creel surveys, conducted during open water and winter seasons, plus data collected during angler tournaments, help determine the overall health and sustainability of the populations and whether current regulations are appropriate. Smallmouth and largemouth bass populations in Lake Nipissing are considered to be healthy with robust age structures and relatively low adult mortality.

Fishing efforts for both bass species could be increased, considering targeted bass fishing efforts during open water season were only five per cent for smallmouth bass and less than one per cent for largemouth bass (Figure 2).

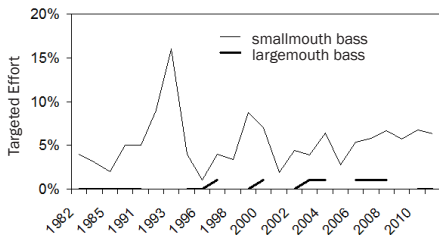


Figure 2: Percentage of angling effort targeting bass in Lake Nipissing

There is emerging evidence that the effects of climate change may favour bass

abundance in Lake Nipissing. The spawning season is now earlier by as much as 10 days (1980-2010). As well, bass nesting numbers have increased noticeably from 1958-2010 and the growing season is longer, resulting in increased survival of young of the year.

These factors indicate that it is possible to develop regulations that protect spawning adults while increasing angling opportunities on the lake. There is also general agreement that bass have the potential to be of greater value to the tourism industry. Ultimately an increased focus on bass would also benefit the walleye population by directing some of the fishing pressure onto the healthy bass population.

## 5. Proposed Bass Fishing Regulations

As part of the draft Lake Nipissing Fisheries Management Plan, new fishing regulations are proposed to increase the fishing opportunities for smallmouth and largemouth bass.

The proposed change to the regulations is intended to increase fishing opportunities, while maintaining healthy and sustainable bass populations

Current Regulation	Proposed Regulation
<b>Season:</b> Open 4th Saturday in June to November 30	<b>Season:</b> Open 3rd Saturday in June to November 30
<b>Catch Limits:</b> Sport – 6 Conservation – 2	<b>Catch Limits:</b> Sport – 6 Conservation – 2

The proposed change would open the bass season one week earlier, on the 3rd Saturday in June rather than the 4th Saturday. The proposed change is consistent with the current management objectives for bass on the lake and the overall objectives recently developed by the government and the Lake Nipissing Fisheries Management Plan Advisory Council.

Focusing more fishing effort on bass will have a positive benefit for walleye, while expanding the overall sport fishing opportunities on Lake Nipissing.

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For more information about how you can contribute, please contact:

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