

5 Critical Facts about Walleye in Lake Nipissing

1. Status of Walleye

The walleye population in Lake Nipissing is in serious decline with the current population now half of what it was in the 1980s.

In response to concerns for the state of the walleye population and the potential changes in the aquatic ecosystem, the government initiated a review of all Lake Nipissing walleye data from 1967 to 2011.

We learned that the decline in the number of adult walleye (more than five years old) has varied between 30 per cent and 55 per cent over the last five decades (Figure 1).

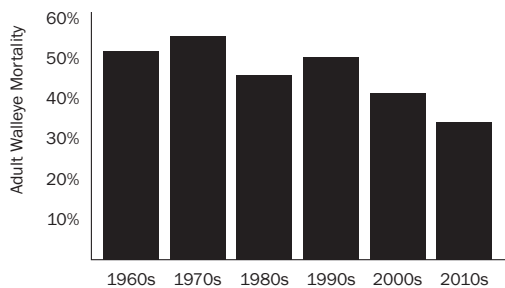
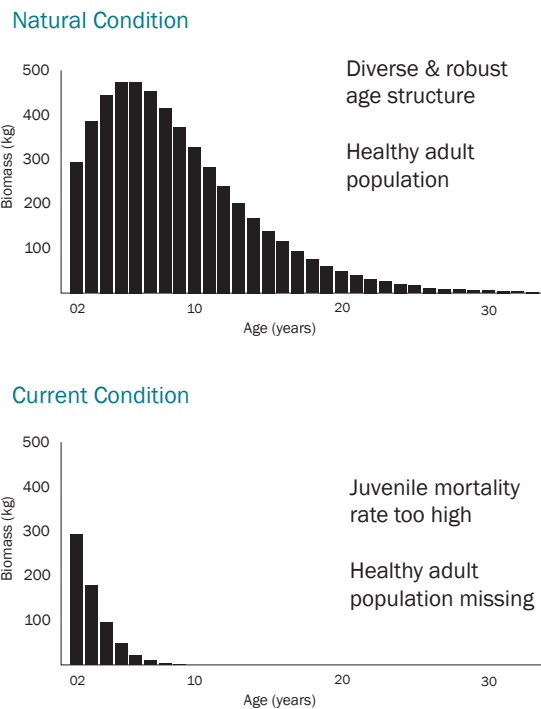


Figure 1: Rates of loss of adult walleye.

Even though it appears that adult walleye have been disappearing at lower rates over the past two decades, research reveals that the overall walleye population is still in decline. The science tells us that this disturbing decline is associated with a loss of fish younger than five years of age. (Figure 2)

Today, with a decreasing population of young fish that have not yet had a chance to spawn, the walleye has declined to its lowest level and may continue to decline in the future.

Figure 2 Natural (unfished) age structure compared to the current condition



2. The Primary cause of walleye decline

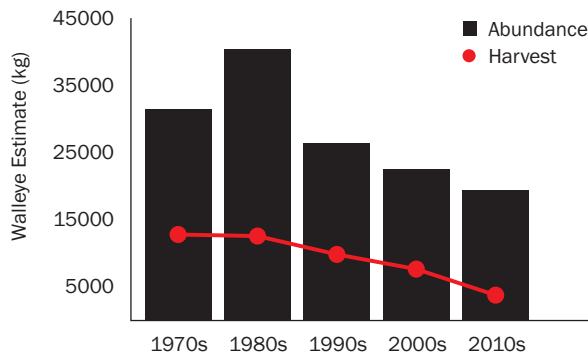
Over-fishing has placed the walleye population in a vulnerable state and walleye abundance is now too low to support a harvest at previous levels.

Few fisheries of inland lakes have been studied as long or as intensively as the Lake Nipissing walleye fishery. In the 1970s and 1980s, combined harvest of walleye from the recreational and commercial fisheries on Lake Nipissing was very high, exceeding 100,000 kilograms per year. Through the 1990s, walleye harvests dropped slightly, averaging 100,000 kilograms per year. During that decade the noticeable

decline in population was attributed in great part to the high harvest rates.

In face of the downward population trends, the walleye harvest fell further to 66,000 kilograms per year in the mid-2000s. However, even at these reduced harvests, the walleye population continued to decline (Figure 3).

Figure 3: Walleye abundance and harvest of over four decades.



Unfortunately, in 2013 the combined harvest of walleye by the recreational and commercial fisheries exceeded sustainable levels. Both fisheries over-harvested walleye. It has become clear that today's combined harvest is still too high to allow the stressed walleye fishery to recover.

If the walleye fishery is to recover, the government has identified that harvest levels of the past can no longer be sustained.

3. Value of Walleye

Walleye plays an important role in the Lake Nipissing fishery and is a significant contributor to the local economy.

Lake Nipissing is a premier fishing destination for walleye in northeastern Ontario. On average each year recreational anglers spend nearly half a million hours fishing on the lake. The approximately 80 tourist establishments on Lake Nipissing rely heavily on healthy fisheries for their livelihood.

As well, there are treaty rights to fish commercially on Lake Nipissing, as legally confirmed in the 1990 R. v. Commanda case.

If we are going to maintain the socio-economic benefits obtained from the recreational and commercial fisheries over the long-term, we all need to work together to find ways to maintain a healthy fishery by reducing the fishing pressures on an already stressed walleye population.

4. Proposed Management Actions

It is possible for the walleye population to recover, if we make immediate changes to the management of the fishery.

In 2013 the government undertook a thorough review of the changes in the Lake Nipissing walleye population. The study, Lake Nipissing Data Review 1967 to 2011, reports that "the abundance of walleye > (greater than or equal to) 350mm (14 inches) in Lake Nipissing has declined dramatically, especially in recent years, the age distribution shows very few mature (aged 3 years and older) fish...".

The study concludes that because of the reduced numbers of mature fish, younger walleye that have not had a chance to spawn, are now more vulnerable to harvest. We all need to find ways to protect these younger fish. The future survival of Lake Nipissing's walleye fishery depends on their survival.

In January 2014, to support the long-term survival of the walleye fishery, the government increased the fishing opportunities for yellow perch, a predator of young walleye. With new, higher perch daily catch limits – from 25 to 50 fish for a sport fishing licence – anglers can have a positive impact on walleye by directing some of their fishing efforts to perch.

To further support the recovery of walleye, the following changes are proposed to the fishing regulations:

- A new minimum size limit for walleye for the recreational angler with a zero possession of walleye less than 46 cm (18 inches) in length. There are no changes to catch limits for fish over this size.
- The bass (both smallmouth and largemouth) season to open one week earlier.

Scientific studies have established that, if we protect the young fish, reduce the overall number of kilograms of walleye caught annually, and direct some of our fishing effort to other species, the walleye fishery could recover.

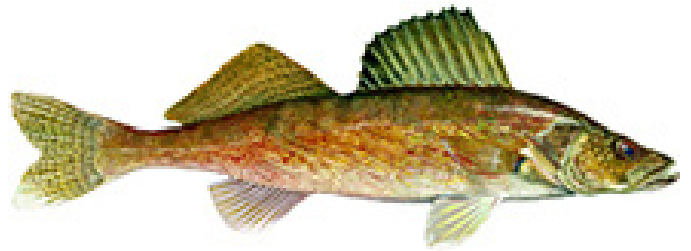
5. Our Individual Actions

You can help by fishing for other species and reducing the fishing effort on walleye. If we all cooperate and make sacrifices, we can preserve the Lake Nipissing walleye fishery into the future.

In cooperation with the government, an advisory council that includes local stakeholders has developed recommendations to address the serious decline of walleye in Lake Nipissing, including examining ways to reduce the harvest. With the combined, immediate actions of local anglers, stakeholders, First Nations and fisheries experts, we can help this ecologically and economically important fishery rebound.

However, if we delay in taking decisive action, there is a high risk to the future recovery of the walleye population in Lake Nipissing – it's clear, we need to act now.

Fish Today... For Tomorrow



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

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