

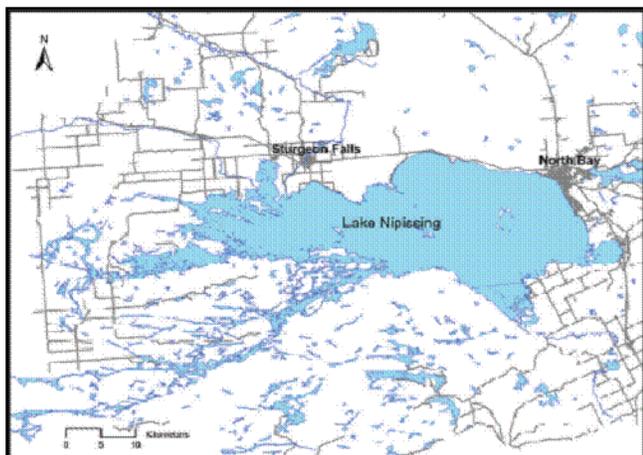
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YELLOW PERCH IN LAKE NIPISSING

This fact sheet is part of a series prepared in support of the development of a new Fisheries Management Plan for Lake Nipissing.

LAKE NIPISSING FISHERIES MANAGEMENT PLANNING

Under the Ministry of Natural Resources' Ecological Framework for Fisheries Management, Lake Nipissing is a Specially Designated Water due to its large size and socio-economic importance. At 90,000 hectares, Lake Nipissing is Ontario's fourth largest lake, excluding the Great Lakes, and the seventh most fished lake, including the Great Lakes. Lake Nipissing has been a premier fishing destination in Northeastern Ontario for decades, and it is estimated that fishing activities contribute up to \$60 million annually into Ontario's economy. Ontario manages this valued resource through a lake specific management plan.

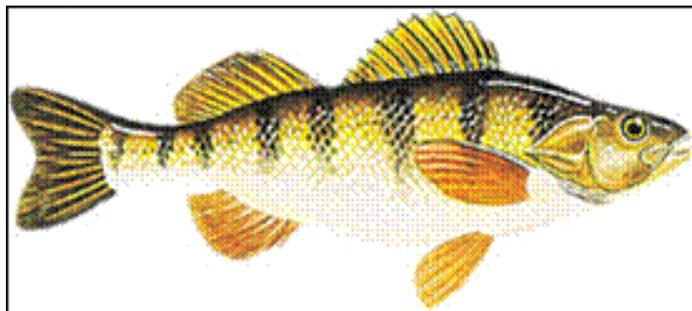


LAKE NIPISSING YELLOW PERCH FISHERY

On average, anglers spend 50,000 hours per year fishing for perch on the lake. While this represents only about 10 percent of all angling effort, yellow perch harvest is the most harvested fish (177,406 fish/year) on the lake, twice that of walleye.

YELLOW PERCH BIOLOGY

Yellow perch are a prolific cool-water species that thrives in warm to cool water habitats and is most abundant in the open water of lakes with moderate vegetation, clear water and bottoms of muck or sand and gravel.



Across Ontario, female perch are larger and tend to live longer than males. Males first spawn at two to three years and in Lake Nipissing, the average female yellow perch reaches sexual maturity at 15.5 cm (approx. 6 in.), close to three years of age.

Spawning occurs over vegetation in shallow waters in the early spring when water temperatures reach 6°C, usually from mid-April to early May.

Growth in yellow perch is rapid at first and varies with population size, habitat size and productivity. Growth slows as populations increase and there are fewer resources. In 2010, older yellow perch on Lake Nipissing were not reaching the same size as they were in 1998 (Figure 1).

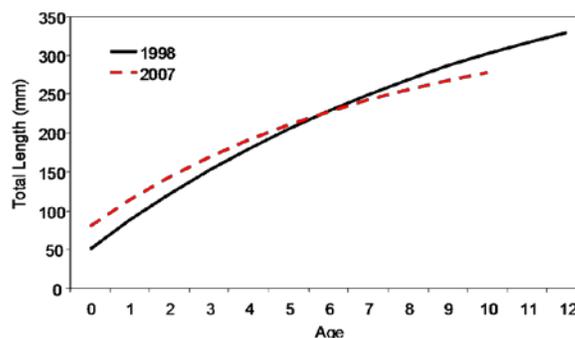


Figure 1: Comparison of Lake Nipissing yellow perch growth rates between 1998 and 2007 from Fall Walleye Index Netting surveys.

ASSESSING THE LAKE NIPISSING YELLOW PERCH FISHERY

The key objectives for yellow perch in the 2007-2010 Management Plan were:

- monitor the perch population; and
- prevent the occurrence of an over-harvest.

To assess our achievement of these objectives, two types of fisheries assessment data are collected: Fall Walleye Index Netting (FWIN) and creel surveys. FWIN is an assessment tool used to provide measures of relative abundance, as well as information on growth and other life history characteristics.

Creel surveys, conducted during both open water and winter angling seasons, involve counting and interviewing anglers about their daily catches. They are used to estimate fishing pressure, catch and harvest rates. Together, these surveys help determine the overall health and sustainability of the population and whether current regulations are appropriate.

STATUS OF YELLOW PERCH IN LAKE NIPISSING

Recent data suggest that the yellow perch population is on the rise. Index netting results indicate that the relative abundance of yellow perch has increased significantly on the lake (Figure 2).

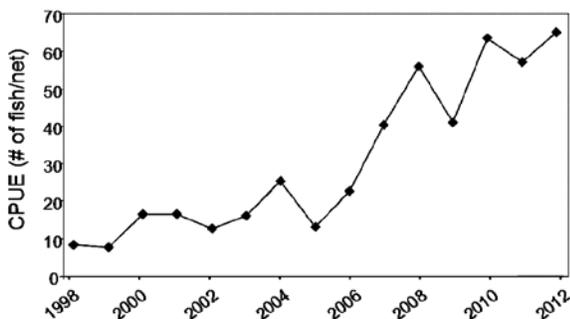


Figure 2: Relative abundance of yellow perch in Lake Nipissing as measured as catch per unit effort represented by the number of fish caught per net during Fall Walleye Index Netting.

Despite the peak harvest experienced in the late 1980s, harvest on the lake has been relatively stable. More recently however, there has been a surge in perch harvest and targeted effort for the species (Figure 3). This surge appears to coincide with the known stressed walleye

population and the increase in the abundance of yellow perch on the lake.

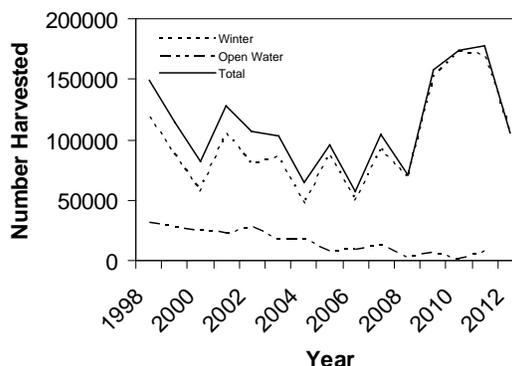


Figure 3: Angler harvest of yellow perch on Lake Nipissing as represented by numbers of fish harvested during both the open water and winter seasons.

MANAGING YELLOW PERCH INTO THE FUTURE

As part of the Lake Nipissing Fisheries Management Plan, new fishing regulations are being considered for yellow perch. The intent is to manage the lake so that the primary walleye fishery, which is stressed, remains viable and sustainable. This, in turn, helps manage the secondary fisheries, including perch. More specifically, this could result in increased catch and possession limits and/or season extensions for yellow perch.

The following three options were developed and are being proposed by the Lake Nipissing Fisheries Management Plan Advisory Council to be considered in the revised FMP for the lake.

Open Season	Catch (Possession) Limit	
	Sport Licence	Conservation Licence
Jan 1 to March 15 th & 3 rd Sat in May to Oct 15	50 (50)	25 (25)
Jan 1 to March 15 th & 3 rd Sat in May to Oct 15	50 (100)	25 (50)
Jan 1 to March 15 th & 3 rd Sat in May to Nov 30	50 (50)	25 (25)

For more information please contact:

Scott Kaufman, Nipissing Area Large Lake Biologist, MNR
North Bay, 3301 Trout Lake Road, North Bay, ON

705-475-5537 Scott.Kaufman@Ontario.ca