

ONTARIO FEDERATION OF ANGLERS & HUNTERS



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THE 2012 REPORT ON THE LAKE NIPISSING WALLEYE FISHERY A Review by the Ontario Federation of Anglers and Hunters OFAH Staff: Matt DeMille (M.Sc.) & Terry Quinney (Ph.D.)

Status of Lake Nipissing Walleye

The data presented in the 1998-2011 Lake Nipissing Walleye Data Review Report (May 2012, Draft) commissioned by the Ontario Ministry of Natural Resources (MNR; hereafter referred to as The Report) shows that the abundance, age structure, and growth of the Walleye population has changed dramatically, especially in recent years, to a point where very few spawning fish remain. Specifically, The Report shows the relative abundance of Walleye ($\geq 350\text{mm}$) in Lake Nipissing has declined and the age distribution shows very few age-3 and older Walleye. Please see The Report itself for more details on the current status of the fishery. The OFAH review of The Report (and data) focuses on how the fishery arrived at its current state.

The Role of Fishing Mortality in the Lake Nipissing Walleye Fishery

Walleye population data for Lake Nipissing shows that overexploitation is a contributing factor to the current status of Walleye. The data shows that there are clear differences in fishing mortality resulting from recreational angling and First Nation commercial gill net harvesting; however, The Report does not adequately illustrate or describe these differences, because it presents fishing mortality from each fishery together as a single factor. **The OFAH strongly recommends that recreational angling and First Nation commercial gill net harvesting cannot be grouped together and that fishing mortality should be explicitly separated into recreational and commercial categories to analyze the fishery.** To illustrate key differences between recreational angling and commercial gill net harvest of Lake Nipissing Walleye, OFAH staff created a series of graphical figures using the data presented in The Report. Overexploitation by the commercial gill net fishery has been identified as a major contributing factor with a harvest that has been 3-fold greater than the angler harvest on average since 2005 (Figure 1).

Lake Nipissing Recreational Angling (1998-2011): The Untold Story

A primary concern with The Report is that it does not adequately illustrate the effects of regulatory changes to angler effort and harvest on Lake Nipissing. Anglers have experienced significant restrictions since 1998 on Lake Nipissing. In 1999, the MNR introduced a suite of restrictions that included shorter open water (6 weeks less) and winter (2 weeks less) seasons, lower creel limits (from 6 to 4 Walleye), and a protected slot (400-600mm) during the open water season (from no size limit). In 2005, anglers were further restricted when the protected slot was also extended to the winter season on Lake Nipissing. There was a greater than 40% reduction in annual angler effort after the 1999 regulation changes, which was particularly evident for the open water fishery where the slot was introduced (63.5%; Figure 2).

In addition to a decline in angler effort, there was a large decrease (greater than 60%) in the number of Walleye harvested by anglers following the 1999 regulatory changes (see Figures 3 and 4). Figure 3 also separates the time series into three distinct periods (based on recent regulation changes described above) and illustrates the average annual angler harvest during each. Figure 3 shows clear reductions in the Walleye harvest following each of the 1999 and 2005 regulation changes. Following the 1999 regulation changes, there was a more than 60% reduction (72.3% for the open water fishery; 29.3 for the winter fishery). In the 7-year period following the last regulatory restrictions (since 2005), anglers have harvested 75% (or 102,313) fewer Walleye on average than they did prior to 1999.

The recreational angling data shows that the restrictions imposed on anglers since 1999 have had dramatic effects on overall effort and harvest, as well as the size-class distribution of harvest (Figure 5). The establishment of a protected slot was intended to reduce angler harvest, especially of the spawning stock biomass, because it is believed that *"The critical factor that contributes to year class strength production is the presence of sufficient adult spawning fish in the population."* Figures 5 and 6 clearly show that the protected slot has reduced the angler harvest of larger Walleye.

Lake Nipissing First Nation Commercial Gill Net Fishery

Harvest reporting

There is a lack of detailed information on the commercial gill net Walleye harvest in Lake Nipissing. Without an accurate knowledge of the harvest, it is difficult to understand changes in Walleye stocks over time. In the MNR 2007-2010 Interim Fisheries Management Plan, it states that “*Since 1999, no annual harvest data has been received from Nipissing First Nation. This has presented serious management challenges.*” Although it appears that the level of harvest reporting has improved in recent years, there are still serious deficiencies associated with unreported harvest, as well as the way harvest is reported. For example, the bulk weight of harvested Walleye for 2010 and 2011 does not provide any information on the number and size-class structure of the Walleye that are harvested.

Current Regime

The MNR developed an Aboriginal Communal Fishing Licence (ACFL), which established regulations related to harvest reporting, net marking and harvest quotas. This licence was not accepted by the Nipissing First Nation. Instead, the Nipissing First Nation established a set of “Fisheries Laws” in 2005. Although these “Fisheries Laws” adopted some of the principles of the MNR licence (e.g. moratorium on gill nets during the spawning season), the initial harvest quota limits were 50% greater than those recommended in the ACFL, leading the MNR to state that the harvest quota is “*not biologically justifiable.*” These initial quotas were based on previous harvest levels and not on biologically defensible criteria that are representative of Lake Nipissing Walleye stocks or the desired state/condition to optimize all fisheries (i.e. subsistence, recreational and commercial). Although a quota adjustment protocol was established, it relied on the arbitrary initial quota as a baseline, subjective interpretations of what constitutes a “favourable” stock assessment and adjustment by increments of 10%.

Conclusion

For more than a decade, the MNR has stated their concerns regarding the sustainability of the Lake Nipissing Walleye fishery. In response, the MNR has restricted the recreational fishery, yet they have not imposed any of their own recommended restrictions on the commercial fishery (Appendix A).

Our graphical figures illustrate that anglers have significantly reduced their: 1) overall harvest (Figures 3 and 4); and 2) harvest of spawning stock biomass (Figures 5 and 6).

For 13 years, anglers have sacrificed these recreational fishing opportunities on Lake Nipissing with the hope of achieving a more productive Walleye fishery for the future. During the same time, fishing guides, tourist outfitters, ice hut operators, bait dealers, and other small businesses have also suffered due to the loss of socio-economic benefits associated with those opportunities.

Thirteen years of additional angling restrictions and sacrifice by the recreational fishing community have resulted in a Walleye fishery that is in a worse state now than it was prior to the regulatory changes. The continued exploitation of an unregulated commercial gill net fishery has overharvested the Lake Nipissing Walleye resource to its current state, where even their arbitrary quota limits are not achieved (Figure 7).

OFAH Staff Recommendations

The Ontario government needs to immediately suspend all commercial gill netting, and the commercial gill net Walleye fishery in Lake Nipissing must be regulated with biologically defensible quotas, size limitations, and seasons, and include mandatory reporting for all Lake Nipissing Walleye fisheries (commercial, recreational, subsistence/ceremonial), prior to any consideration of further restrictions on recreational Walleye angling.¹

¹ The life-history data for Lake Nipissing Walleye presented in The Report indicates that the current protected slot size for the recreational fishery may no longer be an appropriate regulation.