

Lake Nipissing Fisheries Management Plan Update 2020

By: Paul Cormier

I recently attended a Lake Nipissing Fisheries Management Plan (LNFMP) meeting, scheduled in North Bay at Ministry of Natural Resources office at on Feb. 6, 2020, as a representative of the Upper French River Cottagers Association. The meeting was held to review the progress of the LNFMP originally set in motion in the spring of 2015. The meeting focused on changing regulations based on historical evidence for Walleye, Pike and Muskellunge population, for the spring/summer of 2021.

As you may recall, the focus of the regulation's changes in 2015 were slot size and catch limits designed to protect the immature Walleye biomass in Lake Nipissing. The slot size and catch limits were modified in 2015 to (Sportsman License) 2 fish only over 18.1". The LNFMP objectives for walleye management were to rebuild the walleye biomass in Lake Nipissing to healthy levels (4.6 kg/ha) in 10 years, rebuild the age structure of the population to include healthy levels of spawning sized walleye and decrease juvenile (30-45 cm) mortality and increase recruitment into the spawning stock. In 2015, Ministry of Natural Resources and Fisheries (MNR) committed to review the fishing regulations and the model used to manage the Walleye population (RAMJAM model) 5 years after implementation.

In attendance were key stakeholders, scientists and MNR staff. MNR presented an overview of historical biomass data for Lake Nipissing up to and including the fall of 2019 on the three fisheries, Pike, Walleye and Muskellunge. The data regarding walleye showed that, as a result of the Fisheries Management changes enacted in 2015, the walleye biomass has undergone a significant recovery. The data however also revealed the Walleye population appears to have stagnated in biomass and growth. This "stagnation" or "stockpiling" of walleye in a particular size category seemed to suggest that the walleye biomass had adapted to a more healthy population and slowed their growth rate down. Previously walleye had been growing more rapidly as a result of the biomass trying to respond to a population under stress. MNR also advised the LNFMP committee that there is now enough data (continuous time series) to use a more sophisticated modelling procedure for management of the Walleye fishery, using the Bayesian Model.

After a lengthy discussion about the stock piling effect, (many different year classes staying in the 300 to 45 size group) and a review of all the data for the last 5 years on Lake Nipissing fishery for walleye, the LNFMP committee voted to recommend revisions to the fishing regulations for the spring of 2021. It is important to note that this vote is simply a recommendation which will be vetted by the MNR over the coming months after consultation with the public and MNR senior administration. The approved recommendation was to change the slot size for 2021 to a narrow fishable slot for walleye of 400 mm (15.748 inches) to 450 mm (17.165 inches). The two fish limit has been maintained (sportsman license) in this recommendation. There are many fish in this class due to the stock piling effect. This change is seen as a means of protecting the larger spawning walleye that we have carefully been shepherding through the age-class structure over the past 5 years.

We also reviewed pike biomass data and noted that the pike population appears to be in decline on Lake Nipissing. After reviewing the data and through discussions by the Committee we voted to recommend altering the current slot size and fish limits for pike in Lake Nipissing to encourage growth of larger pike. Our recommendation was to proceed with a maximum limit of 4 fish (sportsman license) and a slot size of 700 mm (27.5519 inches) to 900 mm (35.4331 inches), with only 1 allowed over 900mm.

We also reviewed data on Muskellunge in Lake Nipissing. It was determined that Lake Nipissing has a unique Muskellunge population that has potential to achieve the status of a destination Musky fishery. Lake Nipissing Muskellunge reach 1372mm (54 inches) in less than 20 years and they can reach the weight of 50 lbs. during that 20-year period. To protect this slow growing fishery the LNFMP committee recommended that we increase minimum size limit for one keeping fish of 54" (1372 mm).

These changes must go through a lengthy consulting period over the coming months and the final determination will be shared once the process is complete in late 2020.