

ONTARIO FEDERATION OF ANGLERS & HUNTERS



Ontario Conservation Centre

P.O. Box 2800, 4601 Guthrie Drive, Peterborough, Ontario K9J 8L5
Phone: (705) 748.6324 • Fax: (705) 748.9577 • Visit: www.ofah.org • Email: ofah@ofah.org

OFAH FILE: 422/452
May 11, 2021

Ms. Kim Tremblay
Management Biologist
North Bay District
Ministry of Natural Resources and Forestry
3301 Trout Lake Road
North Bay, Ontario
P1A 4L7

Dear Ms. Tremblay:

Subject: Fisheries Management Zone (FMZ) 11 and Lake Nipissing fishing regulation proposed changes

The Ontario Federation of Anglers and Hunters (OFAH) is Ontario's largest, non-profit, fish and wildlife conservation-based organization, representing 100,000 members, subscribers and supporters, and 725 member clubs. We appreciate the opportunity to provide comment on the Ministry of Natural Resources and Forestry's (MNRF) proposed changes to the 2022 fishing regulations in Fisheries Management Zone (FMZ) 11 and Lake Nipissing and provide the following detailed comments for consideration.

Aurora Trout Lakes in FMZ 11

The OFAH is supportive of the proposal to create a year-round sanctuary (no fishing would be allowed) on Little White Pine Lake, Little Aurora Lake, Aurora Lake, and the connecting streams within Lady Evelyn Smoothwater Provincial Park. However, this management action must be done in concert with a variety of strategies to ensure the ongoing sustainability of this unique ecological component to the region's biodiversity. Alongside sanctuaries, the OFAH would like to see the MNRF and partners, including the Ministry of the Environment, Conservation, and Parks (MECP) and Laurentian University's Cooperative Freshwater Ecology Unit, remain committed to fulfilling the management actions to meet Aurora Trout objectives. To this, we encourage the continued use of 7/8th back-cross Aurora Trout for PGT fisheries and call on the government to monitor the effectiveness of using back-cross Aurora Trout, as well as exploring stocking opportunities in other candidate lakes and FMZs.

There are socio-economic and ecological justifications for conserving Aurora Trout. The OFAH does not want to see this unique angling experience fall by the wayside now that species at risk and parks have transferred to MECP, and Aurora Trout has been delisted as an endangered species. It is our understanding the current management strategy will reach its end-of-life by 2023, marking an opportune time to conduct an evaluation (i.e., "report card") on the objectives, indicators, benchmarks, targets, management actions, and monitoring strategies for the Aurora Trout. Assessment data should also include creel surveys to help determine how well the back-cross fish have improved fishing in the PGT lakes. This data would be useful in updating and moving forward with a management plan for beyond 2023. In conjunction with the FMZ 11 Advisory Council, we would like the government to modernize and develop a new management strategy for Aurora Trout that ensures adequate funding and resourcing to deliver all aspects of the plan.

Lake Nipissing Walleye

In the Fisheries Management Plan for Lake Nipissing (MNRF, 2014), juvenile mortality was identified as the greatest barrier to the recovery of Walleye. Walleye below 46 cm needed protection to help ensure each individual has at least one reproductive event during their lifetime. For this reason, the minimum size-based regulation of 46 cm was implemented.

Recent fisheries surveys have shown improvements in the Walleye population since the regulation was first implemented in terms of increasing total numbers and biomass of juvenile fish in the lake. A regulation change is being proposed to help achieve the biological objectives for Walleye by continuing to increase biomass, protecting younger fish so they can mature and reproduce, as well as avoiding the harvest of mature individuals. The following regulation change is being considered:

- Harvestable slot size of Walleye between 40-45 centimetres (none less than 40 centimetres and none greater than 45 centimetres).
- Sport licence – 2 and Conservation licence – 1.

The OFAH appreciates the ongoing efforts to help in the recovery of the Lake Nipissing Walleye fishery. Following the recommendations of the Quantitative Fisheries Centre, moving away from the former Risk Assessment Model for Joint Adaptive Management to the Bayesian state-space model, demonstrates adaptive fisheries management and science-based decision making; that said, the OFAH does not support the regulation option being proposed.

The harvestable slot between 40-45 cm is extremely narrow and may be challenging to enforce. We often hear from our members and the broader angling community about their dissatisfaction towards protected and harvestable slots, so setting an unprecedented slot of 5 cm for Walleye will not be viewed favourably by anglers. Presented in the Bayesian Model Report (Morgan et al. 2019), the MNRF has landed on one of the most restrictive candidate angling regulations proposed for Lake Nipissing Walleye. We agree, in theory, this regulation will help achieve the biological objectives for Walleye, particularly in the conservation of juvenile and mature fish, but two other options should be brought forward, including:

1. 40 to 50 cm fishable (harvest) slot size limit with 2 fish creel limit.
2. 45 to 55 cm fishable (harvest) slot size limit with 2 fish creel limit.

Researchers specializing in Walleye population dynamics have indicated the difference in biological outcomes between a 5 cm slot and 10 cm would be quite small and potentially not detectable through the Fall Walleye Index Netting assessment program. The marginal gains for achieving biological objectives may not outweigh the losses and negative impacts on recreational fishing, local communities (ice hut operators, cottage rentals, tackle shops, etc.), and provincial licence revenue that goes back into fish and wildlife management. Therefore, there should be flexibility around the size-based regulations, so long as a precautionary management approach is maintained, and total fishing effort is not extremely high or significantly increased. Both 10 cm harvestable slots noted above gives anglers a reasonable chance at harvesting fish, is simpler for anglers, and have similar outcomes for the fishery according to the Bayesian Model Report (Morgan et al. 2019). We hope the MNRF gives more consideration to these regulations in lieu of unnecessarily restrictive, 5 cm harvestable slots.

Lake Nipissing Northern Pike

Over the past several decades, the Lake Nipissing Northern Pike (pike) fishery has experienced significant declines in biomass, catch rates, and harvest levels. Despite having a reduced catch-and-possession limit introduced in the late 90s, a size-based regulation first implemented over a decade ago, and more restrictive regulations that followed, it appears pike have been unable to recover.

The current regulation consists of a catch and possession limit of 4, but not more than 2 greater than 61 cm and not more than 1 greater than 86 cm (under a Sport licence). The first regulation option being proposed consists of the same catch and possession limit, but not more than 1 greater than 60 cm and none greater than 85 cm. This is a slight difference from the current regulation, and without having any models to test the performance of this option, the outcomes for the pike fishery are unclear. Considering the lack of recovery to date, making minute changes such as this may not have a significant effect on the pike fishery. For instance, high-quality trophy pike continue to be rare, and the average size of harvested pike is only 55 cm long. Therefore, due to the apparent low numbers of larger individuals, the added protections in this regard may not have the desired population-level effect on the fishery. Because of these unknowns and uncertainties, the OFAH does not support this option.

Similarly, the second option consists of a catch and possession limit of 4, but includes a protected slot between 70 and 90 cm and only one fish permitted over 90 cm. A review of this regulation by the MNRF (2006) identified mixed results with pike populations in Northwestern Ontario, so it is doubtful if this regulation will benefit the Lake Nipissing pike fishery. As such, the OFAH is unsure if this option will provide the conservation measures needed to help in the recovery of pike, and again, we highlight the need to test the performance of various regulation options using models prior to implementation.

The OFAH appreciates the collaborative efforts and information flow between the MNRF and the Nipissing First Nations (NFN), but the ministry needs to enhance this partnership to better understand the size distributions and biomass of pike being commercially harvested. The OFAH recommends conducting a review of historical commercial harvest of pike in relation to gill net mesh size, and moving forward, full documentation and complete modelling of commercial catch sampling that includes the size distribution of pike that are being harvested. More robust information needs to be collected on the commercial fishery that includes, at a minimum, fully processing subset samples of commercially harvested pike on an annual basis. This will help in identifying sustainable annual targets and the most appropriate management actions to ensure the ongoing productivity of the fishery.

Scale age data has been used for analysis provided in the MNRF's report on The Status of Lake Nipissing Northern Pike and Associated Fisheries 1967 to 2018 (Morgan, 2019). After discussions with leading pike experts, we agree this type of data can be untrustworthy and misleading at times, and for such an extended time series, there is potential for multiple unvalidated age interpretations. Among other things, accurate age data is critically important for calculating fishing and natural mortality rates. Similarly, the degree of variance in size-at-age data is not commonly seen in pike populations and could be indicative of an underlying problem with the age interpretation procedures. We recommend the MNRF consider using cleithral ageing structures to improve data accuracy, interpretation of the data, and thus, the overall understanding of the pike fishery. A large amount of scale age data will not make up for a smaller, more accurate set of cleithral age data.

The OFAH is willing to explore more aggressive regulation measures for pike, but as previously mentioned, models should be used prior to the implementation of a regulation, improvements are needed with commercial catch sampling data, and cleithral data should be used in lieu of scale age data. It may also be advantageous to form a Lake Nipissing Northern Pike Task Group that includes researchers, representatives from NFN, government, and stakeholders like the OFAH to assist in the recovery of pike. Lastly, with these recommendations in mind, the OFAH calls on the MNRF to report on the findings and outcomes of these management actions and publicly post the document to either the FMZ 11 website or the Environmental Registry of Ontario.

Lake Nipissing Muskellunge

The MNRF is proposing the following regulation options for Lake Nipissing Muskellunge:

1. Maintain status quo: Minimum size limit; Sport licence - 1; must be greater than 122 centimetres (48 inches), and Conservation licence – 0.
2. Change regulation: Minimum size limit; Sport licence - 1; must be greater than 137 centimetres (54 inches), and Conservation licence – 0.

Muskellunge anglers are reporting catching trophy-class fish and assessments indicate that Lake Nipissing can produce Muskellunge at or above 137 cm. The OFAH supports option 2 and the regulation change from the current minimum size limit of 48 inches to 54 inches with a catch-and-possession limit of 1 under a Sport licence.

We would also like to draw to your attention the limitations, ineffectiveness, and confusion surrounding section 12 of the Ontario Fishery Regulations (*Release of Fish*). This long-standing rule is an unreasonable extension that goes beyond the intent of the law and makes it illegal to delay the immediate release of fish for several reasons, including catching a fish that is of a prohibited size. Delaying the immediate release to weigh, measure, and/or take a photo of a fish could be considered illegal. We acknowledge that while convictions under the current regulations are possible, it is generally enforced with discretion meaning that well-intended anglers (i.e., those measuring a fish for compliance) are not being charged for this offence. That said, if an angler were to delay the release of a Muskellunge under 54 inches by taking a photo, they would be in contravention of the regulation, could be processed under the federal court system, and if convicted, be charged and have a criminal record.

In the spirit of angling, the MNRF should consider modernizing the regulations to permit an angler to weigh, measure and/or quickly take a photo, but still maintain that fish must be released in a manner that causes the least amount of harm. Other jurisdictions, such as New York State’s Department of Environmental Conservation, achieve this by using the following wording: “*Measuring, weighing and photographing of the fish are permitted as long as the fish is not removed from the water for an extended period or handled in a manner that could cause it harm.*” Making changes to the wording in this way will modernize the regulations in a way that benefits the angling community without compromising the conservation of Ontario’s fisheries.

Lake Nipissing Smallmouth and Largemouth Bass

Unlike many other areas in FMZ 11 where bass have been introduced, it is widely believed both Smallmouth and Largemouth Bass are native to Lake Nipissing via the Great Lakes watershed. In those introduced waters, the OFAH supports more liberalized regulations; however, applying a similar management strategy for Lake Nipissing could have negative consequences for the bass fishery.

Conservation concerns with angling seasons that overlap sensitive spawning and nesting periods of bass are well documented for both catch and consumption and catch and release angling. The largest male bass are the most equipped at providing parental care for their offspring and typically have the greatest contribution to the year-class. They are also susceptible to angling and easily targeted, because of their more aggressive behaviour. Option A will undoubtedly attract tournaments and a significant number of the largest bass that contribute the most to the fishery will not spawn successfully, because they will be removed from their nests and held in livewells. One tournament boat during the sensitive nesting period can put a large amount of selective pressure on bass fisheries that can result in the biggest, most aggressive, and fecund individuals being pulled from their nests. A notable researcher in Ontario pointed out, “nothing good can come from fishing bass off their nests.”

Catch and release angling during the nesting period for bass can have negative fisheries-induced evolutionary consequences as evidenced by Philipp et al. (2015). Over time, this leads to populations becoming dominated by bass that are less aggressive and less capable at providing parental care. Similarly, Option B could succumb to these same generational shortfalls, wherein bass become more difficult to catch, the quality of the fishery diminishes, and there is less recruitment.

Walleye are in a state of recovery and it appears pike are in need of a recovery strategy. If bass are also put at risk, then the fishery will be in the same position as these other sportfish. In a journal article that looked at the ecology and timing of bass in FMZ 20 (Lake Ontario and the St. Lawrence), Dr. Bruce Tufts highlights, “consistent removal of the reproductive contribution of the largest individuals could have important long-term implications” (Tufts et al. 2019). We acknowledge these aquatic ecosystems are vastly different from one another, but the argument to conserve critical reproductive components of a fish population is fundamental to sound fisheries management regardless of the waterbody. The Lake Ontario experience may not be appropriate for directing bass management in, for example, Lake Nipissing. However, the research helped guide bass regulations in FMZ 20 by avoiding spawning and nesting periods using an early season end date of May 10th and splitting the bass season to better conserve Smallmouth Bass. These developments came from a strong, principled concern from stakeholders and the MNRF. Until further studies are done on the implications of an early season regulation for bass on Lake Nipissing, as well as conducting additional consultation and engagement with the advisory council on these findings, we believe status quo should be maintained.

Lake Nipissing-Lavase River Boundary Definitions

The OFAH supports the proposal to clarify and define the boundaries between Lake Nipissing and the Lavase River. Using the boat launch on the Lavase River to describe where the Lavase River ends and Lake Nipissing begins provides a clearly defined, physical landmark that should help with angler compliance and enforcement. Additionally, we recommend the MNRF post additional signage at this boundary to enhance awareness of the regulation differences in Lake Nipissing and within the Lavase River.

Closing Remarks

In summary, the Aurora Trout has long been an integral part to the socio-ecological fabric of the FMZ 11 angling experience that should be maintained using the proposed sanctuaries, but also through renewed commitments by government and partnership organizations. Walleye in Lake Nipissing are now at a turning point in their recovery and the size limit should include exploring larger harvestable slots. But while Walleye appear to be in a state of recovery, pike may require more aggressive management actions and strategies to help re-establish populations. A larger minimum size regulation for Muskellunge makes sense, but more catch-and-release fishing further conflicts with the current regulatory limitations in the Ontario Fishery Regulations on the immediate release of fish. Furthermore, this issue will have similar implications if a harvestable slot for Walleye is pursued. The OFAH is not opposed to early seasons for bass, especially where bass are not considered to be native, but more studies and research should be done, and further conversations are needed with leading bass experts in Ontario prior to moving forward with a regulation change for Lake Nipissing.

We commend the MNRF for the continued consultation and engagement on regulation options for FMZ 11 and Lake Nipissing and would like to reiterate the importance of advisory councils and seeking input and feedback from stakeholders through these platforms. Councils are a critical component to the Ecological Framework for Recreational Fisheries Management in Ontario, are fundamental to provincial policy, and should continue to be a part of the fisheries management planning process. We look forward to future developments on these regulation proposals.

Yours in Conservation,



Adam Weir
Fisheries Biologist

AW/jb

- cc: OFAH Board of Directors
 OFAH Fisheries Advisory Committee
 Angelo Lombardo, OFAH Executive Committee
 Matt DeMille, OFAH Manager, Fish & Wildlife Services
 Mark Ryckman, OFAH Manager, Policy
 Chris Robinson, OFAH Manager, Conservation Programs
 OFAH Fish & Wildlife Staff

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