Proposed Regulation Change - Muskellunge Minimum Size Limit for Fisheries Management Zone 20

- Proposal: To raise the muskellunge minimum size limit in Zone 20
- From: 122 cm (48 inches) and 112 cm (44 inches) in the lower Niagara River
- To:
- 137cm (54 inches) for all of Zone 20

Issue

In 2005-2006, VHS (Viral Hemorrhagic Septicaemia) killed a large number of large mature muskellunge in the upper St. Lawrence River. This widespread die-off is a special concern, since this population and fishery is world-class, highly valued, and has been carefully managed to provide exceptional angling opportunities.



Description of Zone 20

- Lake Ontario and embayments
- Niagara River below the Falls
- Hamilton Harbour
- Toronto Harbour
- Bay of Quinte
 - St. Lawrence River to Quebec
- Lake St. Francis

Following the die-off, muskellunge angler diaries, provided by the Gananoque Chapter of Muskies Canada, were used to determine impacts. When pre- and post-VHS years were compared, the diaries suggested that approximately half of the mature population succumbed to the virus. In fact, it now takes anglers approximately 7.3 times longer than before the die-off to catch a muskellunge. Fisheries independent assessment data collected by the State University of New York confirm this decline (see figure below). Concerns about the decline of mature fish are reinforced by recent declines in juvenile (young of the year) muskellunge collected at nursery locations in the St. Lawrence River (see figure below). The decline in the numbers of spawning fish may have long-term effects on muskellunge abundance.

Following a standard, biologically-based procedure used in Ontario for examining muskellunge size limits using population growth rates, Dr. John Casselman - a recognized muskellunge expert - has advised the Zone 20 Fisheries Advisory Council that a new minimum length of 137cm (54 inches) should be implemented to protect the remaining spawning stock. Additional protection for large mature fish may improve reproductive potential and aid in population recovery. The Zone 20 Fisheries Advisory Council is supportive of seeking public consultation for the proposed regulation change. For more information on the impact of die-off and the use of population growth rates as a means of setting size limits, please visit the Muskies Canada website at www.muskiescanada.ca/news.php?article_id=70.



Catch of adult muskellunge in spring index trapnets (bars) and catch per unit effort of young of the year muskellunge in index seine net surveys (solid line). Data from the Thousand Islands Section of the St. Lawrence River (Farrel et al NYSDEC Lake Ontario Annual Report 2010).

Provide Feedback

The ministry is encouraging the public to provide feedback on the proposal.

Please send your comments May 4, 2012 to:

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