

Michipicoten Fisheries UPDATE

Presence or Absence of Lake Sturgeon in Dore River

December 2012

INTRODUCTION

Michipicoten First Nation has proposed to construct a small hydroelectric development on the Dore River. The Dore River is located near Wawa, ON and drains into eastern Lake Superior near the Michipicoten First Nation. The proposed hydroelectric development is located approximately 5km from Lake Superior, while Lake Sturgeon are restricted to the lower 135m of the river due to a natural barrier in the river.

Before advancing to the construction and operation phases of development, Michipicoten First Nation has requested the Anishinabek/Ontario Fisheries Resource Centre to conduct a two-week presence/absence research study in the Dore River to identify whether Lake Sturgeon existed in the Dore River system.

METHODS

Sampling was to occur in two three-day periods with one occurring in the spring (early June) and another in the summer (mid-July). Each sampling period would consist of six 8" to 12" mesh gill nets being set overnight in areas that represent potential Lake Sturgeon habitat (i.e. deep portions of the river, near the uppermost boundary, and at the



Dore River

mouth of the river).

Once Lake Sturgeon were captured, physical attributes were recorded (i.e. length, weight, girth, sex, maturity), genetic and ageing samples were also collected, and individual Lake Sturgeon were to be tagged with a Floy tag and two PIT (Passive Integrated Transponder) tags.

RESULTS

To increase the probability of capturing Lake Sturgeon, the two sampling periods were combined into one and the timing was focused on the spring spawning period.

A crew was out on the Dore River from June 7th — 12th, 2012. Gill nets, measuring



A Brook Trout caught in Dore River.

300 feet in length and ranging from 4" to 12" mesh, were set overnight at the mouth of the river and in Lake Superior where suitable netting conditions were available. A total of 14 nets were set overnight at the Dore River, however no Lake Sturgeon were captured.

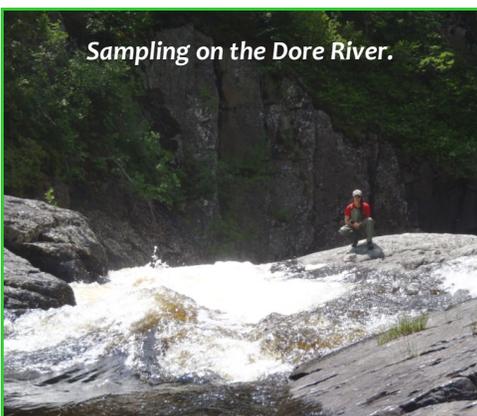
Water temperatures in the Dore River ranged from 12.2°C to 15.4°C during the sampling period. The optimum spawning temperature for Lake Sturgeon is between 13° and 18°C.

Other captured species included; Brook Trout (6 captured), White Sucker (16 captured), Lake Whitefish (1 captured), and Rainbow Trout (1 captured).

CONCLUSION

It is unlikely that Lake Sturgeon spawn or forage in the Dore River given that it is narrow, short, shallow, and mostly comprised of bedrock or large boulder substrate. Further work on the lower section of the Dore River should focus on assessing Brook Trout given that six individuals were captured during this study and community members from MFN regularly utilize this resource.

A full technical report is currently available from the A/OFC.



For more information on this or other fisheries projects please contact the A/OFC:

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