



SUMMARY REPORT

MISSISSAUGA FIRST NATION

Juvenile Lake Sturgeon Study

SEPTEMBER 2026

Introduction

Mississauga First Nation, the Ministry of Natural Resources, Mount Allison University, and the Anishinabek/Ontario Fisheries Resource Centre (A/OFRC) partnered to conduct a lake sturgeon (*Huso fulvescens*) movement project using acoustic telemetry. As part of this project, A/OFRC was responsible for capturing and surgically implanting acoustic tags in 10 juvenile and sub-adult lake sturgeon.



Paige Morningstar from Mississauga First Nation holding a juvenile lake sturgeon.

Methods

From July 6–10 and July 13–14, A/OFRC set 16 overnight gill nets along the north shore and below the Mississaugi Falls to capture juvenile and sub-adult lake sturgeon. Most nets had mesh sizes ranging from 4.5 to 8 inches and were set for approximately 24 hours.

Captured lake sturgeon were carefully sampled for length, weight, girth, Floy tag, PIT tag, acoustic tag, genetics, and blood. Following sampling, all lake sturgeon were safely released back into the lake or river.



The A/OFRC is a not-for-profit organization that serves as an independent source of information for communities within the Anishinabek Nation. The Centre provides information and recommendations for sustainable fisheries management, reports of stock status, evaluates stresses on fish populations and habitats, and offers technical support.



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Results

A total of 10 juvenile and sub-adult lake sturgeon were captured and fitted with acoustic tags. They ranged in total length from 395 mm to 1,165 mm. The majority of lake sturgeon were captured below the Mississauga River. Blood samples were collected from 7 of the 10 lake sturgeon, while genetic samples were collected from all 10. These samples were sent to Dr. Matthew Litvak from Mount Allison University for analysis.



Kruz Kohoko, A/OFRF Fisheries Intern, holding a juvenile lake sturgeon.

Conclusion

A/OFRF successfully completed its portion of the lake sturgeon movement project within the Mississauga River and along the North Shore. The information collected will help us better understand where juvenile and sub-adult lake sturgeon move throughout the system and identify areas that may be important for protection. Movement data will continue to be collected next year by other project partners, helping to build a better understanding of lake sturgeon habitat use within the system.



Bridget Juselius, A/OFRF Fisheries Intern, holding a juvenile lake sturgeon.

For questions or concerns, please contact:

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