

A/OFRC PROJECT SUMMARY November, 2024

EAST BASS LAKE— WAHNAPIITAE FIRST NATION

EAST BASS LAKE, BROAD—SCALE MONITORING SURVEY

INTRODUCTION

The Anishinabek/Ontario Fisheries Resource Centre (A/OFRC) in partnership with Wahnapiitae First Nation have successfully completed a Bathymetric survey, a Broad-scale monitoring (BSM) survey and standardized BSM water analysis in East Bass Lake during the late Summer of 2024. East Bass Lake is located on Wahnapiitae First Nation territory in Capreol, Ontario, and is classified as a fish sanctuary. The objectives of this project were to 1) generate a bathymetric map that illustrates depths and underwater topographic features of East Bass Lake, and 2) gain insight into the fish habitat and community of East Bass Lake.



East Bass Lake, Capreol, Ontario



METHODS

On September 17th, 2024, a bathymetric survey was completed using a HELIX 5 depth sounder.

From September 17-19th a Broad-Scale Monitoring Survey was completed. A total of 12 index nets were set around East Bass Lake. Predetermined stratum of 1-3m, 3-6m, 6-12m & 12-20m were targeted to maximize catch diversity. During this survey, Large mesh (NA1) and small mesh (ON2) multi-panel BsM index nets were used for overnight sets. The captured fish were measured & weighed, aging structures were harvested and sent to an aging lab.

Water sampling of East Bass Lake was completed on September 19th, 2024. A/OFRC recorded Water temperature and Dissolved Oxygen content using a YSI meter. In addition, water transparency was measured using a Secchi disk. Data was collected from the deepest point of East Bass Lake.

RESULTS

An underwater Bathymetric map of East Bass Lake was successfully created. A/OFRC utilized the map to target stratum while deploying index nets.

The Broad-scale monitoring survey was successful. Numerous species were identified. All fish captured were processed and aging structures were sent to an aging lab. Harvestable fish were filleted and donated to Wahnapiitae First Nation. The species that were captured during the Broad-Scale Monitoring Survey include: 92 Golden Shiners (*Notemigonus crysoleucas*), 59 Yellow Perch (*Perca flavescens*), 25 Smallmouth Bass (*Micropterus dolomieu*), 16 Pumpkinseed (*Lepomis gibbosus*), 13 Common Shiners (*Luxilus cornutus*), 10 Rock Bass (*Ambloplites rupestris*), 8 Cisco (*Coregonus artedii*), 7 Brown



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Bullhead (*Ameiurus nebulosus*), 2
Bluegill (*Lepomis macrochirus*), 2
Northern Pike (*Esox lucius*) and 1
White Sucker (*Catostomus commersonii*) (FIG.1).

In addition, water analysis was collected from the deepest point of East Bass Lake measuring approximately 21m deep (or approximately 69 feet). Water analysis data will be available in the upcoming full-length report.

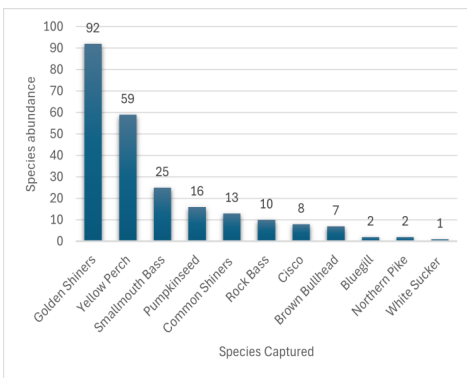


FIG1. Fish captured in BSM index nets on East Bass Lake (Capreol, Ontario) in September of 2024.

CONCLUSION

From September 17—19th, 2024, A/OFRC in partnership with Wahnapiatae First Nation completed a Bathymetric Survey, a Broad-scale Monitoring (BSM) Survey and standardized BSM water analysis on East Bass Lake in Capreol, Ontario. Equipment such as a HELIX 5 depth

sounder, large mesh (NA1) and small mesh (ON2) multi-panel BsM index nets, a YSI Meter and a Secchi Disk were used to complete this project. With the data collected, A/OFRC was able to create a Bathymetric map of East Bass Lake, gain insight on species diversity and their abundance as well as archive completed water analysis data for future reference.

The data collected will contribute towards a more in-depth understanding of the habitat and fish community in East Bass Lake. A detailed full-length report of this study will be available in the Winter of 2025.



For more information on this or other fisheries projects please contact:
Anishinabek/Ontario Fisheries Resource Centre
191 Booth Rd, North Bay, ON P1A 4K3
phone: 705-472-7888 website: www.aofrc.org email: aofrc@aofrc.org