

Wahnapiatae Fisheries UPDATE

Lake Survey on Bass Lake

February 2013

INTRODUCTION

Wahnapiatae First Nation (WFN) is surrounded by several industrial (mining and forestry) activities that could potentially have a negative impact on the local environment including Lake Wanapitei and Bass Lake.

Bass Lake is part of a protected sanctuary (self-imposed by Wahnapiatae First Nation) where motorized vehicles, fishing and hunting are not permitted. Having little to no information on this waterbody, and it being surrounded by mining and forestry operations, Wahnapiatae First Nation felt it would be a beneficial and opportune time to collect baseline data for future monitoring activities. As such, Wahnapiatae First Nation, in cooperation with the Anishinabek/Ontario Fisheries Resource Centre, conducted a Lake Survey on Bass Lake during the summer of 2012.

To engage WFN community youth, summer camp participants were brought in to participate in the collection of lake survey data.

METHODS

Provincial lake survey methods were followed and included shoreline and littoral zone (area of lake where sunlight penetrates to the bottom) mapping,



A beaver dam on Bass Lake.



Wahnapiatae First Nation students get a hand at weighing fish from Bass Lake.

bathymetric (water depths) mapping, water chemistry characteristics, and sampling of the fish community.

Four lake survey nets were set and fished for 24 hours. All sport fish were biologically sampled while all other fish were identified and measured for fork length. Minnow traps were placed in nearshore areas and fished overnight to sample foraging fish species. Shoreline and littoral surveys were conducted to describe habitat characteristics; and a collection of secchi depths, pH and dissolved oxygen profiles were used for lake classification. Bathymetric mapping was also conducted in order to generate depth contour maps.

RESULTS

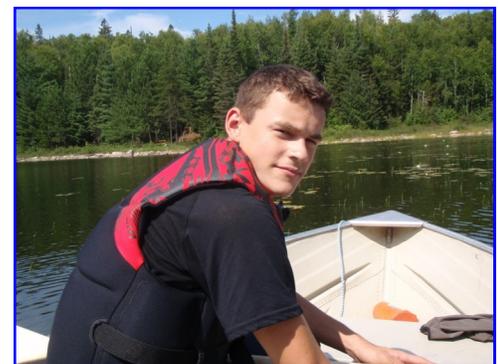
A/OFRC Biologist Kim Tremblay lead the summer camp students through a discussion on why it's important to do surveys on lakes like Bass Lake. Before

the survey nets were set, the kids correctly predicted that Smallmouth Bass and Northern Pike would be found. They were also pleasantly surprised to see the variety of other fish species like, Common Whitesucker, Brown Bullhead, Pumpkinseed, Ciscoe and Rock Bass present in the lake.

The students then took part in hands-on learning where they took turns sampling the fish and recording data. Each student took length measurements, weight, and looked inside the fish to find out the sex and what the fish were eating. There were a lot of great questions like "Do fish have brains?" and "Will the barbs on Brown Bullheads sting you?" as they were able to touch the fish and find out for themselves. The students then set minnow traps and identified the fish they caught the next day. Students talked about water quality features and took pH readings to see how healthy Bass Lake is. Afterwards, they collected aquatic insects through the use of kick and D-nets. The presence of different insects indicates different conditions in regards to the health of the lake.

CONCLUSION

A full technical report is currently being drafted and will be finalized in 2013.



WFN member Nick Recollet worked as part of the lake survey crew.



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

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