

# Bob Lake Benthic Assessment

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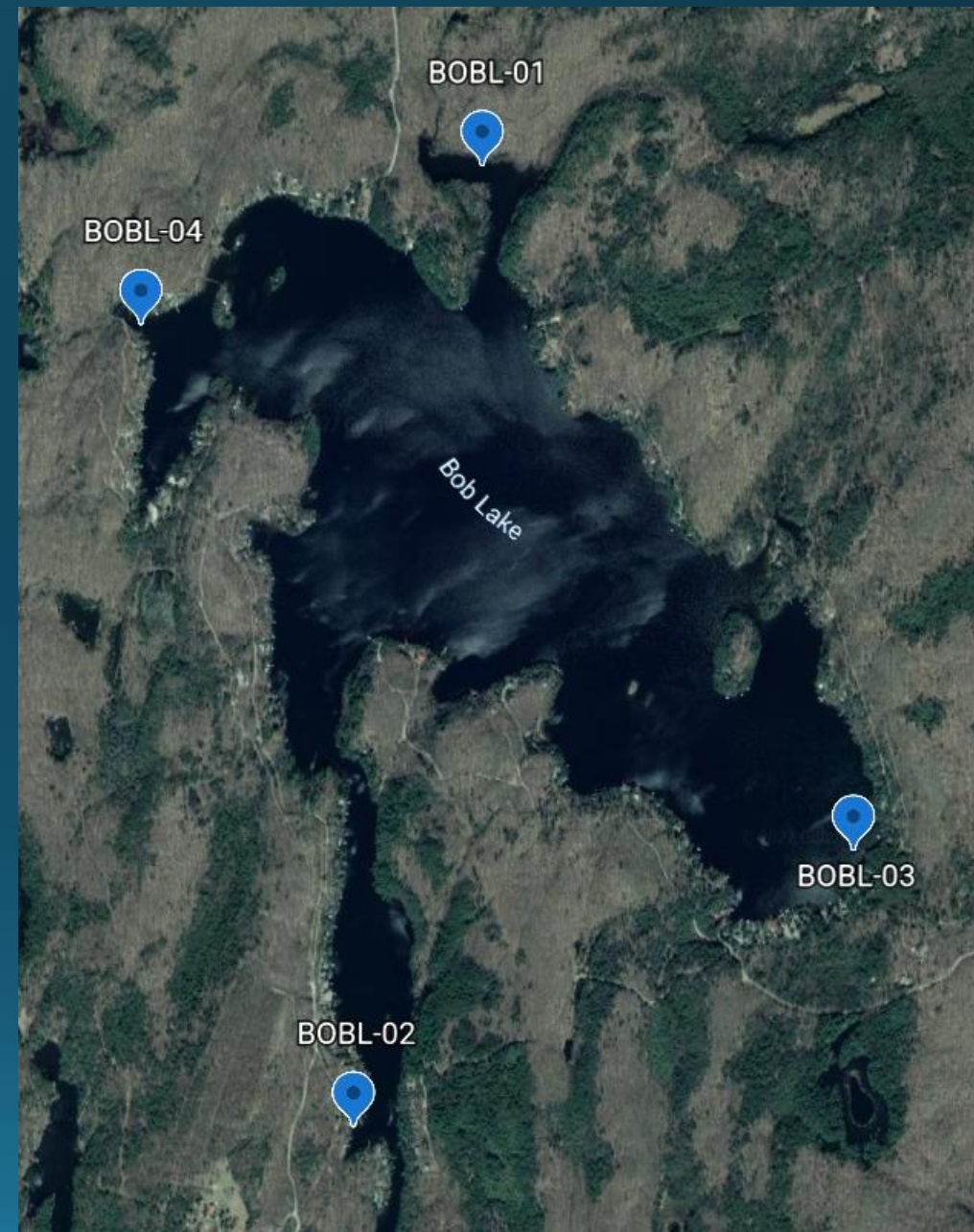
# Benthic Biomonitoring

Following the Ontario Benthos Biomonitoring Network (OBBN) protocol, **800** benthic macroinvertebrates were sampled and identified from **4** sites on Bob Lake.

These small, spineless organisms can be used to identify areas of pollution or disturbance within aquatic habitats and can provide insight to the health of your lake.

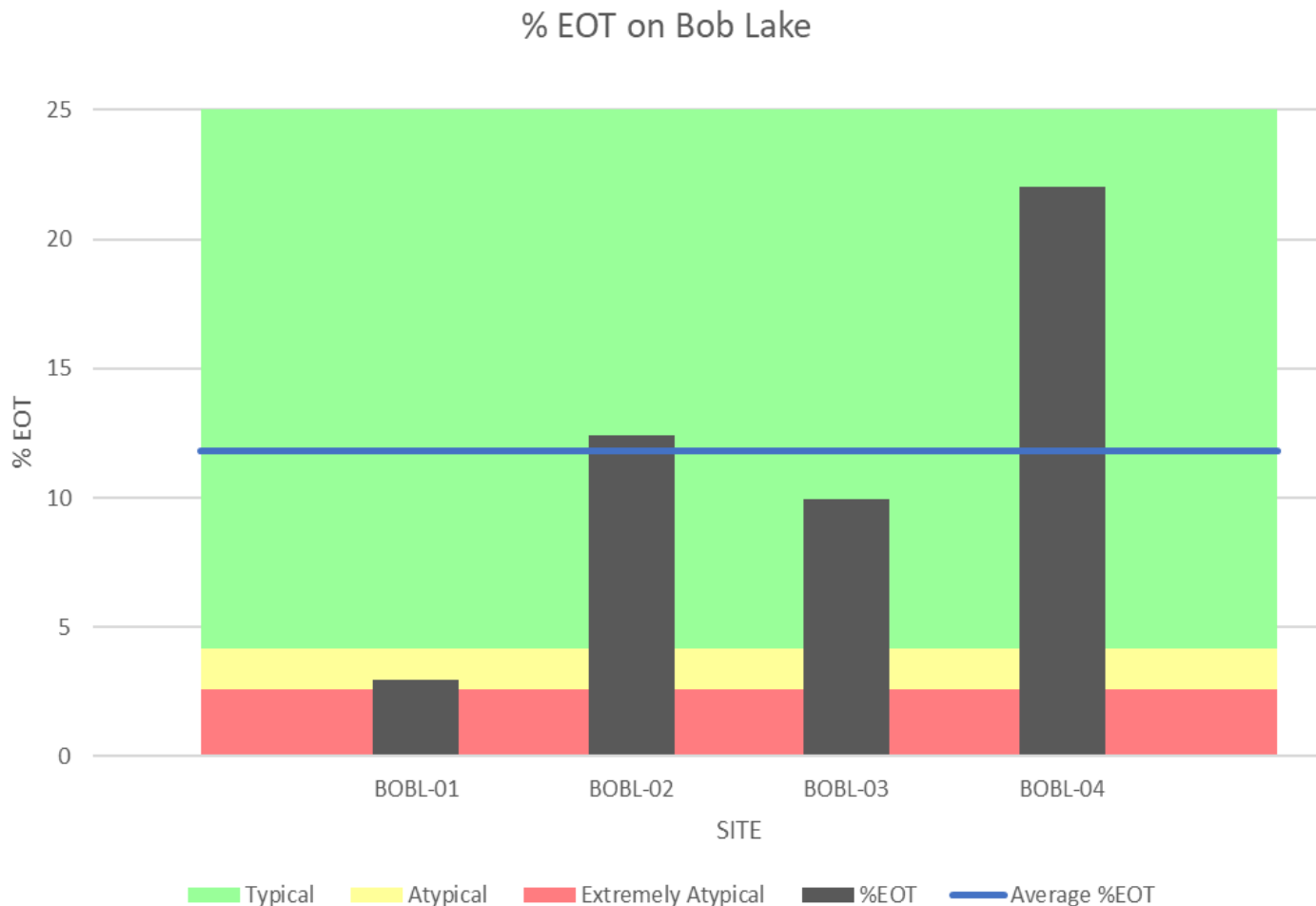
In addition, water chemistry parameters and shoreline features were assessed at each site.

Water Chemistry				
Site	BOBL-01	BOBL-02	BOBL-03	BOBL-04
Temp (°C)	16.6	18.3	17.7	16.1
DO (mg/L)	8.5	9.1	8.5	8.6
Conductivity (µS/cm)	19.4	41.6	38.5	28.5
pH	7.05	7.43	8.11	7.22



Bob Lake Sample Sites - 2021

# Analysis



*Ephemeroptera* (Mayflies), *Odonata* (Dragonflies), and *Trichoptera* (Caddisflies) are used as indicators due to their low tolerance of pollution and contaminants.

The % EOT at each site is compared to the normal range found within Haliburton County lakes.

BOB-01 has a lower % of EOT species.

- May be due to the drawdown before sampling and mucky substrate at the site. We should keep an eye out here for future trends.

Bob Lake % EOT average is well within the typical range and indicates healthy waters.

# Next Steps

The Woodlands and Waterways EcoWatch (U-Links program) goal is to fill the environmental data gap in Haliburton County. We want this benthic data to be used by decision makers to implement policies for environmental conservation when needed.

5 years of data is needed for a baseline to determine any trends in lake health.

- U-Links will continue to sample Bob Lake with the help of Trent/Fleming students and community citizen scientists for the next 4 years.
- **Volunteer are welcome!**

In order to protect your waters and shoreline please practice responsible water recreation:

- regularly maintain septic systems to reduce nutrient loading into the water
- limit wakes where necessary to minimize shoreline erosion
- re-naturalize your shorelines to provide habitat and limit runoff
- clean boats and equipment before travelling to new locations to prevent the spread of invasive species and pathogens



Innalyn Guindon collecting bug samples on Bob Lake 2021