

Supplementary File 2. Sampling protocol sent to volunteer citizens of Adopt a Lake.



Sampling Procedure for Algae Blooms

Equipment provided

- Three pairs of gloves
- Two 125 mL square bottles (toxin analysis)
- Two 500 mL wide mouth bottles (nutrient analysis)
- Three Eppendorf tubes (genomic analysis)
- Three single use sterile wood spatula (genomic analysis)
- One Icepak (please send back)
- One 6-way test strips kit (please send back)
- Thermometer
- One field sheet
- One sheet with the returning address



125mL Square Bottle for Toxin Analysis



500mL Wide Mouth Bottle for Nutrient Analysis



Eppendorf for Genomic Analysis



6-way test strips kit

Sample Collection

The water samples should be taken as near as possible to the algae bloom without disturbing the bottom sediments. Each sample should be collected twice. Use the nitrile gloves that are provided in the kit. Fill the sample bottles as indicated on page 2.

Storage and Transport to Laboratory

All samples should be stored in a cooler with freezer pack while in the field. The toxin and genomic samples as well as the icepack provided should be frozen overnight and the nutrient samples should be kept in the refrigerator until shipment. Samples should be ideally shipped the day following sampling or as soon as possible. Please do not forget to send the 6-way test strips kit back.

ATRAPP - Algal Blooms, Treatment, Risk Assessment, Prediction and Prevention Through Genomics
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Sampling for toxin analysis

- The sample bottle and cap should be rinsed three times with the site water in the immediate vicinity of the collection site, prior to sampling.
- Fill the bottle without touching inside of cap or bottle up to the grey line (not more).
- Cap the containers and tighten securely.
- Freeze the two bottles and the icepak provided overnight.



125mL Square Bottle for Toxin Analysis

Sampling for nutrients analysis and other measures

- Rinse the bottle, three (3) times with lake water prior to collection.
- Fill the bottle without touching inside of cap or bottle almost to the top.
- Use the 6-way test strips provided and record **only** the Alkalinity, pH and Total Hardness values on the field sheet.
 - Keep wet fingers out of the bottle.
 - Close cap tightly after removing strip.
 - Immerse strip for 2 seconds in the nutrient bottle.
 - Remove with pads face up and shake to remove excess water.
 - Read results immediately.
 - Send the remaining 6-way test strips back in the cooler with samples.
- Rinse the bottle, three (3) times with lake water prior to collection.
- Repeat the last two steps to sample the second bottle.
- Cap the container and tighten securely.
- Keep the two bottles in the refrigerator until shipment.
- Thermometer: take the temperature of the sampling point after holding the thermometer 2-3 minutes near the sampling point. Record the value in the field sheet.



500mL Wide Mouth Bottle for Nutrient Analysis



6-way test strips kit

Sampling for genomic analysis

- Use the sterile wood spatula provided to sample the surface water where the algae concentration is at the highest. Dip the spatula as many times as necessary to fill 3/4 of the Eppendorf.
- Cap the lid.
- Repeat two times.
- Keep the Eppendorf in the freezer until shipment.



Eppendorf for Genomic Analysis

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