Maine DEP HAB JAR TEST PROCEDURE



If the water of your lake or pond looks green (Picture 1), this test can help you determine if the color is from harmful algal blooms (HABs) caused by cyanobacteria, or regular algae.



Picture 1: HABs in Maine Lakes and Ponds

For more information visit https://www.maine.gov/dep/water/lakes/cyanobacteria.html

Materials

- Clear jar (pint to quart size) A Mason (canning) jar or a store-bought pickle jar with the label removed works well.
- Rubber or latex gloves.
- Plastic bag or other containment device.

Procedure

- 1. Find a clear glass jar with a screw top lid.
- 2. For safety reasons, use rubber or latex gloves to collect a sample of water from the pond in question to prevent skin exposure.
- 3. Collect the water just below the surface.
 - DO NOT sample directly from the surface but instead just under the surface to avoid collecting just the floating scum.
- 4. Fill the jar about ³/₄ of the way full of the pond water. (See Picture 2.)
 - DO NOT fill the jar completely to the top. Algae will give off gases and may cause of buildup of pressure inside the jar causing it to break.
- 5. Wipe off any scum that may be on the outside of the jar.
- 6. Screw the lid onto the jar, but not too tightly.
- 7. Place the jar inside a clean plastic bag and mark as potentially toxic if other people are likely to encounter it.
- 8. Place the jar in a cold refrigerator and leave it completely undisturbed overnight.
- 9. The next day, **carefully** look at the jar and see where the algae have accumulated.
 - IT IS VERY IMPORTANT that you do not shake or agitate the jar in any way. If you do, this will mix the algae into the water again and you will not get usable test results.
- 10. If the algae are all settled out near the bottom of the jar, then that is a likely indication that the lake does not have a lot of cyanobacteria growing in it. (See Picture 3.)
- 11. If the algae have formed a green ring around the top of the water in the jar or seem to be collected at the air/water divide, there is a strong possibility that the pond does have a cyanobacteria community present. (See Picture 4.)
- 12. Fill out the "Jar Test Report Form", find a link to the pdf at the bottom of https://www.maine.gov/dep/water/lakes/cyanobacteria.html Take a picture of the form next to your jar and email it to BloomReport.DEP@maine.gov.

These instructions are used courtesy of the Kansas Department of Health and Environment



Picture 2: Jar filled with water and algae from suspected bloom



Picture 3: Algae settled to bottom of jar. Likely that lake DOES NOT have a HAB



Picture 4: Algae floating at top of jar. HAB MAY BE present