

Shoreline Monitors Program

How-to Guide

brantlakemilfoil.org

Note: The Brant Lake Shoreline Monitors Program was established in 2011. With the lakeshore divided into 14 one-half mile sections, trusted volunteers have committed to be responsible for monitoring each section. However, “the more eyes the better”, so even if you are not signed up for this program, your “unofficial” participation is strongly encouraged.

Looking For Milfoil

The earliest that monitoring should begin is mid to late June, when the plants are first becoming visible. In Brant Lake Milfoil is generally found in water 3 to 18 feet deep. Maps are available that show the area of the lake that is under 18 feet to guide you in your search (see below). Since our lake is generally shallow, in some areas of the lake the 18 foot depth line may be a significant distance from the shore. This means that a single pass will generally not be sufficient, and typically at least 3 or 4 passes at different water depths will be required for a given stretch of shore line to be properly inspected. Is this a tedious task? Yes! You will have to work out your own system for assuring that you are covering the appropriate water depth. A recommended technique is to, at least initially, place floats with 18 foot lines to mark the outward boundary of the area you are covering.

By far the most effective way to look for milfoil is with two people in a powered boat, with one near the bow as the observer and the other piloting. Standing is the best view point if it can be done safely. The advantage of this technique is that you have a higher viewing angle, which results in less glare when compared to observing from a kayak or canoe at a low angle. You also have a wider field of view, reducing the number of passes required to cover a given area. However, even with a high viewing angle you will quickly discover that unless conditions are right you will be unable to see well below the surface. Obviously you will want still water, but in addition you will want the sun to be close to the horizon, as it will be in the early morning and late afternoon. You may also find that partial cloud cover is helpful. Finally, **the use of Polarized sunglasses to filter out the sun glare is a "must"**.

Early in the season (May – mid July) seeing milfoil in areas deeper than 8 feet will be difficult because it has not grown to a significant height. During this time it will be more productive to concentrate any searches in the shallower areas. In the later part of the summer the milfoil will have grown significantly. It will start to approach the surface by September and in extreme cases be at the surface. So searching the deeper areas (up to 18 feet) will be effective during late summer.

Identifying Milfoil



Eurasian watermilfoil is an attractive plant with feathery underwater foliage. It was once commonly sold as an aquarium plant. However, the appearance when viewed from above the water is quite different and less distinctive. Additionally, Brant Lake also contains a similar looking native, non-invasive plant called Northern Milfoil. It can be distinguished by the number of leaf divisions; Eurasian milfoil has 9-21 pairs of leaflets per leaf, while Northern milfoil typically has 7-11 pairs of leaflets. Another technique for telling the two apart is that the feathery leaves of Eurasian milfoil usually collapse when removed from the water, while Northern Milfoil leaves remain firm. Holding the plant upside down makes the collapse more apparent.

Recording Your Observations - Materials Required

1. Clipboard, paper and pencil. It may be helpful to have a thin plastic sheet as the top layer. Alternatively, you can use our smartphone app described below.
2. Two or more buoys to mark the 18 foot outer boundary of your monitoring area or to mark plants discovered. These can be made by you from empty plastic bottles and twine. For the float, spray paint the interior of one bottle orange and write MILFOIL on it. For the anchor end punch holes in a second bottle and fill with gravel or pebbles. Alternatively, there may be pre-made buoys available for the taking at the boat launch; stop by to check.

3. A contour map of your lake section to aid you in determining the 18 foot outer boundary of your search area. If you are an official Shoreline Monitor this map will be provided to you, or may be printed by going to brantlakemilfoil.org and selecting *Volunteer Support >> Shoreline Monitors Program >> View/Print Shoreline Monitors Areas Map*. If you are an unofficial monitor, a lake map can be viewed and printed by going to the Brant Lake Milfoil Control website and clicking on *Other Information >> Milfoil Maps and Data >> Shoreline Monitors map*.
4. A GPS and a depth finder may also be helpful.

Determining the Location

With rare exceptions we no longer have milfoil **beds**, only individual plants and plant clusters. When you spot suspect plants throw one of your marker buoys right on it. Move around the area to see how large an area has the suspect milfoil. Mark it with buoys as necessary. There are 4 techniques for determining the location.

1. If you have access to a **GPS** you can use it to determine the location. (The association has a few for loan. Also, free GPS apps are available for all smartphone.) Make sure the GPS is set to display in **decimal degrees** (e.g. 43.741585036), not in degrees, minutes, seconds (e.g. 34N 40' 50.12"). You only need to report locations to 5 decimal places; e.g. 43.74152.
2. Use our **smartphone app**, which will detect your GPS location and allow you to easily submit an email report of your findings. This is a "web app", which is different from a typical smartphone app in that it resides on the Internet, not on your device. To "install" it you simply add a shortcut button to your home screen that will allow you to access the app. To add a shortcut button to your home screen, using your smartphone browser go to brantlakemilfoil.org/report. Then:
 - On an **Android** device (using Chrome), tap the *Menu* icon and select **Add to Home Screen**.
 - On an **IOS** device, tap the *Share* icon - that's the rectangle with an arrow pointing upward, and select **Add to Home Screen**.

Then, exit your browser and tap the (bright green) button that you just added to your home screen to launch the app.

3. Mark the location on your map. It is understood that there will be some guessing involved. Then, when you return to your computer, access your map as described above, position your mouse pointer at the location you marked on your map, and click. You will see a small pop-up window with the latitude and longitude of the point where you clicked.
4. Finally, you can mark the location with a buoy and note shoreline landmarks to help in finding the buoy. After reporting the buoy will be located, its location determined using a GPS, and the buoy will be returned to the boat launch for reuse.

Reporting Your Observations

Since each volunteer will have up to a ½ mile of lake to cover, it is expected that surveillance will be done by sections on different days. It may be useful to divide your area into thirds or quarters. Please report after each observation session even if you find no invasives. If you found no milfoil, a report might be simply: "7/15/11 - Inspected north 3rd , no milfoil found."

Reports should be made to our Program Coordinator, Tom Wynne, at tomcat114@optimum.net or 516-480-8523. (If you are using the smartphone app your findings will be reported to the Tom's email address.)

We will be providing all our Shoreline Monitors with access to our excel log sheet being used for tracking search and eradication efforts. It would be helpful, but not required if you could enter a line of data whenever an invasive is found during a search. Then e-mail a copy of the log to Tom Wynne.

Thank you for your efforts, and enjoy our great lake!