

Phase 2 of the Eurasian Watermilfoil Management Project (March 15, 2019)

In response to Chandos Lake residents and environmental representatives, in 2018 the CLPOA commissioned Trent University to conduct an Aquatic Invasive Species (AIS) management project. Trent University's research project focuses on managing the AIS Eurasian Watermilfoil (*Myriophyllum spicatum*) that is invading Chandos Lake.

This letter provides details about **Phase 2 of the Eurasian Watermilfoil Management Project** that will be conducted this summer with the installation of more benthic mats around the lake. **An additional letter will be sent to property owners (about 160) who asked to participate in Phase 2 in response to a survey in the fall.**

What was accomplished in Phase 1 (summer 2018)?

In Phase 1 (summer of 2018), sites were selected around the lake: **Five control sites** to monitor changes without active intervention; and **five treatment sites** that received one benthic mat (2m x 8m) and a portion of the 25,000 total weevils released. (Milfoil weevils (*Euhrychiopsis lecontei*) are a small native aquatic insect naturally found in the lake and used as a form of biocontrol that feeds on the Eurasian watermilfoil over the summer.)

Trent University's Research Project Progress Report 2018 (Excerpt)

"By the end of the summer, all but two treatment sites showed a significant decrease in Eurasian watermilfoil stem density, weevil damage increased at all sites, and species richness increased at all but one site.

We believe that the abundance of milfoil in the lake may be partly due to a lack of effective competition from native plant species. Although weevils may offer lake managers a degree of control over invasive milfoil patches by reducing the density of thick dense Eurasian watermilfoil monocultures, this study and previous studies suggest it is unlikely that Eurasian watermilfoil will be eradicated in Chandos Lake by milfoil weevils alone.

We recommend that the management of Eurasian watermilfoil in Chandos Lake should primarily focus on encouraging native plants to compete with the invasive milfoil, as this may be more successful at limiting Eurasian watermilfoil abundance in targeted patches.

We also recommend the continued monitoring of experimental patches throughout the lake to confirm conclusions regarding the effectiveness of the management program.” (For the full report click [here.](#))

What is the objective of Phase 2 (summer of 2019)?

Trent University will expand the research project and place more benthic mats around the lake as well as continue to monitor the sites set up in 2018 for long term changes.

The benthic mats are made of biodegradable materials, such as coconut husk. Trent University will seed the mats with native aquatic vegetation then lay them on the lake bottom to act much like a shade cloth does in a garden, preventing milfoil from growing back and replacing it with the native aquatic vegetation.

In addition, the Trent students will spend 3-4 days conducting an **aquatic plant assessment**, surveying the entire lake taking inventory of what native and invasive plant species are present in Chandos Lake. The information will help us determine how healthy Chandos Lake is based on species richness (the amount of different plant species). The survey will also reveal if there are other invasive aquatic plant species of concern and will help identify Eurasian Watermilfoil hotspots and areas we should focus on for treatment.

What are the steps in Phase 2?

1. The CLPOA will apply to the Ministry of Natural Resources & Forestry (MNRF) in the spring for the approval required for mat installations.
2. The MNRF will stipulate the maximum number of mats that can be installed in Chandos Lake in summer 2019 during the unrestricted activity timing window for the protection of fish & fish habitat (July 15 to Oct 1).
3. The CLPOA will purchase a bulk order of mats that Trent University will then seed with native aquatic vegetation.
4. Trent University will determine the installation sites based on their aquatic plant assessment survey, as well as taking into account the MNRF maximum number and a consideration of what realistically can be accomplished in the time period. (Note: Sites must have a significant milfoil problem and a depth of 10 feet or less.)
5. Property Owners of the sites selected will be notified (date to be determined) to

discuss installation arrangements & mat purchase (price to be determined) from the CLPOA (maximum 2 per site in Phase 2).

6. Trent University will coordinate an installation schedule and then install the mats.
7. Trent University will monitor all the sites and prepare a 2019 Research Project Progress Report, including recommendations for 2020.

The CLPOA thanks the property owners participating in the Trent University Research project. It is understood that it will require patience; however, by participating property owners will save time, effort and dollars, as well as ensure an expert installation, for the following reasons:

- The paperwork and request for MNRF approval is handled by the CLPOA.
- Savings from the CLPOA's bulk order of mats is passed along to participants.
- The mats will be seeded by Trent University with native aquatic vegetation.
- The mats will be expertly installed by Trent University students.
- The sites will be monitored and included in the findings of the research project.

And most importantly, property owners will be participating in a research project that is focused on the quality of the entire lake.

If you have any questions, or didn't reply to the fall survey but would like to participate, please write to loveyourlake.clpoa@gmail.com.

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