Canadian Lakes Aquatic Plant Control Program 2022 Annual Report

A publication of the Canadian Lakes Property Owners Corporation

Canadian Lakes Property Owners Corporation
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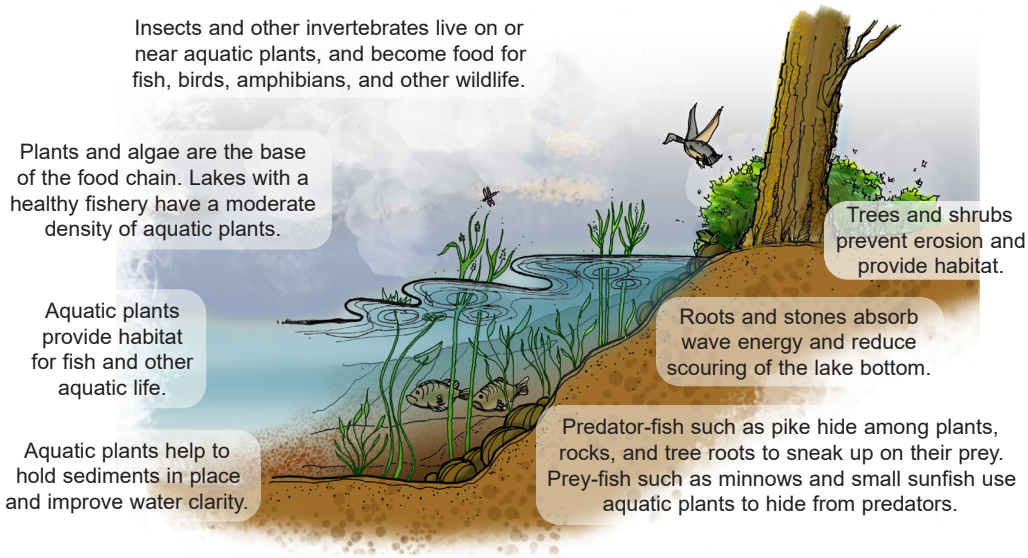
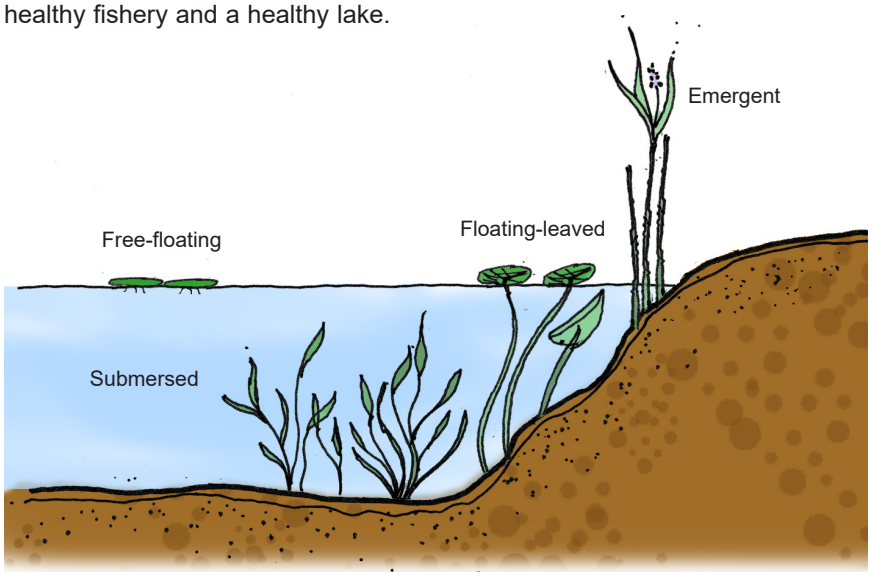
For many years, a nuisance plant control program has been ongoing on Canadian Lakes. The primary objective of the program is to prevent the spread of invasive aquatic plants while preserving beneficial plant species. The program is financed through the Canadian Lakes Property Owners Corporation. This report contains an overview of plant control activities conducted on Canadian Lakes in 2022.

Aquatic plants are an important component of lakes. They produce oxygen during photosynthesis, provide food, habitat and cover for fish, and help stabilize shoreline and bottom sediments.



There are four main aquatic plant groups: submersed, floating-leaved, free-floating, and emergent. Each plant group provides important ecological functions. Maintaining a diversity of aquatic plants is important to sustaining a healthy fishery and a healthy lake.



Environmental Consultant
Progressive AE

Herbicide Applicator
Michigan Lakefront Solutions

Harvesting Contractor
PLM Lake and Land Management

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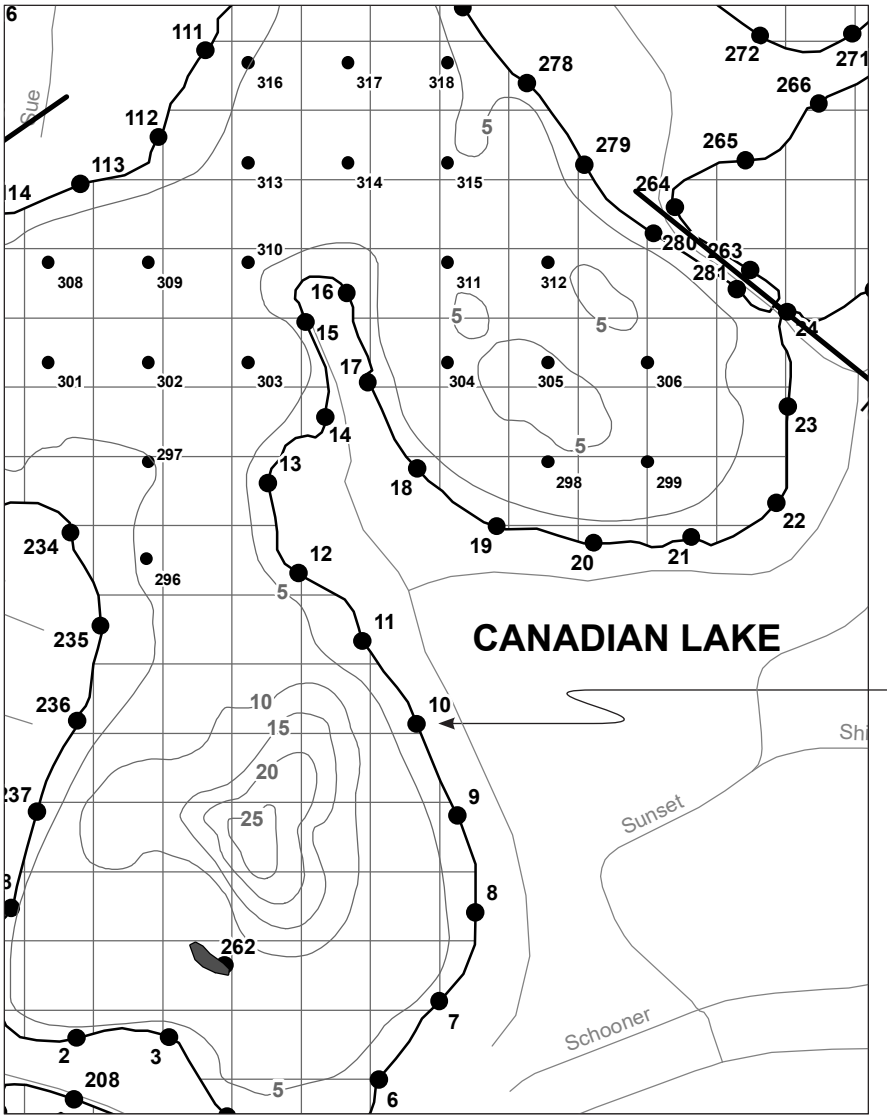
Plant control activities are coordinated under the direction of an environmental consultant, Progressive AE. Biologists from Progressive conduct GPS-guided surveys of the lake to identify problem areas, and detailed plant control maps are provided to the plant control contractors. Progressive performs follow-up surveys throughout the growing season to evaluate results and the need for additional plant control measures. In 2022, surveys of the lake were conducted on May 12, June 7, June 27, June 29, July 13, August 11, and September 7.



GPS reference points established along the shoreline and across shallow portions of Canadian Lakes are used to guide plant surveys and to accurately identify the location of nuisance plant growth areas.

Plant control in Canadian Lakes involves the select use of herbicides as well as mechanical harvesting of nuisance plants. Primary plants targeted for control in Canadian Lakes include Eurasian milfoil and starry stonewort. Both of these plants are non-native (exotic) species that tend to be highly invasive and have the potential to spread quickly if left unchecked.

Eurasian milfoil

Starry stonewort

Commercial plant control activities conducted on Canadian Lakes in 2022 are summarized in the table below. Pond treatments are not included in this summary.

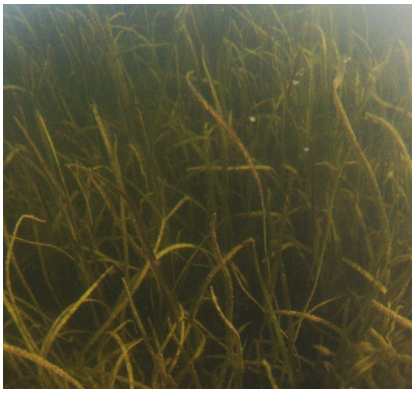
CANADIAN LAKES
2022 NUISANCE AQUATIC PLANT CONTROL SUMMARY

Treatment Date	Plants Targeted	Acres Treated
June 1	E. milfoil, curly-leaf	57.75
June 15	E. milfoil, starry, algae, curly-leaf	73.75
June 22	E. milfoil	0.5
June 29-July 13	**Nuisance native plant harvest**	**73.25**
July 13	E. milfoil	18.25
July 28	E. milfoil, starry, nuisance natives, algae	66.75
Total		290.25

The Canadian Lakes contain an abundance of plant species, both native and exotic. Three of the most common native plant species found in Canadian Lakes are Illinois pondweed, large-leaf pondweed, and wild celery. Both Illinois pondweed and large-leaf pondweed can grow to the lake's surface during summer and produce a spike that pokes above the surface. Wild celery leaves typically stay below the water's surface, however, the small white flower it produces on a "curly-q" stalk in late July and August typically breaks the lake's surface. Wild celery is shallow-rooted, leading to large floating mats that can accumulate when there is heavy boat traffic. These native plant species are vital to the Canadian Lakes ecosystem.

Illinois pondweed

Large-leaf pondweed



Wild celery

Native plants have specific permit restrictions in that they may only be treated along developed shorelines within 100 feet of shore or out to the five foot depth contour, whatever is closest to shore. Most often, mechanical harvesting is the most appropriate way to manage nuisance native plant growth. An added benefit of harvesting is that the biomass is removed from the lake, preventing the plants from falling to the bottom and contributing to the muck buildup within the lakes.

Commercial mechanical harvester