



ONTARIO COUNTY Planning Department

Thomas P. Harvey, Director

HONEOYE LAKE AQUATIC VEGETATION MANAGEMENT PROGRAM 2018 ACTIVITY REPORT

Background

Honeoye Lake is a shallow (16 feet mean depth), eutrophic (nutrient-enriched) lake that supports dense seasonal aquatic vegetation that can impair recreational uses like swimming and boating. The plant community includes both native and invasive, non-native species. Since 1987, Ontario County has operated the Aquatic Vegetation Management Program (AVMP) in cooperation with the Towns of Richmond and Canadice to manage nuisance aquatic vegetation. The AVMP also works closely with the Honeoye Lake Watershed Task Force, the organization coordinating watershed research and management efforts.

The program works to meet the following goals:

- 1) Improve access for recreational lake users
- 2) Remove nutrients from the lake environment
- 3) Improve circulation of water in areas clogged by aquatic plants (excepting the state regulated wetland or where access is deemed inadequate)

Management Approach

The program has a two-pronged approach: In-lake and shoreline vegetation management.

In-lake plant management is accomplished with a mechanical weed harvester (Alpha Boats FX 11). The harvester can be adjusted to cut in the range of three to seven feet below the surface to remove vegetation growing at or near the surface of the water. Cut vegetation is loaded onto the harvester by an integrated conveyor, and offloaded at shore to a dump truck. Cut vegetation is transported to area farms and gardens for composting. Plant density maps made with the help of volunteers using specialized Sonar equipment help direct harvesting efforts. Field observations as well as requests from lakeshore residents also determine the schedule.

Mechanical harvesting is the recommended management practice to control nuisance aquatic vegetation per the Honeoye Lake Macrophyte Management Plan (Final, April 30, 2008) available at: <http://www.co.ontario.ny.us/DocumentCenter/View/1308>. It is also a recommended strategy in the Honeoye Lake HABs Action Plan (2018) available at https://www.dec.ny.gov/docs/water_pdf/honeoyehabplan.pdf.

Shoreline vegetation management removes plant fragments collected at shore before they decay and release nutrients back to the lake. Plant fragments on shore come from multiple sources. The harvester is not 100% efficient, and some fragments float up after harvesting or are missed by the conveyor. The harvester may be used to skim and collect floaters post-harvesting to reduce this occurrence. Plants are also commonly cut by boat propellers or by wind and wave action. The New York State regulated wetland extends into Honeoye Lake at the south end (where no harvesting is permitted) and is a source of weed fragments over the course of the season from anglers, boaters, natural die-off and wind/wave breakage.

The AVMP uses the work barge to travel the shoreline to pick up piles of weed fragments collected by residents. The barge will typically follow the harvester, but experience has shown that certain shoreline areas

are on the receiving end of prevailing winds, and cut weeds, from any source, tend to concentrate in predictable places. In these areas, many residents work cooperatively with the AVMP crew to clean up shoreline and reduce both aesthetic problems and nutrient recycling.

2018 Operations Summary

AVMP operations were interrupted by mechanical issues and vandalism to equipment in 2018. Ontario County Department of the Sheriff in cooperation with New York State Park Police initiated an investigation into the vandalism and increased surveillance at the NYS boat launch staging area. The \$5,600 in damage to public property constitutes a felony offense and cost borne by the taxpayers of Canadice and Richmond.

The harvester operated on four days in July (10, 11, 12 and 16) at targeted areas with dense vegetation: Dana Shores, Lakes End Lane to Southwest Shores, area north of California Ranch, Willow Beach, Francis Shores and Picketts Cove.

Harvesting resumed for a late-season cut, operating seven days in September (11, 12, 13, 17, 18, 19 and 20). The management goal after Labor Day shifts from opening recreational access to removal of nutrients. Rooted aquatic weeds act as a temporary nutrient storage or “sink”, as plants take up nutrients in the sediments for growth. Post Labor Day harvesting removes the late season growth and nutrients before the full length of each plant dies and decays in the lake, releasing those nutrients. The Post Labor Day harvest focused on densely vegetated areas at Dana Shores, north of California Ranch, Lakes End Lane up to West Shore Cove, Francis Shores and Honeoye Lake Park. In addition, requests for harvesting to reduce vegetation were accommodated for Deyo Drive to Burns Point, North and South Forest View, California Ranch Cove, and Lakes End Lane. Overall across the lake, vegetation growth got an early start in 2018, but was relatively light to moderate (depending on location) compared to previous years.

The work barge operated each week from July 10 to October 11, consuming 250 man hours. Requests for shoreline pickup started early and were steady throughout the season. Notifications about weeds on shore began June 11 (weeks before the program start date) and continued until the program ended on October 11. Both residents and staff reported **record amounts of weeds on shore**. The capacity of the shoreline pickup program was nearly overwhelmed at times. The abundance of plants at shore can be attributed largely to propeller chop, windy weather and the fact that the harvester was not removing any plant material during most of the growing season (so it was subsequently cut by other means).

In 2018, an estimated 85 wet tons (17 harvester loads) of weeds were removed by harvesting. Another estimated 80 tons of vegetation were removed by barge from the shoreline. The crew assisted town staff at Sandy Bottom Park over 13 hours to remove seven truckloads of vegetation from the swimming beach.

Additional information:

- Ontario County Honeoye Lake Aquatic Vegetation Management Program:
<http://www.co.ontario.ny.us/index.aspx?nid=452>
- NYS Department of Environmental Conservation blue green algae bloom notices:
<http://www.dec.ny.gov/chemical/83310.html>
- NYS Department of Environmental Conservation TMDLs and Nine Key Element Watershed Plans:
<http://www.dec.ny.gov/chemical/23835.html>

For more information on the AVMP, contact Betsy Landre, Ontario County Planning Department, @ (585) 396-4458; email: betsy.landre@co.ontario.ny.us