

What will this Project do to Stop Hydrilla?

The U.S. Army Corps of Engineers Buffalo District is continuing its efforts to treat hydrilla in the vicinity of Wells College Bay on Cayuga Lake, where hydrilla was first observed in September 2016. The 2020 effort represents the fourth year of fluridone (Sonar® H4C) and chelated copper (Komeen® Crystal or Harpoon® Granular) treatment and focuses on a treatment area delineated based on observations of hydrilla beds from fall 2019.

For 2020, USACE Buffalo will monitor an approximately 120-acre area containing hydrilla, divided into the following sections (see Figure 1):

- Lake Sonar® H4C treatment block:** Approximately 30 acres in Wells College Bay along 5,000 linear feet of shoreline from just south of Paines Creek to the south and the southern extent of the Wells College campus to the north. The Sonar® H4C application will be split into a total of 10 treatments:
 - two applications at 20 parts per billion (ppb) occurring over the first two treatments, and
 - eight applications at 13.75 ppb occurring over treatments 3 through 10.
- Spot treatment blocks:** Two known plots have been identified for spot treatment with Harpoon(R) Granular. Additionally, the entire 120-acre project area will be monitored for hydrilla and spot treated with Harpoon(R) Granular, as needed, up to 5 acres.

Post-treatment monitoring will be conducted to determine the success of the treatment and whether future treatments will be needed.

When will Treatment Occur?

The initial application of Sonar® H4C is targeted for the week of June 22, 2020, and a total of 10 treatments will occur between June and August. Treatments will initially occur approximately 7 days apart, depending on dilution rates within the lake treatment area. Spot treatment of approximately 5 acres will be completed with Harpoon® Granular at a concentration of 1 part per million (ppm; or 1,000 ppb), likely during the weeks of July 20 or August 10, 2020.

Herbicide will routinely be applied on Thursdays, unless there are weather delays. The herbicide will be applied only if there are favorable weather conditions. Any changes in the treatment schedule will be communicated to the public.

Herbicide Information

For more information on Sonar® H4C and Harpoon® Granular, refer to the link below for product labels:

<https://www.solitudelakemanagement.com/product-labels-new-york-updates>

Will there be any Restrictions on Use of the Lake during Treatment?

A water sampling program will be implemented to monitor fluridone concentrations in the lake. The program will ensure that the herbicides are applied at the targeted concentration rates, and the monitoring results be used to determine herbicide dispersion. The Cayuga County Health Department will again be posting the monitoring results on their website which can be accessed at:

<https://www.cayugacounty.us/1540/Eradication-Project-in-Aurora>

Restrictions

There are no restrictions for fishing, swimming, or livestock/pet water consumption at the proposed application rates of Sonar® H4C and Harpoon® Granular.

There **ARE** restrictions for using water treated with Sonar® H4C for irrigation and for potable water treated with Sonar® H4C and Harpoon® Granular if treated water concentrations are above what is indicated in Table 1.

Table 1 Water Use Restrictions

Product	Established Row Crops/Turf/Ornamental Plants	Tobacco, Tomatoes, Peppers and Similar Plants, and Newly Seeded Crops/Seedbeds or Areas to be Planted Including Overseeded Golf Courses	Nursery, Greenhouse, Hydroponics	Potable Water
Sonar® H4C	Do not use if concentrations > 10 ppb	Do not use if concentrations > 5 ppb	Do not use if concentrations > 1 ppb; <i>FastEST</i> required	Do not use if concentrations > 50 ppb*
Harpoon® Granular	None	None	None	Do not use if concentrations > 200 ppb**

* Applications of Sonar® H4C will be below the listed thresholds. **ppb** parts per billion

** Application of Harpoon® Granular will only exceed these concentrations in small spot treatment areas that are not expected to exceed a cumulative total of 5 acres for the season. These spot treatment areas are away from potable water intakes.

Signs will be placed at all public access locations within the treatment area to notify the public of these restrictions.

Tentative Treatment Schedule (the Week of...)

WEEK OF	Treatment	Treatment	
June 22	1st Sonar® H4C Treatment	July 27	6th Sonar® H4C Treatment
June 29	2nd Sonar® H4C Treatment	August 3	7th Sonar® H4C Treatment
July 6	3rd Sonar® H4C Treatment	August 10	8th Sonar® H4C treatment/ Potential Harpoon® Granular Spot Treatment*
July 13	4th Sonar® H4C Treatment	August 17	9th Sonar® H4C Treatment
July 20	5th Sonar® H4C treatment/ Potential Harpoon® Granular Spot Treatment*	August 24	10th Sonar® H4C Treatment

*Harpoon® Granular treatments will be schedule as needed. Dates identified above may change.

Who Can I Contact for More Information?

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CAYUGA LAKE AT AURORA, NEW YORK HYDRILLA CONTROL DEMONSTRATION PROJECT

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into other areas of New York State
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What is Hydrilla and What Concerns Does it Pose to Cayuga Lake?



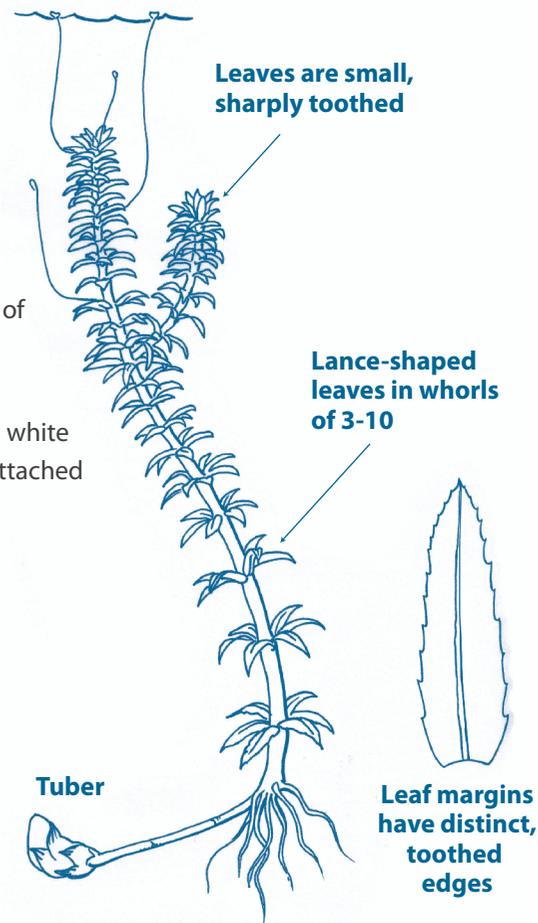
Source: Scott Kishbaugh, NYSDEC Hydrilla whorls up close

Hydrilla is a very aggressive aquatic invasive plant native to Korea. It is a submerged aquatic plant that is typically rooted in shallow water, with long stems that can grow up to 30 feet in length and up to one inch per day. These stems branch at the water's surface and grow horizontally, forming thick, dense mats. Hydrilla also produces tubers, small potato-like structures, which store food for the plant and also allow it to overwinter in the substrate of the waterbody and sprout in the spring.

What Does Hydrilla Look Like?

Key plant identification features:

- Pointed, bright green leaves about 5/8 inch long with small teeth on the edges
- Leaves generally grow in whorls of 3-10 around the stem, though 5 leaves are most common
- Floating white flowers and small white to yellowish potato-like tubers attached to the roots



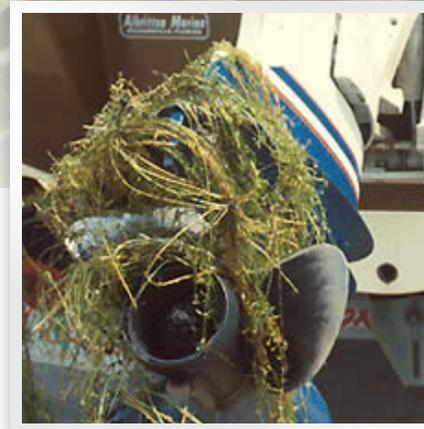
Source: Cayuga Lake Watershed Network 2012

Source: Leslie Mehrhoff, from the U.S. Forest Service



How Does it Spread?

- Primary method of spreading is through hydrilla fragments on recreational boats and trailers
- Even tiny fragments of hydrilla can sprout roots and establish new populations
- Fragments float and can be spread via wind and water currents



Source: Jeff Schardt, Florida DEP Hydrilla on boat

Why Do We Need to Stop It?

- It is one of the world's most invasive aquatic plants.
- It can grow up to one inch per day.
- It forms dense mats that block sunlight and displace native plants.
- It decreases dissolved oxygen levels which can lead to fish kills.
- It destroys waterfowl feeding areas and fish spawning sites.
- It reduces the weight and size of sportsfish due to loss of open water and native vegetation.
- It excludes boating, fishing, and swimming due to its thick mats.
- It can hurt the local economy due to impacts on tourism and waterfront property values.

Figure 1: 2020 Project Area Map

