

## What will this Project do to Stop Hydrilla?

The USACE Buffalo District is continuing its efforts to treat hydrilla in Cayuga Lake in the vicinity of Ithaca. For 2022, approximately 93.6 acres at the southern end of Cayuga Lake have been identified for treatment, based on observations of hydrilla beds from fall 2021. The aquatic herbicides fluridone (Sonar® H4C, Sonar® Genesis) and chelated copper (Harpoon® Granular) will be applied within the 93.6-acre project area, which is divided into the following four treatment areas (see Figure 1):

### Herbicide Information

For more information on Sonar® H4C, Sonar® Genesis, and Harpoon® Granular, refer to the link below for product labels: <https://www.solitudelakemanagement.com/product-labels-new-york-updates>

- 1. Fall Creek:** 22.5 acres starting at Fall Creek from the SR 13 bridge to the confluence with Cayuga Lake including the lagoons at Stewart Park and the golf course, and an additional 3.8 areas hydrologically connected to Fall Creek. To be treated with Sonar® Genesis and Sonar® H4C.
- 2. Cayuga Lake East:** 43.4 acres at the southern end of Cayuga Lake offshore of Stewart Park and the Cornell Community Sailing Center. To be treated with Sonar® H4C.
- 3. Cayuga Lake West:** 13.6 acres comprised of two areas near Treman State Marine Park west of the confluence with Cayuga Inlet. To be treated with Sonar® H4C.
- 4. Cayuga Inlet:** 14.1 acres comprised of four different areas within the Cayuga Inlet. To be treated with Sonar® H4C.

In all 4 treatment areas, the Sonar® H4C application will be split into 10 treatments. For Fall Creek and Cayuga Lake East, the first two applications will occur at 20 parts per billion (ppb), and the remaining eight applications at 9 ppb. For Cayuga Lake West and Cayuga Inlet, the first two applications will occur at 20 ppb, and the remaining eight applications at 13.75 ppb. The area in Fall Creek from the SR 13 bridge to Cayuga Lake will also be treated with Sonar® Genesis to maintain a 2.5 ppb daily rate using an injection system.

Post-treatment monitoring will be conducted to determine the success of the treatment and whether future treatments will be needed. The 2021 post-treatment assessment report contains a summary of the management efforts including water monitoring results and is available on the Hydrilla Collaborative website at:

<https://hydrillacollaborative.com/Home/CaseStudies>

## When will the Project Take Place?

In Fall Creek, the first applications of Sonar® H4C and Sonar® Genesis will occur on or about June 16, 2022. In Cayuga Lake East, Cayuga Lake West, and Cayuga Inlet, the first applications of Sonar® H4C will occur on or about June 30, 2022. A total of 10 treatments in each treatment area will occur between June and September. Treatments will initially occur approximately 7 days apart, depending on dilution rates within the lake treatment area. Spot treatment of up to approximately 5 acres within the project area may be completed with Harpoon® Granular at a concentration of 1.0 ppm (1,000 ppb) if necessary.

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.

## Will There Be Any Restrictions on Use of the Lake during Treatment?

Water sampling will be conducted to monitor fluridone concentrations in the lake. This will ensure that the herbicides are applied at the targeted concentration rates, and the monitoring results will be used to determine herbicide dispersion. The Tompkins County Health Department will again be posting the monitoring results on their website which can be accessed at: <https://tompkinscountyny.gov/health/eh/water/hydrilla>

### Restrictions

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

There **ARE** restrictions for using water treated with Sonar® H4C for irrigation and for potable water treated with all three herbicides 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, Sonar® Genesis	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 and Sonar® Genesis 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.

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...)

<b>June 13</b>	1st Sonar® H4C/Genesis Treatment (Fall Creek only)
<b>June 20</b>	2nd Sonar® H4C/Genesis Treatment (Fall Creek only)
<b>June 27</b>	3rd Sonar® H4C/Genesis Treatment (Fall Creek), 1st Sonar® H4C Treatment (Lake & Cayuga Inlet)
<b>July 4</b>	4th Sonar® H4C/Genesis Treatment (Fall Creek), 2nd Sonar® H4C Treatment (Lake & Cayuga Inlet)
<b>July 11</b>	5th Sonar® H4C/Genesis Treatment (Fall Creek), 3rd Sonar® H4C Treatment (Lake & Cayuga Inlet)
<b>July 18</b>	6th Sonar® H4C/Genesis Treatment (Fall Creek), 4th Sonar® H4C Treatment (Lake & Cayuga Inlet)
<b>July 25</b>	7th Sonar® H4C/Genesis Treatment (Fall Creek), 5th Sonar® H4C Treatment (Lake & Cayuga Inlet)
<b>Aug 1</b>	8th Sonar® H4C/Genesis Treatment (Fall Creek), 6th Sonar® H4C Treatment (Lake & Cayuga Inlet)
<b>Aug 8</b>	9th Sonar® H4C/Genesis Treatment (Fall Creek), 7th Sonar® H4C Treatment (Lake & Cayuga Inlet)
<b>Aug 15</b>	10th Sonar® H4C/Genesis Treatment (Fall Creek), 8th Sonar® H4C Treatment (Lake & Cayuga Inlet)
<b>Aug 22</b>	9th Sonar® H4C Treatment (Lake & Cayuga Inlet only)
<b>Aug 29</b>	10th Sonar® H4C Treatment (Lake & Cayuga Inlet only)

## Who Can I Contact for More Information?

**Richard Ruby, USACE Buffalo District**  
 (716) 879-4109 | [richard.j.ruby@usace.army.mil](mailto:richard.j.ruby@usace.army.mil)



# STEWART PARK, CAYUGA LAKE, ITHACA, NEW YORK

## 2022 HYDRILLA CONTROL DEMONSTRATION PROJECT

Stop hydrilla from expanding further into other areas of New York State and the Great Lakes!



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 Buffalo District  
**BUILDING STRONG®**

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## What is Hydrilla and What Concerns Does it Pose to Cayuga Lake?



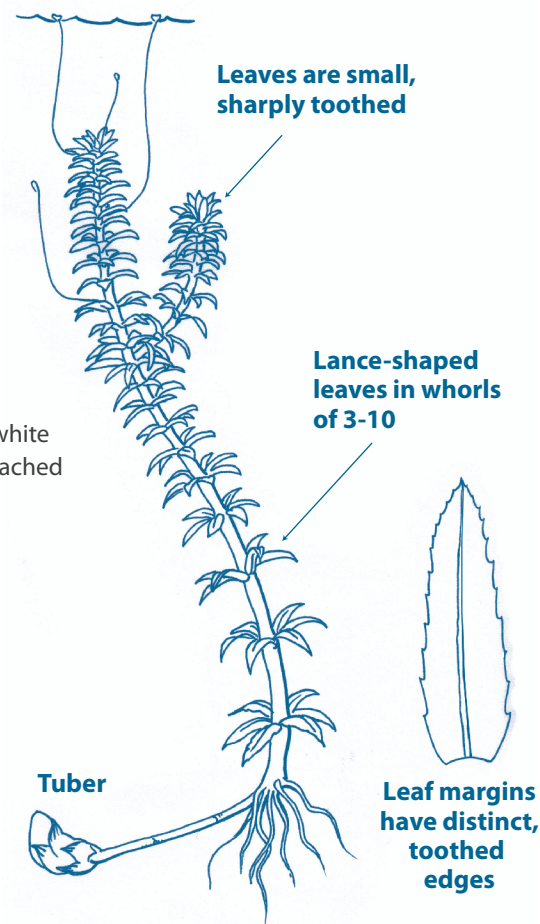
Source: Scott Kishbaugh, NYSDEC Hydrilla whorls up close

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:

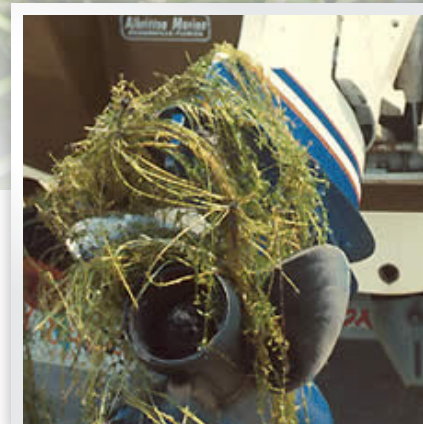
- Pointed, bright green leaves about 5/8 inch long with small teeth on the edges
- Leaves generally grow in whorls of 3-10 around the stem, though 5 leaves are most common
- Floating white flowers and small white to yellowish potato-like tubers attached to the roots



Source: Cayuga Lake Watershed Network 2012



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



Source: Jeff Schardt, Florida DEP Hydrilla on boat

## 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

## 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 2022 Project Area Map



■ Sonar® Genesis  
■ Sonar® H4C  
 0 1,000 Feet  
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