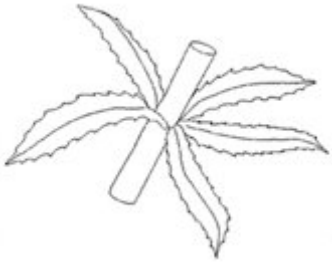
CAYUGA COUNTY
Water Quality Management Agency
WATER NEWS

**March 2021: Invasive Species Edition**

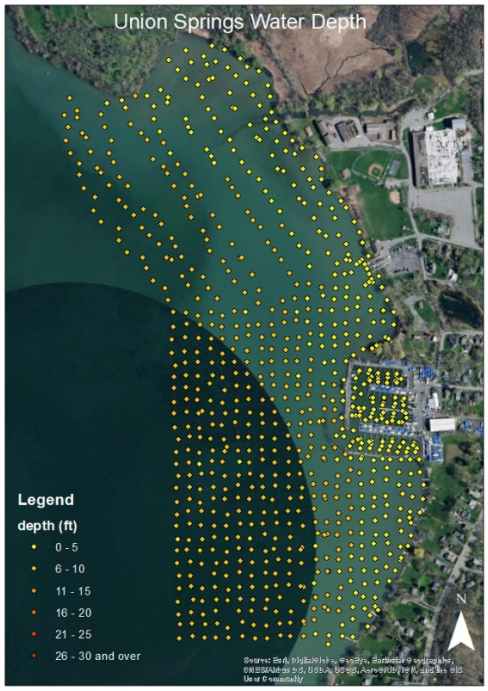
**The Finger Lakes Institute's Hydrilla Survey**
**Joshua Neff, Finger Lakes Institute at Hobart and William Smith Colleges**

Hydrilla (*Hydrilla verticillata*) is an invasive submerged aquatic plant that has been at the forefront of eradication campaigns in Cayuga Lake for the past 10 years. Hydrilla has long, slender stems and whorled, toothed leaves, which usually grow in whorls of 5. This invasive is known to be one of the most aggressive plant invaders in the world! It is a habitat generalist, meaning it can grow in a wide range of environmental conditions (water temperature, pH, depth, substrate types, etc.). Once it has established in a waterbody, Hydrilla can grow up to an inch per day, which is worrisome since, as a very brittle plant, it spreads easily by fragmentation.




*Identifying features of Hydrilla include toothed leaves in whorls of 3-8, but usually 5.*

The Finger Lakes Institute at Hobart and William Smith Colleges has managed a seasonal team to survey for Hydrilla in Cayuga Lake and surrounding areas since 2018. The Hydrilla team is trained to strategically target areas for survey where Hydrilla is likely to occur. These areas include characteristics such as waterbodies with known Hydrilla infestations (Cayuga Lake), neighboring waterbodies near any infested waterbody (Owasco and Seneca Lakes), as well as other high-use recreational areas such as: boat launches, marinas, and other lake access sites in the Finger Lakes region. In 2020, the Hydrilla team sampled 15 waterbodies across the Finger Lakes region from July to November, during which, they conducted over 10,000 rake tosses! Fortunately, no new Hydrilla infestations were detected. Currently, the known Hydrilla populations in Cayuga Lake are located in Aurora, King Ferry, Lansing, and Ithaca areas. Each of these locations have been, or are currently being managed.


*Map of Hydrilla infestation locations on Cayuga Lake (on left). Example of a survey done around a boat launch, each point represents a rake toss (on right).*

Moving forward, we will continue to survey areas that may by subject to Hydrilla invasion, including boat launches and marinas. Consistent and meticulous survey efforts in combination with treatment and community education will be necessary for several years in order to win the battle against further Hydrilla invasion in our beautiful Finger Lakes region. More information on Hydrilla and other invasive species can be found at fingerlakesinvasives.org or by checking out our YouTube video on Hydrilla (https://www.youtube.com/watch?v=AAl7KyMxNSU ). If you think you see a plant that resembles Hydrilla, we encourage you to take photos, then email them and the location to FLXplantID@gmail.com.

If you are interested in helping us keep our Finger Lakes free of high priority invasive species that cause the greatest damage, you can sign up for our Finger Lakes Invasive Plant Detectors Program. More information is available on our website at http://fingerlakesinvasives.org/invasive-survey/. To register contact Megan Harris at mharris@hws.edu or visit the website and click on the 'register here' link!

**Hydrilla Treatment in Cayuga Lake**
**Eileen O'Connor, Cayuga County Health Department**

In 2016, Hydrilla was detected in Cayuga Lake in front of the Village of Aurora. During the past four summers, the U.S. Army Corps of Engineers (USACE), Buffalo District, has worked on a project aimed toward the eradication of hydrilla from this portion of Cayuga Lake. Fluridone in a slow release pellet form, trade name Sonar H4C, was used to treat the hydrilla in the primary treatment zone and chelated copper was used for spot treatments.

This treatment has been successful in reducing the amount of hydrilla in this area. As shown in the figure below created by the USACE, the percent occurrence of Hydrilla in the area has dropped each year.


The USACE reported that despite an observed drop in abundance of plants within these treatment areas, diversity of native plants was maintained. A site visit performed in early October, 2020 by a USACE contractor however detected several patches of Hydrilla north of the original treatment area. This approximately 11-acre area will be treated as part of the on-going project in 2021. It is anticipated that the treatment during the summer months will continue for a number of years.

During the treatment, the Health Department monitors the drinking water from the Wells College water distribution system. For more information on the monitoring go to the following link: https://www.cayugacounty.us/1540/Eradication-Project-in-Aurora.

**Diving Deep with Aquatic Invasive Species (AIS)**
**Frank Moses, Skaneateles Lake Association**

Frank Moses, the Executive Director has created a brief video message of results from Skaneateles Lake Association's 2020 AIS Prevention efforts. To view, you can click on this link to YouTube: https://youtu.be/53QCwhBy_E8.


**Landscaping with Native Plants**
**Master Gardeners of CCE Cayuga County**

Whether you have waterfront property or live miles away from the nearest shoreline—everyone has an impact on the quality of water that enters and leaves their property as it travels through the watershed. The right combination of landscaping techniques can help filter out pollutants and soak up excess water. The extensive and deep root systems of native plants

slow down runoff, reduce soil erosion along river and stream banks, and absorb dirty water before it gets into the nearby waterways. Landscaping with Native Plants helps ensure that the water leaving your property is as pure as possible. They can also add beauty to your yard that will provide blooming color, enjoyable scenery, and important butterfly & songbird habitat!

***Why Choosing Native Plants is the Right Choice***

Native plants are healthier and stronger because their root systems can run deeper. They have evolved over thousands of years and they grow in harmony with the soil, the water supply, the varying weather throughout all the seasons. Environmentally, landscapes that contain native plants use much less water, fertilizer, and pesticides. Native plants even suppress weeds which makes them low maintenance.

Pollinators need native plants! Research has shown that native plants are four times more likely than non-native plants to attract native bees. Other research has shown that landscaping with indigenous plants can support 14 times as many species of native insects. A yard full of native plants is a yard full of well- fed birds.

Let's be honest with ourselves. The biggest reason we like plants, flower and trees is to add grandeur to our backdrops. Well, native plants provide a visual connection between our landscapes and the surrounding environment. This can give our community a distinct regional character. Plants native to this continent that had been overlooked by Americans looking for something exotic. Sometimes beauty really is right under your nose**.**

For help in choosing plants that will thrive in the soil and conditions on your property and also add beauty call Cornell Cooperative Extension Master Gardener Hotline. Our Master Gardener Volunteers Cindy, Susan and Chris are available to assist you. The Master Gardener hotline is open to answer your questions beginning in April and running until mid-October.

Monday, Wednesday & Friday – 10 am to 12 pm call 315-255-1183 x228 or email cayugamastergardener@gmail.com or cayuga@cornell.edu.

***Sources:***
CCE Cayuga Master Gardeners
Finger Lakes Landscapes-Landscaping for Water Quality in the Finger Lakes Region
CCE of Onondaga County
CCE Genesee Master Gardeners
Cornell University Lab of Ornithology

**The Lake Friendly Living Program Spreads its Wings!: May 2-8 Region-wide online events**
**Hilary Lambert, Cayuga Lake Watershed Network Executive Director**

In 2019, the Cayuga Lake Watershed Network joined other Finger Lakes lake associations and watershed groups in developing and launching a program called Lake Friendly Living (LFL). LFL outlines simple steps every homeowner (whether a lakeshore owner or not) can take to help protect and improve water quality and create sustainable watershed living environments. The partner lakes include Canandaigua, Cayuga, Honeoye, Keuka, Otisco, Owasco, Seneca, and Skaneateles.

This year, from May 2-8, the LFL coalition is planning a series of public events - held virtually and free, of course! During this week, lake groups will be holding webinars, Facebook Live events, and demonstrations that explain and exemplify some of the 12 simple strategies

outlined in the Cayuga Lake LFL program. You can find all 12 strategies outlined here: https://www.cayugalake.org/lake-friendly-living/.

The Cayuga Lake Watershed Network will focus our presentation on native plants and shoreline naturalization! We will offer two informational webinars, including practical steps for making beneficial changes to your landscape. Dan Segal, owner of The Plantsmen, and Camille Marcotte, Water and Ecology Educator, Cornell Cooperative Extension, will present separate webinars on Native Plantings and Shorescaping. We will also provide local resources where you can purchase native plants for your property.

Please keep in mind that anyone will be able to attend any program offered by any of these lake groups. We look forward to sharing specific program dates and times as they become available.

**If We Lose the Hemlocks….**
**Dana Hall, President, Owasco Watershed Lake Association**

Early in 2021, volunteers affiliated with the Owasco Watershed Lake Association and the Cornell Hemlock Initiative surveyed the hemlocks along and in the ravines and gorges on seventeen privately owned properties in the Owasco Lake watershed. The survey found hemlock woolly adelgid (HWA) infestations on 12 of the 17 properties. Most worrisome, was the presence of HWA on many trees holding the soil in place on the sides of the ravines and gullies. Loss of these watershed critical guardians will in turn cause sediment and nutrients to reach Owasco Lake worsening the Lake's water quality.

Since the January survey, OWLA has decided to take on a multi-year spring and fall targeted treatment campaign to save as many of the critical hemlocks as resources will permit. OWLA has donated $25,000 and private citizens are adding more to fund this spring's treatment effort. Targeted treatment will begin as soon as good weather arrives, perhaps in late March."

The full article published in *The Citizen* can be viewed here: https://auburnpub.com/lifestyles/owla-if-we-lose-the-hemlocks/article_89b958bb-7fe3-591d-8648-5efb9e3f0a24.html

**Hemlock Trees in Fillmore Glen State Park Receive Protection Against Woolly Adelgid**
**Andrew Snell, Owasco Lake Watershed Inspection and Protection Division**

Assessments of hemlock stands are taking place throughout the Owasco Lake Watershed to determine the extent of hemlock woolly adelgid infestations. New York State Parks has begun hemlock preservation at Fillmore Glen State Park, which is within the Owasco Lake Watershed. The extensive preservation efforts conducted by the state parks office throughout the parks of the Finger Lakes region and within the Fillmore Glen State Park demonstrate a terrific model of HWA treatment and hemlock preservation efforts.

The full article published in *The Citizen* can be viewed here: **https://auburnpub.com/lifestyles/effler-hemlocks-in-fillmore-glen-receive-protection-against-invasive-species/article_e79acb74-0d19-5f73-a920-76fef62343bc.html**

**Spotted Lanternfly**

Spotted Lanternfly was found in Tompkins County in the fall of 2020. If Spotted Lanternfly becomes established it will be devastating to New York agriculture, including some of our leading crops, such as apples and grapes. Join us in working to prevent this pest's establishment in New York. Visit http://cayugacountywater.org/wp-content/uploads/2021/03/Spotted-LanternFly-Flyer.pdf for a flyer from Cornell Cooperative Extension on what to do if you find a Spotted Lanternfly.

**Cayuga County WQMA**

For more information about the Cayuga County Water Quality Management Agency, check out our website at www.cayugacountywater.org. The Cayuga County WQMA is also on social media. For up to date information on water quality issues and events, please either friend us on Facebook at https://facebook.com/CayugaCoWQMA or follow us on Twitter at https://twitter.com/CayugaCoWQMA.

The Cayuga County WQMA is looking for story ideas for its webpage and its newsletter. If you have something you would like to share, please email us at wqma@cayugacounty.us.

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