

Researchers Focus on New Strain of Hydrilla Found Thriving in the Connecticut River

Hydrilla is well-known for invading lakes, ponds and waterways, especially across the southeastern U.S. Hydrilla is the most widespread of the 19 aquatic weeds on the federal noxious weed list. It also represents a significant ecological and economic risk. The Weed Science Society of America (WSSA) say a new strain of the weed has now been found along a 70-mile portion of the 400-mile-long Connecticut River. First discovered in 2016, the new hydrilla strain is spreading quickly. Recent surveys show the infestation has produced dense mats of floating hydrilla biomass that now cover nearly 1,000 acres of the river.

WESTMINSTER, Colo. ([PRWEB](#)) December 12, 2022 -- Hydrilla is well-known for invading lakes, ponds and waterways, especially across the southeastern U.S. But experts with the Weed Science Society of America (WSSA) say a new strain of the weed has now been found along a 70-mile portion of the 400-mile-long Connecticut River.

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The river has a major impact on the region and its economy. It supports fish, birds and other wildlife; farms, fisheries, marinas and other businesses; and the recreation and water needs of millions of residents who live and work nearby.

First discovered in 2016, the new hydrilla strain is spreading quickly. Recent surveys show the infestation has produced dense mats of floating hydrilla biomass that now cover nearly 1,000 acres of the river. And the impact is already being felt.

Greg Bugbee, a scientist with the Connecticut Agricultural Experiment Station, says the new invader has begun to replace the native eelgrass that provides a critical habitat for fish, mussels and other aquatic life. It has also begun to clog tributaries and coves along the river – making them impassible to motorboats used for touring, fishing and other water sports. The hydrilla engulfs propellor blades and causes engines to stall – a problem researchers faced firsthand as they conducted their survey of the river.

Bugbee says the new strain is genetically distinct from hydrilla found elsewhere, with differences in how it grows and reproduces. It is hardy and tolerates a wide range of growing conditions. Unlike other hydrilla strains in the U.S., it has yet to be observed producing potato-like tubers that can be buried in the sediment of rivers, lakes and ponds.

That may offer a control advantage, Bugbee says, since tubers can be hard to locate and remove and can sprout after remaining dormant for many years. By comparison, the new strain seems to spread primarily through axillary and basal turions – budlike nodules on the plant's stem that can break off and root where they drop.

There are still lots of unknowns, though. Scientists don't yet know how this genotype is best controlled. They also don't know whether it can harbor neurotoxin-producing algae that can kill eagles, ospreys and coots –

something that occurs among the warm-weather hydrilla found in the southeastern U.S. There is also great concern that this strain of hydrilla could be spread to other bodies of water by boats, canoes, kayaks and other sports equipment that can transport small fragments of the weed to new locations.

Fortunately, work is actively underway by various stakeholders to fill the information gap. One of the many agencies engaged in that effort is the U.S. Army Corps of Engineers, particularly at their Engineer Research and Development Center in Vicksburg, Mississippi. Michael Greer, the Corps' program manager for aquatic nuisance species research, says his team is working closely with local, state and regional groups and is spearheading several initiatives that are already underway or on the horizon:

- It has funded a nationwide effort to expand what we know about the genetics of hydrilla – identifying the various strains of the invader, determining their range and measuring the extent of their infestation.
- It has funded research to explore the biology of the new Connecticut River variant and to conduct lab studies to determine how the nuisance species responds to the herbicides registered for control of aquatic weeds.
- It is working with partners from across the region to plan a Connecticut River field study that will serve as a proof of concept in how best to control the new genotype and restore the important ecological and economic benefits of the river.

“In effect, we’re writing a ‘book of knowledge’ that will capture the life history of this new strain, how it spreads and how to manage it effectively,” Greer says. “We hope to bring what we learn from our research into a real world setting and build a body of best management practices.”

To Learn More

- Explore a [map](#) of the Connecticut River Basin.
- [Watch a video](#) describing the hydrilla invasion on the Connecticut River.
- Read the Connecticut Agricultural Experiment Station's [report](#) on hydrilla and other aquatic plants on the Connecticut River.
- Explore the [five-year hydrilla management plan](#) for the Connecticut River developed in 2020 by the Northeast Aquatic Nuisance Species Panel.
- Visit the [Connecticut River Conservancy](#) to find out more about hydrilla and the steps each of us can take to help slow its spread.

About the Weed Science Society of America

The Weed Science Society of America, a nonprofit scientific society, was founded in 1956 to encourage and promote the development of knowledge concerning weeds and their impact on the environment. The Society promotes research, education and extension outreach activities related to weeds, provides science-based information to the public and policy makers, fosters awareness of weeds and their impact on managed and natural ecosystems, and promotes cooperation among weed science organizations across the nation and around the world. For more information, visit www.wssa.net. The Aquatic Plant Management Society (APMS) is a national affiliate of WSSA.

EDITORS: Photos to support this press release can be downloaded from the WSSA website at <https://wssa.net/credit-lines-for-hydrilla-photos>.



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