What Does *Hydrilla* Look Like?

Hydrilla typically is bright green, with small leaves growing along its thin, long stems. The leaves are about 5/8 of an inch long. It sometimes is confused with the native plant *Elodea canadensis* or Canadian waterweed.

This is how you can tell them apart:

- *Hydrilla* has tiny teeth along the edges of its leaves. The leaves generally grow in whorls of 5 around the stem, although there can be 3 to 8 leaves per whorl. *Elodea* generally has 3 leaves per whorl and appears to have smooth leaf edges when viewed without magnification.
- *Hydrilla* has tubers that form in the soil. *Elodea* does not have tubers.

Rob Emens, NC Division of Water Resources

Steve Hoyle, NC State University

How Can You Help Stop the Spread?

When boating:

- Inspect your watercraft and trailer. Pay special attention to areas that stay wet (bilge, live well, etc.) and areas that catch vegetation. Dispose of all plant matter in the trash or on dry land well **above high water.**

Around docks, launch sites and other areas:

- Weeding *Hydrilla* is discouraged because it fragments easily. If you remove it, collect all plant fragments to prevent them from drifting.
- Dispose of plants well **above the water line.** *Hydrilla* cannot tolerate drying out.

Report suspected new populations of *Hydrilla*.

Tell others about *Hydrilla*.

For more information and to learn how to report new infestations or get involved with *Hydrilla* monitoring in coastal North Carolina, visit North Carolina Sea Grant: *ncseagrant.ncsu.edu/hydrilla.*

Sea Grant
North Carolina
UNC-SG-15-08

Sources: NC State University Department of Crop Science; North Carolina Department of Environment and Natural Resources Division of Water Resources; New York Cayuga Lake Watershed "Stop Hydrilla" brochure; Eno River Task Force "Hydrilla in the Eno River Watershed" brochure.

HYDRILLA
Hydrilla verticillata

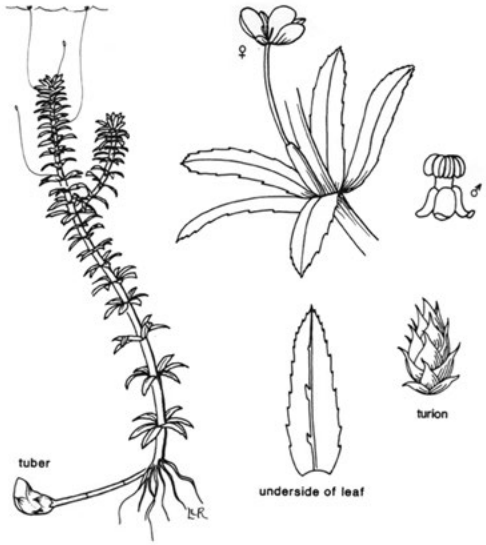


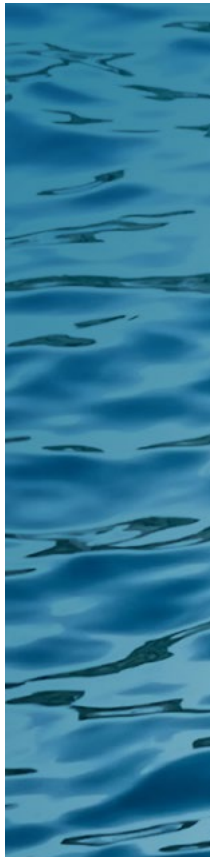
Illustration provided by
IFAS, Center for Aquatic Plants
University of Florida, Gainesville, 1999

Hydrilla:
An Emerging Concern for the Albemarle Region

HELP STOP THE SPREAD

FAST FACTS

- One of the world's most invasive aquatic plants.
- Spreads easily and displaces native plants by forming dense mats that block sunlight.
- Obstructs boating, swimming and fishing.
- Harms tourism and waterfront property values.
- Clogs drainage and irrigation canals.



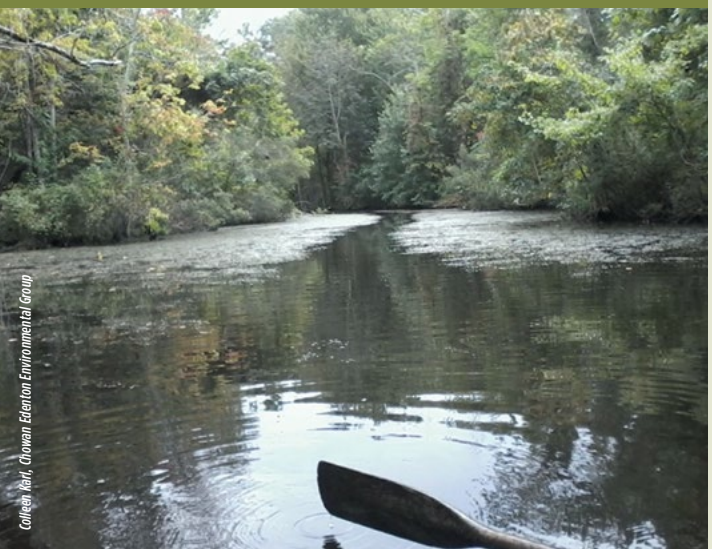
What is *Hydrilla*?

Hydrilla verticillata is an invasive aquatic plant defined by law as a noxious aquatic weed. It roots in the bottom of ponds, lakes, streams and rivers. It can grow stems up to 20 feet long and form thick, dense mats.

North Carolina is infested with monoecious *Hydrilla*, a biotype that is native to Asia. *Hydrilla* spreads by seeds, buds, tubers and fragments. It grows as a herbaceous perennial plant, so shoots die back (senesce) in the fall.

Hydrilla stores energy in pea-sized underground tubers that re-sprout in the spring. Tubers can remain viable in sediment for at least six years. *Hydrilla* also can produce "buds" at the axil or where the leaf joins the stem. The buds can break off and settle in the soil or move downstream.

Found throughout the state, *Hydrilla* has been identified in several water bodies and their tributaries in northeastern North Carolina. These include the Chowan River, Roanoke River, Edenton Bay, and western reaches of the Albemarle Sound.



Colleen Kerl, Chowan Edenton Environmental Group

What is Being Done to Manage *Hydrilla*?

Coordination

Local and state agencies are beginning not only to communicate about the issue, but also to identify and implement monitoring, outreach, research and treatment strategies.

Monitoring

Trained volunteers and professionals are mapping current infestations and looking for new populations.

Outreach

Signs, educational programs and public service opportunities for all ages are being implemented to help prevent the spread.

Treatment Challenges

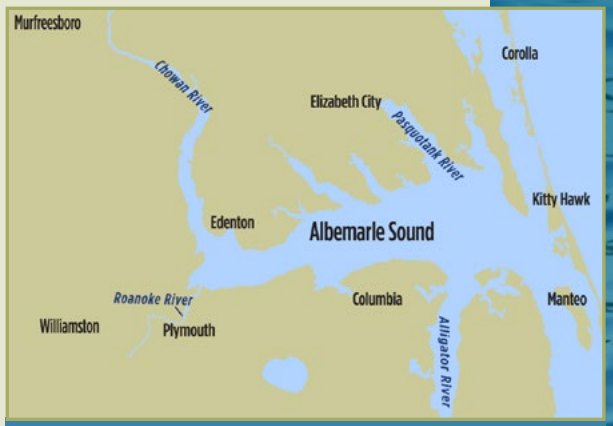
Physical removal is not effective because the plant easily fragments and spreads.

Biological control using sterile triploid grass carp often is used in impoundments but is not an option in open waters because fish cannot be contained to one area. Carp also are known to feed on beneficial native vegetation.

Herbicide Options

Herbicides are used as a primary method to control *Hydrilla* once it has become established in an area.

A few communities in the region are using the herbicides endothall and fluridone to control *Hydrilla*. Both chemicals disrupt plant-specific growth processes.



Hydrilla **has been identified in the Chowan River, Roanoke River, Edenton Bay and the western reaches of the Albemarle Sound. The salinity of the Albemarle Sound is low enough that *Hydrilla* can survive and spread.**

Endothall typically is applied as a single application. Fluridone often is applied as slow-release granules to maintain a low-dose, extended contact period.

These herbicides are U.S. EPA-approved for use in aquatic ecosystems, including sources of drinking water. According to state law, aquatic herbicides can be applied to public waters only by qualified, licensed aquatic applicators. Both herbicides are not known to be persistent in the environment, nor are they known to bio-accumulate over time.

More information about controlling *Hydrilla* infestations can be found at this Cornell University Tompkins County website at *ccetompkins.org/environment/aquatic-invasives/Hydrilla.*

Small fragments of *Hydrilla* can sprout roots and establish new populations.