

# Water Chestnut Alert!

Water Chestnut, *Trapa natans*, is an invasive, exotic, aquatic plant. This non-native species is an extremely prolific annual that moves in and dominates an area, forming dense, impenetrable surface mats that can severely limit recreation and habitat. Water Chestnut negatively impacts wetlands, beaches, sluggish rivers and streams. Together we can stop this weed from becoming established in our areas.

The Seneca River is already plagued with this glossy, green, plant that can easily choke water bodies, out competing the native flora. During the past two decades, Water Chestnut has spread throughout the Central New York river/canal system from Cross Lake to Oneida Lake, and into the Oswego River Corridor. It now consumes well over 100 acres there and its range is constantly expanding. Our primary mission is to keep Water Chestnuts out of the water resources of Cayuga County.

## Identification

### Fruit

Has four sharp spines.

### Flowers

Four white petals up to ¼ inch long, blooming from late June to September.

### Leaves

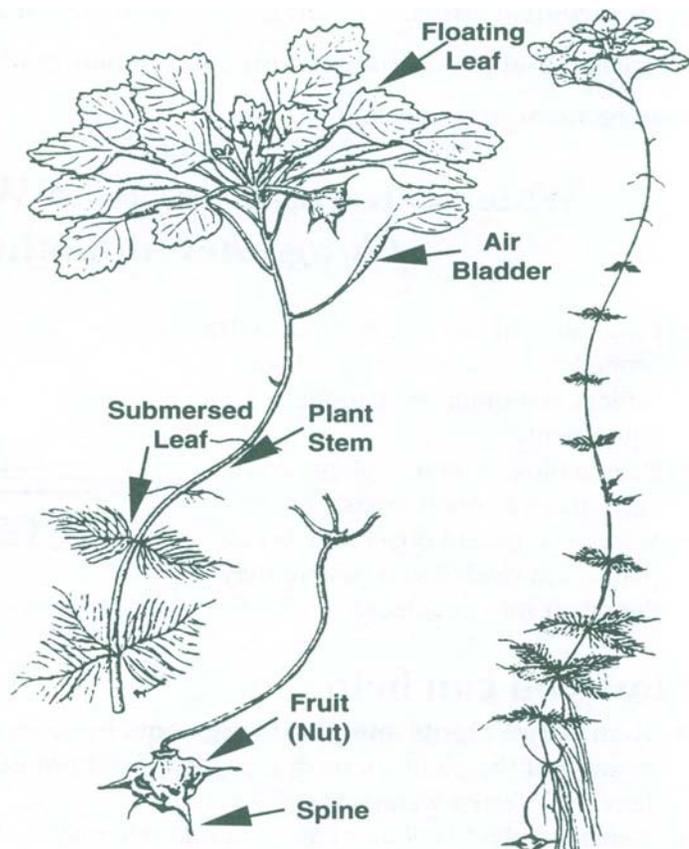
Submersed leaves are feather-like and oppositely paired along the stem. Floating leaves are waxy on top, hairy on the underside, and triangular, forming a rosette on the water surface.

### Air Bladder

Connected to the floating leaves and has a bladder filled with air and spongy material that provides buoyancy.

### Stem

The cord-like plant stem can attain lengths up to 16 feet.



*Aquatic Plants of New England Series: Trapa natans L.*  
Crow and Hellquist 1983. Illustration by Pam Bruns.

## Reproduction and Spread

Water Chestnut is an annual plant with a **high reproductive capacity**. The seeds germinate in early spring. An individual seed can give rise to 10 to 15 rosettes, each of which can produce 15 to 20 seeds. Thus, **one seed can produce 300 new seeds in a single year**. Water Chestnuts begin to flower in mid to late July and nuts will ripen approximately one month later. Flowering and seed production continue into the fall when frost kills the floating rosettes. The mature nuts sink to the bottom when dropped and can remain viable for up to 8 to 12 years. The plant spreads either by the rosettes detaching from their stems and floating to another area, or more often by the nuts being swept by currents or waves to other parts of the lake or stream. The plant over winters entirely by seed.

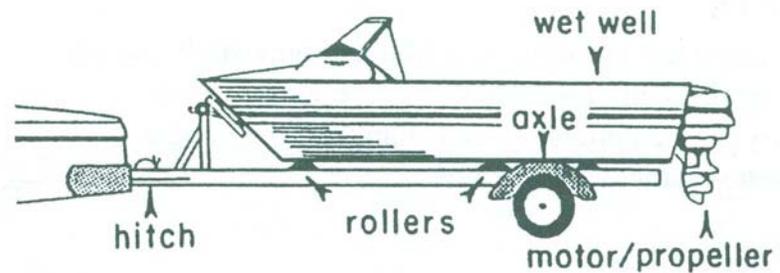
# Control of Water Chestnut

Mechanical harvesting and hand pulling can inhibit the growth of Water Chestnut, provided that the work occurs in the summer before the nuts have a chance to mature and drop off the plant. Once an area has been cleared of Water Chestnut, maintenance harvesting is necessary to keep the area clear. Besides opening an area for wildlife and recreation, removing Water Chestnut helps prevent its spread to other areas.

Once Water Chestnut is pulled or cut, removal and disposal away from water is essential to prevent re-establishment of the plants. Control programs and individual efforts can be successful in reducing and controlling infestation. Many areas that support monocultures of Water Chestnut may be freed of nuisance levels. Public agency control efforts, as well as increased citizen awareness and participation in hand pulling to control the spread, and preventing introduction to bodies of water are all necessary for future Water Chestnut management to succeed.

## How Aquatic Weeds Spread

- Fragments of the plants cling to the propellers of boat motors, to boat trailers and other recreational equipment.
- People pick attractive plants and carry them to other areas.
- Wind, waves and boats may break plants and seeds loose, where they then drift into new locations.



## How You Can Help

- Remove all plants and plant fragments from boat propellers and trailers before leaving launch sites and dispose of the plants in trash receptacles or burn them. Drain all bilge water, live well and bait buckets before leaving infested waterways.
- Learn to identify Water Chestnut and other aquatic weeds. Know which bodies of water are currently infested and use caution in these areas.
- Get involved! If you identify Water Chestnut, pull them yourself and encourage your neighbors to do the same.
- Spread the work, not the plant. Please share this material with others.

## For More Information

For more information or to report Water Chestnuts in Cayuga County water contact:



**Cooperative Extension**  
**CAYUGA COUNTY**

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