

Water Chestnut – not for roasting over an open fire!

Nicole Landers, CCE Yates County

Water chestnut (*Trapa natans*) is a highly invasive, rooted plant that generates both via seed and vegetative growth. It originates from Europe, Asia and Africa and was brought to North America in the mid-1800s as an ornamental pond plant. It has triangular leaves with toothed edges and forms dense floating mats. Stems can be as long as 16 feet. Fruit are large and pointed and can cause damage if trodden on. Fruits ripen in about a month and soon sink to the bottom. Most fruits germinate within the first two years, although have been known to take up to 12 years. One seed can give rise to ten to fifteen rosettes, and each rosette may produce as many as twenty seeds. It is estimated that one acre of water chestnut rosettes can expand to 100 acres in one year. The dense mat of leaves prevents sunlight from reaching native aquatic plants under the surface and impedes recreational activities. Decomposition of dense mats can cause lower dissolved oxygen levels in shallow waters.

The most common mode of spread is via attachment to boat trailers. This species was first discovered in the Keuka Lake watershed in 2010 in the Penn Yan Marsh area behind Indian Pines Park. Every summer a crew from the Soil and Water Conservation District makes multiple trips to remove the vegetation by hand as part of their maintenance control program. Invasive plant species survive so well in part because they do not have the natural pests and pathogens that it evolved with in its native habitat.

Some ways that boaters can help reduce the spread and introduction of aquatic invasive plants is to:

- Remove visible plants, animals and mud from your boat before leaving a body of water
- Drain all water from your boat, motor, bilge, live well, and bait containers before leaving a water access,
- Dispose of unwanted bait in the trash, and never release plants or animals into a body of water unless they came from that body of water
- Before entering another body of water, be sure to clean and dry boat and equipment.



Pictures by Leslie J Mehrhoff, University of CT

Keuka Lake - Citizens Science Lakeshore Monitoring Program

The Finger Lakes Regional Watershed Alliance has identified Aquatic Invasive Species Education and Outreach as a goal for 2013. Keuka Lake will join forces with the other Finger Lakes in the effort to monitor lakeshores for invasive species. Early this summer, we will host an informational session to assist interested citizens in the identification of common invasive species and how to fill out a simple online form at regular intervals during the course of the summer. The data collected will be utilized to monitor changes of invasive species populations over time. This would be a great way to get involved in helping keep Keuka Lake free of invasive species and have fun learning about it. If you are interested in more information, please contact Nicole Landers at Cornell Cooperative Extension of Yates County at 315-536-5123 or naw26@cornell.edu.