

CONCORD'S LEAST WANTED!

Water Chestnut, *Trapa natans*



A water chestnut seed.
Triangular shaped leaves.

Origin: Water chestnut is native to Europe and Asia and was first observed in the United States near Concord, Massachusetts in the mid 1800s.

Identification / Habitat: Water chestnut is a rooted, floating plant that invades shallow to deep, fresh water habitats in the northeastern United States. Water chestnut can grow in 12 to 15 feet of water and forms dense floating mats, often three layers deep. Leaves on the surface of the water are alternate, triangular in shape, strongly toothed and connected to the stem by an inflated petiole. Submerged leaves are feathery and either opposite or alternate. The spines of dried seed pods can penetrate shoes.

Dispersal: The seed pods drift in the water and lodge themselves in areas that produce a plant after two years. In addition to this, a plant dislodged from its seed can grow down and begin to produce a new seed. This aggressive species is a prolific reproducer. One acre of water chestnut can produce enough seeds to cover 100 acres the following year. Water chestnut seeds can remain viable in sediments for up to 12 years.

Problems: The dense, floating mats restrict light availability, reduce the oxygen content, and heat the water when decaying, thus displacing other emergent and floating vegetation and impairing fish survival. Water chestnut also limits boating, fishing, swimming, and other recreational activities. The water chestnut destroys native plant life essential for waterfowl and fish. Sanitary problems can arise because of the fact that the thick beds collect and hold quantities of organic waste, thus creating water pollution hazards, where swarms of mosquitoes can breed prolifically among the plants.

CONTROL: Small infestations can be hand removed from shore or by boat. Larger infestations may need to be removed mechanically by means of a harvester. **PLEASE BE SURE TO INSPECT YOUR CANOE, KAYAK, OR BOAT BEFORE LEAVING TO PREVENT SPREADING THIS INVASIVE PLANT TO OTHER WATERBODIES. WASHING OR RINSING THE UNDERSIDE AT THE SITE IS RECOMMENDED.** For more detailed methods of control, check the Concord NRC new invasive plants website! **Any removal within 100 feet of wetland resource areas, including certified vernal pools, or within 200 feet of a perennial stream may require approval from the Concord Natural Resources Commission. Please contact the Division of Natural Resources *before* you begin!**