2007 Series



NEWS from the DUNES

Ouch! What is that thorny thing I just stepped on along Lake Ontario

By 2007 Eastern Lake Ontario Dune Steward Benjamin R. Robedee

What is that black thorny thing I just stepped on along Eastern Lake Ontario? That thorny "thing" is the nutlet, or fruit, of a Water Chestnut (Trapa natans) and it is has begun to appear on local beaches the past couple of years.

John DeHollander of the Oswego County Soil and Water Conservation District says, "The past 3 years, volunteers have been attempting to control water chestnut in the lower Salmon River near Port Ontario. This is the first sign that it is migrating northward through Oswego County."

The New York State Department of Environmental Conservation lists water chestnut as one of eight most important aquatic invasive species plants. Let's take a look at how it may be getting here and what can be done.

Water chestnut is an invasive plant that hinders the aquatic habitat. It can negatively affect plants and animals by causing a loss of wildlife habitat and native aquatic species on all levels of the food chain. Other native aquatic plants and organisms that require sunlight in order to survive cannot compete with water chestnut, because its' canopy shades the aquatic floor. This can lead to a lower concentration of dissolved oxygen levels in the water, which starts a chain reaction – killing plants and small fish leaving predators such as carnivorous fish and waterfowl with less food.

Water chestnut is an aquatic plant native to Europe, Asia, and Africa that was unintentionally released from a botanical garden at Harvard University into the Charles River in the late 1800s. It grows in shallow water, 16 feet or less, in colonies that rapidly multiply with each plant producing 200-300 seeds in a year. By the late 1950s, water chestnut had reached the Great Lakes Basin.



Thick mats of water chestnut clog waterways and disturbs the native aquatic habitat for fish and plants.

The Eastern Lake Ontario Dune Steward Program in partnership with the Oswego County Soil and Water Conservation District is sharing information with local stakeholders about how to monitor and control the spread of this invasive species.

Photo: Charles R. O'Neill, Jr., New York Sea Grant

Water chestnut is difficult to eradicate it because of its long living fruits, or nutlets, and the nutlets can also injure the unsuspecting beach walker because they have four sharp spines. Each mature nutlet is greenish brown in color, but when they are no longer viable, or living, they turn black like the ones littering our beaches.

Now that I have made this plant sound indestructible, I'll let you in on the good news. There are effective ways to control water chestnut with the help of the public.

During the July 2007 Friends of Sandy Pond Beach meeting, Dune Steward Ben Robedee and John DeHollander provided information about developing a monitoring program at Sandy Pond for water chestnut. For more information about the Steward Program please contact New York Sea Grant, 315-312-3042; or visit us on the web at www.nysgextension.org.

The Eastern Lake Ontario Dune Steward & Salmon River Steward Program is managed by New York Sea Grant in partnership with the New York State Department of Environmental Conservation, New York State Parks, and The Nature Conservancy.



