

In response to several requests, this Newsletter insert provides color photos of four invasive (harmful exotic) species that can damage our lakes and reduce property values. Purple loosestrife is already present on Horseshoe Lake. Eurasian watermilfoil, curlyleaf pondweed, and zebra mussels are present in one or more area lakes. I hope these photos will be of help as you watch Horseshoe Lake this season. More information on these invasive species is available on the web at www.dnr.state.mn.us/invasives, and you are welcome to contact me at 218 765 4368 or jlgead@aol.com Jon Geadelmann, Aquatic Plant Management chair, HLPOA

EURASIAN WATERMILFOIL - EWM (below), a submerged aquatic plant, can grow quickly and form dense mats of vegetation that hinder boat movement, degrade wildlife habitat, and shade out native aquatic plants. EWM has not yet been found in Horseshoe Lake.



NORTHERN WATERMILFOIL (below) is a beneficial submerged aquatic plant in Horseshoe Lake. Do not confuse it with Eurasian watermilfoil. Count the number of leaflet pairs per leaf.



CURLYLEAF PONDWEED – CLP (below), a submerged aquatic plant, grows vigorously in early spring, ahead of other aquatic plants. By early summer, CLP can form dense mats of vegetation that cause problems similar to that of Eurasian watermilfoil. CLP has not yet been found in Horseshoe Lake, but our neighbors on Upper and Lower Mission Lakes have been struggling with CLP for several years. A key identifier of CLP are the small “teeth” visible along the leaf edge. Do not confuse CLP with claspingleaf pondweed (not shown). Photo courtesy of University of Florida.



Curly pondweed
Potamogeton crispus
Photo by Vic Ramey
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PURPLE LOOSESTRIFE – PL (below) is a wetland plant that grows near but not in the water. PL invades lakeshores and marshes, replacing cattails and other beneficial plant species. PL can form dense, impenetrable stands which are unsuitable as cover, food, or nesting sites for a wide range of animals. PL is present on Horseshoe Lake; control efforts to date have limited its growth and spread. Do not confuse PL with fireweed or blue vervain (not shown). Photo courtesy of University of Florida.



ZEBRA MUSSEL – ZM (below) are small, fingernail-sized mussels from Asia which have spread to parts of all the Great Lakes, the Mississippi River, and some inland lakes including nearby Ossawinnamakee Lake. ZM's can clog water treatment systems and irrigation facilities and can severely reduce or eliminate native mussel species. The photo below shows several ZM's on the shell of a native clam at Ossawinnamakee Lake, Fall 2004 (photo courtesy of Ed Feiler, DNR). ZM's can attach to any solid submerged object, such as dock posts and immersed lower units of boats. A likely means of ZM spread is microscopic-sized larvae carried in livewells or bilge water of boats. ZM's have not yet been found in Horseshoe Lake.

Please Note: Zebra mussels are the **SMALL** striped shells clustered on the much larger clam held in the photo below.

