

NEW AQUATIC INVASIVES ARE SERIOUS THREAT

News from the Chateaugay Lake Foundation

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Throughout the Adirondacks, the number of aquatic invasive species is increasing. Not only invasive plants, but invasive animals are a growing concern.

Invasives to Watch For

For the past two years, Lake George has been striving to eradicate the Asian Clam—a tiny, yellow-brown striped clam that breeds prolifically and supplants native species. It forms dense beds and its excretions of nutrients cause algae blooms leading to oxygen depletion and fish kills. It is thought to have been introduced by someone dumping an aquarium into the Lake. So far, over \$1.5 million dollars has been spent to try to smother it and keep it from spreading.

The spiny water flea is a crustacean about ½ inch long with a long, sharp barbed tail spine. It has invaded the Great Lakes and was found in the southern Adirondacks several years ago. It feeds on zooplankton, competing with small and baby fish, and its barbed tail is indigestible



Asian clams change the water chemistry, foul boat and water intakes, and make it impossible to enter the water without bathing shoes.

by larger fish, causing fish declines. It collects on fishing lines and equipment, as well as in bilge water or live wells, so it is easily transported. Last summer, it was found in Lake George as well as the feeder canals leading from the Hudson River to Lake Champlain. If Lake Champlain is invaded, the rest of the Adirondacks will be at high risk.



Masses of spiny water fleas can become attached to fishing lines.

In 2011, hydrilla—an exotic plant that makes milfoil seem tame—was discovered in Cayuga Lake in the Finger Lakes. There is an all-out effort to eradicate it before it spreads within the region.

Adirondack Lakes are somewhat resistant to the zebra mussel that has become a scourge in Lake Champlain. This is because the mussel favors environments where limestone provides calcium needed for shell development. However, resistance is not the same as immunity. And there appears to be no such natural protection against the other invasives just mentioned.

Boat Launch Protection Needed

Chateaugay Lake needs to do more to prevent invasives from being introduced into the lake. The DEC public boat launch is especially vulnerable. This is the site where Eurasian milfoil was first found in the lake in the early 1970s. In the past, volunteers from around the Lake have been trained to identify invasive species and to greet boaters at the boat launch to check for invasives and talk to them about spread prevention. But the volunteer coverage has been spotty at best.

Last summer, for the first time, we had a paid “Watershed Steward” assigned to provide weekend coverage throughout the summer, from Memorial Day to Labor Day. The steward was at the Boat Launch from 7 AM until 4 PM and inspected 965 boats as they were being launched or retrieved from the Lake. Of the 965 boats, 141 (15 percent) had been used within the prior two weeks in water bodies other than Chateaugay Lake that are known to be infested with aquatic invasive species, presenting the risk of new introductions.

The Steward found 29 instances of invasives on boats entering the Lake and 49 instances of invasives on boats leaving the Lake. Most were Eurasian milfoil (22 entering, 47 leaving). Alarmingly, there were two instances of Zebra mussels entering the Lake (on boats that had been in Chateaugay Lake and Lake Champlain in the past two weeks); no zebra mussels were found on boats leaving the Lake.



Zebra mussels get their name from a striped pattern commonly seen on their shells. They are usually about the size of a fingernail, but can grow to a maximum length of nearly 2 inches.

Also, there were five cases of curly-leaf pondweed entering the Lake and two cases of boats *leaving* the lake with curly-leaf pondweed—suggesting that Chateaugay Lake has developed a population of this invasive plant. This plant is also found nearby in Lake Champlain and Meacham Lake.



Curly-leaf pondweed has leaves that are stiff and crinkly, with finely serrated edges, about 3 inches long growing on spaghetti-like stems.

Curly-Leaf Pondweed in Chateaugay Lake

Over the past few years, isolated clumps of curly-leaf pondweed have been found and removed by the milfoil control divers at locations including the Lower Lake Inlet (2009), south of Camp Chateaugay (3 - 6 plants, 2011), the Boat Launch (about 100 plants, 2012) and off Buckhorn Point by the Sand Bar (2012). The plant tolerates low light and cool temperatures and emerges early in the spring, giving it a head start over other plants. It can form dense mats. When it dies back in mid-July, the decaying plants use up dissolved oxygen and the nutrient load creates algae blooms and piles of dying plant matter. Since it prevents other plants from developing, there is a loss of habitat and food for wildlife.

As the threats multiply, Chateaugay Lake needs protection more than ever!