Aquatic Plant Survey August - September 2010

Lower Chateaugay Lake and Chateaugay Narrows (North of Boat Launch)

In August and early September, 2010, Dan Kelting and Corey Laxson of the Adirondack Watershed Institute of Paul Smith's College performed surface surveys of the aquatic plants of Lower Chateaugay Lake and the Chateaugay Narrows (beginning north of the NYS DEC boat launch). The objectives of this survey were to: (1) document the location and species composition of aquatic plant beds; (2) determine the location and size of Eurasian water-milfoil beds; and (3) determine the location and abundance of Curlyleaf pondweed plants and beds.

The surface survey of the Lower Chateaugay Lake was performed by slowly trolling the entire littoral zone of the lake in a zigzag fashion, starting at the shoreline and moving out to a depth of approximately 15 feet (depth checked with a portable sounder) and then back to the shoreline. The Chateaugay Narrows was surveyed in the same fashion, starting from the eastern shoreline to the center of the channel heading north, then from the western shoreline to the center of the channel heading south.

Lower Chateaugay Lake

Lower Chateaugay Lake supports approximately 19 significant macrophyte beds. We identified 14 aquatic plant species, not including the numerous emergent and semi-aquatic plants that fringe areas of the lake margin. The most common plants to occur in the lower lake are Eurasian water-milfoil and members of the pondweed genus *Potamogeton*. The species, *amplifolius*, *epihydrus*, *praelongus*, and *perfoliatus* are particularly common throughout the lake and make up the majority of the offshore community. Nearshore species such as the bur-reed *Sparganium*, the white water lily *Nyphaea*, the spatterdock *Nuphar*, and the watershield *Brasenia* are scattered around the entire lake (Table 1).

Eurasian water-milfoil is common member of the aquatic plant community of Lower Chateaugay. It occurs in all 19 of the macrophyte beds surveyed and occupies a minimum of 56 acres of surface area (Figure 1). Milfoil was found to be rare (<5% cover) in 5.4 acres, occasional (5-15% cover) in 7.2 acres, present (15-25% cover) in 4 acres, common (25-50% cover) in 24 acres and abundant (>50% cover) in 14.8 acres. Curlyleaf pondweed was not observed during the survey.

Chateaugay Narrows

The Chateaugay Narrows north of the NYS boat launch supports approximately 26 distinct macrophyte beds (Figure 2). The plant community visible from the surface is comprised of the same species as in Lower Chateaugay Lake.

Similarly, the community is dominated by Eurasian water-milfoil and members of the pondweed genus *Potamogeton* as well as floating leaf species such as bur-reed, white water lily, spatterdock, and watershield (Table 1).

Eurasian water-milfoil occurs throughout the narrows, occupying a minimum area of 33 acres (Figure 2). Milfoil was found to be rare (<5% cover) in 1.1 acres, occasional (5-15% cover) in 6.0 acres, present (15-25% cover) in 1.86 acres, common (25-50% cover) in 17.1 acres and abundant (>50% cover) in 6.6 acres. Curlyleaf pondweed was not observed during the survey; however, this species was observed (and harvested) by the management crew during the summer in front of the NYS DEC boat launch.

Table 1. Aquatic plant species detected in Lower Chateaugay Lake and the Chateaugay Narrows during the surface survey conducted September, 2010.

Scientific Name	Common Name
Brasenia schreberi	water shield
Elodea canadensis	common water weed
Myriophyllum spicatum	Eurasian water milfoil
Nuphar variegata	spatterdock
Nymphaea odorata	white water lilly
Potamogeton amplifolius	large- leaf pondweed
Potamogeton epihydrus	ribbon-leaf pondweed
Potamogeton perfoliatus	clasping-leaf pond weed
Potamogeton praelongus	white-stem pondweed
Potamogeton robbinsii	Robbins pondweed
Potamogeton zosteriformis	flat-stem pondweed
Sparganium species	bur-reed
Vallisaneria americana	eel-grass
Zosterella dubia	water stargrass

Aquatic Plant Survey, Lower Chateaugay Lake

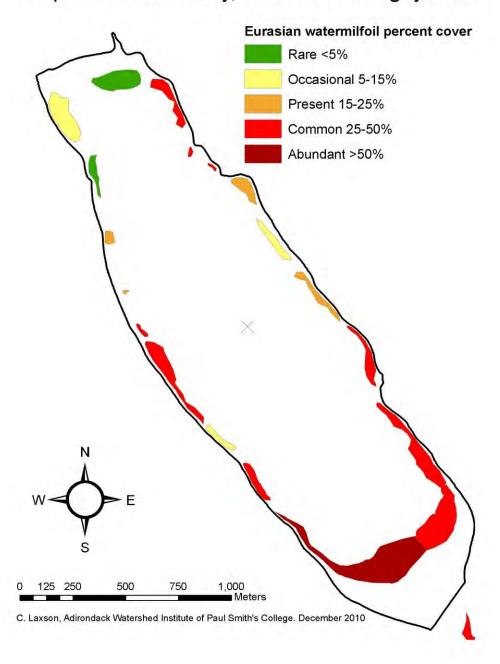


Figure 1. Location and percent cover of the Eurasian water milfoil beds of Lower Chateaugay Lake. Results obtained from a surface survey conducted in September, 2010.

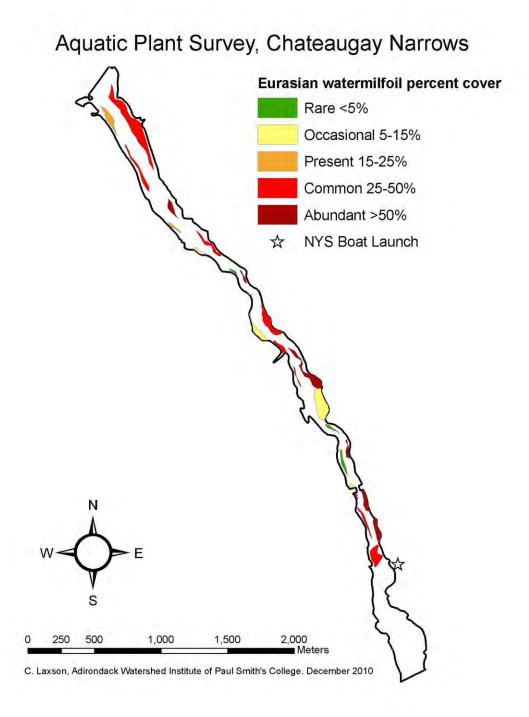


Figure 2. Location and percent cover of the Eurasian water milfoil beds in the Chateaugay Narrows. Results obtained from a surface survey conducted in August 2010.