



Milfoil Project Update

December 2022

2022 Season Wrap-Up

This past summer marked the 15th season of Eurasian milfoil control on Chateaugay Lake. We are so grateful for the support from the community that has made this possible!

This year, SCUBA divers spent six weeks hand-harvesting—two weeks in each part of the lake. The focus continues to be hot spots where milfoil is especially dense and boat traffic helps spread the invasive plant.

In the **Chateaugay Narrows**, milfoil removal started in mid-June at the boat launch, where the deeper areas along the channel needed extra attention. The crew moved on to the access lane to the Upper Lake, off the sand bar. New maps from the 2021 plant survey helped the divers zero in on dense patches in the line of boat traffic.

In **Lower Chateaugay**, the dive team worked to maintain and expand a cleared path through the large milfoil bed at the mouth of the Narrows. Buoys were placed with the message *Avoid Milfoil – Use Boat Path* to mark the path at the north and south. Rather than go around the buoys, boaters should travel in between

them to avoid the milfoil. Please let your family and friends know!

In **Upper Chateaugay**, a milestone was reached after six years of work! Divers were able to harvest the entire Indian Point shoreline to midway between milfoil buoys 3 and 4 on the west, establishing a zone for future maintenance control. In week two, the dive crew moved to the eastern shore along Boomhower Road, opening a new front in an area where milfoil has been spreading rapidly. Stepped-up support from the Town of Dannemora allowed for two weeks of removal work this year. The great news is that the Town has budgeted funds to support two weeks of work in the Upper Lake again next year!

Lake Wide, over the past 15 years, 196 tons of milfoil have been removed from the Chateaugay Lake system—about two tons for each week of work. This has greatly reduced the milfoil load, helping to slow its spread and dampen its impact. We are making progress but continue to search for ways to extend control lake-wide. A new herbicide approved for use in the Adirondacks could help us reach that elusive goal. See “New Directions” and “ProcellaCOR EC” (over).

Help us Help the Lake

The Chateaugay Lake Foundation needs your support! Mail a donation or donate online at www.chateaugaylakefoundation.org. We also accept donated securities. For more information, email info@chateaugaylakefoundation.org. Be sure to send your donation to the Chateaugay Lake Foundation rather than the Chateaugay Lakes Association, to ensure milfoil project designation as well as tax deductibility.

Thank you Towns of Belmont, Dannemora and Ellenburg for your continued support this year!

Your Purchases Can Help!

Through the Amazon Smile Program, Amazon donates 0.5% of the purchase price of your eligible on-line purchases to a charity of your choice. Please sign up and select Chateaugay Lake Foundation as your charitable organization.



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New Directions for Milfoil Control

After 15 years and \$640,000 spent on milfoil control, the goal of moving from spot control to lake-wide control remains a challenge. Here are some reasons why.

Lake Configuration. The long shallow stretch of the Narrows is almost all littoral zone—the zone where light reaches to the bottom and promotes plant growth. Eurasian milfoil became established here over 40 years ago and continues to flourish, especially in quiet bays.

Popularity of Boating. Chateaugay Lake is a great lake for boating, with heavy boat traffic between the Upper and Lower Lakes. As boats go through the Narrows, propellers chop the milfoil, creating fragments that take root and spread the plant. This results in rapid reinfestation of harvested areas.

Size and Density of Infestation. Milfoil was confirmed in the Chateaugay Lake system in 1979 at the boat launch. By 2006, prior to the start of control, there were 200 infested acres affecting 14 percent of the shoreline. Despite effective spot control, milfoil has continued to spread. The 2021 aquatic plant survey found Eurasian milfoil at 38 percent of the sample points, with beds averaging 29 percent cover. Some beds become very dense. Prior to control, milfoil density at the boat launch and the sand bar averaged 35,000 stems per acre. This compares to only 500 stems/acre when Upper Saranac Lake began their successful control effort in 2003. Quite a difference!

Cost and Limited Effectiveness of Control Methods. The CLF has relied on control methods recommended in a 2006 milfoil management plan by the Adirondack Watershed Institute. These included placing underwater “benthic” mats to smother dense growth, combined with hand harvesting of the shoreline. Benthic mats had limited effectiveness and are no longer used, leading to reliance on hand-harvesting. Weekly costs for a three-person harvesting crew run about \$7,500 and annual milfoil control spending has averaged about \$42,000 over the past 15 years. But the costs to achieve and maintain control lake wide are significantly higher.

We could expect to spend at least \$1.5 million over three years to reduce milfoil to maintenance levels lake wide. This is what was spent to control milfoil on Upper Saranac Lake, a similarly sized lake. They continue to spend about \$100,000 annually to maintain control, with divers harvesting the entire shoreline. We would need to raise similar amounts. This has not proved possible.

Looking Ahead. For all these reasons, the CLF Board was excited to learn of a new herbicide that would offer more effective control at significantly less cost. Read more about this relatively new product—ProcellaCOR EC—and why we think it holds promise for Chateaugay Lake.

ProcellaCOR EC

What is it? ProcellaCOR EC is a type of herbicide known as an “auxin mimic.” It works by mimicking a plant hormone that causes the target plant to grow so fast that it collapses and dies. Only plants are susceptible. It is highly specific to milfoils. Most native plants are not affected or recover soon after exposure.

Safety. The US EPA approved ProcellaCOR EC in 2018, assigning its lowest possible toxicity rating for humans, mammals, fish, birds, reptiles, and amphibians. The NYS DEC approved its use the following year after reviews by the Department of Health and DEC Division of Fish and Wildlife corroborated EPA’s findings. It was approved for use by the Adirondack Park Agency in 2020.

Use Restrictions. An advantage over earlier herbicides is that ProcellaCOR EC is effective at low concentrations, thereby reducing costs, and dissipates rapidly. It is effective at concentrations well below the drinking water threshold. There are no restrictions on use for drinking water, fishing, or contact recreation after treatment.

Effectiveness. ProcellaCOR EC has been used for 200 projects nationwide, including 18 in Vermont, 43 in New Hampshire, and 30 in New York, with dramatic reductions in Eurasian milfoil in treated sites. In the Adirondacks, it was tried in Minerva Lake in 2020 and two years later, only a handful of milfoil plants had returned, which were easily hand-harvested.

Cost. The estimated cost for a three-year phased treatment of all the milfoil beds in Chateaugay Lake would be in the range of \$415,000-\$465,000, a third of the cost to hand-harvest, bringing the goal of lake-wide control within reach.

Next Steps. The CLF is planning to host a presentation and community discussion about the potential use of ProcellaCOR EC this spring via the digital platform Zoom. To participate, please make sure we have your email address to send the invitation. Contact us at www.chateaugaylakefoundation.org.