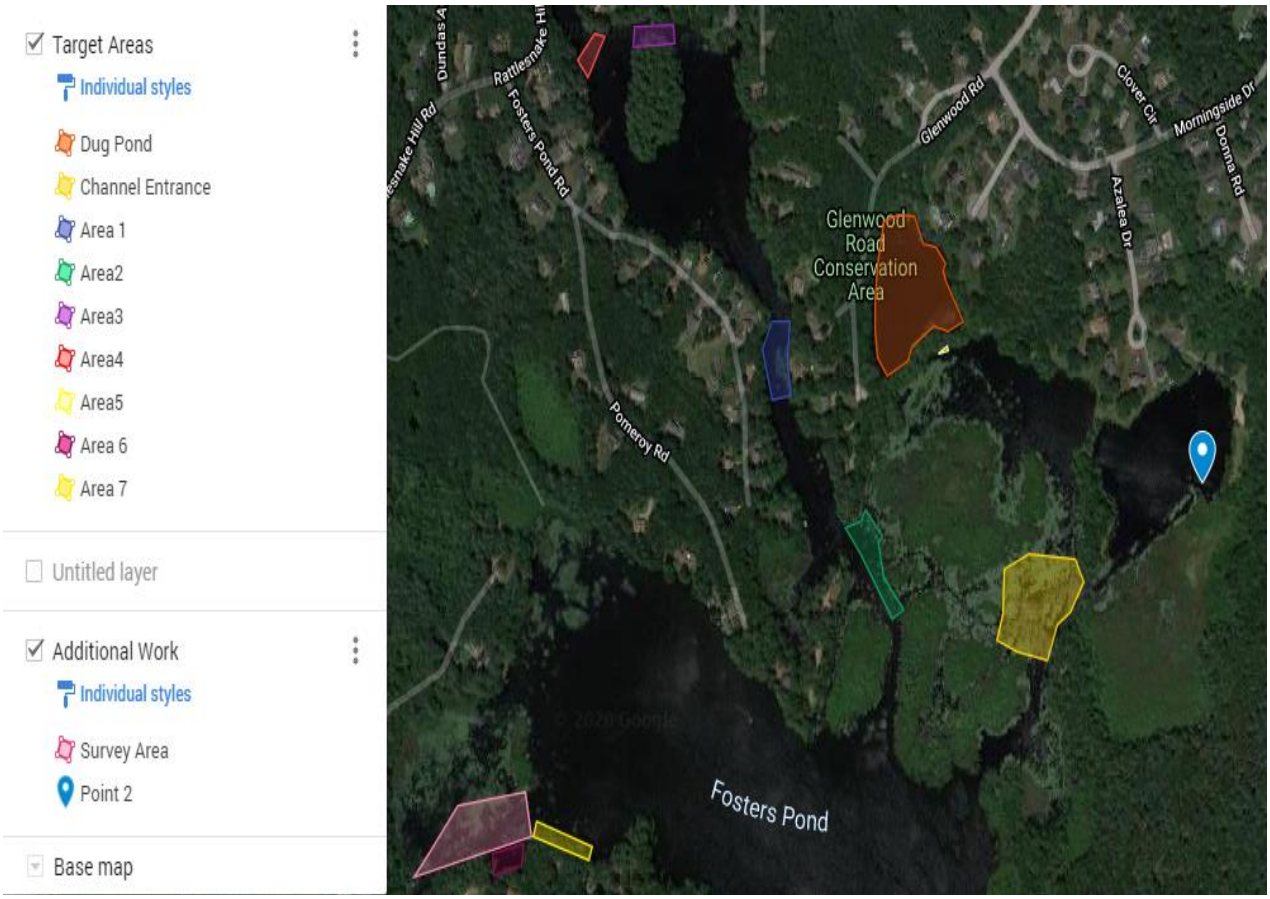
Aquatic Resource Support Services

After Action Report
Foster's Pond, 2020

Summary

During August and September 2020, we removed approximately 2.5 cubic yards of Fanwort biomass from 8 acres of Foster's Pond within the target areas in which the density of plants was mostly low and patchy. An exit survey revealed traces of dead or dying Fanwort within the Mill Reservoir.

Map



Map 1

Detailed Scope of Work

Dug Pond and Area 5

Dug pond accounted for approximately 30% of the biomass removed. Only a few fragments were removed from Area 5 just south of Dug. We began by removing a large patch on the western shore.

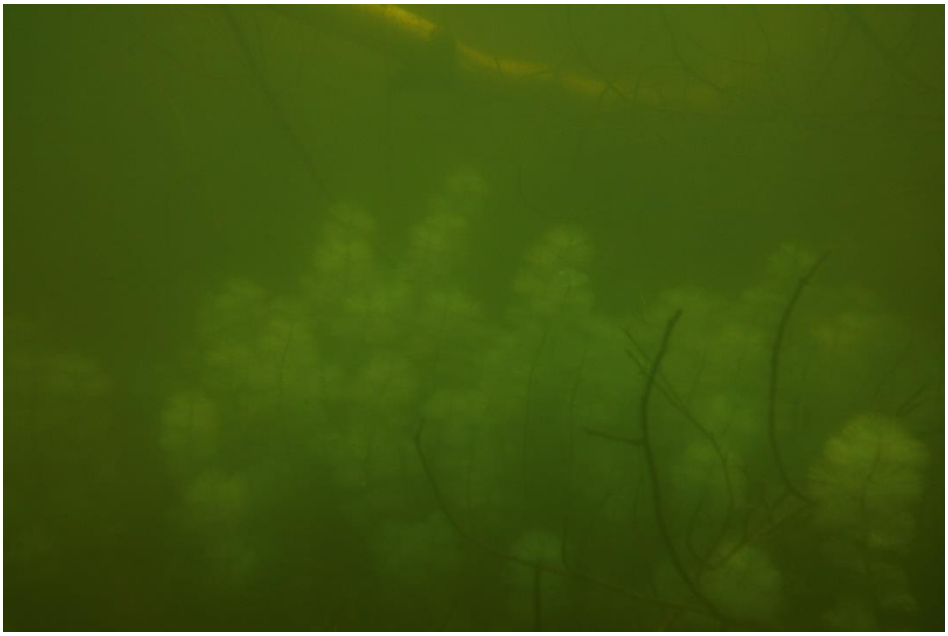


Image 1: A portion of the large patch near the downed tree for scale. Water conditions made capturing an image of the entire patch impractical.

Due to its size and density, a floating barrier was deployed around the patch to reduce fragmentation.

Image 2: The floating barrier around the initial patch.

We then searched the entire littoral zone from the shore to the persistent thermocline at a depth of roughly 10 ft. Other than the initial patch, the Fanwort was mostly sporadic small to medium sized plants. Though a few small patches were revealed, including one beneath the thermocline at approximately 15 ft. The search also revealed that the removal site from the 2019 season remains clear, with the exception of a few small plants on the border of the previous target area.

Image 3: A small Fanwort plant in the patch below the thermocline.

Mill Reservoir Entrance

This area accounted for roughly another 30% of the removed biomass. We searched the area in a grid pattern removing sporadic small and medium sized plants throughout, as well as the occasional small patch.

Image 4: The Mill Reservoir entrance with orange survey buoys visible.

Many of the plants, especially those nearest the entrance to the reservoir, exhibited significant chlorosis.

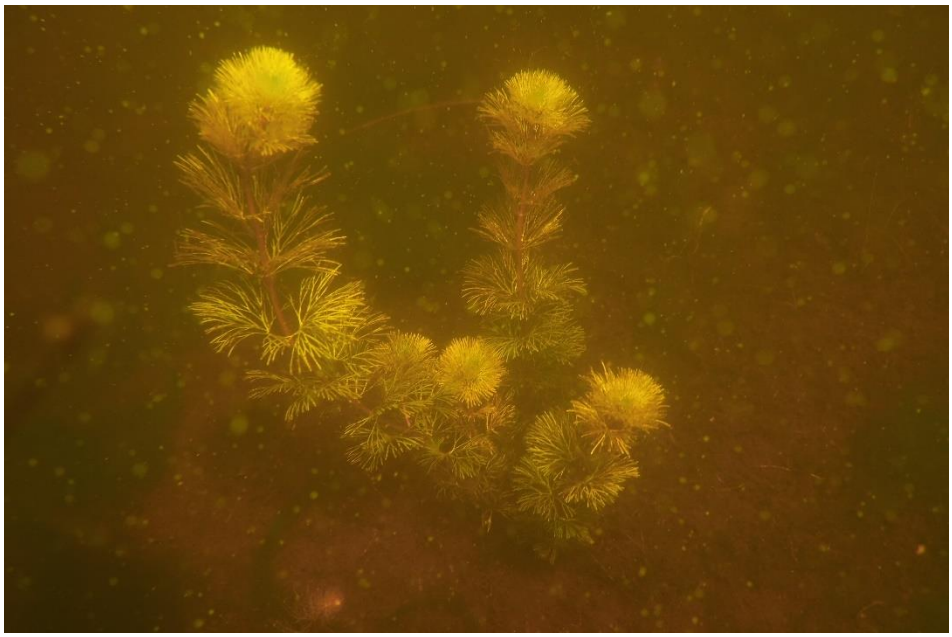


Image 5: A Chlorotic Fanwort plant in the Mill Reservoir Entrance.

Areas 1-4

These areas were an auxiliary target during the first deployment of the season and primary in the second. Combined they account for about 10% of the removed biomass. Much of what I will call the West Lobe, extending from the main pond below Area 2 up to Area 4, was surveyed. The marked areas indicate those in which Fanwort was observed and removed.

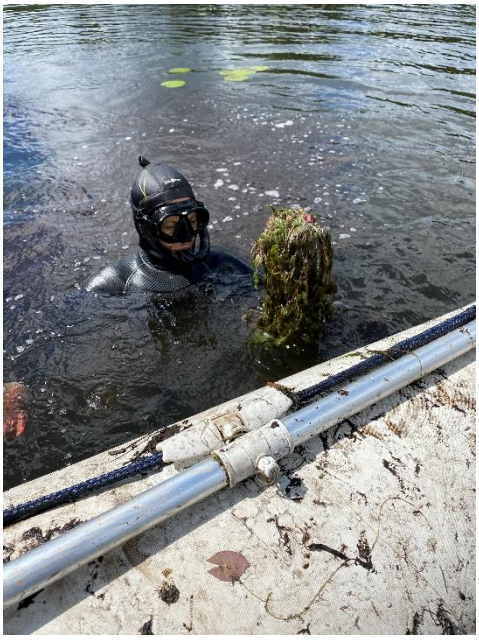


Image 6: A diver surfaces with a handful of Fanwort during the survey.

Areas 6 and 7

These areas were targeted based on a report from a resident and accounted for the remaining 30% of removed biomass. In addition to the plants removed from Areas 6 and 7, a survey revealed a significant amount of patchy surfacing Fanwort to the North.

Map 2

Bycatch

As always, we strove to minimize bycatch of non-target species. The estimated bycatch of non-target plant species was ~10% of the removed biomass. The majority of bycatch was pervasive native species, though some Lily bycatch was unavoidable due to Fanwort growth among the Lily stems. Additionally, I had a close encounter with a pond resident who, in my opinion, proved to be the most remarkable part of this endeavor as well as a profound reminder of why our aquatic ecosystem is so worthy of protection. I came so close to being snapped by a turtle that he ended up in my bag. Astounded, I brought him, very carefully, to shore for a quick photo op to record his presence.

Image 7: The resident from my close encounter. A very special Common Snapping Turtle.

Though I had neither the time nor the equipment to make precise measurements, he was quite heavy, and his carapace was over 24 inches long. This makes him, conservatively, over 70 years old and he may well be as much as a full century older than that.[1] The turtle was released immediately following this photo and scurried back into the pond unharmed.

Exit Survey

Despite being cut short by an unplanned dive, a brief survey within the Mill Reservoir revealed traces of Fanwort at the point indicated in the map below. Most appeared to be dead or dying, but some new growth was observed that did not seem to be affected by the chemical treatment. Additionally, a significant number of surfacing plants were observed in the area north of Areas 6 and 7. This growth did not appear on previous survey maps and could be indicative of a wider infestation along the northwest shore of the main pond.

[1] Armstrong, Doug & Brooks, Ronald. (2014). Estimating Ages of Turtles from Growth Data. Chelonian Conservation and Biology. 13. 9-15. 10.2744/CCB-1055.1.

Image 8: The location in Mill Reservoir where Fanwort fragments were found.

As always, feel free to reach out to us with any questions or concerns. We appreciate your business and look forward to working with you again soon.

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