

# HARVESTING REPORT

## By AB Aquatics, Inc.

Location: Lunenburg, MA Hickory Hills Lake

Dates: From: Monday, June 04, 2018; - To: Friday, June 08, 2018

Exotic Plants: Fanwort

Diver(s): Robert Patterson IV, Mike Briggs

Crew: Robert Patterson IV, Mike Briggs, Joseph McGuinn

Amounts: 670 Total Gallons 31.5 Total hours worked

Detail report included (check): Excel spreadsheet ☒ Map(s) ☒ Other ☐

Report: **Monday 6/4:** Diver began in the NW corner of zone 5. Planning to start in this area of the zone and move east into the area that the 2017 crew ended in. This long pass across the zone enabled the diver to assess how dense the area was infested in a general sense. Across the zone only a few single plants were found. Once in the northeast corner of the zone near Blueberry Island, the diver began patterning to the south toward Hemlock Drive and island 1. **Dive B:** After switching divers early in the patterning, still heading toward island 1, the diver was able to locate both scattered single plants and some smaller patches. The most fanwort was found in the deepest section of the zone for the portion we were covering. The diver noted that most of the plants were still laying down in a dormant state particularly in the deepest areas. The diver finished the pattern and day in the corner formed by island 1 and the Hemlock Drive peninsula. Team plans to move on from this zone.

**Tuesday 6/5:** The dive began at the southern tip of Lizard Island. The diver initiated a north/south search pattern moving in an easterly direction towards the rock pile. Over the course of this part of the dive the diver encountered scattered single plants up to one foot in length, medium sized patches, and several small fields. The plants comprising the patches and fields ranged from two to eight feet in length and were lying along the lake bottom. The way the plants grew along the silty bottom made for low visibility and a slow pulling process. From the rock pile the crew relocated east off the coast of Peninsula Drive. This part of the dive began in the northeast corner of zone 11. The diver initiated an east/ west search pattern in a southerly direction. The diver encountered single scattered plants up to two feet in height, a small patch and two large patches. The patches were comprised of plants from two to six feet in length growing along the silty bottom. Heavy siltation made for a more difficult pulling process. The dive ended halfway down the eastern shore of zone 11.

**Wednesday 6/6:** The diver began in the northeastern corner of zone 11. The crew initiated an east/west search pattern moving in a southerly direction. The search pattern spanned from 40 to 140 feet from the eastern shore. Over the course of the dive the diver encountered single plants scattered every 50 feet or so. The diver also reported finding small, medium, and large patches scattered throughout the course of the dive. The single plants ranged from one to two feet in length. The plants comprising the patches ranged from 6 to 12 feet in length and grew along the lake bottom. The well-established root systems found in the patches made for a tedious pulling process. A fair amount of the growth found was concentrated at the foot of the steep slope leading up to shore. The fanwort harvested during the dive amounted to 6 bags. The dive ended at the southwestern corner of

zone 11. **Dive B:** Dive began in the northeastern corner of zone 11. The crew initiated a long south/north search pattern spanning the entire width of zone 11 starting about 150 feet from shore moving westward. Over the course of the dive the diver encountered single plants scattered every 40-50 feet as well as two large patches. The single plants ranged up to two feet in length. The plants comprising the patches ranged from 4 to 10 feet in length and grew along the lake bottom. This trailing growth pattern and the well-established root systems found in the patches made for a tedious pulling process. The fanwort harvested during the dive amounted to 2 bags. The dive ended by the northern border of zone 11 about 175 feet from the eastern shore.

**Thursday 6/7:** The dive started in the northeastern section of zone 11. The crew initiated a long north/south search pattern spanning the entire width of zone 11, 185 feet from shore in a westerly direction. Over the course of the dive the diver encountered scattered singles with roughly 100 feet from each other as well as two medium patches. The single plants ranged from 1 to 2 feet and the patches were in the height range of 4 to 8 feet. The depth of the work area got deeper as the search moved westward, starting at 16ft going to depths of 20ft. There was almost no growth in the deeper sections of the zone. **Dive B:** The dive started in the southeast section of zone 12 approximately 60 feet from shore. Diver initiated a north/south search pattern moving west along the shore. Diver encountered scattered single plants every 50ft or so and 3 medium sized patches. The single plants were 1 to 2 feet in height the patches were comprised of plants 4 to 8 ft in height. Once the western shore was reached, the crew turned around and began a north/south search pattern in an easterly direction just north of the previous search. During this path the diver encountered scattered single plants approximately every 50ft and three medium sized patches. The single plants were 1 to 2 ft in height. The plants in the patches were roughly 4 to 8 ft in length. All the patches found during the course of this dive were sparsely populated with plants indicating that they had been previously harvested. The fanwort harvested over the course of the dive amounted to 3 and a half bags.

**Friday 6/8:** Diver initiated dive in the northern part of zone 23. Diver commenced an east/west search pattern moving southward towards the mouth of the Cove. Diver reported finding scattered single plants and a density of 2 through the entire Cove. The plants were 1 to 3 ft in length. Many of the plants found appeared to be fragments that had settled and began to root, other plants seemed to be growing out from the benthic barriers. One bag was harvested in all of area 23. The diver made a thorough search of the area but due to the depth of the water and high siltation another search would be wise later in season. **Dive B:** Diver began the dive in the northwest section of zone 8. After searching the mouth of zone 23's Cove, the diver initiated a north/south search pattern moving in a westerly direction. Small patches were found at the mouth of the Cove and scattered throughout zone 8. The patches were comprised of 3 to 5 plants varying from 1 to 4 feet in length. In the areas that had markers the diver reported finding large previously harvested patches. All that remained were single plants scattered over the harvested areas. All fanwort found during the dive grew amongst short dense native plants. The dive depth ranged from 5 feet at the mouth of zone 23 to 14 feet at the southern edge of zone 8. Three bags were harvested during the dive.

By: Al Hoch ; Date submitted June 14, 2018

Date	Vessel Used	Harvest locations	Yield (Gal)	Bottom types	Density (1-4)	Harvest Method & Hrs.			
						ABA DASH	2nd DASH Diver	Hand Pull	Survey
Monday, June 4, 2018	20D4	Zone 5	140	Silt, native plants	3-1	6.00			
Tuesday, June 5, 2018	20D4	Zone 11 Lizards Island, N to S	180	Silt, native plants	4-1	6.25			
Wednesday, June 6, 2018	20D4	Zone 11 Northern end	160	Silt, native plants	3-1	6.25			
Thursday, June 7, 2018	20D4	Zone 11 Eastern side	110	Silt, native plants	3-1	7.00			
Friday, June 8, 2018	20D4	Zone 23	20	Organic	2	2.50			
Friday, June 8, 2018	20D4	Zone 8	60	Silt, native plants	3-1	3.50			
Total Gallons			670			-----	-----	-----	-----
			Current week dive hours			31.50	0.00	0.00	0.00
			Carry forward: over/ under hours			0.00	0.00	0.00	0.00
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			Unbilled Hours			31.50	0.00	0.00	0.00
						-----	-----	-----	-----
			Total Dive Days			5.25	0.00	0.00	0.00
<< Date Invoice Number >>						Days			
						-----	-----	-----	-----
			Carry forward: over/under hours			31.50	0.00	0.00	0.00

