## HARVESTING REPORT By AB Aquatics, Inc.

Location: Lunenbury, MA Hickory Hills Lake

Dates: From: Monday, June 11, 2018; - To: Friday, June 15, 2018

Exotic Plants: Fanwort

Diver(s): Mike Briggs

Crew: Joseph McGuinn, Devon Huckins

Amounts: 1,665 Total Gallons 30.0 Total hours worked

Detail report included (check): Excel spreadsheet  $\boxtimes$  Map(s)  $\boxtimes$  Other  $\square$ 

Report: **Monday 6/11:** The dive began on the northern boundary of zone 9 just west of center. The diver initiated a north/south search pattern moving in a westerly direction covering the northern half of zone 9. Toward the beginning of the dive, the diver encountered several small and medium sized patches comprised of plants ranging from 1 to 6 feet in length. The diver also reported finding previously harvested patches with scattered plants growing within the former patch area. The fanwort harvested from the first half of the dive amounted to 6 bags. In the latter half of the dive, the diver encountered two large sized patches marked by buoys placed by Hickory Hills survey divers. The plants found in these patches varied from 2 to 8 feet in length. These last two patches were located near the boat trafficked area off the shore from the boat launch where heavy growth was suspected. The latter half of the dive yielded 8.25 bags of fanwort. All plants encountered today grew amongst natives and were beginning to grow upward and stand erect off the lake bottom though many still trailed along the silty floor.

Tuesday 6/12: The diver initiated the dive in the north section of zone 9. Upon descending the diver encountered a large patch yielding 9 bags. The plants ranged from 2 to 6 ft in length and standing approximately 3 feet above the lake bottom. The diver continued the north/south search pattern in a easterly direction. Along the search the diver encountered three small patches, two medium and an additional large patch. The plant growth conditions were like those described in the first patch. The harvest from the latter patches amount to 9 bags combined harvest was a total of 18 bags. **Dive B:** Dive began just east of the center of zone 9. The diver returned to previously marked area of growth. The patch was medium in size with plants ranging 2 to 6 feet in length standing 1 to 3 feet off the lake bottom, yielding one bag. Diver continued with a north/south search pattern in a easterly direction encountering a few more small patches with similar growth pattern found over the preceding parts of the dive. The total yield for the dive was 4 bags. Wednesday 6/13: The dive began just west of the center of zone 9. The diver imitated a north/south search pattern in a easterly direction. The diver encountered a medium patch in the southern part of zone 9 about 30 feet from the shoreline. Diver encountered a large patch near the center of the southern border of zone 9 and a large patch just east of dead center of zone 9. Several other small and medium patches over the course of the dive. The plants ranged in length from two to six feet standing four feet off the lake bottom. Patches encountered during this dive were lower in density compared to patches previously found. Strong winds gave the crew difficulty with the search pattern.

**Thursday 6/14:** The dive began east of the center of zone 9 about 500 feet from the eastern shore. Diver imitated a west/east search pattern moving in a southerly direction. As the search proceeded the diver harvested single plants, small patches, and medium sized patches scattered throughout the eastern half of zone 9. In the southeastern corner of zone 9, almost directly on the border of zone 10 and 80 feet from shore, the diver encountered a large patch (~150 square feet) which yielded approximately 4 bags of fanwort. The single plants encountered appeared to be fragments which were beginning to take root and were 1 to 2 feet in length. All patches were comprised of plants ranging from 2 to 8 feet in length the majority of which grew along the lake bottom though some were stand up to 4 feet up into the water column. Total yield from this dive was 8 bags. **Dive B:** The dive began in the northeastern corner of zone 10 about 60 feet from shore. The diver continued an east/west search pattern moving in a southerly direction. Shortly after entering the section the diver encountered a large patch (~ 100 square feet) near the northern border of the zone approximately 200 feet from the eastern shore. Over the course of the search the diver encountered 8 to 12 small and medium sized patches. Toward the end of the diver the diver encountered 2 large patches just east of the island in the southeastern corner of Zone 10. The growth pattern observed throughout the dive was like those observed in previous dives, plants 2 to 8 feet in length growing mainly along the lake bottom with some thanking erect up to 4 feet tall. The dive ended in the southeastern corner of Zone 10.

**Friday 6/15:** The dive began in the northwestern section of zone 10. The diver initiated a west/east search pattern in a southerly direction. On the first pass the diver encountered a field of fanwort (~400 square feet) located along the northern border of zone 10 approximately 150feet east of the peninsula in the northwestern corner of the zone. This field alone yielded 8 bags of fanwort. Due to wind and siltation the crew relocated to the south western corner of zone 10 just east of Island 1. The diver restarted an east/west search pattern moving in a northerly direction. The search ran from the eastern border of zone 10 to the center of zone 10. The diver encountered large patches just east of Island 1, and just east of Island 3; with several small patches scattered throughout the search. Just before the end of the dive another large patch was discovered near the northern border of the zone. All patches encountered throughout the dive shared similar characteristics with those seen in previous dives, plants varied from 2 to 8 feet in length with most of growth trailing along the lake bottom but some growth extending up to 4 feet into the water column. The final yield was 17 bags.

By: Al Hoch; Date submitted June 16, 2018

						Harvest Method & Hrs.			
Date	Vessel Used	Harvest locations	Yield (Gal)	Dottom trings	Density (1-4)	ABA DASH	2nd DASH Diver	Hand Pull	Sm.co
	20D4			Bottom types	· · ·	4.50	Diver	Pull	Survey
Monday, June 11, 2018	+	Zone 9 N part		Silt, native plants	3-1				
Tuesday, June 12, 2018	20D4	Zone 9 N and E parts		Silt, native plants	4-2	7.00			
Wednesday, June 13, 2018	20D4	Zone 9 just W of center		Silt, native plants	3-1	6.00			
Thursday, June 14, 2018	20D4	Zone 9 NE part		Silt, native plants	4-1	2.75			
Thursday, June 14, 2018	20D4	Zone 10 NE corner		Silt, native plants	4-1	4.25			
Friday, June 15, 2018	20D4	Zone 9 NW corner	340	Silt, native plants	3-1	5.50			
			-						
		Total Gallons	1665	 i					
		Total Gallons	1000	Current week d	ive hours	30.00	0.00	0.00	0.00
			Ca	rry forward: over/ und	der <b>hours</b>	31.50	0.00	0.00	0.00
				Unbill	ed <b>Hours</b>	61.50	0.00	0.00	0.00
				Total [	Dive <b>Days</b>	10.25	0.00	0.00	0.00
		<< Date <u>Invoice</u> Number >>			<u>Days</u>				
			Ca	 arry forward: over/und	der <b>hours</b>	61.50	0.00	0.00	

