

**Myles Standish State Forest – Interior Northern Section of East Tract Unit A - Small Tree Mulching Lot****Overview:**

This post-harvest inventory was conducted on the 173 acre tree mulching project conducted in the winter/spring of 2010-11 on the northern section of East Tract Unit A, located in the Myles Standish State Forest in the Town of Plymouth.

The operation parameters were to mulch in place all trees less than 8 in. (DBH) that were within 20 feet of a tree larger than 8 in. DBH. This was to reduce the occurrence of torching during subsequent prescribed burns. The operation was done with tracked skid steers with flail mower heads.

A post-harvest inventory was conducted in which 25 points were systematically located in the harvest area. At each point, overstory trees ( $\geq 1$  in. DBH) were sampled using horizontal point sampling with a BAF 10<sub>ENGLISH</sub> angle gauge; understory trees ( $< 1$  in. DBH,  $\geq 3$  in. tall) were sampled using circular plots of fixed radius 6.0 ft.; and CWD was sampled using line intersect sampling with single 50 ft. long transects. Field inventory was conducted during August 2019, under dry summer conditions using standards set forth in the DCR: DSPR Post-management Inventory Protocols. Photographs were taken at 12 of these plots.

**Overstory observations:**

A portion of the area was burned during a wildfire in 1957. No widespread or intensive silvicultural work had been completed on this part of the State Forest prior to the wildfire. The 2010-11 operation removed smaller trees near larger trees to lower the complexity of subsequent prescribed burns. A few small isolated patches of standing dead red pine occur in the project area. Only Eastern white pine, pitch pine, and black oak trees  $\geq 1$  in. DBH were found in the project area. Oak tends to dominate towards the northern end with native pines dominating elsewhere. Eastern white pines tended to be the larger trees up to 22 in. DBH. Pitch pine and Eastern white pine compose 77% of the 78 ft<sup>2</sup>/ac basal area live of overstory trees. 14 snags per acre  $\geq 4$  in. DBH are present.

**Understory observations:**

The understory is comprised of white pine, pitch pine, black oak, sassafras, and black cherry with all stems less than 4.5 feet tall except for a small portion over 4.5 feet tall being all eastern white pine. The ground cover included both woody and herbaceous species, most of which is dominated by black huckleberry, lowbush blueberry, and scrub oak. Glossy buckthorn was observed in the understory. Eastern white pine and pitch pine compose 70% of the 265 trees per acre  $< 1$  in. DBH.

**Coarse woody debris observations:**

Operations created FWD (decomposed by this date) as the result of mulching and did contribute to an increase in CWD as small oak trees were allowed to remain as long as half of the stem was mulched. 90 ft<sup>3</sup>/ac of CWD were present, with 100% of that in pieces.

**Photographs:**



View in the northern third of area, showing black oaks.



View of pitch pine and Eastern white pine.



View showing thick shrubs (scrub oak, black huckleberry) surrounded by pitch pine and Eastern white pine. Shrubs provide rare species habitat for many moths and butterflies.

STANDING LIVE TREES;  
ALL SIZES -  
STAND TABLE

COMMON NAME SPCD HT (FT) / DBH (IN) CLASS	pitch pine		eastern white pine		black cherry		black oak		sassafras		TOTAL BA	TOTAL TPA
	126 BA	126 TPA	129 BA	129 TPA	762 BA	762 TPA	837 BA	837 TPA	931 BA	931 TPA		
3.0 IN ≤ HT < 4.5 FT.	0	46	0	125	0	33	0	31	0	15	0	250
4.5 FT ≤ HT < 10.0 FT.	0	0	0	15	0	0	0	0	0	0	0	15
10.0 FT ≤ HT > 15.0 FT. / < 1.0 IN. DBH	0	0	0	0	0	0	0	0	0	0	0	0
2	0	24	0	0	0	0	0	0	0	0	0	24
4	0	5	1	10	0	0	1	10	0	0	2	24
6	6	34	2	8	0	0	4	19	0	0	12	61
8	10	30	3	8	0	0	8	23	0	0	21	62
10	8	14	3	6	0	0	3	6	0	0	14	26
12	6	8	4	6	0	0	2	2	0	0	12	16
14	2	2	4	4	0	0	1	1	0	0	7	7
16	0	0	3	2	0	0	0	0	0	0	4	3
18	0	0	3	2	0	0	0	0	0	0	3	2
20	0	0	2	1	0	0	0	0	0	0	2	1
22	0	0	1	0	0	0	0	0	0	0	1	0
24	0	0	0	0	0	0	0	0	0	0	0	0
26	0	0	0	0	0	0	0	0	0	0	0	0
28	0	0	0	0	0	0	0	0	0	0	0	0
30	0	0	0	0	0	0	0	0	0	0	0	0
32	0	0	0	0	0	0	0	0	0	0	0	0
34	0	0	0	0	0	0	0	0	0	0	0	0
36	0	0	0	0	0	0	0	0	0	0	0	0
38	0	0	0	0	0	0	0	0	0	0	0	0
40	0	0	0	0	0	0	0	0	0	0	0	0
42	0	0	0	0	0	0	0	0	0	0	0	0
44	0	0	0	0	0	0	0	0	0	0	0	0
46	0	0	0	0	0	0	0	0	0	0	0	0
48	0	0	0	0	0	0	0	0	0	0	0	0
≥50	0	0	0	0	0	0	0	0	0	0	0	0
TOTALS	34	164	26	187	0	33	18	92	0	15	78	491

**STANDING DEAD TREES;  
≥ 1 IN. DBH -  
STAND TABLE**

COMMON NAME SPCD HT (FT) / DBH (IN) CLASS	pitch pine		eastern white pine		black cherry		black oak		sassafras		TOTAL	TOTAL
	126 BA	126 TPA	129 BA	129 TPA	762 BA	762 TPA	837 BA	837 TPA	931 BA	931 TPA	BA	TPA
3.0 IN ≤ HT < 4.5 FT.	0	0	0	0	0	0	0	0	0	0	0	0
4.5 FT ≤ HT < 10.0 FT.	0	0	0	0	0	0	0	0	0	0	0	0
10.0 FT ≤ HT < 15.0 FT. / < 1.0 IN. DBH	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	5	0	0	0	5
6	0	0	0	0	0	0	1	4	0	0	1	4
8	0	1	0	1	0	0	0	1	0	0	1	3
10	0	0	0	0	0	0	0	0	0	0	0	0
12	0	0	0	1	0	0	0	0	0	0	0	1
14	0	0	0	0	0	0	0	0	0	0	0	0
16	0	0	1	1	0	0	0	0	0	0	1	1
18	0	0	0	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0	0	0	0
22	0	0	0	0	0	0	0	0	0	0	0	0
24	0	0	0	0	0	0	0	0	0	0	0	0
26	0	0	0	0	0	0	0	0	0	0	0	0
28	0	0	0	0	0	0	0	0	0	0	0	0
30	0	0	0	0	0	0	0	0	0	0	0	0
32	0	0	0	0	0	0	0	0	0	0	0	0
34	0	0	0	0	0	0	0	0	0	0	0	0
36	0	0	0	0	0	0	0	0	0	0	0	0
38	0	0	0	0	0	0	0	0	0	0	0	0
40	0	0	0	0	0	0	0	0	0	0	0	0
42	0	0	0	0	0	0	0	0	0	0	0	0
44	0	0	0	0	0	0	0	0	0	0	0	0
46	0	0	0	0	0	0	0	0	0	0	0	0
48	0	0	0	0	0	0	0	0	0	0	0	0
≥50	0	0	0	0	0	0	0	0	0	0	0	0
<b>TOTALS</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>10</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>14</b>

**COARSE WOODY DEBRIS SUMMARY** (DEAD; >45° FROM VERTICAL; ≥ 3.0 IN DIA; ≥ 3.0 FT LENGTH)

PIECES/ AC	PIECE CF/AC	PILES (DIMENSIONS)/AC	PILE CF/AC	PILE DEPTH CF/AC	TOTAL CWD CF/AC: PIECES + PILE DIMENSIONS	TOTAL CWD CF/AC: PIECES + PILE DEPTH
79.7	90.1	0.0	0.0	0.0	90.1	90.1