DCR: DSPR Post-management monitoring **September 2019**
Savoy Mountain State Forest – Adams Road Spruce Lot

Overview:

This post-harvest inventory was conducted on a ±128 acre harvest conducted from 2006 through 2011 as the "Adams Road Spruce Lot" located in the Savoy Mountain State Forest in the Town of Savoy. The harvest incorporated three different silvicultural techniques to include: overstory removal with reserves, thinning, and strip cutting. This was a mechanized operation that utilized harvesters, forwarders, and skidders.

A post-harvest inventory was conducted using 25 points that were located within the harvest area in a constrained random fashion. At each point overstory trees (≥ 1 in. DBH) were inventoried using horizontal point sampling and a BAF $20_{ENGLISH}$ angle gage; understory trees (< 1 in. DBH) were sampled using circular plots with a fixed 6.8 ft. radius; and CWD was sampled using line intersect sampling with a single 10 ft. long transect at each point. Sampling was conducted during August 2019, under mostly dry summer conditions using standards set forth in the DCR: DSPR Post-management Inventory Protocol. Photographs were taken at 5 of these points.

Overstory Observations:

The overstory within harvested areas is composed primarily of Norway spruce left behind in the thinning portions of the harvest. In the years since the harvest, there has been significant damage in the form of broken tops and blowdowns in these areas. Wetland buffers and filter strips are composed mainly of red maple, yellow birch, and balsam fir. Yellow birch and balsam fir compose 35% of the 94 ft^2/ac basal area of live overstory trees. 15 snags per acre ≥ 2 in. DBH are present.

Understory Observations:

Favorable growing conditions and open direct sunlight have allowed for significant numbers of desirable tree species to regenerate within the harvested areas. No invasive exotic vegetation was observed at any of the sample points. Yellow birch and red maple compose 38% of the 5,364 trees per acre < 1 in. DBH.

Coarse Woody Debris Observations:

Harvesting operations have left CWD scattered throughout the project area and approximately 5 piles of larger logs were observed throughout the harvest area. The larger log piles were primarily observed when moving between plots; only one pile fell near a sample point, and no piles were intersected by CWD transects and tallied during this sample. All piles located were on the south side of Adams Road. The logs appeared to have been firewood or pulp pieces that were not utilized by the harvesters. Fine woody material that is currently present is through normal branch shedding of healthy trees, and those finer materials that were part of harvesting operations are completely decomposed. 1,195 ft^3/ac of CWD were present, with 100% of that in measurable pieces.

Photographs:



A 180° panorama of point 7. This point is located within the northeastern portion of the sale and sampled an overstory removal with reserves. The photo shows a large amount of balsam fir regeneration approximately 2 – 3 in. diameter with some interspersed hardwood regeneration of approximately 1 – 2 in. diameter.



A 180° panorama of point 17. This point is located within the central portion of the project area and sampled an area that was thinned to approximately 40% of its pre-harvest basal area density. The photo shows much less regeneration, and larger trees present. The hardwoods and softwoods present on this sample point ranged from 8 – 10 in. diameter, but significantly larger trees were scattered throughout the harvest area.



A 180° panorama taken at point 20. This sample point is located in the south-central portion of the sale area and the area around it served as a log landing during the project. The photo shows the scattered trees, goldenrod, thistle, and various grasses associated with high quality pollinator habitat and early seral forest.

STANDING LIVE TREES;
ALL SIZES -
STAND TABLE

COMMON NAME	balsam fir		Norway spruce		red spruce		eastern hemlock		striped maple	
SPCD	12	12	91	91	97	97	261	261	315	315
HT (FT) / DBH (IN) CLASS	**BA**	**TPA**	**BA**	**TPA**	**BA**	**TPA**	**BA**	**TPA**	**BA**	**TPA**
3.0 IN ≤ HT < 4.5 FT.	0	0	0	228	0	0	0	0	0	60
4.5 FT ≤ HT < 10.0 FT.	0	84	0	72	0	0	0	0	0	24
10.0 FT ≤ HT > 15.0 FT. / < 1.0 IN. DBH	4	252	2	132	0	0	0	0	1	144
2	2	98	0	0	0	0	0	0	0	0
4	5	59	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	1	4
8	2	7	1	2	0	0	1	2	0	0
10	0	0	0	0	0	0	1	1	0	0
12	1	1	3	4	0	0	1	1	0	0
14	1	1	0	0	0	0	0	0	0	0
16	0	0	3	2	0	0	0	0	0	0
18	0	0	2	1	2	1	1	0	0	0
20	0	0	2	1	0	0	0	0	0	0
22	0	0	0	0	0	0	0	0	0	0
24	0	0	1	0	1	0	0	0	0	0
26	0	0	0	0	0	0	0	0	0	0
28	0	0	0	0	0	0	0	0	0	0
30	0	0	0	0	0	0	0	0	0	0
32	0	0	0	0	0	0	0	0	0	0
34	0	0	0	0	0	0	0	0	0	0
36	0	0	0	0	0	0	0	0	0	0
38	0	0	0	0	0	0	0	0	0	0
40	0	0	0	0	0	0	0	0	0	0
42	0	0	0	0	0	0	0	0	0	0
44	0	0	0	0	0	0	0	0	0	0
46	0	0	0	0	0	0	0	0	0	0
48	0	0	0	0	0	0	0	0	0	0
≥50	0	0	0	0	0	0	0	0	0	0
TOTALS	**14**	**501**	**13**	**442**	**2**	**1**	**3**	**5**	**2**	**232**

STANDING LIVE TREES;
ALL SIZES -
STAND TABLE

COMMON NAME	red maple		sugar maple		mountain maple		European alder		serviceberry spp.	
SPCD	316	316	318	318	319	319	355	355	356	356
HT (FT) / DBH (IN) CLASS	**BA**	**TPA**	**BA**	**TPA**	**BA**	**TPA**	**BA**	**TPA**	**BA**	**TPA**
3.0 IN ≤ HT < 4.5 FT.	0	132	0	36	0	60	0	0	0	0
4.5 FT ≤ HT < 10.0 FT.	0	60	0	60	0	24	0	24	0	12
10.0 FT ≤ HT > 15.0 FT. / < 1.0 IN. DBH	1	432	0	24	0	0	1	120	0	48
2	2	98	2	98	0	0	0	0	1	49
4	0	0	0	0	0	0	0	0	0	0
6	2	8	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	1	2
10	2	3	0	0	0	0	0	0	1	1
12	1	1	1	1	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0	0	0	0
18	2	1	0	0	0	0	0	0	0	0
20	2	1	0	0	0	0	0	0	0	0
22	2	1	0	0	0	0	0	0	0	0
24	0	0	0	0	0	0	0	0	0	0
26	0	0	0	0	0	0	0	0	0	0
28	0	0	0	0	0	0	0	0	0	0
30	0	0	0	0	0	0	0	0	0	0
32	0	0	0	0	0	0	0	0	0	0
34	0	0	0	0	0	0	0	0	0	0
36	0	0	0	0	0	0	0	0	0	0
38	0	0	0	0	0	0	0	0	0	0
40	0	0	0	0	0	0	0	0	0	0
42	0	0	0	0	0	0	0	0	0	0
44	0	0	0	0	0	0	0	0	0	0
46	0	0	0	0	0	0	0	0	0	0
48	0	0	0	0	0	0	0	0	0	0
≥50	0	0	0	0	0	0	0	0	0	0
TOTALS	**12**	**736**	**3**	**219**	**0**	**84**	**1**	**144**	**3**	**113**

STANDING LIVE TREES;
ALL SIZES -
STAND TABLE

COMMON NAME	yellow birch		paper birch		American beech		white ash		quaking aspen	
SPCD	371	371	375	375	531	531	541	541	746	746
HT (FT) / DBH (IN) CLASS	BA	TPA	BA	TPA	BA	TPA	BA	TPA	BA	TPA
3.0 IN ≤ HT < 4.5 FT.	0	48	0	12	0	144	0	12	0	24
4.5 FT ≤ HT < 10.0 FT.	0	72	0	0	0	60	0	12	0	0
10.0 FT ≤ HT > 15.0 FT. / < 1.0 IN. DBH	2	708	0	156	0	36	0	24	0	48
2	8	489	2	98	1	49	0	0	0	0
4	1	10	2	29	0	0	0	0	0	0
6	1	4	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	2	3	0	0	0	0
12	1	1	0	0	0	0	0	0	0	0
14	4	4	0	0	0	0	0	0	0	0
16	1	1	2	2	0	0	0	0	1	1
18	1	0	0	0	0	0	0	0	0	0
20	1	0	0	0	0	0	0	0	0	0
22	0	0	0	0	0	0	0	0	0	0
24	0	0	1	0	0	0	0	0	0	0
26	0	0	0	0	0	0	0	0	0	0
28	0	0	0	0	0	0	0	0	0	0
30	0	0	0	0	0	0	0	0	0	0
32	0	0	0	0	0	0	0	0	0	0
34	0	0	0	0	0	0	0	0	0	0
36	0	0	0	0	0	0	0	0	0	0
38	0	0	0	0	0	0	0	0	0	0
40	0	0	0	0	0	0	0	0	0	0
42	0	0	0	0	0	0	0	0	0	0
44	0	0	0	0	0	0	0	0	0	0
46	0	0	0	0	0	0	0	0	0	0
48	0	0	0	0	0	0	0	0	0	0
≥50	0	0	0	0	0	0	0	0	0	0
TOTALS	**19**	**1337**	**8**	**297**	**3**	**292**	**0**	**48**	**1**	**73**

STANDING LIVE TREES;
ALL SIZES -
STAND TABLE

COMMON NAME	pin cherry		black cherry			
SPCD	761	761	762	762	TOTAL	TOTAL
HT (FT) / DBH (IN) CLASS	**BA**	**TPA**	**BA**	**TPA**	**BA**	**TPA**
3.0 IN ≤ HT < 4.5 FT.	0	0	0	264	0	1020
4.5 FT ≤ HT < 10.0 FT.	0	24	0	48	1	576
10.0 FT ≤ HT > 15.0 FT. / < 1.0 IN. DBH	1	144	1	240	14	2507
2	0	0	2	98	18	1076
4	1	10	0	0	9	108
6	0	0	2	8	5	25
8	0	0	1	2	6	16
10	0	0	0	0	5	9
12	0	0	1	1	8	10
14	0	0	0	0	5	5
16	0	0	1	1	8	6
18	0	0	2	1	8	5
20	0	0	0	0	4	2
22	0	0	0	0	2	1
24	0	0	0	0	2	1
26	0	0	0	0	0	0
28	0	0	0	0	0	0
30	0	0	0	0	0	0
32	0	0	0	0	0	0
34	0	0	0	0	0	0
36	0	0	0	0	0	0
38	0	0	0	0	0	0
40	0	0	0	0	0	0
42	0	0	0	0	0	0
44	0	0	0	0	0	0
46	0	0	0	0	0	0
48	0	0	0	0	0	0
≥50	0	0	0	0	0	0
TOTALS	**2**	**178**	**8**	**663**	**94**	**5364**

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

COMMON NAME	balsam fir		Norway spruce		red spruce		eastern hemlock		striped maple	
SPCD	12	12	91	91	97	97	261	261	315	315
HT (FT) / DBH (IN) CLASS	BA	TPA	BA	TPA	BA	TPA	BA	TPA	BA	TPA
3.0 IN ≤ HT < 4.5 FT.	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
10.0 FT ≤ HT > 15.0 FT. / < 1.0 IN. DBH	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0
10	2	3	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0	0	0
16	1	1	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0	0
22	0	0	0	0	0	0	0	0	0	0
24	0	0	0	0	0	0	0	0	0	0
26	0	0	0	0	0	0	0	0	0	0
28	0	0	0	0	0	0	0	0	0	0
30	0	0	0	0	0	0	0	0	0	0
32	0	0	0	0	0	0	0	0	0	0
34	0	0	0	0	0	0	0	0	0	0
36	0	0	0	0	0	0	0	0	0	0
38	0	0	0	0	0	0	0	0	0	0
40	0	0	0	0	0	0	0	0	0	0
42	0	0	0	0	0	0	0	0	0	0
44	0	0	0	0	0	0	0	0	0	0
46	0	0	0	0	0	0	0	0	0	0
48	0	0	0	0	0	0	0	0	0	0
≥50	0	0	0	0	0	0	0	0	0	0
TOTALS	**2**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

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

COMMON NAME	red maple		sugar maple		mountain maple		European alder		serviceberry spp.	
SPCD	316	316	318	318	319	319	355	355	356	356
HT (FT) / DBH (IN) CLASS	BA	TPA	BA	TPA	BA	TPA	BA	TPA	BA	TPA
3.0 IN ≤ HT < 4.5 FT.	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
10.0 FT ≤ HT > 15.0 FT. / < 1.0 IN. DBH	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	2	8
8	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0	0
22	0	0	0	0	0	0	0	0	0	0
24	0	0	0	0	0	0	0	0	0	0
26	0	0	0	0	0	0	0	0	0	0
28	0	0	0	0	0	0	0	0	0	0
30	0	0	0	0	0	0	0	0	0	0
32	0	0	0	0	0	0	0	0	0	0
34	0	0	0	0	0	0	0	0	0	0
36	0	0	0	0	0	0	0	0	0	0
38	0	0	0	0	0	0	0	0	0	0
40	0	0	0	0	0	0	0	0	0	0
42	0	0	0	0	0	0	0	0	0	0
44	0	0	0	0	0	0	0	0	0	0
46	0	0	0	0	0	0	0	0	0	0
48	0	0	0	0	0	0	0	0	0	0
≥50	0	0	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**8**

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

COMMON NAME	yellow birch		paper birch		American beech		white ash		quaking aspen	
SPCD	371	371	375	375	531	531	541	541	746	746
HT (FT) / DBH (IN) CLASS	BA	TPA	BA	TPA	BA	TPA	BA	TPA	BA	TPA
3.0 IN ≤ HT < 4.5 FT.	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
10.0 FT ≤ HT > 15.0 FT. / < 1.0 IN. DBH	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0
12	0	0	1	1	0	0	0	0	0	0
14	1	1	0	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0	0
22	0	0	0	0	0	0	0	0	0	0
24	0	0	0	0	0	0	0	0	0	0
26	0	0	0	0	0	0	0	0	0	0
28	0	0	0	0	0	0	0	0	0	0
30	0	0	0	0	0	0	0	0	0	0
32	0	0	0	0	0	0	0	0	0	0
34	0	0	0	0	0	0	0	0	0	0
36	0	0	0	0	0	0	0	0	0	0
38	0	0	0	0	0	0	0	0	0	0
40	0	0	0	0	0	0	0	0	0	0
42	0	0	0	0	0	0	0	0	0	0
44	0	0	0	0	0	0	0	0	0	0
46	0	0	0	0	0	0	0	0	0	0
48	0	0	0	0	0	0	0	0	0	0
≥50	0	0	0	0	0	0	0	0	0	0
TOTALS	**1**	**1**	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**0**

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

COMMON NAME	pin cherry		black cherry			
SPCD	761	761	762	762	TOTAL	TOTAL
HT (FT) / DBH (IN) CLASS	BA	TPA	BA	TPA	BA	TPA
3.0 IN ≤ HT < 4.5 FT.	0	0	0	0	0	0
4.5 FT ≤ HT < 10.0 FT.	0	0	0	0	0	0
10.0 FT ≤ HT > 15.0 FT. / < 1.0 IN. DBH	0	0	0	0	0	0
2	0	0	0	0	0	0
4	0	0	0	0	0	0
6	0	0	0	0	2	8
8	0	0	0	0	0	0
10	0	0	0	0	2	3
12	0	0	0	0	1	1
14	0	0	1	1	2	2
16	0	0	1	1	2	1
18	0	0	0	0	0	0
20	0	0	0	0	0	0
22	0	0	0	0	0	0
24	0	0	0	0	0	0
26	0	0	0	0	0	0
28	0	0	0	0	0	0
30	0	0	0	0	0	0
32	0	0	0	0	0	0
34	0	0	0	0	0	0
36	0	0	0	0	0	0
38	0	0	0	0	0	0
40	0	0	0	0	0	0
42	0	0	0	0	0	0
44	0	0	0	0	0	0
46	0	0	0	0	0	0
48	0	0	0	0	0	0
≥50	0	0	0	0	0	0
TOTALS	**0**	**0**	**2**	**1**	**7**	**15**

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
650.6	1194.9	0.0	0.0	0.0	1194.9	1194.9