

Overview:

This post-harvest inventory was conducted on the ±70 acre project that was harvested during 2008-9 on the “Major Lot” located off of Griffin Brook Road in the Chester-Blandford State Forest. The harvest was a combination of single tree selection and small group selection cutting. The overall species composition was intended to be maintained, while beginning a new age class in patches, and promoting growth of high quality residual growing stock between the harvested groups.

A post-harvest inventory was conducted using 27 sample points 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 6.0 ft. radius; and CWD was sampled using line intersect sampling with a single 10 ft. long transect at each point. Sampling was conducted during September 2019, under mostly dry summer conditions using standards set forth in the DCR: DSPR Post-management Inventory Protocol. Photographs were taken at each of these points.

Overstory Observations:

Within the areas of lower-intensity harvesting the canopy has closed creating shaded conditions for the established tree regeneration, shrubs and ground cover. Areas within or adjacent to the small group opening have more vibrant tree regeneration which is entering the stem exclusion stage of stand development. Sugar maple, hemlock, red oak, beech, and yellow and black birch were the dominant overstory species observed. Sugar maple and red oak compose 40% of the 119 ft²/ac basal area of live overstory trees. The current growing stock is healthy and vigorous; the continued growth and closure of the canopy will soon be a detriment to the existing pockets of regeneration.

Understory Observations:

The irregular patterns of harvesting within this project area have affected the density, diversity, and distribution of regeneration. There is an average of 3,980 trees per acre under 1.0 in. in diameter. Within and adjacent to group openings and in areas of heavier cutting, red oak, maple, and birch seedlings are successfully competing with less desirable species, *e.g.* striped maple and beech. Within portions of the project area where the canopy is dense those undesirable regeneration species are dominating the understory. At this point other observed shrub and ground cover species including grasses, ferns, hobble bush, and *Rubus* spp. are not competing with desirable tree species. These areas could benefit from an additional harvest that expands existing gaps in the canopy to foster existing, and continue establishing, regeneration of desirable tree species.

Coarse Woody Debris Observations:

The CWD observed within the sale area and directly associated with the project was more than adequate. CWD from both the harvest as well as naturally occurring were observed. 1,594 ft³/ac of CWD is present, with 100% of that in pieces. There are also an estimated 9 snags (over 5.0 in. DBH) per acre.

Photographs:



The above photos, showing typical patterns of regeneration, were taken at point 11 located in the western portion of the project area.



The above photos, showing typical patterns of regeneration, were taken at point 34 located in the central portion of the project area.



The above photos, showing typical patterns of regeneration, were taken at point 36 located in the northwestern portion of the project area.



The above photos, taken near plot 38, show a fallen 36 in. DBH sugar maple legacy tree that was left during the 2008-9 harvest. There are several other trees of this type that are still standing within the harvested area.

STANDING LIVE TREES;
ALL SIZES -
STAND TABLE

COMMON NAME SPCD HT (FT) / DBH (IN) CLASS	eastern white pine		hemlock spp.		eastern hemlock		striped maple		red maple	
	129 BA	129 TPA	260 BA	260 TPA	261 BA	261 TPA	315 BA	315 TPA	316 BA	316 TPA
3.0 IN ≤ HT < 4.5 FT.	0	27	0	0	0	12	0	82	0	109
4.5 FT ≤ HT < 10.0 FT.	0	0	0	0	0	0	1	382	0	0
10.0 FT ≤ HT < 15.0 FT. / < 1.0 IN. DBH	0	0	0	0	0	0	1	147	0	0
2	0	0	0	0	0	0	1	50	0	0
4	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	2	8	0	0	0	0
8	0	0	0	0	2	7	0	0	1	2
10	0	0	0	0	1	1	0	0	1	1
12	0	0	0	0	2	2	0	0	2	3
14	0	0	1	1	3	3	0	0	0	0
16	0	0	0	0	2	2	0	0	0	0
18	0	0	0	0	1	0	0	0	2	1
20	0	0	0	0	0	0	0	0	0	0
22	0	0	0	0	2	1	0	0	1	0
24	0	0	0	0	1	0	0	0	1	0
26	0	0	0	0	0	0	0	0	0	0
28	0	0	0	0	1	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	27	1	1	17	37	3	662	8	117

STANDING LIVE TREES;
ALL SIZES -
STAND TABLE

COMMON NAME SPCD HT (FT) / DBH (IN) CLASS	sugar maple		yellow buckeye		yellow birch		sweet birch		paper birch	
	318 BA	318 TPA	332 BA	332 TPA	371 BA	371 TPA	372 BA	372 TPA	375 BA	375 TPA
3.0 IN ≤ HT < 4.5 FT.	0	515	0	0	0	32	0	47	0	0
4.5 FT ≤ HT < 10.0 FT.	0	0	0	12	0	90	0	223	0	0
10.0 FT ≤ HT < 15.0 FT. / < 1.0 IN. DBH	0	0	0	0	0	27	2	445	0	0
2	0	0	0	0	3	188	5	284	0	0
4	1	10	0	0	0	0	0	0	0	0
6	0	0	0	0	1	4	0	0	0	0
8	3	8	0	0	0	0	0	0	0	0
10	4	7	0	0	0	0	0	0	0	0
12	3	4	0	0	1	1	0	0	0	0
14	5	4	0	0	0	0	0	0	0	0
16	7	5	0	0	3	2	3	2	0	0
18	4	2	0	0	0	0	1	1	0	0
20	4	2	0	0	2	1	1	0	1	0
22	3	1	0	0	1	0	0	0	0	0
24	1	0	0	0	0	0	0	0	0	0
26	2	0	0	0	0	0	0	0	0	0
28	1	0	0	0	0	0	0	0	0	0
30	0	0	0	0	0	0	0	0	0	0
32	1	0	0	0	0	0	0	0	0	0
34	1	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	37	559	0	12	10	344	12	1002	1	0

STANDING LIVE TREES;
ALL SIZES -
STAND TABLE

COMMON NAME SPCD HT (FT) / DBH (IN) CLASS	hickory spp.		American beech		white ash		eastern hophornbeam		black cherry	
	400 BA	400 TPA	531 BA	531 TPA	541 BA	541 TPA	701 BA	701 TPA	762 BA	762 TPA
3.0 IN ≤ HT < 4.5 FT.	0	79	0	445	0	31	0	0	0	39
4.5 FT ≤ HT < 10.0 FT.	0	0	0	542	0	0	0	0	0	0
10.0 FT ≤ HT < 15.0 FT. / < 1.0 IN. DBH	0	12	1	216	0	0	0	0	0	0
2	0	0	2	145	0	0	1	37	0	0
4	0	0	3	37	0	0	0	0	0	0
6	0	0	6	32	0	0	0	0	0	0
8	1	2	0	0	0	0	0	0	0	0
10	0	0	1	1	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0	0
14	0	0	1	1	1	1	0	0	0	0
16	0	0	0	0	0	0	0	0	0	0
18	0	0	1	0	0	0	0	0	1	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	1	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	92	16	1420	1	32	1	37	1	39

STANDING LIVE TREES;
ALL SIZES -
STAND TABLE

COMMON NAME SPCD HT (FT) / DBH (IN) CLASS	northern red oak		American basswood		TOTAL	TOTAL
	833 BA	833 TPA	951 BA	951 TPA	BA	TPA
3.0 IN ≤ HT < 4.5 FT.	0	437	0	0	0	1854
4.5 FT ≤ HT < 10.0 FT.	0	30	0	0	1	1278
10.0 FT ≤ HT > 15.0 FT. / < 1.0 IN. DBH	0	0	0	0	5	847
2	0	0	0	0	12	705
4	0	0	0	0	4	47
6	0	0	0	0	8	44
8	0	0	0	0	7	19
10	0	0	0	0	6	11
12	0	0	0	0	7	9
14	0	0	1	1	12	11
16	2	1	0	0	17	12
18	0	0	0	0	9	5
20	1	1	0	0	8	4
22	1	0	0	0	8	3
24	1	0	0	0	3	1
26	1	0	0	0	2	1
28	2	0	0	0	4	1
30	2	0	0	0	3	1
32	2	0	0	0	2	0
34	0	0	0	0	1	0
36	0	0	0	0	0	0
38	0	0	0	0	0	0
40	0	0	0	0	0	0
42	1	0	0	0	1	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	11	471	1	1	119	4855

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

COMMON NAME SPCD HT (FT) / DBH (IN) CLASS	eastern white pine		hemlock spp.		eastern hemlock		striped maple		red maple	
	129 BA	129 TPA	260 BA	260 TPA	261 BA	261 TPA	315 BA	315 TPA	316 BA	316 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	1	48	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	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	1	48	0	0

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

COMMON NAME SPCD HT (FT) / DBH (IN) CLASS	sugar maple		yellow buckeye		yellow birch		sweet birch		paper birch	
	318 BA	318 TPA	332 BA	332 TPA	371 BA	371 TPA	372 BA	372 TPA	375 BA	375 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	1	1	0	0	1	1	0	0	0	0
14	1	1	0	0	0	0	0	0	0	0
16	0	0	0	0	1	1	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	1	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	1	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	2	0	0	2	2	0	0	0	0

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

COMMON NAME SPCD HT (FT) / DBH (IN) CLASS	hickory spp.		American beech		white ash		eastern hophornbeam		black cherry	
	400 BA	400 TPA	531 BA	531 TPA	541 BA	541 TPA	701 BA	701 TPA	762 BA	762 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	1	4	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	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0	0	0
16	0	0	2	1	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	2	5	0	0	0	0	0	0

STANDING DEAD TREES;

≥ 1 IN. DBH -

STAND TABLE

COMMON NAME SPCD HT (FT) / DBH (IN) CLASS	northern red oak		American basswood		TOTAL	TOTAL
	833 BA	833 TPA	951 BA	951 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	1	48
4	0	0	0	0	0	0
6	0	0	0	0	1	4
8	0	0	0	0	0	0
10	0	0	0	0	0	0
12	0	0	0	0	1	2
14	0	0	0	0	1	1
16	0	0	0	0	2	2
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	1	0
28	0	0	0	0	0	0
30	0	0	0	0	0	0
32	0	0	0	0	1	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	0	0	8	57

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
326.2	1594.9	0.0	0.0	0.0	1594.9	1594.9