

TM 901

Forester Dieter Rudolph

Date 8/5/08

RESOURCE MANAGEMENT GUIDE

STATE FOREST Clark

COMPARTMENT 8

TRACT 11

INVENTORY SUMMARY

ACREAGE IN:

Commercial Forest 140
 Non-Commercial Forest 0
 Recreation Use 0
 Permanent Openings 0
 Other Uses 0
 TOTAL AREA 140

Average Site Index
 Average Annual Growth
 Total B.A./Acre 113.2 ft²/ac
 B.A.-Trees 10" & 85.8 ft²/ac
 B.A.-< 10" 27.4 ft²/ac

Estimated Per Acre Volumes for Commercial Forest Area - Bd., Ft., Doyle Rule

<u>Harvest / Leave Summary</u>				
Species	Harvest Stock MBF	Growing Stock MBF	Total MBF	BF/Ac
American Beech	12.6	9.8	23.8	170
American Elm	0	0	0	0
Black Cherry	0	5.6	5.6	40
Blackgum	9.8	0	9.8	70
Black Oak	21	44.8	65.8	470
Black Walnut	0	2.8	2.8	20
Chestnut Oak	98	147	245	1750
Eastern White Pine	84	25.2	109.2	780
Hackberry	0	0	0	0
Northern Red Oak	22.4	22.4	43.4	310
Pignut Hickory	12.6	32.2	44.8	320
Red Maple	26.6	51.8	78.4	560
Scarlet Oak	4.2	0	4.2	30
Shagbark Hickory	0	2.8	2.8	20
Sugar Maple	1.4	12.6	14	100
Sweetgum	11.2	18.2	29.4	210
Virginia Pine	86.8	21	107.8	770
White Ash	0	8.4	8.4	60
White Oak	56	172.2	226.8	1620
Yellow Poplar	32.2	96.6	128.8	920
Tract Totals (MBF)	476	672	1148	
Per Acre Totals (BF)	3400	4800	8200	

RESOURCE MANAGEMENT GUIDE

Date 8/4/08

Compartment 8

Tract 11

FORESTERS NARRATIVE

(Describe the area/timber/wildlife - Present stand, soils, regeneration potential, condition, timber types, private boundaries, forest protection, etc.)

Location

Compartment 8 Tract 11 is located in sections 36, 35, and 1, T2N R6E of Monroe Township in Clark County.

Hardwoods

The main sawtimber species within this stand is chestnut oak followed by white oak and then red maple. The chestnut oak and white oak were both found to have good quality in the southern half of the tract where the terrain is flatter. The steeper terrain in the northern section had many poor formed chestnut oak with some mature chestnut oaks scattered along the slopes. At this moment, red maple dominates both the regenerating layer and the understory with high amounts of sugar maple regeneration also present while the oaks are relatively low in regeneration.

Pine

This tract contains both eastern white pine and Virginia pine. The white pines found were of larger diameter classes, between 16 inches and 28 inches in diameter offering 0.60 MBF per acre of harvestable volume. Likewise, the Virginia pine located were spread throughout the diameter classes reaching a max diameter of 25 inches and offering 0.62 MBF per acre of harvestable volume. Due to the tracts proximity to the main drive and the white pine stand being within site of the road, these trees should be harvested based on individual tree selection rather than a clearing to preserve the aesthetics of the tract.

Access

This tract can easily be accessed by Fire Tower Road which runs along the tracts eastern boundary and Forestry Road running along the south eastern boundary.

Boundaries

State forest completely surrounds this tract with Fire Tower Road marking its eastern extent and forestry road along its southeastern boundary.

Cultural Resources

No known cultural resources exist within this tract.

Recreation

Fire Tower Road runs alongside this tract. Due to the high use of this road withing Clark State Forest aesthetics remains an important issue. Likewise, the scenic overlook shelter looks out over a portion of this tract reinforcing the importance of the aesthetics within this area.

Soils

Soils contained within this tract:

Beanblossom silt loam (BcrAW)

Contains 1 to 3 percent slopes and is occasionally flooded for a brief duration. This soil type is deep, roughly 40 to 60 inches and is moderately well drained.

Coolville silt loam (ComC)

Contains 6 to 12 percent slopes. This soil type is typically found on hills underlain with shale or sandstone. It is typically deep, being around 40 to 60 inches to the bedrock and moderately well drained.

Coolville-Rarden complex (ConD)

Contains 12 to 18 percent slopes and are mainly located on hills underlain with shale or siltstone. The Coolville soils are deep; being 40 to 60 inches to the bedrock and are moderately well drained. The Rarden soils are moderately deep, around 20 to 40 inches, and also moderately well drained.

Deam silty clay loam (DbrG)

Contains 20 to 55 percent slopes and is mainly located on hills underlain with shale. These soils are moderately deep, 20 to 40 inches to bedrock, and are well drained.

Gnawbone-Kurtz silt loams (GmaG)

Contains 20 to 60 percent slopes and are located on hills underlain with siltstone. The Gnawbone soils are moderately deep, 20 to 40 inches, and are well drained. The Kurtz soils are deep, 40 to 60 inches, and likewise well drained.

Gilwood-Wrays silt loams (GgfD)

Contains 6 to 18 percent slopes and are located on hills underlain with siltstone. These soils are moderately deep, having the bedrock 20 to 40 inches below the surface, and are well drained.

Brownstown-Gilwood silt loams (BvoG)

Contains 35 to 75 percent slopes and are commonly located on hills underlain with siltstone. These soils are moderately deep, having the bedrock 20 to 40 inches below the surface, and are well drained.

Stendal silt loam (StaAQ)

Contains 0 to 2 percent slopes and are rarely flooded. This soil type tends to be located on flood plains and is typically very deep, being more than 60 inches to the bedrock. Overall, this soil type is somewhat poorly drained.

Pekin silt loam (PcrB2)

Contains 2 to 6 percent slopes and is typically eroded. It is located on dissected stream terraces and is very deep, being more than 80 inches to the bedrock. This soil type is moderately well drained.

Pekin silt loam (PcrC2)

Contains 6 to 12 percent slopes and is eroded. It is located on dissected stream terraces and is very deep, being more than 80 inches to the bedrock. This soil type is moderately well drained.

RESOURCE MANAGEMENT GUIDE

Date 8/5/08

Compartment 8

Tract 11

SILVICULTURAL PRESCRIPTION

(Describe silvicultural practices needed [if any] - Harvest, TSI, Tree Planting, Wildlife Habitat, Erosion Control, Natural Regeneration, etc.)

A harvest would be recommended for this tract in the near future. At the moment there is 3.40 MBF per acre of harvestable timber which would, in turn, leave 4.80 MBF per acre of residual volume. The harvest should take the stand down from a basal area of 113 ft² per acre to 80 to 90 ft² per acre. The harvest should not go below this prescribed basal area due to the importance of aesthetics in the area because of its high visibility to the public. For the same reason, the pine component should be harvested by individual tree selection so as to avoid clearings that would be negatively viewed by the public.

The harvest of the hardwoods should be done by individual tree selection focusing on the future quality of the stand. In order to promote oak regeneration, some quality white oak and chestnut oaks should be left to act as seed trees while the trees surrounding these seed trees should be thinned in order to promote the regeneration.

Following the harvest, a TSI should be performed to remove low quality trees that are remaining. Also, the maple understory should be removed to reduce competition with the desired oak regeneration.

RESOURCE MANAGEMENT GUIDE

Date 8/5/08

Compartment 8

Tract 11

SPECIFIC PRACTICES FOR ACCOMPLISHMENT

(Tree Planting, TSI, Harvesting, Special Product Sales, Wildlife Habitat Work, Erosion Control,
Unique Area, Recreation, etc.)

<u>Year</u> <u>Planned</u>	<u>Practice</u>	<u>Year</u> <u>Accomplished</u>
2010	Harvest	
2011	TSI	

To submit a comment on this document, click on the following link:
http://www.in.gov/surveytool/public/survey.php?name=dnr_forestry

You **must** indicate the State Forest Name, Compartment Number and Tract Number in the “Subject or file reference” line to ensure that your comment receives appropriate consideration. Comments received within 30 days of posting will be considered.