Indiana Department of Natural Resources - Division of Forestry

TM 901 Forester Dieter Rudolph

Date 8/5/08

RESOURCE MANAGEMENT GUIDE

STATE FOREST Clark COMPARTMENT 8 TRACT 10

INVENTORY SUMMARY

ACREAGE IN:

Commercial Forest 129
Non-Commercial Forest 0
Recreation Use 0
Permanent Openings 0
Other Uses 0
TOTAL AREA 129

Average Site Index
Average Annual Growth
Total B.A./Acre 105.5 ft^2/ac
B.A.-Trees 10" & 78.7 ft^2/ac
B.A.-< 10" 26.8 ft^2/ac

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

Harvest / Leave Summary

Species	Harvest Stock MBF	Growing Stock MBF	Total MBF	BF/Ac
American Beech	28.38	6.45	34.83	270
Blackgum	0	2.58	2.58	20
Black Oak	25.8	16.77	42.57	330
Black Walnut	0	5.16	5.16	40
Chestnut Oak	86.43	248.97	335.4	2600
Dogwood	0	0	0	0
Eastern Red Cedar	0	0	0	0
Northern Red Oak	0	6.45	6.45	50
Pawpaw	0	0	0	0
Pignut Hickory	3.87	25.8	29.67	230
Redbud	0	0	0	0
Red Maple	19.35	16.77	37.41	290
Scarlet Oak	6.45	5.16	11.61	90
Shagbark Hickory	0	6.45	6.45	50
Sugar Maple	6.45	3.87	10.32	80
Virginia Pine	72.24	14.19	86.43	670
White Ash	2.58	3.87	6.45	50
White Oak	5.16	174.15	179.31	1390
Yellow Poplar	32.25	61.92	94.17	730
Tract Totals (MBF)	288.96	598.56	887.52	
Per Acre Totals (BF)	2240	4640	6880	

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FORESTERS NARRATIVE

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

Location
Compartment 8 Tract 10 is located in sections 36, 35, 1, and 2, T2N R6E of Monroe Township in Clark County.

Hardwoods
The main component of hardwood sawtimber within compartment 8 tract 10 was chestnut oak and white oak. However these two species were low in the understory layer and almost non-existent in the regeneration. American beech, red maple, and yellow poplar were the most common species to see among the regeneration within this area. The quality of the sawtimber depended mostly on the location. The steep sections of the tract along the northwestern boundaries had lower quality chestnut oaks present along with a scattering of mature chestnut oaks. The rest of the tract showed potential for higher quality sawtimber to be produced.

Pine
There was a low amount of pine within this tract, mostly consisting of Virginia pine averaging out at close to 5 sawtimber trees per acre. The overall harvestable volume for this species was 0.56 MBF per acre. Due to the proximity to the scenic overlook shelter, denser stands of these pines should be thinned rather than cleared so as to preserve the aesthetic component in the tract.

Access
This tract can be accessed by forestry road which runs along a section of its southeastern boundary.

Boundaries
Private land borders this tract along its southern boundary. The rest of the tract is surrounded by state lands.

Cultural Resources
Cultural resources may be present on the tract but their location is protected. Adverse impacts to significant cultural resources will be avoided during any management or construction projects.

Recreation
There are no recreational resources within this site. However, as the scenic overlook shelter looks across part of this tract, aesthetics remains an important factor within the 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.

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.

Weddel silt loam (WedB2)

Contains 2 to 6 percent slopes and is typically eroded. These soils are located on dissected till plains and are typically very deep, being more than 60 inches to the bedrock. Likewise, they are moderately well drained soils.

Blocher, soft bedrock substratum-Weddel silt loams (BfbC2)

Contains 6 to 12 percent slopes and is eroded. This soil type can be found on dissected till plains on the shoulders and backslopes. It is very deep, being more than 60 inches to the bedrock and is moderately well drained.

Rarden silty clay loam (RblD3)

Contains 12 to 18 percent slopes and is severely eroded. It can be found on the shoulders and backslopes of hills underlain with shale. It is moderately deep, being 20 to 40 inches to the bedrock and moderately well drained.

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SILVICULTURAL PRESCRIPTION

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

The tract contains a large number of smaller trees that show the potential into growing into large, quality sawtimber. At the present moment there is 2.24 MBF per acre of harvestable timber with a residual volume of 4.64 MBF per acre. A large portion of the leave volume is white oaks and chestnut oaks that will potentially become high quality trees and will act as seed trees in the meantime.

A thinning at the current time would aid in the development of the stand. It would reduce competition to stimulate growth among the remaining trees. While thinning the stand, a TSI should also occur, mainly to remove the red maple from the understory and regeneration. A secondary goal of this thinning would be to promote oak regeneration, as it is minimal at the moment. Reducing the competition in the understory and creating small gaps in the overstory to allow light into the understory, which is required for young oak growth, can best stimulate oak regeneration. Removing lower quality trees from the overstory, which in turn will also reduce competition among the residual sawtimber trees, will create these gaps.

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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.

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SPECIFIC PRACTICES FOR ACCOMPLISHMENT

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

Year Planned	Practice	Year Accomplished
2010	Thining	