

Indiana Department of Natural Resources - Division of Forestry

TM 901			
RESOURCE MANAGEMENT GUIDE			
INVENTORY SUMMARY			
		Compartment:	8
Jackson-Washington State Forest		Tract:	3
Forester:	Jacob Florine	Date:	8/7/08

ACREAGE IN:			
Commercial Forest	90	Average Site Index	72
Non-Commercial		Ave. Annual Growth	190
Recreation Use		Total B.A./Acre	115.9
Permanent Openings		B.A. Trees 6" & Up	110.1
Other Uses		B.A. Trees < 6"	5.8
<b>TOTAL AREA</b>	<b>90</b>		

(Estimated Tract Volumes for Commercial Forest Area-Bd.Ft., Doyle Rule)

SPECIES	HARVEST STOCK	GROWING STOCK	TOTAL VOLUME
American beech	11,210	23,000	34,210
American sycamore	8,610	5,250	13,860
blackgum	2,390	1,080	3,470
black oak	11,540	30,070	41,610
black walnut	0	2,210	2,210
chestnut oak	80,980	176,370	257,350
northern red oak	8,660	42,630	51,290
pignut hickory	5,850	105,740	111,590
red maple	5,140	2,730	7,870
sassafras	3,690	2,210	5,900
scarlet oak	0	6,290	6,290
shagbark hickory	8,820	22,310	31,130
sugar maple	28,020	54,470	82,490
white ash	16,000	1,150	17,150
white oak	8,060	81,010	89,070
yellow poplar	29,820	19,160	48,980
<b>TRACT TOTALS</b>	<b>228,790</b>	<b>575,680</b>	<b>804,470</b>
<b>PER ACRE TOTALS</b>	<b>2,542</b>	<b>6,396</b>	<b>8,939</b>

PREVIOUS CRUISE DATA			
DATE:	03/01/73	GROWING STOCK	HARVEST STOCK
<b>PER ACRE TOTALS</b>		1,072	1,198
			<b>TOTAL VOLUME</b>
			2,270

## RESOURCE MANAGEMENT GUIDE

### FORESTER'S NARRATIVE

**Jackson-Washington State Forest**

**Compartment 08 Tract 03**

**Forester: Jacob Florine**

**Draft Date: August 7, 2008**

**Management Cycle End Year: 2033**

**Management Cycle Length: 25 years**

#### **Location**

This tract is located in Monroe Township, Washington County in Section 9, Township 3 North, Range 4 East.

#### **General Description**

This tract has fairly steep south, east and west facing slopes and is comprised of mixed hardwoods and oak-hickory cover types. Quality of these trees ranges from average to high quality.

#### **History**

Compartment 08 Tract 03 is comprised of two land acquisitions. A parcel of this tract is part of a 77 acre purchase from Thomas Bryan in March 1955. Another parcel of this tract is part of a 69.6 acre purchase from Elva B. True in November 1967.

This tract was formally a part of two separate tracts. These were inventoried in 1973. The inventory on the east side indicated 1,276 board feet per acre of harvestable timber with 1,237 board feet per acre of leave timber. Total volume on this part of the tract was 2,513 board feet per acre. The inventory on the west side indicated 1,120 board feet of harvestable timber per acre with 906 board feet per acre of leave timber. Total volume on this part of the tract was 2,026 board feet per acre.

#### **Landscape context**

The surrounding landscape is mostly forested with several watershed lakes. Topography varies from flat bottomlands and steep slopes and on up to upland ridges. Agriculture fields dominate the flat ground. Development is minimal and mostly resulting from single family houses.

#### **Topography, Geology and Hydrology**

This tract is comprised of mostly south, east and west facing slopes. There are several ephemeral drainages resulting from the steep slopes. These ephemeral drainages flow into an intermittent stream on the south part of the tract which then flows into Plattsburg Pond. Soils in this area generally were formed in material weathered from shale, siltstone, sandstone, clayey till, loess or acidic silty alluvium.

## Soils

There are five different soil types found in this tract.

**Berks-Weikert complex**, 25-75 percent slopes, (BhF) is well drained with bedrock at a depth between 20-40 inches. This soil type is commonly found on side slopes and uplands. Berks-Weikert has a black oak site index of 50 (16.17 acres).

**Burnside silt loam**, 0-2 percent slopes, (Bu) is moderately well drained with bedrock at a depth between 40-65 inches. This soil is commonly found on flood plains. Burnside silt loam has a yellow-poplar site index of 95 (7.02 acres).

**Crider silt loam**, 6-12 percent slopes, eroded, (CoC2) is well drained with its most restrictive layer at a depth above 60 inches. This soil type is commonly found on uplands. Crider silt loam has a northern red oak site index of 84 (1.99 acres).

**Gilpin silt loam**, 12-18 percent slopes, eroded, (GID2) is well drained with bedrock at a depth of 20-40 inches. This soil type is commonly found on side slopes and uplands. Gilpin silt loam has a northern red oak site index of 80 (7.36 acres).

**Wellston silt loam**, 6-12 percent slopes, eroded, (WeC2) is well drained with bedrock at a depth of 40-72 inches. This soil type is commonly found on uplands. Wellston silt loam has a northern red oak site index of 81 (13.74 acres).

## Access

This tract can be accessed from Rooster Hill Road. Fire trail 610 begins on Rooster Hill Road and continues down a ridge through the middle of the tract and eventually ends at Plattsburg Pond. This trail should be used as the main skid road to the log yard on near Rooster Hill Road.

## Wildlife

This tract contains abundant wildlife habitat. There are several oak and hickory trees which will provide hard mast food for a diversity of species such as deer, turkey and squirrels. There is also several soft mast producing trees which also provide food for wildlife.

The Natural Heritage Database Review does not show any threatened, endangered or rare species in this tract.

## Indiana Bat Habitat Guidelines

The following present values were determined from the inventory:

Snags (all species):	Present	Goal	Available for Removal
9" +dbh	324	270	54
19" +dbh	53	45	8

We have exceeded the snag habitat goal in both size classes in this tract, although few snags are typically marked for harvest. Timber stand improvement will also create additional snags in both size classes by deadening the low quality less desirable species to allow for more sunlight to reach the more desirable species.

## **Recreation**

This tract has several recreational uses. Hunting and hiking seem to be the most popular recreational uses of this tract. Fire trail 610 goes through this tract which leads to Plattsburg Pond, a popular fishing spot.

## **Cultural**

No home sites or any other significant archeological artifacts were discovered while cruising this tract. If any are discovered during marking or the harvest, the area will be avoided and the archaeologist notified.

## **Tract Area Descriptions – see attached map**

### **Mixed Hardwoods**

The basal area in this section is approximately 108 square feet of basal area per acre. The mixed hardwoods cover type encompasses approximately 42 acres. The basal area varies widely throughout this type. In some areas the basal area is as low as 50 square feet per acre and in other areas it is as high as 190 square feet per acre. The areas with the high basal area are overstocked and should be harvested. The areas with the low basal area are good places to incorporate group openings to increase the stocking. The size of the trees in this tract ranges from seedlings and saplings to large mature and over mature sawtimber. Overall the quality of this area ranges from low to high. The overstory is dominated mostly by sugar maple, white ash, white oak, American beech and yellow-poplar. The understory in this area is mostly comprised of sugar maple and American beech along with several varying species. The regeneration is inhibited in certain areas with thick stands of pawpaw and spicebush. Regeneration varies depending on the amount of sunlight and the site conditions. In the areas with very low basal area, regeneration openings could be implemented to encourage younger trees and achieve a higher stocking. In the areas with higher stocking single tree selection could be used to reduce the stocking and improve the growing conditions for the more vigorous trees.

### **Oak Hickory**

The basal area in this section is approximately 123 square feet per acre and covers approximately 48 acres. This high basal area indicates that a harvest should be done to reduce the stocking to promote healthier trees and more vigorous growth. The trees range in size from pole size to large mature and over mature sawtimber. The species most commonly found in this section are white oak, red oak, black oak, chestnut oak, shagbark hickory and pignut hickory. The quality ranges from average quality to very high quality. The understory is mostly comprised of sugar maple and American beech with some oaks and hickory intermixed. The regeneration is mostly sugar maple, American beech or white ash. In several plots the regeneration is poor. This is likely due to the dense sub-canopy created by the beech-maple understory. This stand should be managed to grow a mixture of high quality oak and hickory. Regenerating these oaks should be a major focus for management in this section especially since it is on a south slope and there is some oak regeneration already occurring. This could be done by incorporating group openings in areas with both good oak regeneration and mature, damaged, and/or defective overstory.

## Overall

The inventory done in August 2008 indicates that the tract has an approximate total of 8,940 board feet per acre with 2,540 board feet per acre available for harvest and 6,400 board feet per acre as growing stock. The total harvest volume could be at least 228,800 board feet.

This tract has not been harvested since it has been in state ownership. As indicated by the stocking guide, this tract is ready to have a substantial harvest, which should be performed within the next 5 years. This harvest should incorporate both single-tree and group selection methods. Post harvest timber stand improvement would benefit the stand by releasing the higher quality, more desirable trees and allowing them to get more sunlight and nutrients. TSI will also create snags in both size classes of the Indiana bat habitat guidelines.

### SPECIFIC PRACTICES FOR ACCOMPLISHMENT

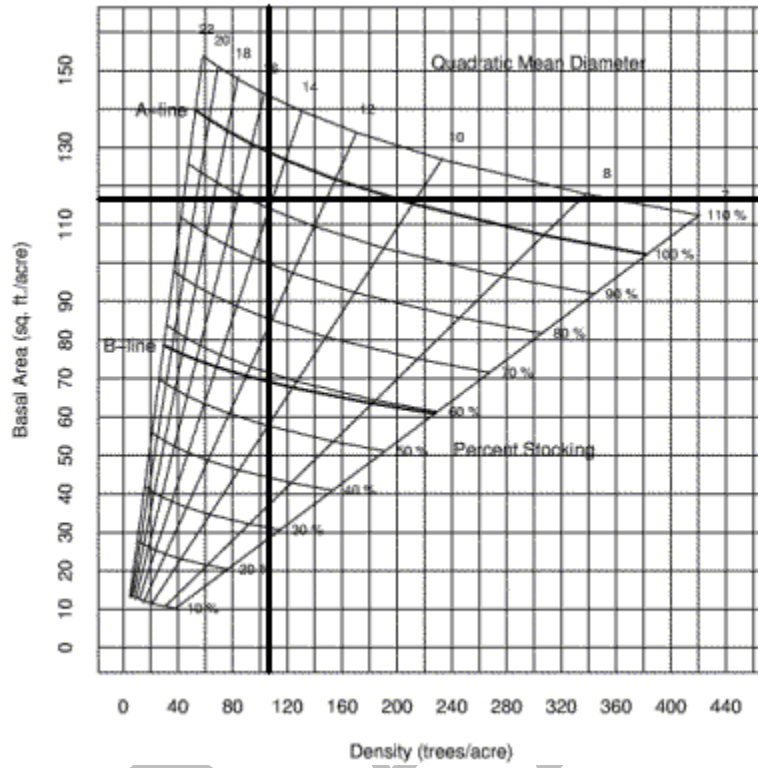
Year Planned	Practice
2010-2011	Mark Timber Sale
2011	Sell Timber
2011-2013	Timber Harvest
2012-2014	Post-Harvest TSI
2033	Inventory and Management Plan

**To submit a comment on this document, click on the following link:**

[http://www.in.gov/surveytool/public/survey.php?name=dnr\\_forestry](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.

# Stocking Guide



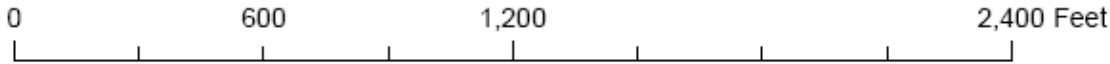
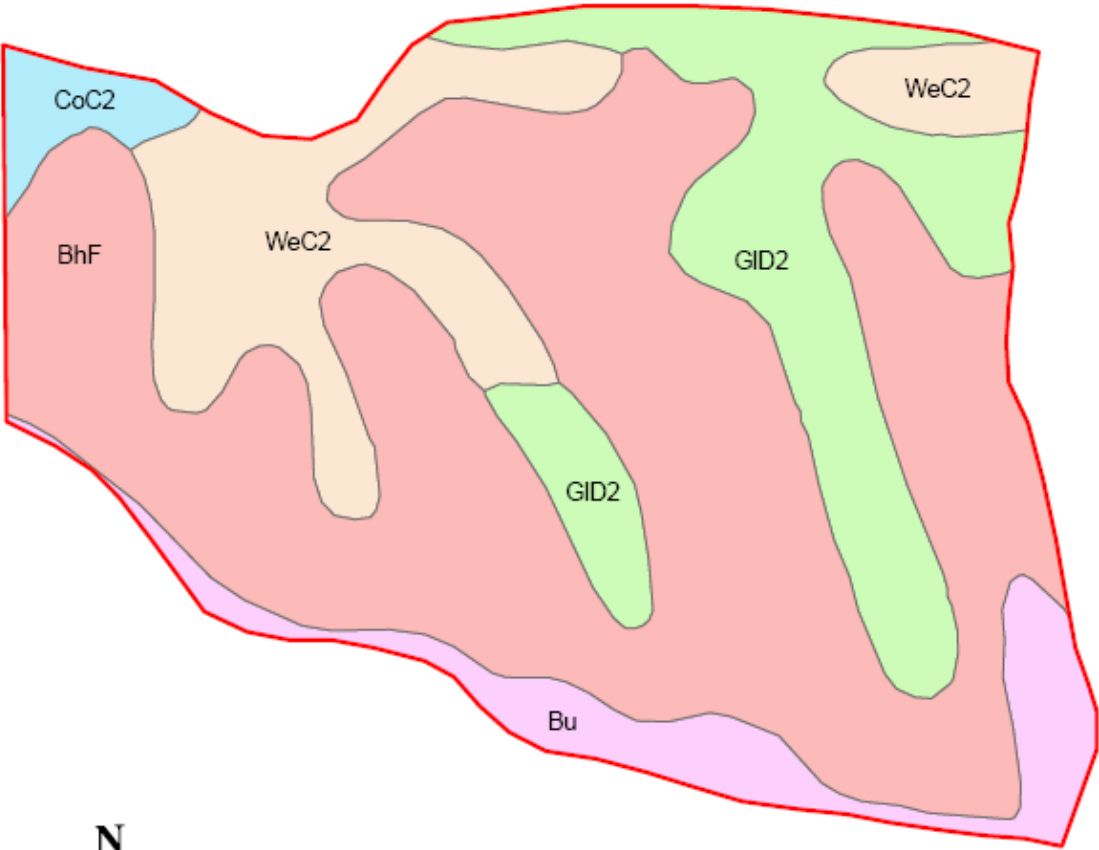
Total BA/A = 115.9 sq.ft./AC

Total #trees/acre = 106

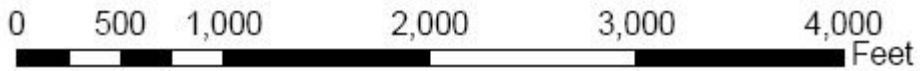
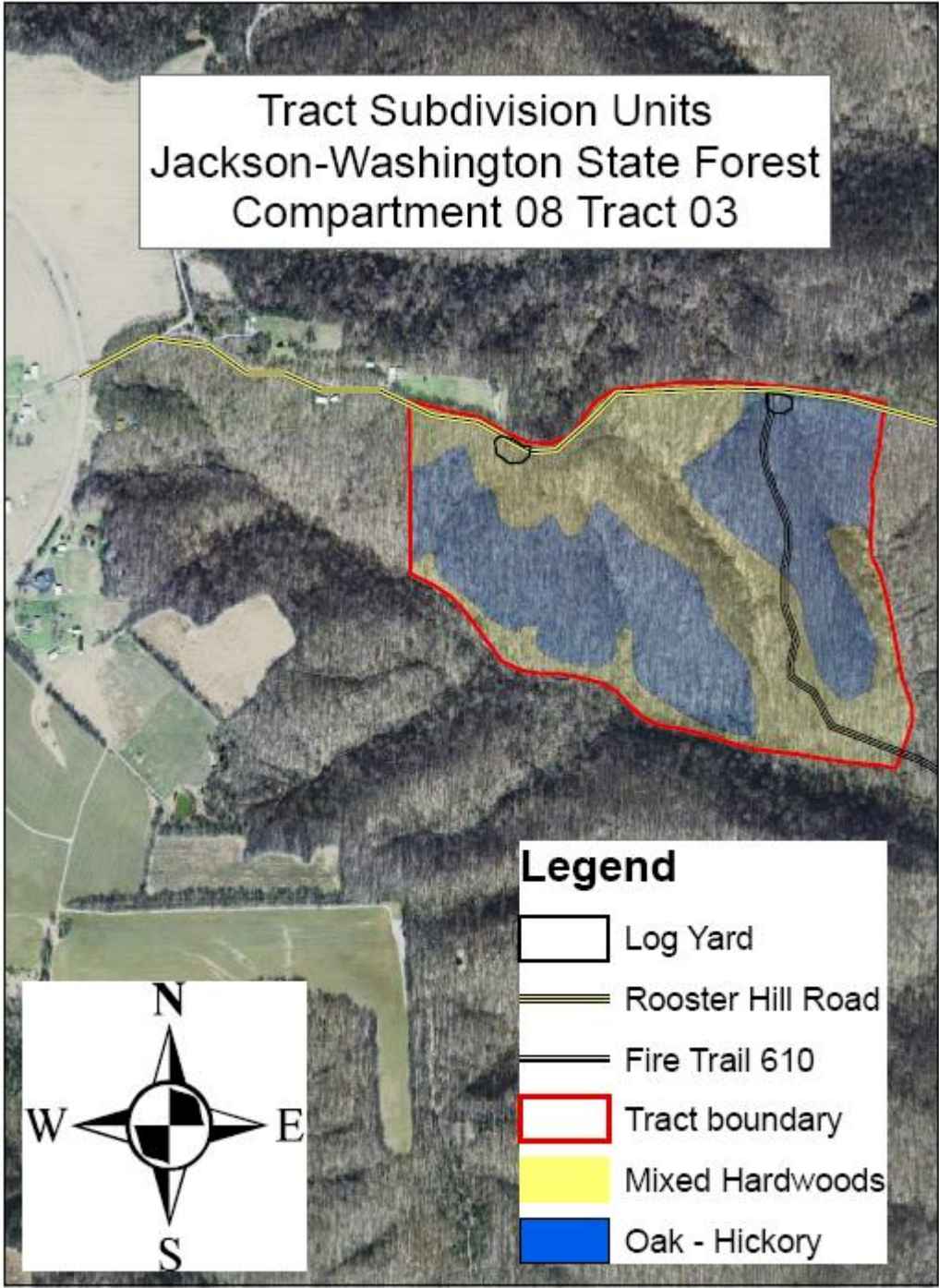
Avg. tree diameter = 14

Percent stocking = 90%

Soils Map  
Jackson-Washington State Forest  
Compartment 8 Tract 3

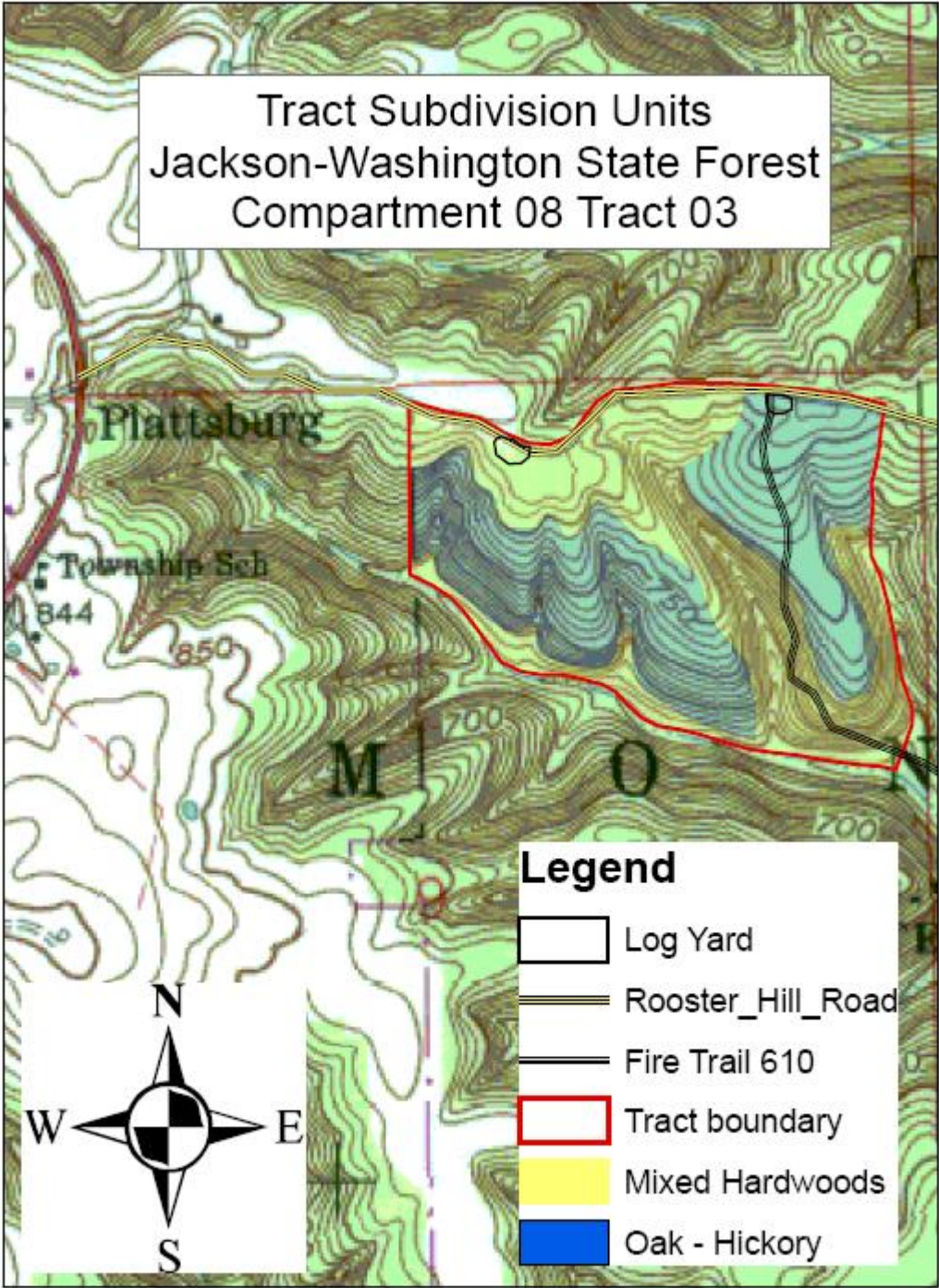


Tract Subdivision Units  
Jackson-Washington State Forest  
Compartment 08 Tract 03





Tract Subdivision Units  
Jackson-Washington State Forest  
Compartment 08 Tract 03



- Legend**
- Log Yard
  - Rooster\_Hill\_Road
  - Fire Trail 610
  - Tract boundary
  - Mixed Hardwoods
  - Oak - Hickory

0 500 1,000 2,000 3,000 4,000 Feet