TM 902 Date: 8-19-09

RESOURCE MANAGEMENT GUIDE

Compartment: 4 Tract: 9 Acreage: 96 County: Martin Section: 10 Township: 3N

Range: 3W

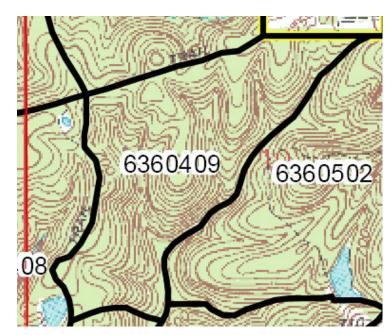
FORESTER'S NARRATIVE

By: Abe Bear

ROADS AND BOUNDARIES:

This tract is almost entirely surrounded by state forest property. The exception to this is a small portion of the northern boundry. From the intersection Firelanes 8 and 11 the boundary line runs north

along Firelane 11 almost to Firelane 12. Before reaching 12, the tract boundary splits off due north, making the wildlife pond in this area part of the adjacent tract to the west. The northern border then turns east and follows Firelane 12 for approximately ½ mile. On the eastern end of this line, private property to the north borders state owned land. The eastern boundry is a large drainage flowing southwest. The northeastern corner is not very distinct in the field, but shows up as the head of the drainage on topographic maps. The southeastern corner is at the intersection of the drainage and Firelane 8. At this point, the southern boundary follows Firelane 8 upslope to the point of beginning. The tract previously extended



south of Firelane 8, but the line was revised to simplify the boundary. Firelane 7 runs through the eastern portion of this tract linking Firelane 12 on the ridge top with Firelane 5 in the drainage on the eastern border.

TRACT DESCRIPTION:

Topography:

Topography in this tract is fairly easy to navigate. Slopes are not overly steep and ravines are not deep. In general, the aspect is southern with finger ridges containing east and west aspects. The northern border is part of a major ridgeline which spans much of this compartment.

Timber:

The majority of this tract is dominated by mature Oak-Hickory forest. Mixed hardwood timber is present on the eastern slopes and old field type areas along the north and western boundaries. Timber quality is good overall with some very good quality white oak present, especially in the southwestern quarter. The ridgetops typically contain lower quality black oak and thick green briar. Some pine is present, but is not well represented in the inventory. Areas of pine include a linear strip of white pine

along Firelane 11 and a declining plantation of red pine on a ridge top in the east central portion of the tract.

Regeneration consisted largely of sugar maple, American beech, and ironwood throughout much of the tract. Some areas did have a fair amount of oak regeneration. The red pine plantation and the area adjacent to Firelane 11 contained the most promising oak regeneration. Mid-story level trees were also sugar maple and beech in the majority of the tract. A small area on the eastern side of Firelane 7 contained a significant stocking of pole to post size Chinkapin oak. Timber Stand Improvement (T.S.I.) was conducted in this stand following the inventory to release these oaks.

The Oak-Hickory timber type comprises 66 acres of the stand. Average stocking in this strata is heavy at 8,526 bf./ac. Of this 5,480 bf was recorded as growing stock and 3,456 as harvest stock. Harvest trees were primarily suppressed, damaged, or declining trees. Removal of these trees would not change the timber type or the overall appearance of the stand. No significant regeneration openings were recommended as part of the pending harvest.

The mixed hardwoods portion of the stand contained points on eastern slopes, naturally regenerated open areas, and pine plantings. Stocking was high in this strata as well with an average of 9,697 bf./ac. Of this 5,266 bf was listed as growing stock and 4,431 bf was recorded as harvest stock. In most cases harvest trees were recorded as such to favor better quality stems or convert declining pine to native hardwood forest.

SOILS:

The tract is dominated by Wellston-Tipsaw-Adyeville complex. This complex makes up 84 % of the tract acreage. Apalona silt loam comprised the remaining 16% of the tract. The Wellston complex is a well drained soil found on the slopes and the Apalonoa is a moderately well drained soil located on the ridgetops. Native vegetation on both soil types is hardwood forest. See the attached soil map for specific distributions.

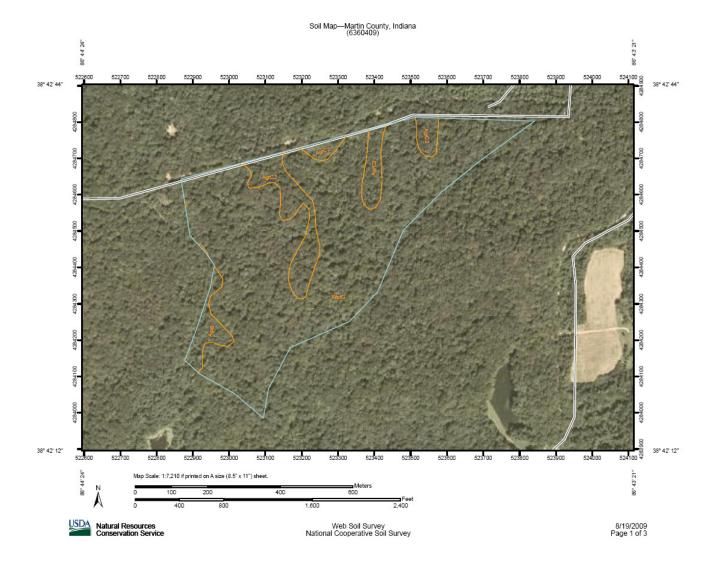
HISTORY:

Cultural Resources:

This is part of the original Martin State Forest area acquired by the state in the early 1930's. Prior to that time, the land had been privately owned. Slopes were likely grazed and flat ridgetops used for agriculture. 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.

Forest Management:

The earliest recorded management on the tract is a 1974 management guide composed by Ben Hubbard. This guide describes the tract as small to medium sawtimber with scattered mature timber. Total volume per acre at that time was only 1,145 bf. He mentions stumps from a prior harvest estimated to have been conducted around 1940. More likely this harvest was in the early 1930's just before the land was sold to the state. Another inventory was conducted in 1992 by Janet Eger. This inventory reported a much higher volume at roughly 6,200 bf/acre. A harvest was conducted following this inventory. The sale consisted of 118,745 bf and was purchased by DMI furniture of Ferdinand, IN for \$45,100.00. Following the harvest, T.S.I. was conducted throughout the tract. In 2009 a small area with a good stocking of post size oaks near Firelane 7 underwent a mid-rotation T.S.I. to free them from competing ash and tulip poplar. The tract across Firelane 11 (C4T8) is currently marked and will sell in 2009. An opening has been marked across Firelane 11 along the southwestern edge of this tract. In order to utilize the increase in light from this adjacent opening, competing understory seedlings and saplings have been removed in Tract 9 on the east side of the Firelane. There is a good stocking of oak seedlings in this area that should develop nicely with the increase in light.



RECREATION AND WILDLIFE:

Hiking, hunting, birding, and mushroom gathering are the most common forms of recreation on this tract. The proximity to the forest office, other tracts and accessibility make it a popular location. Common wildlife species include: various mature forest songbirds, hawks, owls, box turtles, snakes, salamanders, white-tailed deer, raccoons, opossums, squirrels, coyotes, and foxes.

A structural habitat analysis was done at the time of the inventory. Results indicated that legacy trees, snags, and cavity trees all exceed the recommended maintenance levels. Specific quantities are listed in the attached table.

A map representing the results of a heritage database query and ecological review form are on file in the property office.

WATERSHED:

Water flows south from this tract to the unnamed drainage that makes up the eastern tract boundary. This drainage continues to flow south to the confluence with Beaver Creek about 1.5 miles south of this tract. Beaver creek flows south and east to the Eastern Fork of The White River just south of Shoals.

TM 903 Date: 8-19-09

SILVICULTURAL PRESCRIPTION

By: Abe Bear

Although this tract is fairly heavily stocked, it is not in dire need of a harvest. There is improvement work to be done, but the stand will not decline if allowed to go 5 more years. Trees generally have room to grow. When marked, the tools will likely be single tree selection and group selection. Pines should be removed or greatly thinned where oaks have become established in the understory.

The adjacent tract across Firelane 11 has been marked and will sell in 2009. An opening is marked just across the Firelane. Light from that opening will benefit young oaks in this tract. To increase the benefit, the competing understory saplings in the area along Firelane 11 are currently being removed. The development of oak seedlings in this area should be monitored.

Some downed trees may be salvages as part of a larger salvage harvest in the fall of 2009. Several trees are down near Firelane 8 and Firelane 12.

| Year | Activity | Completed |
|------|---|-----------|
| 2009 | TSI - small pocket of oak near Firelane 7 needs release | 8-2009 |
| 2009 | Salvage downed trees along Firelanes 8 and 12 | |
| 2013 | Harvest approximately 300,000 bd. ft | |

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You **must** indicate "Martin C4 T9" 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.