

RESOURCE MANAGEMENT GUIDE

Date: 7/18/07
 Revised: 2-17-10

Compartment: 04

Tract: 02

Acreage: 100

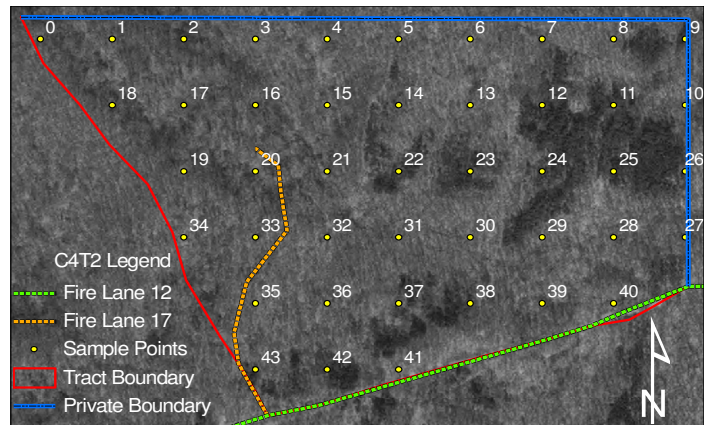
FORESTER'S NARRATIVE

By: Michael Ranniger

Revised by: Abe Bear

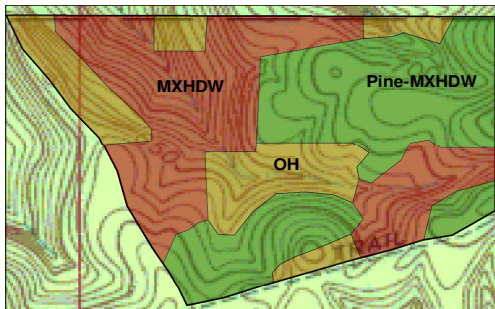
ROADS AND BOUNDARIES:

This tract is somewhat difficult to access fully. Fire lanes 12 and 17 provide good entry from the south and west. The deep ravine bisecting the tract restricts access to the northeast quarter. A good route to this area exists, but requires crossing private property to the east. Fire lane 12 is a well kept, gravel road, and fire lane 17 is graveled for about 200 yards to a log yard where maintenance stops. The trail once extended out the hillside to the north property line and could be rehabilitated if needed. The tract is bounded by Martin state forest on the west and south sides and private property line to the north and east.



TRACT DESCRIPTION:

This tract is made up of roughly 20 percent oak-hickory stands, 40 percent mixed hardwood stands and 40 percent pine-mixed hardwood stands. Oak-hickory is shown in gold on the map, mixed hardwood in red and pine-mixed hardwood in green. Beech-maple dominated the pole class throughout the tract. Much of the pine stands contained heavy undergrowth made up of briars and saplings. An oak-hickory ridge top on the far west side of the tract contained a regeneration opening.



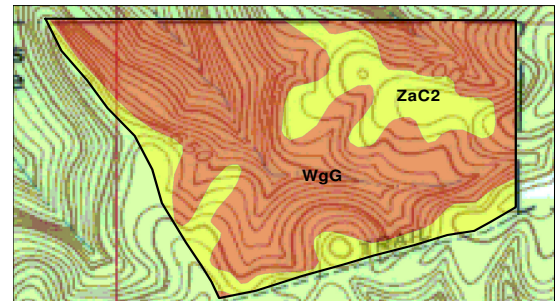
Overall timber quality is fair throughout. The western portion of the tract holds the best quality timber. Good stands of tulip poplar are present on these east and north facing slopes. The broad ridge top in the eastern portion of the tract contains lower quality timber both in terms of species mix and form. The pine is maturing and in some cases beginning to decline. The hardwood timber on the ridge is open grown and generally has poor form. Common species are Tulip poplar, white ash, red maple, and sassafras. The presence of a fragipan restricting root growth may also have a negative impact on tree form. Annual growth is about 96 board feet per acre which is quite low. Many tracts at Martin State Forest produce 150 to 175 board feet per acre per year. This is likely due to the high volume of slow growing hickory, and the stagnant pine stands. For volume by species, refer to TM 901.

SOILS:

There are two major soil types found in this tract, the most abundant of which is the Wellston-

Berks-Gilpin complex (WgG), 18-70 percent slopes. It makes up roughly 75 percent of the tract, and is colored red on the map. These well-drained soils are characteristically deep to moderately deep. Available water capacity is very low in the Berks soil, low in the Gilpin soil and high in the Wellston soil. Permeability is moderate to moderately rapid, and surface runoff is rapid to very rapid. Erosion hazards are moderate to severe on these soils.

Zanesville silt loam (ZaC2), 6 to 12 percent slopes, eroded. This soil is colored yellow on the map and is found on some ridgetops and upper side slopes. It covers about 25 percent of the tract soil. It is a moderately sloping, deep, well to moderately well drained soil. The surface layer is a five-inch thick layer of brown silt loam. The subsoil layer, about 39 inches thick, is friable silt loam over a silty clay loam. This is underlain by a silt loam fragipan, which restricts root penetration and downward water movement. This restriction to water movement often results in saturated soil conditions in the winter and spring. Available water capacity is moderate, and permeability is moderate above and slows in the fragipan. Surface runoff is rapid, requiring measures such as water turnouts and bars to properly remove water from roads and yards. The organic matter content is moderate in the surface layer. Erosion hazards and equipment limitations are slight for this soil; however, winter/spring logging may be restricted due to the saturated soil conditions. Site index for Northern Red Oak on this soil is fairly low at 68.



HISTORY:

Forest Management

The State Forest Service purchased the area for this tract in 1934. The state paid Festus Troutman \$650.00 for 140 acres, of which 100 acres became land for C4T2.

Inventories on this tract were conducted in 1973, 1989, and 2007. A timber sale was completed in April of 1991, to DMI Furniture Inc. The sale included 267 trees totaling a volume of 77,155 bd. ft, and was sold for \$19,120.00.

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 AND WILDLIFE:

Hunting and gathering are the main forms of recreation on this tract of forest. The mixed hardwood timber provides great whitetail deer habitat along with many other non-game species of wildlife. Morel mushrooms are present during the spring and bramble berries are numerous along the Firelanes during summer months.

During the timber inventory, snag and Legacy trees were tallied. A deficiency exists in the large diameter snags. This can be corrected during future Timber Stand Improvement. Cavity trees were not tallied at the time of inventory. For this reason, the Wildlife Habitat Feature Summary shows large deficiencies in number of cavity trees. Given the presence of declining pioneer species, it is assumed cavities are plentiful.

A review of the Natural Resource Heritage Database revealed numerous elements near this tract. Many aquatic species including: Rabbitsfoot, Ohio Pigtoe, Clubshell, Tough Pigtoe, Eastern Fanshell Pearlymussel, Sheepnose, Spotted Darter, Tippecanoe Darter, and Lake Sturgeon are present in the East Fork of the White River ½ mile north of this tract. A bald eagle was reported just over 1 mile north of the

tract on the White River. Reports of Bobcat and Worm eating warbler were recorded, both over one mile from the tract. To the east, a waterfall and cascade are present in a deep canyon. None of these elements will be impacted by any proposed activity on this tract.

WATERSHED:

This tract is divided into northeast and southwest sections by a drainage area that flows from the east to northwest. This ravine drains directly into the East Fork of the White River a short distance north of the tract.

SILVICULTURAL PRESCRIPTION

By: Abe Bear

This tract could benefit from a timber harvest on the broad ridge top north of the ravine. Timber in this region is of low quality. A large opening (roughly 25 acres) would allow the pine to be converted to native hardwoods, regenerate the poor form hardwood stands, and improve wildlife habitat. An opening this large could be allowed to naturally regenerate to poplar, ash, sassafras, and cherry or could be planted to include oak. If such an opening is created, the log yard must be on the ridge top to prevent skidding such a large volume across the blue line stream in the ravine. Currently we have no access to the ridge top. Access would have to either go through the private inholding to the east, or follow Firelane 17 and cross the stream on a portable bridge or large culvert. If access goes through private property, the yard would be near the east property line. If Firelane 17 is extended, the yard would be near the west end of that opening. Without such access, the ridge should be marked via single tree selection and timber skidded to the yard on Firelane 17. Timber south of the ravine could stand a light harvest, but the need is not imminent. Access to this area is simple and logs would be yarded at the established yard on Firelane 17.

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RESOURCE MANAGEMENT GUIDE

Compartment: 4
County: Martin

Tract: 2
Section: 10

Acreage: 100
Township: 3N

Range: 3W

Specific Practices For Accomplishment

By: Abe Bear

Year Planned	Practice	Year Accomplished
2010	Inquire about an easement through private property and scout potential Firelane 17 extension to find route to access area north of ravine.	2010- no access across ravine
2012	If access in possible, install haul road and stone. Establish skid trails. Vine TSI	
2014	Mark harvest	
2017	Update Management Guide	