

Resource Management Guide

Greene-Sullivan State Forest

Compartment 5 Tract 1

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Foresters Narrative

Location

Tract 1 of compartment 5 is found in Greene County, Section 32 of Stockton Township, T7N R7W. From Dugger take Highway 159 south to County Road 600 South and turn left. Take this road to the eastern edge of the forest property and the tract will be north of you or on your left. This will be the south-east corner of the tract.

General Description

Tract 1 is 116 acres with the majority of the stand being hardwoods, but it also has an integral component of mixed pine. Hay and Star Lake reside in this tract along with some scattered smaller lakes.

History

This tract was acquired from Sentry Royalty Company on May 5, 1964. The majority of the tract was strip mined for coal prior to the state acquisition. The trees seem to have been planted around this time.

Landscape Context

The west and south borders of this tract share borders with more State Forest that rival the same forest type inside C05T01. The north and south borders of the tract border primarily agricultural land, with the exception of one private residence at the south-eastern corner.

Topography, Geology and Hydrology

The stripper hills run primarily north to south in this tract with a slight curve. Also, the northern most section of this tract has not been mined. There are not any streams in this tract. Hay and Star Lake reside in this tract along with some scattered smaller lakes. Their total surface area is estimated to be about 9.1 acres or about 8% of the tract's total area.

Soils

The soils in this tract are classified as strip mines. They are described as long narrow mounds of mine spoil (a mixture of soil, till, shale, sandstone and some coal) and a few open pits. Due to this soil type, the slope between the spoil hills can be very steep. Also, the northern most section of this tract has Shakamak silt loam soil which consists of deep, somewhat poorly drained or moderately well drained, very slowly permeable soils on uplands. Shakamak Series soils formed in loess and in the underlying glacial till. Slopes range from one to three percent.

Access

County Road 600 South borders this tract to the south. Sassafras Road borders the tract to the west. There is a small access road that leads off of Sassafras Road to Star Lake in the northern part of the tract. Also, there is a horse trail that starts at the southern border of the tract that loops by the two major lakes before ending by the access road at the northern end of the tract.

Boundaries

County Road 600 South borders this tract to the south. Sassafras Road borders the tract to the west. The northern and eastern boundaries border private land.

Wildlife

There is a wide variety of wildlife present in this tract. Deer and turkey sightings and sign were common. Frogs and amphibians were common. Several songbirds and woodpeckers were noted during the inventory.

This area is known to attract both deer and turkey hunters.

Table 1 shows how this tract compares to the Indiana Bat guidelines. With the exception of the preferred live trees per acre ≥ 11 " DBH this tract does not meet the Indiana Bat guidelines. Over time it is expected some of the smaller trees will grow to help reach the goal of 3 trees per acre ≥ 20 " DBH. Also it can be expected that some trees die so as to meet the 1 snag ≥ 19 " DBH and 5 snags ≥ 9 " DBH per acre. These may also be created during TSI activities.

Description	Goal	Tract
Preferred live trees per acre ≥ 20 " DBH	3	1.2
Preferred live trees per acre ≥ 11 " DBH	6	21.5
Snags per acre ≥ 9 " DBH	5	0
Snags per acre ≥ 19 " DBH	1	0

TABLE 1

Communities

Most of this tract is a mix of various hardwood and pine trees. While the majority of the trees in the tract are hardwood, there is an ample supply of pines. Soft and hard mast trees can be found throughout the tract. Aquatic and riparian trees also add to the diversity of the tract. Invasives such as Japanese honeysuckle, autumn olive and multiflora rose were observed during the inventory. There was also an abundance of grapevines.

Recreation

There is a great deal of public recreational opportunities in this tract. With there being two larger bodies of water with easy access to one of them (both if you count the horse trail), fishing is popular in this tract. There is a horse trail that runs through this tract, as well. This site is also known to be a popular spot for hunters.

Cultural

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.

Silviculture Prescription

The overall recommendation of this tract is to conduct an intermediate cutting, more specifically an improvement harvest using single tree and group selection. This harvest should take place within the next couple of years. This harvest will improve the overall vigor, quality and value of the residual stand, in part by removing the pines to transition the tract to a more hardwood forest, while capitalizing on stems dropping out due to natural mortality or maturity. Wildlife will benefit from this harvest as well. Additional sunlight penetrating the forest floor will stimulate the development of new ground flora, consequentially increasing nesting and foraging habitat. This is essential for game and non-game species as well as continued forest development.

The improvement harvest should yield approximately 382,090 board feet, if the whole tract is harvested, leaving approximately 162,910 board feet. After the harvest a TSI will increase the snags per acre while diversifying diameter distributions of both snags and growing stock trees; also, it will control grapevine and release selected crop trees not successfully released during the harvest. This stand should be re-inventoried in 2027.

Proposed Activities Listing

<i>Proposed Management Activity</i>	<i>Proposed Date</i>
Skid Trail / Log Yard Construction	2008 – 2009
Timber Marking	2008 - 2009
Harvest	2009 - 2011
Close Out	2010 - 2011
TSI (Post-Harvest)	2011 - 2014
Re-Inventory	2027

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