TM 902 Date: 1-20-2010

# **RESOURCE MANAGEMENT GUIDE**

Compartment: 1 Tract: 7 Acreage: 48
County: Martin Section: 15 Township: 4N

#### FORESTER'S NARRATIVE

By: Abe Bear

#### **ROADS AND BOUNDARIES:**

This tract is bounded on the west by Bear Hill Road. The eastern boundry is Indian Creek. State Forest ownership continues across Bear Hill Road to the west and across Indian Creek to the east. The northern boundry is shared with private property. An old fence is present along this line, but is down in many places. The southern boundry is also shared with private property, but is very clear due to a good fence and land use change. The private land is an open hayfield. Both the northern and southern boundry were flagged with pink flagging at the time of inventory.

Although no roads or firelanes penetrate the tract boundary, access is good via Bear Hill Road. This is a gravel county road navigable to log trucks and heavy equipment.



Range: 3W

#### TRACT DESCRIPTION:

This tract is entirely wooded, but is not of uniform age class. The strip within 100 yards of the southern boundry and continuing along Indian creek supports a mature stand of timber. The species mix is dominated by tulip poplar, but includes black walnut, black oak, white oak, hickory, sycamore, and red maple. The remainder of the tract is dominated by young timber. This area was reported as being open field/brush in a 1970's era inventory. Now, dense stands of tulip are present along with cedar, Virginia pine, red maple, black walnut, red maple, hickory, black cherry, and sycamore. Tree species are beginning to sort themselves based on rates of growth with the tulip and sycamore becoming dominant over the slower growing species. Despite the proximity to Indian Creek, the timber consists mostly of mixed hardwoods. (Only one inventory point was classified as bottomland hardwood.) Harvest stock for the tract was about 2,300 bf/acre while growing stock was 4,000 bf/acre. While this seems like enough volume to warrant a light harvest, the spatial distribution of timber does not lend itself to a worthwhile harvest.

Grape vines are numerous throughout much of this tract, especially in the old field areas. They are becoming a problem for sapling growth and development. In several areas, they have damaged the crowns of young trees.

Multiple old roadbeds transect the old field portion of the tract. These are thought to be old farm paths, or skid trails from a small timber harvest in the early 1980's.

One area along Bear Hill Road is being used as a roadside dump. No recent trash was noted during the 2010 inventory, but the location was marked and is shown on the map above as a green dot.

#### **INVASIVE SPECIES:**

With the exception of limited multi-flora rose near the road, no invasive species were noted during the 2010 inventory.

#### SOILS:

This tract consists of four main soil types. The most abundant soil is Newark silt loam which covers about 37 percent of the tract. Newark is a somewhat poorly drained soil located in the central portion of the tract. The next most prevalent soil type is the Wellston-Tipsaw-Adyeville complex. This is a well drained complex located on the western edge of the tract. Haymond silt loam is located in the southeastern corner of the tract near the bend in Indian Creek. This soil is well drained and supports good black walnut. The final soil type is McAdoo silt loam. This type is located along Indian Creek on the eastern edge of the tract. McAdoo is rich well drained soil rarely found in forested areas.

# HISTORY:

The State of Indiana acquired this parcel in 1940 from Calvin and Josephine Cox. Little recorded forest management work was conducted until a 1970s recon by state forest personnel. This report listed much of the area as open field/brush. Average basal area for the tract was 68.2 and total volume was 45,080 board feet (939 bf/acre). In March of 1976, 1000 1-0 Yellow Polar seedlings were planted on 6'x6' spacing in a portion of the open field. Brush was cleared by hand in the planting area the year prior. At some point, Virginia pine must have been planted in the old field area. It is still present in limited areas. The area along the creek was wooded and contained good quality black walnut. A timber sale focusing on black walnut was conducted in 1981. TSI followed the harvest, and the tract has been left to grow since.

#### **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:

Recreation on this tract consists mainly of hunting and gathering. General hiking is unlikely due to the absence of trails and the dense young timber. The dense growth along with the availability of water makes for great wildlife habitat. Numerous deer trails were noted during the inventory along with several turkey feathers. It is assumed many songbirds, small mammals, amphibians and reptiles use this tract. A review of the Indiana Natural Heritage Database confirmed the presence of Blue heron to the west of the tract and Tippecanoe Darter, Lake Sturgeon, spotted Darter, and Sheepnose in the East Fork of the White River just east of the tract. None of these species should be adversely impacted by silvicultural activities on the tract.

As part of the 2010 timber inventory, a Wildlife Habitat Feature inventory was also conducted. The Results of the inventory indicated a deficiency in large snags and cavity trees (19" + DBH). This will be corrected during the upcoming TSI operation. All other categories had an abundance of habitat features.

#### WATERSHED:

Precipitation flows east from this tract directly into Indian creek which forms the eastern border. Indian Creek flows west into Sulfur Creek about 1½ mile from the tract. Sulfur Creek meanders south before draining into the East Fork of the White River.

# SILVICULTURAL PRESCRIPTION

By: Abe Bear

Although mature timber is present near the creek and southern property line, the majority of this tract is young and needs time to grow before any timber harvesting should occur. The old field area has succeeded nicely to tulip poplar and may be ready for an improvement harvest in 20 years. Prior to that time, the tract should be thinned and potential crop trees released through timber stand improvement. This TSI operation should also eradicate grapevines which are rather thick in the young timber.

# Specific Practices For Accomplishment

Year		Year
Planned	Practice	Accomplished
2010	TSI to release crop trees and control grapevines	

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You **must** indicate 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.

TM 901 Date: 1-19-2010

# RESOURCE MANAGEMENT GUIDE By: Abe Bear

B.A.-Trees: 6-11"

B.A.-Trees ≥ 12"

30

68

Compartment: 1 County: Martin	Tract: 7 Section: 15	Stand: Total Township:3W	Range: 4N
Comercial Forest	48	Average Site Index	90
Non-commercial Forest	0	Average Annual Growth	N/A
Recreational Use	0	Total Basal Area	124

0

0

48

**Permanent Openings** 

Other Openings
Total Acres

Species	Saw Timber Leave	Saw Timber Harvest	Saw timber Total
Yellow Poplar	92,190	55,460	147,650
Virginia Pine	15,290	15,600	30,890
American Sycamore	13,930	15,180	29,110
Northern Red Oak	8,950	3,880	12,830
Black Oak	11,320	0	11,320
Black Walnut	8,920	0	8,920
Shagbark Hickory	6,840	1,810	8,650
Bitternut Hickory	7,310	1,090	8,400
Red Maple	6,400	1,050	7,450
Black Cherry	6,120	1,270	7,390
Silver Maple	0	6,510	6,510
White Ash	4,210	1,720	5,930
Pin Oak	5,540	0	5,540
Sugar Maple	0	3,230	3,230
Sweetgum	0	2,780	2,780
Red Elm	1,780	0	1,780
Hackberry	1,610	0	1,610
Largetooth Aspen	1,480	0	1,480
Totals (tract)	191,890	109,580	301,470
Total (per acre)	3,998	2,283	6,281