TM 902 Date: 2-9-2010

RESOURCE MANAGEMENT GUIDE

Compartment: 2 Tract: 4 Acreage: 100 County: Martin Section: 15 & 22 Township: 4 N

FORESTER'S NARRATIVE

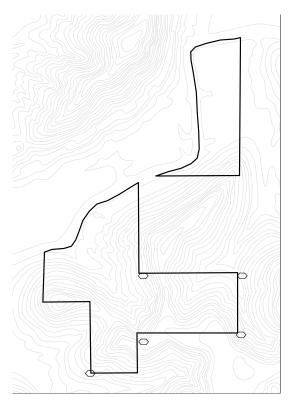
By: Abe Bear

ROADS AND BOUNDARIES:

This tract is not bounded by any roads and is landlocked by private property to the east, south and west and by Indian Creek to the north. The nearest roads are Bear Hill Road on the other side of Indian Creek and State Highway 450 to the south. An old road bed extends from Hwy 450 north onto the tract. The adjacent landowner granted State Forest access via this old roadway for this inventory. The state may have an opportunity to obtain a legal easement along this old roadway.

Several survey stones are present on this tract. These are shown on the map as hexagons. Other corner evidence such as stone piles and fence intersections present at some assumed corners. The entire boundry was flagged with pink tape at the time of inventory. The property line between known corners was painted orange.

The two units that comprise this tract do not actually touch. The centerline of Indian Creek is the property line which leaves a small piece of private property between the east boundary of the south unit and the south boundary of the north unit.



Range: 3 W

TRACT DESCRIPTION:

This tract contains a mix of trees species due to the diverse topography and past land use. The northern unit is mostly abroad flat bottomland. It appears to have been cleared or farmed in recent history. Increment boring of the larger trees reveled they are about 40 years old. The majority of timber in the lowland area is pole to small sawtimber size with some scattered larger stems. The current stocking level is high, but stems are thinning themselves as the stand develops. The northern most edge of this unit along the creek holds very nice black walnut. Several trees are 18-20 inches in diameter and of prime quality. The small upland in the southern portion of the north unit contains better timber both in terms of species mix and quality. Points along the southern line fell in stands of good quality sugar maple and shagbark hickory growing on the north slope overlooking the creek.

The southern unit is a mix of Bottomland Hardwoods, Mixed Hardwood and Oak-Hickory forest types. The bottomland area along the creek contains rather low quality timber. Trees are of fair size, but species mix and stem quality is average at best. The Mixed Hardwood areas on the flats and north facing slopes contain good quality timber. Much of this type is mature, with the exception of the north facing

slope on the western edge of the tract. Here, trees look to be about 30 years old, appearing to having grown as volunteers in an old field. In the mature stands of mixed hardwoods, large tulip are present and are responsible for much of the inventoried volume. The Oak-Hickory type contains good quality timber and is found on the south and west facing slopes. Most stands have mature overstory trees of good quality with little regeneration in the understory. Especially good stands of white oak are found on the south facing slopes in the southern most extent of the tract and on the west facing slope along the northeastern boundry. Some stems do exhibit a swelling at the butt indicating they may be hollow, possibly from past fire damage.

The overall topography on the tract is quite workable. Some steep ground is present, but not in excess. The forty acre in holding of private land to the east contains a very step north facing slope known as Rayen Cliffs.

Overall stocking is quite high on the tract at almost 9,000 board feet per acre. Of this volume, approximately 3,700 board feet was recorded as harvest stock and the remainder as growing stock. For specific species stocking rates and stocking by stratum, refer to TM 901.

INVASIVE SPECIES:

Multi-flora rose is present on the broad flat along the southern property line. The plants seem to be stressed by the dense overstory and will likely continue to thin out. No other invasives were found.

SOILS:

Four main soil types are present in this tract. The most common is Wellston-Tipsaw-Adeyville Complex. This is a very common well drained forestland soil. The next most common soil is Haymond silt loam. This soil is limited to the bottomland areas. It is frequently flooded and well drained. Bonnie silt loam is the next most common soil. This soil is a bottomland soil as well. Bonnie is frequently flooded and poorly drained. The fourth soil type is Apalona Silt Loam. Apalona is located on the broad flat ridgetops and often has a fragipan restricting drainage. For specific soil distributions refer to the attached soil map.

HISTORY:

Forest Management

Martin State Forest received this land in October of 1968 from the U.S. Forest Service. The forest service had acquired the land in the fall of 1940 from several landowners including Calvin and Josephine Cox, Jessie Whaley, Myrtle Van Meter, and the Martin County Bank. After acquiring the land, a timber inventory was conducted in the early 1970's. This inventory showed much of the area to be open and claimed the wooded portion was in need of an improvement harvest to remove fire damaged trees. A timber sale was conducted in February of 1973. This sale included 85,030 board feet of mostly oak. Dolly Madison, Inc. of Ferdinand purchases the timber for \$5,950.00. Timber in the north unit was accessed by crossing the neighboring landowner along the long ridgetop. The open areas were used as log yards and were recommended to be planted following the harvest. They were never planted and a 1981 recon by Janet Eger recommended they be allowed to naturally revert to forest. In 1989, a timber trespass occurred on the tract. Seven trees were cut along the eastern property line by loggers working on the neighboring property. With the exception of property line marking, no other forest management work had been conducted on this tract until the current inventory and management guide.

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:

Due to the poor access, recreational use is limited to neighboring property owners and those who they let access through their property. Deer hunting appears to be a popular activity given the presence of elevated deer stands on the tract. Other recreation likely includes hunting and mushroom gathering. The diverse forest stands along with Indian Creek make for good wildlife habitat. The tract is home to numerous forest dwelling species along with aquatic animals in the creek. A query of the Natural Heritage Database revealed a report of a blue heron to the west and Tippecanoe Darter, Lake Sturgeon, Spotted Darter, and Sheepnose in the East Fork of the White River to the east.

A Wildlife Habitat Feature inventory was conducted during the timber inventory. It found Legacy trees, Snags of all sizes and Cavity trees of all sizes to be plentiful on the tract. Specific results can be found on the attached Wildlife Habitat Feature Tract Summary.

WATERSHED:

Water drains northwest off the tract into Indian Creek. Indian Creek flows southwest and eventually into the East Fork of the White River. Several springs flow from the tract also draining into Indian Creek.

TM 903 Date: 2-9-2010

SILVICULTURAL PRESCRIPTION

By: Abe Bear

In order to effectively manage this tract we must secure access. The best access option is along the old roadbed leading north from HWY 450. The actual route may be parallel to the old road through the open field. The neighboring landowner to the south is willing to work with the state on this access. Some dozer work will be required to get the old road navigable by truck. When the access road is improved, a log yard may be cleared where the road enters the tract and initial skid roads pushed in.

The tract is ready for a timber harvest at this time. The northern unit is inaccessible and does not contain significant mature timber, so a harvest would be limited to the southern unit. The mixed hardwoods should be marked for improvement via single tree selection and group opening. A good site for a regeneration opening and log yard exists on the broad ridgetop along the southern property line. The soil may be difficult since a fragipan likely will restrict drainage. The high quality white oak stands on the south and west slopes are good sites for shelterwood cuts. Currently no oak regeneration exits in these stands. Fire should be used as a tool to help establish good regeneration prior to removing the overstory.

A 3 acre area of good oak regeneration exists on the west slope of the southern unit. This area has been mapped and needs TSI to free the young oak from competing species.

Grapevines are numerous throughout the tract and should be controlled prior to harvest.

The north slope on the western property line contains young timber. This area would not be included in a harvest but should be included in post harvest TSI to release the better stems.

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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 904 Date: 2-9-2010

RESOURCE MANAGEMENT GUIDE

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Range: 3W

Specific Practices For Accomplishment By: Abe Bear

Year		Year
Planned	Practice	Accomplished
2010	Secure legal access from south	
2010	Use YHCC labor to cut grapevines	
2011	Install/improve access road, log yard, skid trails	
2011	Burn WHO stands to establish oak regeneration	
2015	Harvest approx. 300,000 board feet from southern unit	