Indiana Department of Natural Resources - Division of Forestry

Resource Management Guide
Compartment 07 Tract 03

Ferdinand State Forest Oct 23, 2010
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Site Index: 70

Location: Tract 0703 is located at SE ¼, NW ¼, and the NW ¼, SW ¼ Section 10, T4S, R3W, Perry County, Clark Township, IN. Start at Possum Junction (exit 74) and go approximately 3 miles west on State Road 62. Then turn south on Clifton and proceed for about 2.5 miles. Turn west onto Cedar (this turns into Calypso) for ¾ of a mile. Tract is on south side of road approximately ½ miles.

General Description: This tract is 70 acres. It is covered by closed canopy forest. There are about 50 acres of hardwood forest and about 20 acres of pine. The pine areas are marked by a large amount of mortality, especially along the eastern boundary.

There are some small pockets of blowdown that are scattered throughout this tract.

This tract is almost landlocked. It is joined to tract 0704 only by its north east corner. Aside from that it is completely surrounded by private land.

History: This tract was purchased from Robert an Evelyn Leinenbach of Dubois County. The deed was recorded in March of 1951.

An inventory was done by Bill Hahn in February of 1972. A total of 36,960 board feet (1,320 board feet per acre) was recorded. A harvest was not recommended.

An inventory was done by Gretchen Herbaugh on December 11, 2000. A total volume of 207,700 board feet (6,293 board feet per acre) was recorded. A harvest was not recommended.

Landscape Context: This is among other tracts in compartment 7. Tract 0704 is directly NE; in fact, 0704's SW corner is attached to 0703's NE corner. Tract 0702 lies directly to the west and is separated by private land.

The majority of the surrounding land is forested. Some of the land is used for agricultural production and there are private residences scattered about.

Topography, Geology and Hydrology:
This tract is located in the Crawford Upland natural region. This is unglaciated hill country characterized by short, steep slopes often broken by relatively flat benches and rocky bluffs. The geology consists of underlying sandstone often with a loess cap on the ridge tops. The watershed on this tract is such that it drains into the Anderson River.

The topography of this tract is consistent with the immediate area and is comprised of rolling hills. There is a ridgetop in the center of the northern half of the tract.

The vast majority of this tract drains to the west into an unnamed creek that empties into the Anderson River to the north. A small portion in the north east corner drains to the east into an unnamed creek which also empties to the north into Anderson River.

Soils:

Adyeville-Wellston-Deuchars Silt Loams (AbvD3), 8 to 20 percent slopes – Composition: Adyeville and similar soils: 29 percent; Wellston and similar soils: 25 percent; Deuchars and similar soils: 18 percent; Dissimilar components: 28 percent
Adyeville-Wellston-Deuchars stony silt loams intermixed throughout the unit. This association occurs on backslopes on Hills and structural benches underlain with interbedded sandstone, shale, and siltstone.
Properties and Qualities of the Adyeville Soil: Residuum derived from interbedded sandstone, shale, and siltstone. Slope is 8 to 20 percent. The depth to bedrock is 20 to 40 inches. This is a somewhat excessively drained soil.
Properties and Qualities of the Wellston Soil Parent material for this soil is loess over residuum derived from interbedded sandstone, siltstone, and shale with a slope of 8 to 20 percent. Depth to bedrock is 40 to 60 inches. This is a well drained soil.
Properties and Qualities of the Deuchars Soil: Parent material is loess or silty colluvium over residuum derived from shale interbedded with thin beds of sandstone with a slope of 8 to 20 percent. Depth to bedrock is 60 to more than 80 inches. This soil is moderately well drained. Site index is 70

Adyeville-Tipsaw-Ebal complex (AccG), 20 to 50 percent slopes – Composition: Adyeville and similar soils: 31 percent, Tipsaw and similar soils: 24 percent, Ebal and similar soils: 17 percent, dissimilar components: 28 percent.
Properties and Qualities of the Adyeville Soil: Residuum derived from interbedded sandstone, shale, and siltstone. Slope is 8 to 20 percent. The depth to bedrock is 20 to 40 inches. This is a somewhat excessively drained soil.
Properties and Qualities of the Tipsaw Soil: Residuum derived from interbedded sandstone, shale and siltstone. Slope of 20 to 50 percent. Depth to bedrock is 20 to 40 inches. This soil is somewhat excessively drained.
Properties and Qualities of the Ebal Soil: Parent material is 10 to 30 inches of loamy colluvium over clayey residuum from shale. Slope is 20 to 30 percent. Depth to bedrock is 50 to more than 80 inches. This soil is moderately well drained. Site index is 70

Apalona silt loam (AgrC3 & AgrC2), 6 to 12 percent slopes – This soil occurs on shoulders and backslopes of hills and structural benches underlain with interbedded sandstone, shale, and siltstone. Parent material is loess over clayey and loamy residuum derived from interbedded sandstone, shale, and siltstone. Slope is 6 to 12 percent. Depth to restrictive feature is 20 to 40 inches to a fragipan and 72 to more than 80 inches to bedrock. This soil is moderately well drained. Site index is 60.

Gatchel loam (GacAW), 0 to 2 percent slopes -- This soil forms on flood plains on natural levees and alluvial fans. Parent material is loamy alluvium over alluvium with rock fragments. Slope is 0 to 2 percent. Depth to restrictive feature is more than 60 inches. This soil is somewhat excessively drained. Site index is 95.

Access: The closest drivable road is a county road to the north of the tract. This road does provide access to Tract 4 of the same compartment; however, the two tracts share only a common corner so this road would not be a place where direct access could be gained. To access the tract, on must park on the county road that goes through the southern part of tract 0704 and access 0703 on foot.

An old abandoned roadbed cuts across the lower 1/3 of the tract. This road would take minimal effort to clear as far as tree growth. Some sections are still passable but the whole road should be evaluated for suitability to access this tract. It is likely that the neighbor uses this road for hunting access. This road has high banks for much of the length.

Boundary: According to the previous inventory all corners either have signage or a stone. The NE and NW corners have signs only. The NE sign has come off the tree it was attached to and is currently on the ground. The SE corner has a stone. The SW corner is a bit confusing. The state evidence shows the corner having a sign as well as a gutter pipe stuck in the ground, which is still in place. However, the neighbor has run the line and places the corner 10' past the state-indicated corner.

The east line has fencing along the entire length of the line. There is also heavy blowdown along this line. The west line has several rebar stuck in the ground along the line especially near the south west corner.

Wildlife: This tract likely supports wildlife typical of the area. Wildlife witnessed on the track during the taking of inventory include: squirrel, turkey, coyote, deer, and numerous songbirds,

A search of the Natural Heritage Database was dated 10/26/2010. If any endangered, threatened, or rare species were noted, the plan of activities for this tract took those into consideration.

Current policy on managing for the federally endangered Indiana bat requires a certain component of snags and live trees of specific sizes and species. This tract meets the live tree target in both the 11"+ and 20"+ size classes. This tract meets the snag requirements in the 5"+ and 9"+ size classes but does not meet the snag requirement for the 19"+ size class. An additional 28 snags are needed to reach this requirement. This can be done by girdling appropriate trees to create the needed snags.

Communities:
Vine honeysuckle is present on portions of this tract. Generally, it is present in previously disturbed areas that have a bit more opening in the canopy.

Periwinkle was noted close to the central part of the southern half of the tract. It is located along an old roadbed/skid trail and is moving north into the forest. This area should be treated before it expands further and before it is spread via logging operations.

A small bush that is suspected to be Japanese barberry was noted on the north east corner of the tract. It is recommended that it is treated and eradicated at the earliest possibility to prevent its further spread.

Vines do not seem to be a problem on this site so a vine TSI is not needed at this time.

Recreation: This tract shows evidence of recreation in the form of hunting stands. A number of hunting stands are present, on and around this tract so it is likely that it receives moderate hunting pressure. Permanent stands that are present should be removed during the next harvesting operations.

While this tract is surrounded by private property, it is a short hike through a portion of tract 0704 to reach it so access is relatively easy. Recreational opportunities on this tract include hunting, bird watching, hiking, and non-timber forest product harvesting.

Cultural: Cultural resources are to be protected on State Forests. If any resources were noted on this tract the plan of activities took them into consideration.

Tract Subdivision Description and Silvicultural Prescription:
The majority of this tract is coved by oak/hickory forests. The dominate species within this cover type are white oak, black oak, and pignut hickory. There is also yellow poplar, red oak, post oak, and sugar maple present in the stand. The majority of this area consists of small to medium sawtimber sized trees and some areas have the potential for high value. A light harvest of this area and a TSI cut to release the desired crop trees is recommended. Poorly formed, overmature, and undesired trees should be taken out of the stand and oak regeneration should be encouraged.

Much of the hardwood forest has a white pine component. As the pure pine stands, there is mortality among these pine trees. The pine trees should be harvested to release more desirable species.

There is a small area along the eastern boundary where all the pine has died creating an opening. The majority of the regeneration in this area is yellow poplar with some oak present as well. This area is full of vine honeysuckle.

There are areas of almost pure pine present on this tract. The species present in these areas is white pine and Virginia pine. Much of this area has a high amount of mortality which has resulted in large amounts of course woody debris on the ground. Some areas are difficult to walk through because of this. There is evidence of some recent mortality within the pine stands in the form of standing snags. Much of the pine has stagnated and should be harvested to capture the present value before further mortality happens. The majority of trees are medium to large sawtimber that is up to 6 logs tall, so there is a high amount of volume in these areas. Some of these areas of pine have competitive oak

seedling/sapling regeneration present on the site. The pine should be harvested from these sites and oak regeneration should be encouraged. These areas would be ideal for regenerational openings.

The overall stocking of this tract is around 97% which is fully stocked, but very close to the "A" line so it is on the border of being overstocked. After the recommended harvest the overall stocking will be at around 63% which is still fully stocked but close to the "B" line.

Summary Tract Silvicultural Prescription and Proposed Activities:
2011 – Treat Japanese barberry and periwinkle
2011 – Mark boundaries and check road access/condition for haul road.
2012 – Harvest 300,760 board feet off of the entire tract. Create regenerational openings in the pine stands as considered appropriate.
2013 – Post harvest TSI
2021 – Hardwood/oak regeneration evaluation.
2021 – Thin regenerational openings
2030 – Inventory

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