Owen-Putnam State Forest
Resource Management Guide

Forester's Narrative
Compartment 8 Tract 6
September 2008

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Location

Compartment 8, tract 6 lies in the southeast quarter of the southwest quarter of section 34, township 11N, range 4W, Morgan Township, Owen County. It is approximately 2.0 miles southeast of the horse campground and approximately 1.5 miles north of the office.

General Description

This tract is a 35-acre managed, multiple use parcel within compartment 8. Timber types vary from mostly mixed upland hardwoods with some good oak-hickory stands. Pines were planted in 1953 along the access road and ridge top to control erosion from past disturbance. The over-story consists of medium to large sawlog sized White Oak, Red Oak, Yellow Poplar and hickory with some large Black Cherry. The quality of merchantable timber is good. The under-story consists mostly of maple, elm and ash. Advanced regeneration is represented mostly by Sugar Maple, beech and elm with some Yellow Poplar and Chinkapin Oak. This area exhibits good opportunities for multiple use management, including timber management, wildlife management, soil and water conservation and public recreational activities, such as, hunting, hiking, gathering, viewing and interpretation.

History

Owen-Putnam State Forest was established in 1948 with most of its landholdings purchased as smaller non-contiguous tracts in the 50's and 60's. The ridge tops in the area of this tract were farmed up until approximately 1930 and then planted to White and Virginia Pine in 1953 when the state purchased the land. Compartment 8 tract 6 has been managed for several years, being part of a property wide inventory in 1988 and '89 and a tract inventory conducted 2007. There is no record of the tract having been harvested since state ownership.

Landscape Context

Generally the area is wooded rolling hills and ravines with some brushy/early successional areas, open fields and small open bodies of water nearby. The private properties surrounding this compartment and tract are primarily mixed hardwood forests

containing scattered residential housing with some pasturing and no agriculture or industry.

Topography, Geology and Hydrology

The topography of the area varies from nearly level ground on the ridge top along the eastern boundary with moderate to steep, west facing slopes. Water sheds into an unmapped intermittent stream flowing east to west in the center of the tract, then to a mapped intermittent stream flowing north to south on state property along the western boundary. The area is generally comprised of shallow to moderately deep, well-drained soils often containing fragipans, on nearly level to steep slopes. These soils occur throughout the Illinoian glaciated areas of the county. In the event a harvest operation is performed, the existing haul road and log yards can be utilized. However, care must be taken during the planning and execution of skid trails due to the erosive nature of some soils. Best Management Practice (BMP) guidelines will be followed to preserve soil and water quality (Forest Practices Working Group, Indiana Woodland Steward Institute).

Soils

The tract is composed primarily of the Hickory silt loam on steep slopes of 35-70% and Cincinnati soils with fragipans on gentle to moderate slopes of 6–18% slopes. (USDA, SCS – Soil Survey, Owen County, IN 1964).

Specifically, the tract is composed of the following soils:

HcG - Hickory Silt Loam, 35-70% Slopes
CcB2 - Cincinnati Soils, 2-6% Slopes, Moderately Eroded
CfC3 - Cincinnati Soils, 6-12% Slopes, Severely Eroded
CfD3 - Cincinnati Soils, 12-18% Slopes, Severely Eroded
Ph - Philo Silt Loam
Gu - Gullied Land, Residuum
Gt - Gullied Land, Glacial Drift

Access

To access the tract, take S.R. 46 approximately 5-miles west of the town of Spencer to Fish Creek Rd., then travel north on Fish Creek Rd. about 2.00 miles to Forest Ridge Rd., then travel east on Forest Ridge Rd. a ½ mile to the forest parking lot on the left hand side. The tract is accessible to the public via the parking lot on Forest Ridge Rd.

Boundary

This tract is located near the center of the 767 acres contained in compartment 8. Tract boundaries follow the ridge top to the east, a small drainage to the north, a mapped intermittent stream to the west and a county road to the south. Private property borders

this tract to the east and to the west, all of which have been marked with the east line being reasonably well documented.

Wildlife

Wildlife resources in compartment 8 tract 6 seem abundant. Common species present include Grey Squirrel, White-Tailed Deer, Wild Turkey, raptors, songbirds, herpetiles and fish. This tract contains habitat for a variety of wildlife species. Habitat includes mixed hardwoods containing oak, hickory and beech that provide mast for deer, turkey and squirrel. The pine stands provide benefits such as cover, roosts and browse. Snags and cavity trees provide nesting, bugging and roosting sites for woodpeckers, songbirds, small mammals and the Indiana Bat. Rotten logs, crater knolls and ponds nearby provide habitat for herptiles and aquatic vertebrates. A review of the Natural Heritage Database was conducted on July 11, 2007 to locate and identify any known endangered, threatened or rare species or communities. The review did not identify any E.T.R. species or communities in or nearby the project area (Carl Hauser, Division of Forestry – Property Program Specialist).

Silvicultural Prescription

In 1988-'89 a property wide inventory was conducted, including Compartment 8 tract 6. The results estimated the tract to contain 2769 Bd. Ft. of total sawtimber per acre and 398 Bd. Ft. of harvest sawtimber per acre, with a stocking level of 78% and a harvest proposed in the year 2001. The tract was again inventoried in 2007. The data estimated the tract to be 95% stocked with 122 Sq. Ft. of basal area per acre $\geq$ 12 inches in d.b.h. and approximately 9916 Bd. Ft. of total sawtimber per acre with an estimated 2534 Bd. Ft. of harvest sawtimber per acre and an average tree diameter of approximately 16 inches.

The over-story consists of medium to large sawlog sized White Oak, Red Oak, Yellow Poplar and hickory with some large Black Cherry. The pole sized under-story consists mostly of Sugar Maple, elm, Sassafras and White Ash with Red Oak, Yellow Poplar, hickory and Black Cherry present at less than one tree per acre. Advanced regeneration is represented mostly by Sugar Maple, beech and elm with Yellow Poplar and Chinkapin Oak present at less than one tree per acre. The current stocking level indicates the tract is fully stocked and becoming overcrowded. The dominant sawtimber sized oak, poplar and hickory are overly competing for resources. With the overcrowded sawtimber species, this tract would benefit from a timber harvest.

Stocking levels and competition amongst dominant trees can be reduced through an intermediate cutting in the form of a selective thinning. Species composition can be adjusted through an improvement cut. The recommendation is to thin mature trees and remove low quality, damaged, diseased, dying and poorly formed trees as wells as removing less desirable species. With the maturing of oak species and their rapid replacement by climax species, regeneration of oak should be encouraged through group selection openings, mid canopy removal, timber stand improvement and the harvest of

less desirable species. In addition, some suitable red and white oaks should be retained as a seed source for future oak production as well as the retention of standing dead trees (snags), cavity trees and roost trees will be given consideration as habitat for wildlife, such as the Indiana Bat.

Management in the form of Timber Stand Improvement (TSI) should be performed to control grapevines, release crop trees by coppicing low volume, poorly formed and less desirable species, and to encourage early successional regeneration through the completion of group selection openings. In addition TSI can benefit wildlife habitat such as that of the Indiana Bat by the creation of snags.

The overall goal of this prescription is to thin the tract, improve timber species composition and to create favorable growing conditions for oak regeneration, while providing forest wildlife habitat. As with any forest management activities, Best Management Practice (BMP) guidelines will be followed to protect soil and water resources (Forest Practices Working Group, Indiana Woodland Steward Institute).

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Owen-Putnam State Forest

Topographic Map
Compartment 8 Tract 6
35 - Acres

USGS - 7.5 Minute Series
Spencer Quadrangle

N
W E
S

Tract Boundary - Haul Road - Skid Trails - Intermittent Stream -

Log Yard - **Y** Pond – **W** Pines - **P**