

RESOURCE MANAGEMENT GUIDE

FORESTER'S NARRATIVE

*DRAFT*

**Jackson-Washington State Forest**

**Compartment 05 Tract 03**

**Data: July, 2007**

Tract 03 is located 1 mile east of Starve Hollow Lake, and ¼ mile south of Starve Hollow Road. Tract 03 is 91.9 acres ranging from a flat river bottom to south facing slopes and a hilltop. The slopes are predominately south and west facing, ranging from gentle to quite steep. The tract is bordered on the east and west by private landowners, and by the state on the north and south sides.

Access to the tract is fair. Access is through tract 04, from Fire-access road #320 from Starve Hollow Road.

**History**

The creation of tract 03 resulted from three larger land purchases of 178.3 acres from Artie C. Leffler and Freda G. Leffler on June 13th, 1939, 40 acres from Nellie Peters on October 23<sup>rd</sup>, 1963, and 80 acres from George A. Teulker and Freda Teulker on February 27<sup>th</sup>, 1940.

In 1971, an inventory was conducted in this area. Inventory numbers indicated that there was about 1,158 bd. ft. per acre.

**Soils**

There are five (5) soil types present: Berks channery silt loam (BeG), Coolville silt loam (CoD), Gilpin silt loam (GnF), Kurtz silt loam (KnF), and Stonehead silt loam (SsC2). Each soil type present should support harvesting equipment with certain locations being avoided due to topography limitations. GnF, BeG, and KtF are listed with severe equipment limitations due to slopes up to 75 percent. Skid trails should run on contours and/or gentle slopes. See map for soil type locations. Site index ranges from 66 to 90 with an average of 75.

**Wildlife**

Wildlife<sup>1</sup> present includes, but not restricted to, the following: white-tailed deer, wild turkey, gray and fox squirrels, chipmunks, raccoons, eastern box turtles, blue-jays, Cooper's hawk, Pileated woodpecker, Wood thrush, and other song birds. An improvement harvest in this tract should benefit both game and non-game species through the creation of additional foraging and nesting habitat. Using both single tree and group selection provides habitat for early-, mid- and late-successional wildlife species.

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<sup>1</sup> Wildlife listed as present is a result of visual sightings, tracks, fecal matter, etc. by forestry personnel or other qualified individuals.

## Indiana Bat Management Guidelines

The following present values were determined from the inventory:

	Live trees:	Present	Goal	Available for Removal
Minimum	11" +dbh	1488*	828 *	660
	20" +dbh	371*	276 *	95
	Snags:	Present	Goal	
Minimum	9" +dbh	641	552	89
	19" +dbh	55	92	-37

\* The present and goal only include the following Desired Live Tree Species:  
AME, BIH, BLA, BLL, COT, CRA, REO, POO, REE, SAS, SHH, ZSH, SHO,  
SIM, SUM, WHA, WHO

The minimum count for the 19" +dbh snag size class is below the goal; these numbers can be increased through TSI by deadening the appropriate numbers to achieve the goals. Within the other three categories we are well over the target. Through regeneration openings and single tree selection we can promote the species needed by the bats.

The nature of improvement cuttings lends itself to the known Indiana bat habitat. Removal of single trees will permit light and crown space for the residual trees. This temporary opening in the forest canopy lends itself to ease in movement for bats during flight as they capture their prey. Trees opened up to increased sunlight are able to capture the increased warmth for bats under the exfoliating bark. Regeneration openings also provide pockets within the forest canopy for bats to obtain prey while in flight. It has also been discussed that bats frequently use skid roads and haul roads as flight paths in capturing food and travel routes.

A natural heritage database search was completed on July 12, 2007. No species or communities of concern were noted within or immediately adjacent to this tract.

## Recreation

Recreational use of the entire area is minimal. Hunting is the major recreational activity conducted in and around tract 03. During spring and fall hunters seek deer, turkey, squirrel, raccoon, grouse and mushrooms. Management activities conducted in tract 03 will alter the hunting areas during the harvest operations. Signs will be posted to educate the public about current management activities and list areas that are closed to public access. The tract will reopen once the timber harvest has been completed. Signs to warn of safety concerns related to any TSI work completed on the tract will also need to be posted. These policies are administered to address safety issues.

## Tract Area Prescriptions

**Area A** Along the southern portion of this tract is a stream bed where yellow poplar is in great abundance. Along with yellow poplar, American beech and red maple are common throughout the stream bottom. Understory is thick American beech and pawpaw. Black cherry can be found along the western area of this section but generally with poor quality. Most of this area has little regeneration due to the thick understory. An intermediate cutting is recommended for portions of this track. Individually selecting mature and low

quality stems for removal in an effort to improve overall vigor and health of the residual stand. This will provide space for the additional crop trees to continue growing into the next cutting cycle. TSI should follow the harvest to release any crop tree not released by the harvest.

**Area B** Growing from the toe- to mid-slope heights, stands of white oak are dominant. The white oak is of varying quality, being better in the middle range of this section before the terrain begins its transition into yellow poplar on the low side and chestnut oak on the high side. White oak regeneration is well spread besides at the higher portions of this section where greenbrier and sassafras become abundant in the understory, there is little regeneration. Where there is regeneration, there is some advanced regeneration of white oak that could be released with proper treatments. Harvesting mature and defective trees is recommended in order to favor and nurture the advanced regeneration of white oak and remaining, maturing crop trees. An intense TSI project should accompany this harvest. Either pre- or post- TSI should release the oak species and any quality stems not released by the harvest.

**Area C** At the hilltops chestnut oak is dominant and of generally poor quality. Along the eastern part of this track there is mature chestnut oak of fairly good quality but is on very steep slopes seemingly inaccessible. The oak at maturity is ready to be harvested if not prevented by the terrain. Where the oak is growing poorly TSI might be used to improve the residual trees.

**Area D** This is a mixed hardwoods section where chestnut oak, red oak, white oak, pignut hickory, red maple, and sugar maple are all present. White ash is mature in places and its regeneration is very abundant. American beech is heavy in the understory but very few mature beech trees of merchantable size are present. Like area C there are some stands at maturity but the slopes and accessibility is variable. A harvest is recommended to remove mature and defective oak, hickory, maple and ash trees. Most of the trees are not yet mature but need the thinning to be release and have room to grow until the next harvest. The TSI will benefit trees not helped by the harvest, and removed trees not taken out during the harvest that should be removed.

## **OVERALL**

The overall recommendation for this tract is to conduct a cutting to remove competing, defective, and mature trees. One or two openings might be made due to heavy concentrations of mature or poor quality timber, in order to manage for favorable regeneration. This harvest should take place within the next five years. TSI after the harvest is recommended to release younger more vigorous crop trees not successfully released during the harvest. The marking objective is to remove mature/over-mature stems, low quality stems and stems less desirable in an effort to improve the overall health, vigor and composition of the stand. The reduced stocking level will provide ample space for pre-selected crop trees to move forward into the next cutting cycle. A healthier, more vigorous stand with good species composition will be less susceptible to insect and disease infestation a common problem with unhealthy stands. These

management techniques will improve the overall health, vigor and quality of the residual stand, while capitalizing on stems dropping out due to natural mortality from overstocking and maturity.

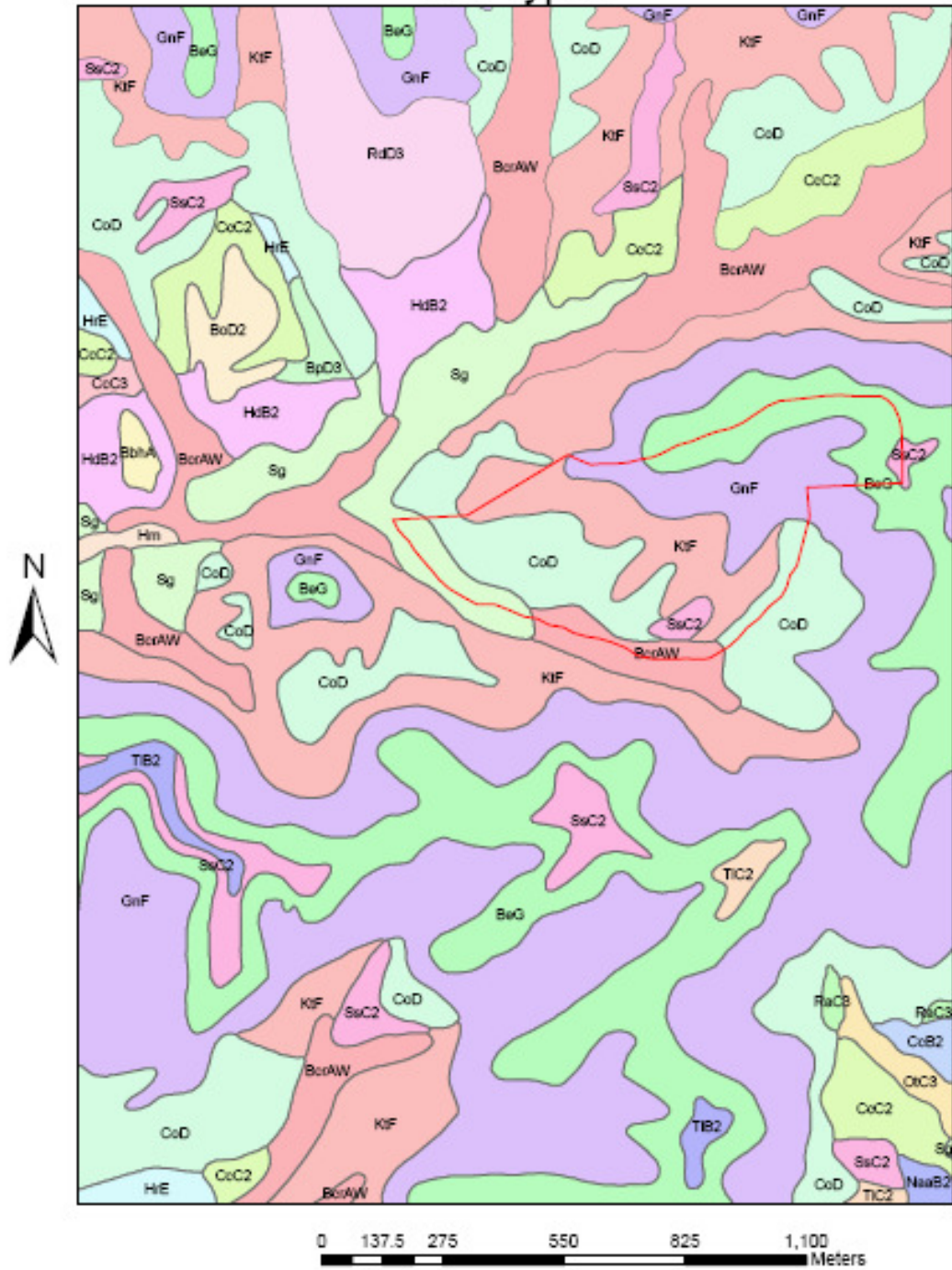
Wildlife will benefit from this harvest as well. Additional sunlight penetrating the forest floor will stimulate the development of new ground flora, subsequently increasing nesting and foraging habitat. This is essential for game and non-game species as well as continued forest development. TSI will increase snag per acre while diversifying diameter distributions of both snags and growing stock trees.

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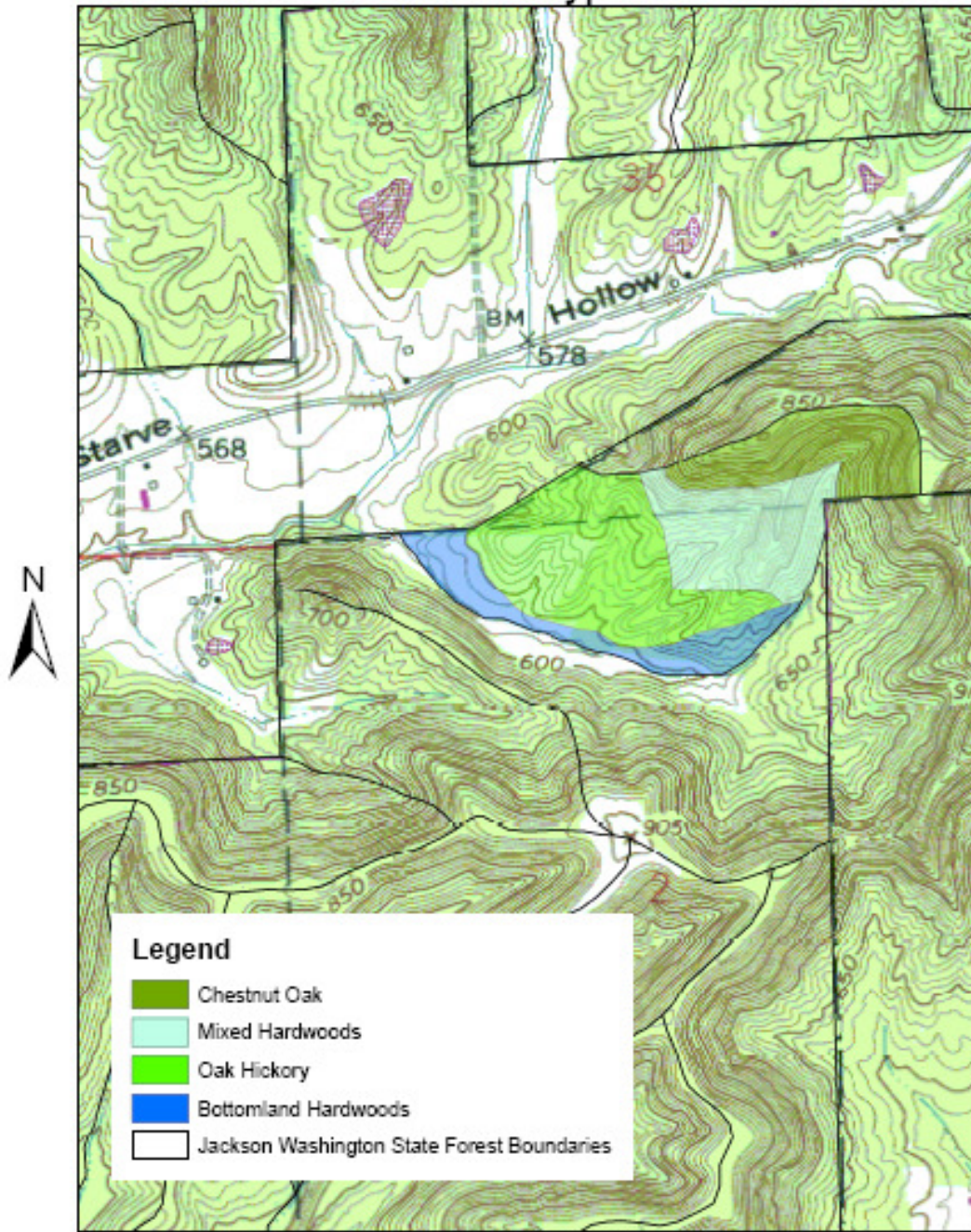
**[http://www.in.gov/surveytool/public/survey.php?name=dnr\\_forestry](http://www.in.gov/surveytool/public/survey.php?name=dnr_forestry)**

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# Compartment 5 Tract 3 Soil Types



# Compartment 5 Tract 3 Timber Types



0 135 270 540 810 1,080 Meters