Indiana Department of Natural Resources - Division of Forestry
Morgan-Monroe State Forest
Compartment 19 Tract 20

Foresters Narrative

Multiple-use Practices MM 1920 58 Acres 08-22-2006
BY Bill Hahn

The most recent inventory was done 7-2006 yielding a tract with 110% stocking, 2,300 bd. ft./acre harvest and 6,330 bd. ft./acre present volume. Basal area is 115sq. ft.

There is one major ridgetop running east – west through the tract upon which exists an old roadway that was used to manage the timber resource in past years. North of the ridgetop are many trees that need to be considered for harvest as they are large, tall and have some defects making them undesirable to carry on the tract? There are also several good, high quality trees that need to be considered as acceptable growing stock. Most of the tract acreage lies south of the ridgetop and is primarily the higher valued timber stand of oak-hickory, ash-poplar mix which needs to have selected trees removed to reduce density and increase tract quality. The ridgetop and immediate slopes should be considered for early selection openings as they are predominately fired and otherwise damaged beech-maple stands of trees.

Wildlife resources are abundant on this tract. Most commonly observed species include: white-tailed deer, various song birds, squirrel, turkey, grouse, raccoon and many other small mammals. Our timber management utilizes intermediate cuts and group selection along with best management practices to provide habitat requirements for a large variety of forest dwelling species. Large snags greater than 16 inches will be left standing in our group selection areas. An appropriate number of hickories, mast producing species and den trees will be retained to provide additional habitat benefits.

The tract soils on this tract are many: Chetwynd, Princeton and Gilpin are the bulk of the soil types making up 2/3 of the tracts soils. The steepest soil is Chetwynd [18-80% slope] followed by Gilpin [18-25% slope] and Princeton [6-25% slope] as less steep. Other soils are considerably less steep or nearly level.

All soils but Vigo and Wakeland are well drained. These soils are poorly drained and found in bottomland areas generally associated with cultivated areas that need drainage tile. All soils are suited to tree growth and found in timbered areas. These soils are not well suited to building sites due to steep slopes, poor drainage patterns or have fragipans which limit basement construction. These soils are typical forest soils. Most soils are mid-slope soils and good supporters of better hardwood trees. These soils greatest flaws are their steepness and frequently erode, but this can be controlled using good logging techniques and proper close out methods. All soils represented allow for adequate regeneration of timber species.

Boundaries for this tract are: a ridgetop to the east, an ephemeral drainage to the north and Grounds Road to the west and south. A visual enhancement boundary will be considered adjacent to Grounds Road. Above and adjacent to Grounds Road is an electrical utility corridor which also traverses parts of the tract on the east and west portions of this tract.

Due to the tracts accessibility from Grounds Road it is heavily hunted during legal hunting seasons. There are no known cultural areas on the tract.

This tract is protected from wildfire by aerial surveillance during fire seasons. Also there is a good neighbor relationship that supports fire control measures.

Silvicultural Prescription

Property: Morgan Monroe State Forest C-T 1920 Acres 58 8-22-2006
By Bill Hahn

This tract consists of 1 major ridgetop running east and west with slopes and coves extending north and south into mapped intermittent and ephemeral drainages. The tracts boundaries are ephemeral drainages on the north, a ridgetop on the east and Grounds Road on the south and west.. There are no private property boundary lines.

The field inventory was conducted 07- -2006. The inventory yielded the following information:

Total tract acreage	58 acres	Present volume/ acre	6,330 bd. ft.
BA/A	115 sq. ft.	Harvest volume/ acre	2,300 bd. ft.
# trees/A	381	Residual volume/ acre	4,030 bd. ft.
Stocking	110%	Average size tree =	7.5" in diameter

Tract has had 1 inventory made since being acquired in 2004. Prior timber sales were very heavy and probably very selective. Many trees that should have been removed were left standing and need to be removed in an improvement harvest.

Much of the ridgetop is in beech and maple trees and could be removed in an early succession opening. On the slopes and coves can be found mixed oak and hickory and other high value hardwoods. On south facing slopes can be found the better timber on this tract.

The prescription is to have an improvement harvest removing mature and large undesirable sawtimber in order to release smaller sawtimber and pole size trees. The goal is to reduce stand density and allow remaining trees to occupy the stand canopy and

become the next rotation of crop trees. The future crop is in small and medium sawtimber and large pole sized trees.

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Group selection openings are prescribed on the upper south and north facing slopes to remove overmature and damaged beech and maple trees. Several of these trees were damaged in previous harvesting activities. The roadway on the ridgetop is of primary concern as it needs to be improved and drainage provided to allow access on the tract during all seasons.

A harvest is recommended to be marked in 2007-8 with a sale in 2008. This tract and the two tracts to the north can be harvested at the same time. A shared log yard between MM1918 and MM1919 will serve as the system log yard for timber harvest.

Following the harvest; the tract will be closed out according to BMP guidelines.

Timber Stand Improvement work will be accomplished in group selection openings.

Six years after final closeout review the tract for compliance to prescription.

25 years after closeout re-inventory the tract for management purposes.

INDIANA DIVISION OF FORESTRY
FOREST MANAGEMENT
BAT MANAGEMENT GUIDELINES

Forester: _Bill Hahn_____ Date Guideline completed: _8-22-2006_____
_Morgan Monroe State Forest, Compartment 19__ Tract 20_ Section 4,5____

1) What previous forest management activities have occurred on this tract? 1990-Salvage harvest;1995-2002-TSI;2006-Timber inventory_____

2) Does the field inventory show a diversity of timber age and size classes? yes X_ no ___

3) What is the stocking per acre? ___110___%

4) What is the average tree size per acre? __7.5___ dbh

5) Live trees per acre > or = 11" dbh _44.8__> or = 20" dbh _4.1___

6) Snags per acre > or = 9" dbh _3.5___> or = 19" dbh _.5___

7) Was there any evidence of Indiana Bat activity during the timber inventory?

yes _____ no _X_____. What evidence?
_____

8) Riparian corridor:
Perennial streams or rivers ___0.0__% 100' buffer
Intermittent streams __1.0____ % 50' buffer

9) Are there any known Indiana Bat hibernacula within 5 miles of this tract?
yes _____ no __X___. How is this being managed?
_____

10) What type timber harvest does the field inventory indicate? AH 355.
"M" I believe we have an uneven aged stand that results from heavy cutting in the past. Many single sawtimber and/or small groups of trees dominate and are supported by a lot of pole and small sawtimber trees. Gingrich recommends an improvement harvest to remove mature and large undesirable sawtimber trees. Harvesting should not go below the "B" level. Poles and small sawtimber will eventually become the main stand of timber.

11) What steps will be taken to minimize the impact on potential Indiana Bat habitat?
The Division of Forestry will follow the adopted management strategy for conservation_
and enhancement of the Indiana Bat on state forest properties (January 2001)._____

Indiana Division of Forestry
Forest Resource Management
Wildlife Review Checklist – Revised April 2005

Date of Review:	7- -2006		
State Forest:	Morgan Monroe State Forest		
Forester:	Bill Hahn		
Compartment:	19	***Township:***	T-11-N
Tract(s):	20	**Range:**	R-1-W
Total Acres:	58	**Section(s):**	4,5

2.5 Mile Matrix Information

1. Does the Natural Heritage Database identify any Endangered, Threatened or Rare species or "significant areas" documented from this tract or nearby? No; but several hawks were patrolling the tract when I was performing the inventory.

2. Describe the vegetative cover/land use matrix within a 2.5 mile radius of this tract:

   a. A majority of the land within the matrix area is __ publicly owned, _X_ privately owned. (mark one)

   b. Which of the following land cover types are present in the matrix area (mark all that can be easily identified as present from aerial photos, use two marks to identify the most prevalent type)?

      XX__ Closed-canopy forest
      _X _ Brushy/early successional areas
      _X_ Open fields
      _X_ Open water
      _X_ Developed areas

   C. Does tract contain any habitat/habitat type, which is otherwise missing or poorly represented within the 2.5 mile radius matrix area? No

D. Has the land use pattern within the matrix area shown obvious significant change within the last 15 years? Yes

If yes, explain: Storm damage to forest resources. Heavy,heavy harvests within the matrix area. Housing development [single homes and developed areas]. Cultivated field edges cleared for additional crops.

Tract Wildlife Information

3. Have there been documented sightings or other evidence of current or recent past (20 years) occurrences of rare, threatened or endangered species within this tract? No

4. List the expected short term (<5 years) and long term (>5 years) effects the proposed forest resource management activities will have on the following **habitat types within this tract**:

A. Closed canopy forest

Short term: Single tree selection will only create gaps which will close rapidly. Early successional openings will take several years to close.

Long term: Gaps – minimal. Openings – will be regenerated naturally from seedlings, stump sprouts and root sprouts and/ or seed source. This will takle several years and will be predominate during the next timber inventory in 25 years or so..

B. Understory woody vegetation

Short term: Gaps – will be released and will try to grow through the canopy before it has time to close but usually will become an intermediate stand below the canopy which will close rapidly.

Openings – will become the future stand in these open areas unless killed during TSI operations following the harvest.

Long term: Gaps – minimal

Openings – will have a good chance to become the future main stand as competition for sunlight will only be from the poles and small sawtimber on the edges. Good TSI will dictate what the future crop will be in these openings.

C. Herbaceous vegetation

Short term: Will become stronger and more pronounced until sunlight is reduced. Greenbriar and multi-flora rose will abundant and invigorated.

Long term: Gaps – will slow down when shaded out.
Openings – Will be abundant and take over the area for several years until the woody vegetation begins to close and reduce sunlight to the ground. Herbaceous growth in openings will be welcomed as it helps hold the soil in place.

D. Streams, Lakes and Ponds NA - the drainages associated with this tract are intermittent at the most.

Short term: Minimal

Long term: Minimal

E. Subterranean: None All soils appear to have sandstone or bedrock base.
F.

5. List any conditions that would suggest that the management proposal for this tract would require further evaluation by any additional wildlife management specialists?

6. Were any additions, changes or amendments made to the proposed forest resource management activities specifically to enhance or protect wildlife populations or wildlife habitat?

Additional Comments:

Evidence of the following species were either observed or heard during the field review of tract(s):

References cited:

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You **must** indicate the 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.