

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

Foresters Narrative

Multiple-use Practices MM 1919 77 Acres 08-03-2006
Inventories and reviewed by Bill Hahn

The most recent inventory was done 08-03-2006 which yielded a tract with 120% stocking, 1,339.8 bd. ft./acre harvest and 5,916.8 bd. ft./acre present volume. Basal area is 113 sq. ft.

The land occupying this tract was acquired in 2004. The lower area, to the SW of about 30 acres is cultivated. The NE upland area is in hardwoods: particularly yellow poplar, sugar maple, red oak, ash and beech. Past management leads me to believe the past harvests were of high quality, quick harvests. Many remaining trees show logging damage, crown breakage and long term fire damage. The majority of the harvest trees are old growth with large crowns.

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 are made up of 5 types: Chetwynd, Parke, Pike, Wakeland and Wilbur. All soils are well drained except Wakeland which is the lower cropland soil. All soils are suited to tree growth and frequently found in timbered areas. These soils are not well suited to building sites due to steep slopes, possible flooding or fragipans which limit basement construction. These soils are typical forest soils. The Chetywynd soil is the steepest with slopes of 18-80%. The Wilbur soil is relatively flat and found as ridgetops. The Parke and Pike soils are mid-slope soils and a supporter of better hardwood trees. The greatest flaw of these forest soils is the Chetwynd soil is steep and is erodable but this can be controlled using good logging techniques and proper close out methods. All these soils allow for adequate regeneration of timber species.

Boundaries for this tract are: a ridgetop on the north and east, drainages on the south and Duckworth Road on the west. No private property boundary lines are adjacent to this tract.

This tract is protected from wildfire by a good neighbor relationship which supports fire control measures. Fire has had occurrence on this tract in past years.

Silvicultural Prescription

Property Morgan Monroe State Forest C-T 1919 Acres 77 8-9-06
Inventory by Bill Hahn

This tract consists of major ridgetops on the north and east with cropland in the southwest. The tracts boundaries are the aforementioned ridgetops and ephemeral drainages on the south. Duckworth Road makes up the west boundary. There are no private property boundary lines for this tract.

The field inventory was conducted on 8-3-2006. The inventory yielded the following information:

Total tract acreage	77 acres	Present volume/ acre	8760.9 bd. ft.
BA/A	113 sq. ft.	Harvest volume/ acre	1976.1 bd. ft.
# trees/A	601	Residual volume/ acre	6784.8 bd. ft.
Stocking	120%	Average size tree =	6" in diameter

Land occupying this tract was acquired in 2004. The land has had several sales, two in the past 10 years. The tract is made up of land that probably came from three different owners that had three different forest management plans. [cropland, yellow poplar pole size trees and mixed hardwood stands. A roadway into this tract and leading to several other tracts needs to be constructed off Duckworth Road.

The prescription is to have an improvement harvest removing mature and large undesirable sawtimber in order to release smaller sawtimber and pole size trees,(specifically high quality 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. This harvest should be incorporated with harvests on tracts 1918 to the north and 1920 to the south, which have been prescribed for harvests.

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

Timber Stand Improvement work will be accomplished removing vines and undesirable cull and/or fire scared trees.

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: 8-8-2006
Morgan Monroe State Forest, Compartment 19 Tract 19 Section
4,5,33

- 1) What previous forest management activities have occurred on this tract? 1988- Salvage harvest; 1995- Timber sale; 2004-state acquired; 2006-Inventory and wildlife review
- 2) Does the field inventory show a diversity of timber age and size classes? yes X no
- 3) What is the stocking per acre? 120 %
- 4) What is the average tree size per acre? 6.0 dbh
- 5) Live trees per acre > or = 11" dbh 46.2 > or = 20" dbh 4.8
- 6) Snags per acre > or = 9" dbh .9 > or = 19" dbh 0.0
- 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 % 100' buffer
Intermittent streams 0 % 50' buffer
- 9) Are there any known Indiana Bat hibernacular 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.
GG An improvement cut to remove scattered sawtimber trees to prepare stand
for future management. Future stand will come from medium and small
sawtimber and pole size trees. Stand may be reduced to "B" level stocking which
is about 57%.
- 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

8-3-2006

Date of Review:

Morgan Monroe State Forest

State Forest:

Forester: Bill Hahn

Compartment: 19

T-11,12-N

Township:

Tract(s): 19

Range: R-1-W

Total Acres: 77

Section(s): 4,5,33

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? Yes. Several hawks are known to frequent this area.
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 has changed forest canopy as well as heavy timber removal [harvests] on adjacent private property. There has been a heavy introduction of development, forested land sub-divided, sold and residential dwellings constructed. Forested fencerows and field edges have been cleared for additional agricultural cropland.

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? Yes. Several hawks are known to frequent the area.
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: Minimal as only selective improvement harvests are planned for the near future

Long term: None. Harvested area will close rapidly.

B. Understory woody vegetation

Short term: Quick release of beech, maples, sassafrass, ash, black cherry and yellow poplar in gaps created from timber harvest.

Long term: More tolerant species may persist but also may be outgrown by intolerants that will fill the gaps. More likely the crowns from existing medium and small sawtimber and pole sized trees will fill the gaps.

C. Herbaceous vegetation

Short term: Quick release and abundant growth particularly greenbriar and multi-flora rose which are frequent found on the tract.

Long term: Greenbriar and multi-flora rose will persist in the understory until long term shading of the ground occurs. Even then MFR may need to be removed chemically and mechanically. Greenbriar tends to drop off under heavy shade.

D. Streams, Lakes and Ponds NA Only unmapped intermittent and ephemeral streams found on this tract.

Short term: May have some increased runoff during harvesting operations but will be short lived due to close out practices

Long term: None

E. Subterranean None. All soils appear to have sandstone/siltstone bedrock.

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

None

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? No

If yes, explain:

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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