

RESOURCE MANAGEMENT GUIDE

DRAFT

State Forest: Morgan-Monroe Compartment 13 Tract 10
Written by Forester: Brad Steward Date: June 22, 2007
Revised By: Amy Zillmer Date: August 20, 2008
Tract Acreage: 81.6 Acres
Commercial Forest: 44.6 Acres

Location

This tract is located in sections 20 & 21 Township 10N, Range 1E of Monroe County, Indiana. The tract is bordered by state forest property to the north, east and west with private property lying to the south.

General Description

This 81.6 acre tract is leaning heavily to more climactic, shade tolerant species such as Sugar Maple and American Beech on the hillside forested area. The old Beanblossom Lake area is growing up in primarily Sycamore and Black Willow, as it is still a very wet area with evidence of frequent flooding. The bottomland area lying between Beanblossom Rd. and Greasy Creek consists of a lot of Black Walnut and Yellow Poplar. There is also a small Black Walnut plantation at the south end of the tract along Beanblossom Rd.

History

According to tract files, it appears that the state acquired this land around 1930. A dam was built across Greasy Creek, creating the approximately 13 acre Beanblossom Lake. The dam was breached in the fall of 1993 and the lake is completely drained at this time. A Black Walnut plantation was established in 1987 in the southern portion of the tract that was once a field or pasture. Bottomland area below the dam was planted in YEP and BLW by CCC in 1934. This area had some TSI work done by the property laborers in 1984. The northern area above the lake had TSI completed by Mark Ratliff in 1983. A previous inventory conducted in 1977 by Bill Bull indicated 3,125 Bf/Ac. present on the tract with a harvestable volume of 1000 Bf/Ac. Although some TSI has been done to release some of the higher quality BLW in the bottomland, no recorded harvest has occurred within the tract since acquisition.

Landscape Context

This is a rural area with agriculture crop production and certified forest predominating on the privately owned properties. Most of the land surrounding the tract is heavily forested and state owned. Lake Lemon is southeast of the tract and provides fishing and boating opportunities.

Topography, Geology and Hydrology

The tract is approximately 15% bottomland and 18% old lakebed. The remainder of the tract ranges from moderately steep to severely steep hillside.

Beanblossom Lake no longer exists, but plans are to rebuild and re-establish it in the near future. Greasy Creek running through the tract drains into Beanblossom Creek and Honey Creek watershed.

Soils

Berks-Weikert complex (BkF) 20-75% slopes, comprises about 60% of the tract. Severe limitations are noted for logging due to steepness. Bartle silt loam (Ba) 0-2% slopes make up another 30% of the soil in the tract. Moderate limitations are noted for this soil due to its low strength. The remainder of the tract is comprised of Wilbur silt loam (Wr) 0-1% slopes. This soil type is poorly suited for haul roads and yards due to frequent flooding.

Access

The bottomland area is easily accessible by Beanblossom Rd. The western hillside area can be accessed through the neighboring tract, C-13 T-11. Haul roads and yards have been established for a timber sale in that tract.

Boundary

The tract is partially bounded on the east side by Beanblossom Rd. The southern boundary of the tract borders private property. It was surveyed and a cornerstone set on the east side of Beanblossom Rd. in 2004. The northwest end of the tract also borders private property. That line was painted in orange boundary marking paint in 2006. The remainder of the tract is bounded by other Morgan-Monroe S.F. tracts.

Wildlife

Wildlife resources are abundant in this tract. Species common in the area include: squirrels, whitetail deer, wild turkey, various small mammals and a variety of songbirds. Several beaver dams exist in the old lakebed. No beavers were seen, but there was sign of fresh cutting. Several Mallard and Wood Ducks were seen in the ponding areas created by the beaver dams. A wildlife review was completed on this tract. This review focuses on various wildlife habitat that is currently present and what can be created through various management activities. A Natural Heritage database review was also completed for the tract to identify any rare, threatened or endangered species. No species of special concern have been sighted within the tract. However, several sightings have been made nearby. Snags, commonly known as dead, standing trees, were inventoried along with the live tree data to analyze the potential of area for the Indiana Bat.

Indiana Bat Habitat Guidelines

Live Trees - Entire Tract - Desired Species Only*

| | Required | Inventory | Available For Removal |
|-----------------|-----------------|------------------|----------------------------------|
| 11" DBH+ | 734.4 | 715 | -20 |
| 20" DBH+ | 244.8 | 225 | -20 |

Snags - Entire Tract - All Species

| | | | |
|-----------------|-------|-----|------|
| 9" DBH+ | 489.6 | 276 | -214 |
| 19" DBH+ | 81.6 | 73 | -9 |

*Desired Species Include: AME, BIH, BLA, BLL, COT, GRA, REO, POO, REE, SAS, SHH, ZSH, SHO, SIM, WHA,

Communities

The Natural Heritage Database review did not identify any plant species or communities of special concern within this tract.

Forest Condition

Inventory results indicate 242 trees/Ac with BA/A= 89.4 sq.ft. This indicates a stocking of approximately 79%. Present volume is inventoried to be approximately 6,298 BdFt./Ac. Timber on the tract ranges from sapling and pole size in the old lakebed, to large sawtimber in the bottomland and hillside area of the tract. There appears to be a considerable amount of mortality on the hillside area of the tract with some very large, mature and declining trees.

Exotics

Black Locust and Autumn Olive were found during the inventory. The BLL would be marked out for the harvest operation. Autumn Olive should be treated prior to harvest.

Recreation

With plans to reconstruct Beanblossom Lake, fishing would be the primary recreation use of the tract. As it is right now, hunting, hiking and birdwatching are likely to be the predominant recreation activities of the tract.

Cultural

Cultural resources may be present on the tract but their location is protected. Adverse impacts to significant cultural resources will be avoided during any management or construction projects.

Tract Subdivision Description and Prescription

Commercial Forest Hardwoods

The commercial forest area of this tract is of a mixed hardwood stand with YEP-BLW and SYC dominating in the bottomland area, and SUM-AMB with some scattered oak dominating in the hillside and upland area. The understory is primarily SUM-AMB as well. Inventory results indicate that the basal area in the commercial forest stand is 109 sq.ft./Ac. with 252 trees/Ac. This indicates a stocking of approximately 98%. The large number of climax, shade tolerant

species indicates that some areas could be regenerated. There are a number of Black Walnut trees in the bottom area that would benefit from an intermediate improvement cut designed to release the higher quality trees.

Excessively Steep Hillside

Inventory results in this area indicate a BA/A of 90.2 with 185 trees/Ac. This data indicates a stocking level of approximately 79%. There is a considerable amount of windthrow in the area due primarily to the very steep terrain with a NE aspect. The timber in this area ranges from small to large sawtimber in AMB-SUM and REO. There are some very large mature trees in this area that should be harvested, but the steepness of the area is not conducive to conventional logging methods.

Old Lakebed

This area lies where the former Beanblossom Lake was located before the dam was breached in 1993. Regeneration in the area is scarce and consists mainly of wet area species such as Willow and Sycamore. Inventory data indicates a basal area of 39.4sq.ft./Ac. and 275 trees/Ac. This indicates that the area is understocked. Beanblossom Lake was a popular fishing and recreation area within the forest, and current plans are to reconstruct the lake in the near future.

Tract Prescription and Proposed Activities

The overall prescription for this tract is an improvement cut over most of the commercial forest area of the tract, with at least one regeneration opening of 2-5 acres. An average of 2,000 - 3,000BdFt./Acre will be harvested off of those areas of the tract, leaving a residual of around 5,000 - 6,000BdFt./Acre. Some post-harvest TSI will be needed in any regeneration openings made. Some exotics were noted during the inventory. BLL should be marked out for harvest and Autumn Olive along road should be treated prior to harvesting the tract. Practices outlined in the Bat Management Guide and Wildlife Review will be adhered to, insuring that some valuable habitat is created or retained. No harvest will occur within the excessively steep areas. This area should serve as a buffer between the harvested upper slope, and the Beanblossom Lake area.

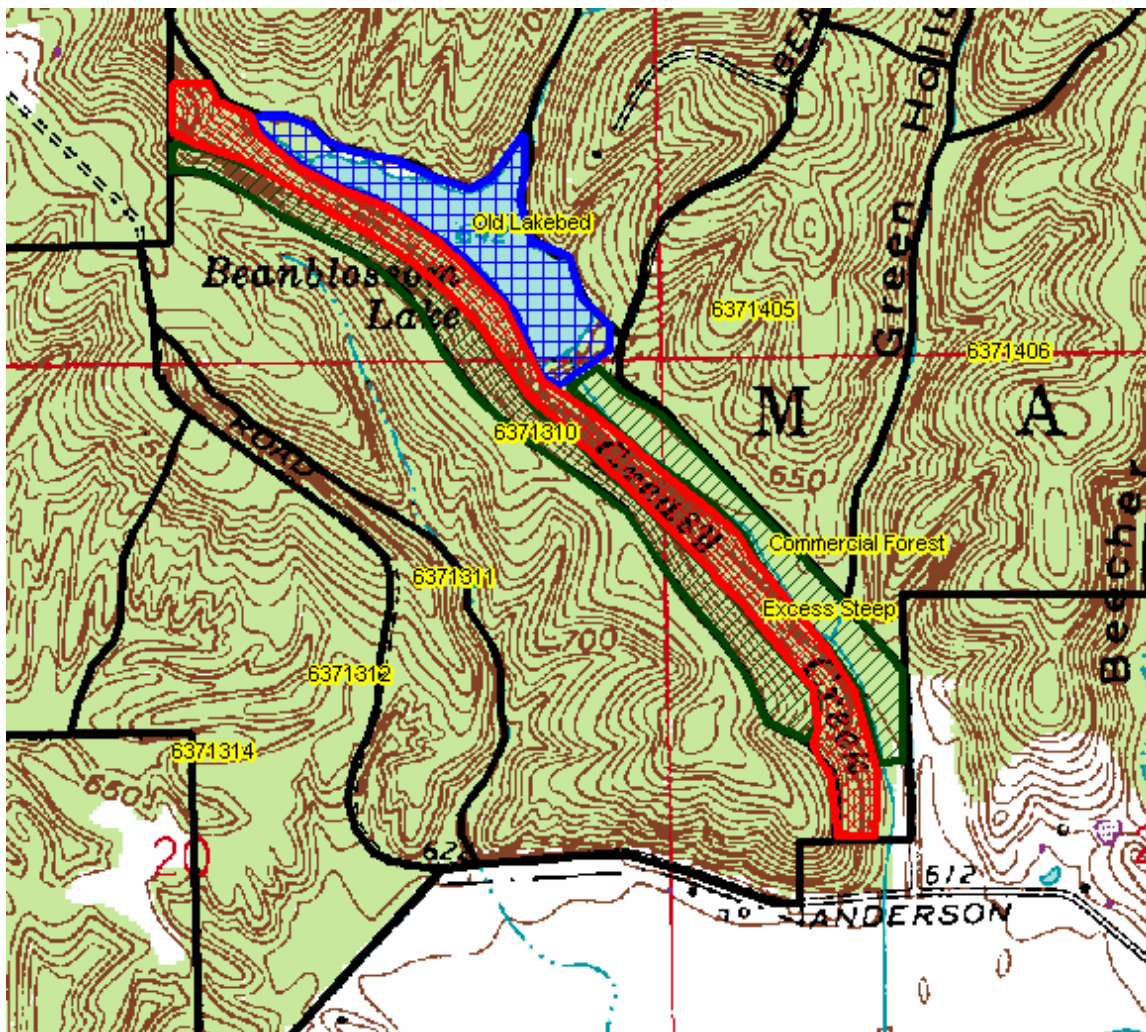
Proposed Activities Listing

Timber Harvest- 2008/2009

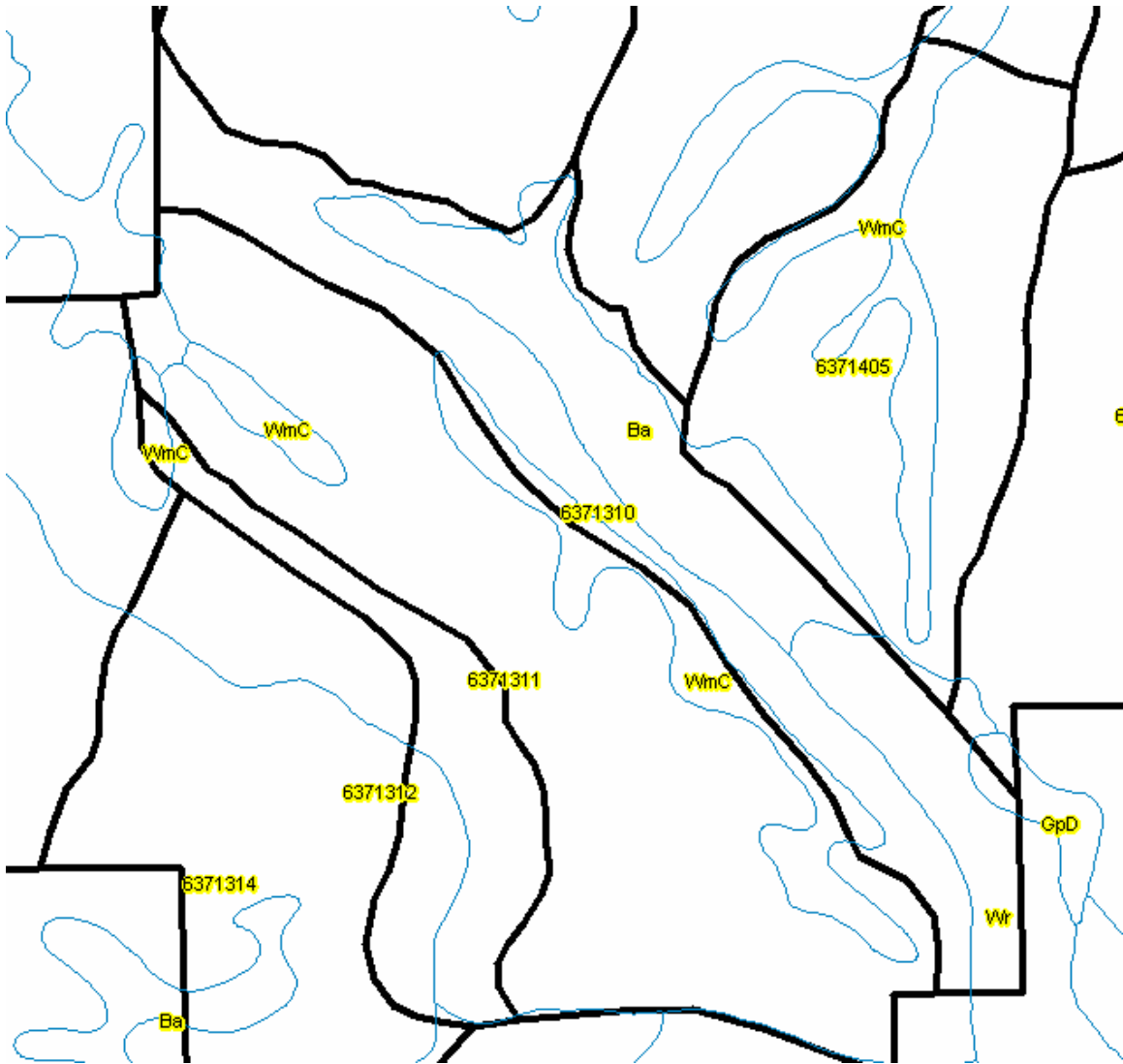
Post-Harvest TSI- 2009/2010

Re-Inventory- 2028/29

MM C-13 T-10 Topo/Type Map



MM C-13 T-10 Soils Map



Soils Description

Map unit: BkF - Berks-Weikert complex, 25 to 75 percent slopes

Description category: Ag

BkF--Berks-Weikert complex, 25 to 75 percent slopes

The Berks soils are well drained, have a watertable at a depth greater than 40 inches and are on sideslopes on uplands. Slopes are 25 to 75 percent. The native vegetation is hardwoods. The surface layer is silt loam and has moderately low or moderate organic matter content (1.0 to 3.0 percent). Permeability is moderate (0.6 to 2 in/hr) in the most restrictive layer above bedrock. Available water capacity is very low (3.0 inches in the upper 60 inches). The pH of the surface layer in non-limed areas is 3.6 to 5.5. Bedrock is at a depth of 20 to 40 inches. Droughtiness and water erosion are management concerns for crop production.

The Weikert soils are well drained, have a watertable at a depth greater than 40 inches and are on sideslopes on uplands. Slopes are 25 to 75 percent. The native vegetation is hardwoods. The surface layer is shaly silt loam and has moderately low or moderate organic matter content (1.0 to 3.0 percent). Permeability is moderate (0.6 to 2 in/hr) in the most restrictive layer above bedrock. Available water capacity is very low (1.2 inches in the upper 60 inches). The pH of the surface layer in non-limed areas is 4.5 to 5.5. Bedrock is at a depth of 10 to 20 inches. Droughtiness and water erosion are management concerns for crop production.

Haul Roads, Log Landings, and Soil Rutting on Forestland

Monroe County, Indiana

[The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the potential limitation. The columns that identify the rating class and limiting features show no more than five limitations for any given soil. The soil may have additional limitations. This report shows only the major soils in each map unit]

| Map symbol and soil name | Pct. of map unit | Limitations affecting construction of haul roads and log landings | | Suitability for log landings | | Soil rutting hazard | |
|--------------------------|------------------|---|-------|------------------------------------|-------|------------------------------------|-------|
| | | Rating class and limiting features | Value | Rating class and limiting features | Value | Rating class and limiting features | Value |
| BkF: Berks | 60 | Severe | | Poorly suited | | | |
| | | Slope | 1.00 | Slope | 1.00 | | |
| | | Landslides | 0.50 | Low strength | 0.50 | | |
| | | | | Landslides | 0.50 | | |
| Weikert | 40 | Severe | | Poorly suited | | | |
| | | Landslides | 1.00 | Slope | 1.00 | | |
| | | Slope | 1.00 | Landslides | 1.00 | | |
| | | | | Low strength | 0.50 | | |

Map unit: Ba - Bartle silt loam

Description category: Ag

Ba--Bartle silt loam

This somewhat poorly drained soil has a seasonal high watertable at 0.5 to 2.0 ft. and is on summits on terraces. Slopes are 0 to 2 percent. The native vegetation is hardwoods. The surface layer is silt loam and has moderately low or moderate organic matter content (1.0 to 3.0 percent). Permeability is very slow (<0.06 in/hr) in the most restrictive layer above 60 inches. Available water capacity is moderate (8.0 inches in the upper 60 inches). The pH of the surface layer in non-limed areas is 4.5 to 5.5. Droughtiness and wetness are

management concerns for crop production.

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| Map symbol and soil name | Pct. of map unit | Limitations affecting construction of haul roads and log landings | | Suitability for log landings | | Soil rutting hazard | |
|--------------------------|------------------|---|-------|------------------------------------|-------|------------------------------------|-------|
| | | Rating class and limiting features | Value | Rating class and limiting features | Value | Rating class and limiting features | Value |
| Ba: Bartle | 97 | Moderate Low strength | 0.50 | Moderately suited Low strength | 0.50 | | |

Map unit: Wr - Wilbur silt loam, frequently flooded

Description category: Ag

Wr--Wilbur silt loam, frequently flooded

This moderately well drained soil has a seasonal high watertable at 1.5 to 2.5 ft. and is on flood plains. Slopes are 0 to 1 percent. The native vegetation is hardwoods. The surface layer is silt loam and has moderately low organic matter content (1.0 to 2.0 percent). Permeability is moderate (0.6 to 2 in/hr) in the most restrictive layer above 60 inches. Available water capacity is very high (12.8 inches in the upper 60 inches). The pH of the surface layer in non-limed areas is 5.6 to 7.3. The flooding hazard is a management concern for crop production. Because of the flooding hazard, this soil has a severe limitation for most non-ag uses.

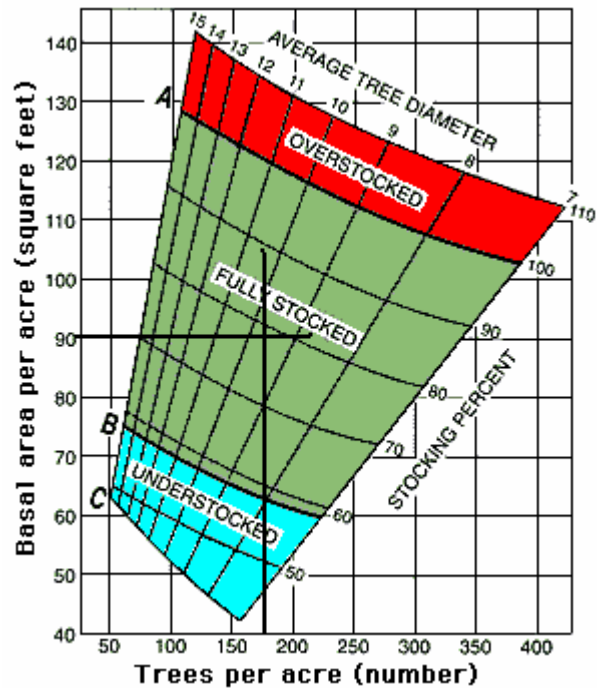
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| Map symbol and soil name | Pct. of map unit | Limitations affecting construction of haul roads and log landings | | Suitability for log landings | | Soil rutting hazard | |
|--------------------------|------------------|---|--------------|---|--------------|------------------------------------|-------|
| | | Rating class and limiting features | Value | Rating class and limiting features | Value | Rating class and limiting features | Value |
| Wr: Wilbur | 97 | Severe Flooding Low strength | 1.00 0.50 | Poorly suited Flooding Low strength | 1.00 0.50 | | |

Entire Tract Stocking



Total BA/A= 89.4sq.ft./A
 Total Trees/A= 242 Trees/A
 Average Tree Diameter = 6.4in. according to TCruise
 Percent Stocking = 79%

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You **must** indicate “Morgan-Monroe C13 T10” 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.