RESOURCE MANAGEMENT GUIDE

State Forest: Morgan Monroe Compartment: 10 Tract: 07
Forester: D. Potts Date: 1/21/2009
Management Cycle End Year: 2029 Management Cycle Length: 20 years

Location

Section 3 Township 10 north Range 1 west in Monroe County Indiana. This parcel of land is commonly referred to as compartment 10 tract 07 of Morgan-Monroe state forest. It is located about nine miles south of Martinsville, Indiana, west of Indiana 37 South.

General Description

This tract contains 38.4 acres of which 34 are commercial forest. The general cover type for this tract is hardwood forest.

History

According to the tract history file, a timber sale was marked and sold in 1974. This sale occurred prior to the construction of Indiana 37. The timber was sold to Weston Paper and Manufacturing Company of Terre Haute, IN for \$5801.00. Stumpage included an estimated 95,535 bd.ft. in 761 trees. However this was a combined sale of tracts 7 and 15 in compartment 10, so it is impossible to know how many trees were sold from tract 7. The next recorded activity was boundary line painting in 1996. The most recent activity was and inventory completed in December of 2008.

Topography, Geology and Hydrology

This tract consists of three main ridges, which are all separated by unmapped intermittent drainages. The tract consists of moderate to steep slopes, bottomlands and ridge tops, with the majority being side-slopes. The very southern portion of the tract contains some very steep slopes. The entire tract lies within the Bryant Creek watershed.

Soils

Berks-Weikert complex (BkF) 25-75% slope. The entire tract falls within this soil type. This soil complex is susceptible to erosion, so care should be taken in layout of skid trails.

Access

Direct access is not available at this time. However, this tract can be accessed from Compartment 10 Tract 16 via an intermittent stream crossing. This 6371016 route is currently being developed.

Boundary

Compartment 10 Tract 16 and Compartment 10 Tract 15 bound this tract to the south and north respectively. Neither the north nor the south tract boundaries are marked but are easy to find, as they are divided by unmapped intermittent drainages. The eastern boundary is IN 37 South. The western tract boundary is a Morgan-Monroe State

Forest/private property boundary. The private boundary has been marked with orange paint for several years.

Wildlife

Wildlife resources in this tract are plentiful. This tract supports many woodland species including but not limited to white-tailed deer, wild turkey, eastern gray squirrel, fox squirrel, chipmunks and various songbirds.

Indiana Bat Habitat Guidelines

Live Trees-Entire Tract-Desired Species Only*					
	Required	Inventory	Available For Removal		
11" DBH+	345	396	50		
20" DBH+	115.2	25	-90		
Snags-Entire Tract-All Species					
9" DBH+	230.4	60	-171		
19" DBH+	38.4	22	-16		

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

Communities

The Natural Heritage Database did not indicate any rare, threatened or endangered species within the tract or nearby. However, a five-inch butternut (also called white walnut in some areas) was found during the most recent inventory. The tree was in poor health, showing signs of advanced decline due to the butternut canker (Sirococcus clavigignenti- juglandacearum).

Recreation

This land locked parcel somewhat limits recreation to hikers and hunters.

Cultural

At present, no cultural sites have been discovered. In the event such a resource is later discovered, its location would not be disclosed to protect its integrity. Adverse impacts to significant cultural resources would be avoided during any resource management or construction project.

Tract Silvicultural Prescription

The dominant timber type within this tract is mixed oak-hickory and mixed upland hardwoods that includes yellow-poplar and sugar maple. Dominant merchantable sawtimber composition for this tract is as follows: mixed oak 33%, mixed hickory 16%, sugar maple 15% and yellow-poplar 11%. According to the 2009 tract inventory the estimated volume in standing merchantable trees for this tract is 7,792 bdft/acre with an estimated 108.5 sqft of basal area/acre. The estimated # of trees/acre (excluding submerchantable trees) is 111. According to the Gingrich stocking guide this tract is fully stocked at 87% stocking, with an average tree diameter of 14 inches. Based on these data a harvest is recommended to create better growing conditions for the residual timber stand, to salvage damaged and dying trees, to improve wildlife habitat, and to

for this tract is to retain the mixed oak hickory composition. It is recommended that basal area be reduced to no less than 70sqft/acre, leaving the residual stocking around 60%. An intermediate harvest will accomplish these goals through uneven-aged management. Singletree selection and group selection openings will be utilized during the marking and timber harvest. Group selection openings will be 5 acres and less in size throughout the tract. The estimated harvest for this tract is 3,210 bdft/acre. Approximately 13 trees/acre and 26.2 sqft of basal area could be removed. Two potential areas were observed during the forest inventory that would benefit from group selection openings. One is located on the north slope of the middle ridge; the other is on the north slope of the southern most ridge. Regeneration openings provide additional wildlife habitat diversity and promote the growth of shade intolerant tree species. During the timber marking process grape vine control is recommended to reduce the number of grapevines within the tract. Also, post harvest timber stand improvement (TSI) is planned in the regeneration openings to remove the remaining pole and sapling size trees. The purpose of this TSI is to reduce competition for regeneration that arises from seeds, seedling sprouts, or stump sprouts.

promote a healthy and vigorous forest environment. The primary management objective

Table 2. Harvest/Leave species and volume (bdft) from December 2008 inventory.

Species	Harvest	Leave	Total
black oak	30210	38190	68400
white oak	30960	24410	55370
yellow poplar	18140	23950	42090
sugar maple	9420	12480	21900
northern red oak	2270	16280	18550
mockernut hickory	0	10780	10780
bitternut hickory	2690	6320	9010
red maple	3220	5730	8950
pignut hickory	3460	5400	8860
American beech	7350	1410	8760
chinkapin oak	0	8440	8440
black cherry	5360	2960	8320
basswood	3750	4490	8240
white ash	3630	1410	5040
black walnut	0	4560	4560
shagbark hickory	0	3830	3830
scarlet oak	2870	0	2870
hackberry	0	1990	1990
American elm	0	1200	1200
red elm	0	1200	1200
blackgum	0	870	870
Tract Total	123330	175900	299230
Tract Average/acre	3210	4580	7790

Proposed Activities

Tract boundary marking will occur prior to a timber harvest, in the spring of 2009. Timber marking will begin in the winter/spring of 2009, following the posting and website review of the resource management guide. Before construction of any roads, a DHPA (archaeology) review will be conducted to protect any buried or discovered historical artifacts. After the sale is marked and approved it will advertised for a timber sale. The timber sale contract will vary, but often it will be less than two years in length. Post harvest TSI will occur within approximately two years after the successful completion of the timber harvest. A forest inventory will then occur at the beginning of the next management cycle, in 2029.

Proposed Activities Listing

Proposed Management Activity	<u>Proposed Date</u>
Timber Marking/grape vine control	2009
Boundary Marking	2009
Timber Sale	2009-2011
Post harvest TSI	2009-2013
Reinventory	2029

Attachments

Aerial photograph with tract boundary Soils map with tract boundary and topographic map Natural Heritage Database Review

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Morgan-Monroe State Forest Compartment 10 Tract 07

