



**SHINGLETON FOREST MANAGEMENT UNIT
COMPARTMENT REVIEW PRESENTATION**

COMPARTMENT # 133 ENTRY YEAR: 2009

Compartment Acreage: 2,453 County: Alger

Revision Date: 11/28/07

Stand Examiner: Jennifer Burnham

Legal Description: T49N R15W Sections 16, 20, 21, 28, 29 & 32

RMU (if applicable):

Management Goals: The main goal in this compartment is to conduct multiple resource management for current and future generations.

Soil and Topography: The topography in this compartment is rolling to flat with some higher elevation in the center. Rubicon sand and Houghton Muck are the two soils. The Rubicon sand, which is naturally low in fertility, carries the upland species in this compartment and the muck soils are for the cedar and low marsh areas. The entire compartment falls within the Kingston Outwash LTA.

Ownership Patterns, Development, and Land Use in and Around the Compartment: The compartment is all State ownership with more to the west, east and south. The north area is adjacent to Pictured Rocks National Lake Shore ownership.

Unique, Natural Features (include only non-site specific and non-sensitive information): Currently under review by Michigan Natural Features Inventory (MNFI).

Archeological, Historical, and Cultural Features (include only non-site specific and non-sensitive information): One possible hit.

Special Management Designations or Considerations: The compartment lies within the PRNL buffer and has a high amount of traffic use during the summer months for camping and other recreation near the lake shore.

Watershed and Fisheries Considerations: N/A

Wildlife Habitat Considerations: Lying to the north of the Kingston Plains, this compartment is bounded on the west by H-58 and on the south by the Hurricane River Truck Trail. Pre-settlement data show the virgin timber contained white pine, spruce, beech, hemlock, and red pine. Yellow birch, red maple, and balsam fir were also common. Lowland swamps were primarily filled with cedar and the occasional tamarack.

Current land cover contains significantly more jack pine and aspen than was found circa 1850. Hemlock has been reduced from historic levels but still exists in good pockets and continues to regenerate. White pine and red pine both exist in good quantities, but probably in a different distributional pattern than found in the virgin forest.

The wildlife habitat management regime includes managing pine stands in a manner that, over time, will move the system to a more heterogeneous mixture of species, maintaining some early successional systems, and enhancing the hard mast component.

Mineral Resource and Development Concerns and/or Restrictions: Surface sediments consist of glacial outwash sand and gravel and postglacial alluvium and lacustrine (lake) sand & gravel. There is insufficient data to determine the glacial drift thickness. The Cambrian Trempealeau and Munising Formations subcrop below the glacial drift. The Trempealeau could be used for stone and the Munising was used as a building stone in the past. Gravel pits are not located in this area, but there could be some potential. There is no commercial oil and gas production in the UP.

Vehicle Access: Access is good. Two county roads border the west and south with many two-tracks with in the compartment. Some of these were blocked after logging in the last entry.

Survey Needs: None.

Recreational Facilities and Opportunities: The snowmobile trail runs on both county roads. The PRNL is close to the boundary with more opportunities there.

Fire Protection: Response would be slow because of the distance from any office. The timber types have good fire potential with a dry year.

Additional Compartment Information:

- **The following 5 reports from the Operations Inventory System (OIPC) are attached:**
 - ◆ **Cover Type by Age Class**
 - ◆ **Cover Type by Management Objective**
 - ◆ **Compartment Volume Summary**
 - ◆ **Proposed Treatments – No Limiting Factors**
 - ◆ **Proposed Treatments – With Limiting Factors**

- **The following information is displayed, where pertinent, on the attached compartment maps:**
 - ◆ **Base feature information, stand numbers, cover types**
 - ◆ **Proposed treatments**
 - ◆ **Proposed road access system**
 - ◆ **Suggested potential old growth**

12/20/2007 11:04:35 AM

Michigan Department of Natural Resources - Operations Inventory System
Individual Compartment Report

LAKE SUPERIOR STATE FOREST

SHINGLETON FOREST AREA

ALGER COUNTY

COMPARTMENT: 133

Table 3

(acres shown in boxes)

STAND AGE CLASS

COVER TYPE	Not Coded	0-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100-109	110-119	120-129	130-139	140-149	150-159	All Aged	Total
Aspen			220	10		3				13									246
Cedar											145								145
Grass	28																		28
Hemlock																		31	31
Jack Pine		45	55	75		251	55												481
Marsh	72																		72
Non Stocked	16																		16
Paper Birch						24				75	52								151
Red Pine			37			43	80		22			169						478	829
Upland Hdwds						6												4	10
Water	21																		21
White Pine				37														386	423
Total	137	45	312	122		327	135		22	88	197	169						899	2453

LAKE SUPERIOR STATE FOREST

SHINGLETON FOREST AREA

ALGER COUNTY

COMPARTMENT: 133

Table 3A

(acres shown in boxes)

MANAGEMENT OBJECTIVE TYPE

COVER TYPE	A	S	V	C	G	H	J	I	L	P	N	Q	X	O	B	R	K	Y	F	E	T	D	U	M	Z	W	Total
A Aspen	246																										246
C Cedar				145																							145
G Grass					28																						28
H Hemlock						31																					31
J Jack Pine							481																				481
N Marsh											72																72
X Non Stocked													16														16
B Paper Birch	27														124												151
R Red Pine							87									742											829
M Upland Hdwds	10																										10
Z Water																									21		21
W White Pine																										423	423
Total	283			145	28	31	568				72		16		124	742									21	423	2453

LAKE SUPERIOR STATE FOREST

SHINGLETON FOREST AREA

ALGER COUNTY

COMPARTMENT: **133**

Table 10 - COMPARTMENT VOLUME SUMMARY - ALL STANDS

COMPARTMENT SUMMARY			
TOTAL VOLUME		CUT VOLUME	
Hardwood	6323 Cds	Hardwood	5005 Cds
Hardwood	15 Mbf	Hardwood	15 Mbf
Softwood	15420 Cds	Softwood	3156 Cds
Softwood	4874 Mbf	Softwood	625 Mbf
Sum TotVol	31521 Cds	Sum CutVol	9441 Cds
Total Cmpt Acres		Acres Proposed For Cut.....	
2453		581	

SHINGLETON FOREST AREA

Proposed Treatments
With NO Limiting Factors

Compartment: 133 Entry Year: 2009

Stand	Cover Type	Acres	Age	Site Index	Mgt Obj	Condition	Method Cut	Harvest Priority	Cultural Need	FDF Status
43	R9	38		58	red pine	unevenaged	thinning	1		
comnts Fmd : STEEP SLOPE - NICE HEMLOCK PATCH. CONTAINS MORE RED PINE IN PLACES. SOME OF STAND THINNED WITH SALE 20-91. Remove all species except oak and hemlock and take only red and white pine marked leaving mainly pulp size trees to keep the trees pruning and gaining height. Edges have some white birch and fir. Rolling terrain. Manage for red pine. No winter cutting because of the snowmobile trail.										
Wld : This stand types out as PARV habitat. The hemlock is fairly well contained within the southeast portion of the stand and could probably be typed out as it's own stand. Logging operations should stay completely out of this hemlock association. The stand also contains a few oak. Do not cut hemlock or oak.										
45	B6	27	84	53	aspen (upland)	mature	final harvest	1	cleaning & weeding	
comnts Fmd : Stand will decrease in acreage b/c of road improvements. This stand has a mix of ages. Aspen and white birch are overmature. Could easily convert to pine for aesthetics along H-58 with the cut. Leave most of the retention near the road to help with aesthetics. There is also a knob of jack and red pine mix up a good slope. TSI afterwards to help get aspen/birch back in the more sparse pine areas. Plant jack pine area if necessary to maintain species composition. No winter cutting because of the snowmobile trail.										
Wld : Do not cut oak and retain all white birch that are less than 4 inches in DBH										
47	M6	4		48	aspen (upland)	mature	final harvest	1	cleaning & weeding	
comnts Fmd : Birch is dying out and the beech has heavy scale. Final harvest to promote more aspen, white birch and pine. There is scattered spruce and red pine in the stand, leave some for diversity. Underplant oak to add diversity. No winter cutting because of the snowmobile trail.										
48	B6	52	90	47	paper birch	mature	final harvest	1	cleaning & weeding	
comnts Fmd : This stand has a mix of ages. Aspen and white birch are overmature. TSI afterwards to help get aspen/birch back in the more sparse pine areas. Leave most of the retention near the road to help with aesthetics. Remove hardwoods to help promote more aspen/birch flush. Saw a couple yellow birch, do not cut yellow birch, hemlock or oak. Scattered red and white pine mark if necessary. No winter cutting because of the snowmobile trail. 98= aspen and fir. No winter cutting because of the snowmobile trail.										
Wld : WLD agrees with FMFM comments and prescription, retain all white birch that are less than 4 inches in DBH.										
50	R9	96		53	red pine	unevenaged	selection	1	planting	
comnts Fmd : Stand is a combination of 1-5 acre patches with some spp variations but all containing red and white pine pulp and logs. Stand should have all species removed, except hemlock and oak, with red and white pine marked for removal to promote a red pine management objective with a mix of the same understory spp present. Where there are pockets of jack pine or white birch make sure the area is opened up enough during marking for regeneration to occur. Under plant red pine and jack pine in the area where the residual is the same. Leave some white birch when cut. Also underplant oak. No winter cutting because of the snowmobile trail.										
Wld : This stand types out as PARV habitat type. A large portion of this stand (on the eastern side) contains little to no red pine. Rather, the timber is white pine over white birch. In addition, the stand also contains some good hemlock inclusions. WLD does not agree with a red pine objective for these portions of the stand. FMFM comments call for the removal of all species except Oak, Hemlock, Red Pine, and White Pine. WLD request that some of the birch within the stand also be retained.										
51	J6	5	56	60	jack pine	mature	final harvest	1	natural regeneration	
comnts Fmd : There are some red pine scattered, mark if necessary. Do not cut oak or hemlock. MO is for JP. No winter cutting because of the snowmobile trail.										
Wld : This stand types out as PVE habitat. WLD generally agrees with FMFM prescription and comments. However, WLD recommends that a few scattered white birch also be retained.										
52	J6	7	56	60	jack pine	mature	final harvest	1	natural regeneration	
comnts Fmd : There are some red pine scattered, mark if necessary. Do not cut oak or hemlock. MO is for JP. No winter cutting because of the snowmobile trail.										
Wld : This stand types out as PVE habitat. WLD generally agrees with FMFM prescription and comments. However, WLD recommends that a few scattered white birch also be retained.										
54	M6	6	45	48	aspen (upland)	low quality	final harvest	1	planting	
comnts Fmd : Beech scale heavy on the trees. Treat with stand 72 to get back more white birch, red and white pine. Underplant oak when cut in open area to promote diversity. No winter cutting because of the snowmobile trail.										
59	R9	169	100	52	red pine	mature	selection	1	planting	
comnts Fmd : Will need to remove pockets of overmature jack pine. Remove white birch and red maple. Thin red and white pine and open the area up more by the jack pine for better regeneration. Heavier areas of pine can be selectively thinned to promote regeneration of the red and white pine. Do not cut hemlock or oak. MO will be for a pine mix, mainly jack pine with the red and white mostly in the overstory. No winter cutting because of the snowmobile trail. 98= black spruce, red and white pine pulp.										
Wld : This stand types out as PARV habitat. The stand contains abundant white pine regeneration and a fair amount of red pine regeneration. WLD agrees with FMFM comments to not cut hemlock and oak. In addition WLD recommends retaining one white birch per acre where possible.										

SHINGLETON FOREST AREA

**Proposed Treatments
With NO Limiting Factors**

Compartment: 133 **Entry Year: 2009**

Stand	Cover Type	Acres	Age	Site Index	Mgt Obj	Condition	Method Cut	Harvest Priority	Cultural Need	fdf Status
60	R1	19	16	57	red pine	in process of regeneration		0	planting	
comnts Fmd : UPDATED TCR 1/12/99 - 020-91-01. Cut in '95 with an MO of red pine. No cultural treatment was ever done. Regen survey found an average of 4 red pine, 2 jack pine, 2 spruce and 1 white pine per plot. Scattered red maple stump sprouts and oak. Hand plant because of the amount of regeneration already established. No winter cutting because of the snowmobile trail.										
69	A5	13	85	49	aspen (upland)	mature	final harvest	1	cleaning & weeding	
comnts Fmd : Aspen and birch are dying out. There are scattered red maple, spruce and white pine. Mark some pine if necessary. MO is for aspen/birch cut to promote. Understory is a mix of aspen and white pine. Do not cut oak. No winter cutting because of the snowmobile trail.										
Wld : WLD agrees with FMFM prescription										
70	B6	14	80	50	paper birch	mature	final harvest	1	cleaning & weeding	
comnts Fmd : Treat stand with an MO of aspen/birch. There is a good mix of white and red pine, jack pine and some oak. Do not cut oak. Leave most of the retention near the road to help with aesthetics. No winter cutting because of the snowmobile trail. Some of the acreage could be lost to road improvements on H-58.										
Wld : WLD agrees with FMFM prescription, retain white birch that are less than 4" in DBH.										
72	B6	34	85	46	paper birch	mature	final harvest	1		
comnts Fmd : Stand contains a good mix of all species for the area. When cut the same mix will be there. Leave most of the retention near the road to help with aesthetics. The "holes" in the stand have been filling in for a while having merchantable trees in them. No winter cutting because of the snowmobile trail.										
Wld : WLD generally agrees with FMFM prescription. However, variable retention within this stand should include scattered white birch and pine. Leave white birch 4" in DBH and smaller.										
75	W9	96		53	white pine	unevenaged	selection	1	planting	
comnts Fmd : Stand is a combination of 1-5 acre patches with some spp variations but all containing red and white pine pulp and logs. The stand volume is the same for wp (pulp/logs) as it is for white birch. MO is for white pine because the stand is naturally converting to this type. Stand should have all species removed, except hemlock and oak, with red and white pine marked for removal to promote a pine management objective with a mix of the same understory spp present. Where there are pockets of jack pine or white birch make sure the area is opened up enough during marking for regeneration to occur. Under plant red pine and jack pine in the area where the residual is the same. Leave some white birch when cut. No winter cutting because of the snowmobile trail.										
Wld : This stand types out as PArV habitat type. A large portion of this stand (on the eastern side) contains little to no red pine. Rather, the timber is white pine over white birch. In addition, the stand also contains some good hemlock inclusions. WLD does not agree with a red pine objective for these portions of the stand. FMFM comments call for the removal of all species except Oak, Hemlock, Red Pine, and White Pine. WLD resquest that some of the birch within the stand also be retained.										
402	G0	20			grass	sparse	final harvest	1		
comnts Fmd : Part of the opening is still relatively clean with scattered white pine and spruce. Wildlife requests stand to have treatment in the "peninsula" between stands 69 and 70. This treatment is for opening maintance but allows us to cut it commercially with the other stands. The remainder of the stand will go untreated. No winter cutting because of the snowmobile trail.										
Total Acres.....		600								

**Proposed Treatments
With Limiting Factors**

Compartment: 133

Entry Year: 2009

Stand	Cover Type	Acres	Age	Site Index	Mgt Obj	Condition	Method Cut	Harvest Priority	Cultural Need	FD Status
--------------	-----------------------	--------------	------------	-----------------------	--------------------	------------------	-----------------------	-----------------------------	--------------------------	----------------------

TREATMENT LIMITING FACTORS:

Total Acres..... 0

Field Map

Compartment 133
 T49N, R15W, Sec. 16, 20, 21, 28, 29, 32
 County: Alger
 Unit: Shingleton
 YOE: 2009
 Acres: 2, 453 GIS Calculated
 Stand Examiner: Jennifer Burnham
 Map Revised: 12/20/2007
 Map Phase: Pre- review

Legend

-  Rls Corners
-  Miris Corners
-  Gravel
-  Paved
-  Poor Dirt Roads
-  Trails
-  Snowmobile Trails
-  Stand Boundary
-  Biodiversity/Old Growth Area
-  011 - Planting/Hand Tools
-  100 - Final Harvest
-  111 - Final Harvest/Planting/Hand Tools
-  145 - Final Harvest/Natural Regeneration/Mechanical, other
-  161 - Final Harvest/Cleaning - weeding/Hand Tools
-  400 - Thinning
-  811 - Selection/Planting/Hand Tools

