



**SHINGLETON FOREST MANAGEMENT UNIT  
COMPARTMENT REVIEW PRESENTATION**

**COMPARTMENT # 60 ENTRY YEAR: 2009**

**Compartment Acreage: 1369      County: Schoolcraft**

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**Revision Date: 12/6/2007**

**Stand Examiner: Bob Burnham**

**Legal Description: T43N R15W Sections 19, 30 & 31**

**RMU (if applicable):**

**Management Goals:** The goals in this compartment include conducting multiple resource management for current and future generations. Forest Health, Recreation, Biodiversity Stewardship, Wildlife and Timber Management are some of the key management components within this compartment.

**Soil and Topography:** The soils in Schoolcraft County have recently been re-mapped by the Soil Survey. Specific soils information including Habitat Types can be found in the individual stand comments. In general, the soils are well drained sands. The terrain in the area is relatively flat. The Eastern Upper Peninsula Eco-Regional Planning Process is using a Management Area Concept to manage on a broader scale and Land Type Associations (LTA's) are key components to defining the soils and topography within the Management Areas. This entire compartment lies within the Hiawatha Moraine LTA.

**Ownership Patterns, Development, and Land Use in and Around the Compartment:** The compartment is entirely contiguous State land. There is little development within the compartment however; due to the upland ground and easy access to the area it does receive a good amount of public use.

**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):** None known.

**Special Management Designations or Considerations:** A portion of section 31 is part of a Sharptail Grouse Corridor which is managed both commercially and non-commercially to maintain the area in an open style habitat which the birds need to survive.

**Watershed and Fisheries Considerations:** No fisheries concerns.

**Wildlife Habitat Considerations:** This compartment lies on the north end of the High Rollways complex. Pre-settlement data show hemlock, sugar maple, white pine and birch dominated the forest within the compartment. Current forest conditions are substantially different from the circa 1850 forests. Pine plantations with a mixture of aspen now dominate the compartment. The wildlife habitat management regime is primarily associated with maintaining early successional forests and developing age structural diversity between pine plantations.

**Mineral Resource and Development Concerns and/or Restrictions:** Surface sediments consist of lacustrine (lake) sand and gravel, coarse-textured till and peat and muck. There is insufficient data to determine the glacial drift thickness. The Silurian Manitoulin Dolomite and Ordovician Queenston Shale subcrop below the glacial drift. The Manitoulin could be used for stone. Gravel pits are located to the west and there could be some potential. There is no commercial oil and gas production in the UP.

**Vehicle Access:** The compartment has excellent access including the High Rollways Truck Trail which is a County Road.

**Survey Needs:** None at the present time.

**Recreational Facilities and Opportunities:** The compartment does not have any recreational facilities. The area gets a lot of recreational users including hunters, birdwatchers, blueberry pickers, ORV users and snowmobilers.

**Fire Protection:** The area has numerous roads which will aid in suppression efforts if a fire were to occur. There is an increased potential for slash fires since so much of the pine is being harvested. In general, the Sharptail Corridor has been managed through fire, therefore most of fuel has been removed which lessens the chance for a large fire to occur.

**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**

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

LAKE SUPERIOR STATE FOREST

SHINGLETON FOREST AREA

SCHOOLCRAFT COUNTY

COMPARTMENT: 60

Table 3

(acres shown in boxes)

STAND AGE CLASS

COVER TYPE	Not Coded	STAND AGE CLASS																All Aged	Total	
		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			
Aspen		34	136	41	55	2	18													286
Bog or Marsh	24																			24
Grass	10																			10
Jack Pine		17			13		2	52												84
Non Stocked	10																			10
Red Pine		134	161		23	224	174	99												815
Upland Hdws			5					16											14	35
White Pine						105														105
<b>Total</b>	<b>44</b>	<b>185</b>	<b>302</b>	<b>41</b>	<b>91</b>	<b>331</b>	<b>194</b>	<b>167</b>											<b>14</b>	<b>1369</b>

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

LAKE SUPERIOR STATE FOREST

SHINGLETON FOREST AREA

SCHOOLCRAFT COUNTY

COMPARTMENT: **60**

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	286																										286
V Bog or Marsh			24																								24
G Grass					10																						10
J Jack Pine							32									52											84
X Non Stocked													10														10
R Red Pine					23											792											815
M Upland Hdwds	13																							22		35	
W White Pine																										105	105
Total	299		24		33		32						10			844									22	105	1369

LAKE SUPERIOR STATE FOREST

SHINGLETON FOREST AREA

SCHOOLCRAFT COUNTY

COMPARTMENT: **60**

**Table 10 - COMPARTMENT VOLUME SUMMARY - ALL STANDS**

COMPARTMENT SUMMARY			
TOTAL VOLUME		CUT VOLUME	
Hardwood	1763 Cds	Hardwood	514 Cds
Hardwood	24 Mbf	Softwood	5860 Cds
Softwood	16006 Cds	Softwood	280 Mbf
Softwood	1720 Mbf	Sum CutVol	6934 Cds
Sum TotVol	21257 Cds		
<b>Total Cmpt Acres</b>		Acres Proposed For Cut.....	591
	1369		

## SHINGLETON FOREST AREA

Proposed Treatments  
With NO Limiting Factors

Compartment: 60

Entry Year: 2009

Stand	Cover Type	Acres	Age	Site Index	Mgt Obj	Condition	Method Cut	Harvest Priority	Cultural Need	fdf Status
2	R6	44	46	59	red pine	immature	thinning	2		
comnts Fmd : Stand is ready for a first thinning. Maintain basal area, skip to every 4th row if necessary. East side has better and more consistent stocking. Cut only species in the rows which will ensure retention in the future. Soil is kalkaska sand and the Habitat Type is PArVAa.										
5	R6	37	58	64	red pine	immature	thinning	2		
comnts Fmd : Stand was planted to red pine and jack pine , in an every other row pattern. However, the red pine really out-competed the jack pine. The jack pine is now mature and starting to die but the red pine remains healthy. Species thin stand and remove everything but the red pine unless needed. Retain any oak, cherry, hemlock and beech. Do not leave any jack pine except for snags. If white pine is found it can be left to increase basal area. There was a small firewood area in the northeast corner of the stand in the early 90's. Habitat Type is PArVAa.										
6	R6	3	46	57	red pine	immature	thinning	2		
comnts Fmd : Stand was species thinned in 1990 in which everything but the red pine was removed. Aspen has come back vigorously. There are some low stocked areas of red pine which can be avoided and the rest needs to be thinned. Maintain basal area even if less than every third row needs to be taken. Retention will occur along the bog edge. Habitat Type is PArVAa.										
8	R6	21	58	64	red pine	immature	thinning	2		
comnts Fmd : Stand was planted to red pine and jack pine , in an every other row pattern. However, the red pine really out-competed the jack pine. The jack pine is now mature and starting to die but the red pine remains healthy. Species thin stand and remove everything but the red pine unless needed. Retain any oak, cherry, hemlock and beech. Do not leave any jack pine except for snags. If white pine is found it can be left to increase basal area. Habitat Type is PArVAa.										
9	R3	77	5	63	red pine	immature		0	release	
comnts Fmd : STAND IS ALTERNATE ROWS OF RED AND JACK PINE Stand cut in the winter/spring 2001 Waiting on slash burn. Burn was cancelled and stand was trenched in the fall of 2001. (7-18-05 AP) Planted in 2002. 2005 Regen count results red pine 658, 272 volunteers. FTP is being kept open for release work. (9/18/06AP) Site was released in September 2006 with Accord. FTP is being kept open to evaluate effectiveness of application in summer 2007. Habitat Type is PArVAa. FTP # is C41-929										
10	R6	3	58	63	red pine	immature	thinning	2		
comnts Fmd : Stand was planted same as adjacent pine stands, every other row jack pine red pine. However, there is an aspen, hardwood and pine component to stand with an A3 understory. Species thin stand but expect this stand to convert to aspen hardwood at the end of its rotation. No retention except pine. Habitat Type is PArVAa.										
12	J6	52	58	62	red pine	mature	final harvest	2	planting	
comnts Fmd : Stand was planted to red pine and jack pine , in an every other row pattern. Unlike the other stands this one doesn't have enough red pine residual to just species thin the jack pine. Therefore, the stand is going to be final harvested and re-planted to red pine. The future stand will include jack pine volunteers that occur naturally within the new plantation. Retention should be patches where the red pine is thicker. Habitat Type is PArVAa.										
13	R6	4	47	56	red pine	immature	thinning	2		
comnts Fmd : Stand needs a first thinning. Stay out of adjacent plantation. Maintain basal area. Retain lesser occurring species where applicable. Habitat Type is PArVAa.										
14	R6	30	58	63	red pine	immature	thinning	2		
comnts Fmd : Stand was planted to red pine and jack pine , in an every other row pattern. However, the red pine really out-competed the jack pine. The jack pine is now mature and starting to die but the red pine remains healthy. Species thin stand and remove everything but the red pine unless needed. Retain any oak, cherry, hemlock and beech. If white pine is found it can be left to increase basal area. Do not leave any jack pine except for snags. BA will be a bit lighter than some of the surrounding stands being treated the same way. Habitat Type is PArVAa.										
15	R3	24	5	63	red pine	immature		0	release	
comnts Fmd : STAND IS ALTERNATE ROWS OF RED AND JACK PINE Stand cut in the winter/spring 2001 Waiting on slash burn. Burn was cancelled and stand was trenched in the fall of 2001. (7-18-05 AP) Planted in 2002. 2005 Regen count results red pine 658, 272 volunteers. FTP is being kept open for release work. (9/18/06AP) Site was released in September 2006 with Accord. FTP is being kept open to evaluate effectiveness of application in summer 2007. Habitat Type is PArVAa. FTP # is C41-929 Glyphosate release did not work well on aspen, approximately 50% control. Site was sprayed with Velpar, spot release, and will continue to be monitored. Check effectiveness next year.										

## SHINGLETON FOREST AREA

Proposed Treatments  
With NO Limiting Factors

Compartment: 60

Entry Year: 2009

Stand	Cover Type	Acres	Age	Site Index	Mgt Obj	Condition	Method Cut	Harvest Priority	Cultural Need	FDF Status
17	R6	8	58	63	red pine	immature	thinning	2		
comnts Fmd : Stand was planted to red pine and jack pine , in an every other row pattern. However, the red pine really out-competed the jack pine. The jack pine is now mature and starting to die but the red pine remains healthy. Species thin stand and remove everything but the red pine unless needed. Retain any oak, cherry, hemlock and beech. Do not leave any jack pine except for snags. If white pine is found it can be left to increase basal area. Habitat Type is PARVAa.										
20	R9	36	57	64	red pine	immature	thinning	2		
comnts Fmd : Stand was part of a large plantation area consisting of red pine and jack pine strips approximately 3 chains wide or so. This strip is part of the residual red pine. Stand was thinned in 1993; Goliath Sale and again in 2001. Stand can use another thinning. Leave any other species that exist besides red pine for retention purposes. There may be light areas that can be walked through, maintain BA and concentrate on damaged trees. Habitat type is PARVAa.										
21	R9	11	57	64	red pine	immature	thinning	2		
comnts Fmd : Stand was part of a large plantation area consisting of red pine and jack pine strips approximately 3 chains wide or so. This strip is part of the residual red pine. Stand was thinned in 1993; Goliath Sale and again in 2001. Stand can use another thinning. Leave any other species that exist besides red pine for retention purposes. There may be light areas that can be walked through, maintain BA and concentrate on damaged trees. Habitat type is PARVAa.										
22	R9	23	57	64	red pine	immature	thinning	2		
comnts Fmd : Stand was part of a large plantation area consisting of red pine and jack pine strips approximately 3 chains wide or so. This strip is part of the residual red pine. Stand was thinned in 1993; Goliath Sale and again in 2001. Stand can use another thinning. Leave any other species that exist besides red pine for retention purposes. There may be light areas that can be walked through, maintain BA and concentrate on damaged trees. Habitat type is PARVAa.										
23	R9	5	57	64	red pine	immature	thinning	2		
comnts Fmd : Stand was part of a large plantation area consisting of red pine and jack pine strips approximately 3 chains wide or so. This strip is part of the residual red pine. Stand was thinned in 1993; Goliath Sale and again in 2001. Stand can use another thinning. Leave any other species that exist besides red pine for retention purposes. There may be light areas that can be walked through, maintain BA and concentrate on damaged trees. Habitat type is PARVAa.										
24	R9	6	57	64	red pine	immature	thinning	2		
comnts Fmd : Stand was part of a large plantation area consisting of red pine and jack pine strips approximately 3 chains wide or so. This strip is part of the residual red pine. Stand was thinned in 1993; Goliath Sale and again in 2001. Stand can use another thinning. Leave any other species that exist besides red pine for retention purposes. There may be light areas that can be walked through, maintain BA and concentrate on damaged trees. Habitat type is PARVAa.										
25	R9	8	57	64	red pine	immature	thinning	2		
comnts Fmd : Stand was part of a large plantation area consisting of red pine and jack pine strips approximately 3 chains wide or so. This strip is part of the residual red pine. Stand was thinned in 1993; Goliath Sale and again in 2001. Stand can use another thinning. Leave any other species that exist besides red pine for retention purposes. There may be light areas that can be walked through, maintain BA and concentrate on damaged trees. Habitat type is PARVAa.										
26	R9	7	57	64	red pine	immature	thinning	2		
comnts Fmd : Stand was part of a large plantation area consisting of red pine and jack pine strips approximately 3 chains wide or so. This strip is part of the residual red pine. Stand was thinned in 1993; Goliath Sale and again in 2001. Stand can use another thinning. Leave any other species that exist besides red pine for retention purposes. There may be light areas that can be walked through, maintain BA and concentrate on damaged trees. Habitat type is PARVAa.										
27	R9	3	57	64	red pine	immature	thinning	2		
comnts Fmd : Stand was part of a large plantation area consisting of red pine and jack pine strips approximately 3 chains wide or so. This strip is part of the residual red pine. Stand was thinned in 1993; Goliath Sale and again in 2001. Stand can use another thinning. Leave any other species that exist besides red pine for retention purposes. There may be light areas that can be walked through, maintain BA and concentrate on damaged trees. Habitat type is PARVAa.										
29	R6	8	47	56	red pine	immature	thinning	2		
comnts Fmd : Stand needs a first thinning. Stay out of adjacent plantation. Maintain basal area. Retain lesser occurring species where applicable.										
30	W6	4	47	54	white pine	immature	thinning	2		
comnts Fmd : Pretty nice white pine plantation. Thin stand via some type of row thinning adaptation so that basal area can be maintained. Mark to cut so that not all species are cut out of stand to ensure retention. Habitat type is PARVAa.										
34	R6	58	47	59	red pine	immature	thinning	2		
comnts Fmd : Stand was row thinned last entry. There is a large area in the center of the two 40's that is being split out because there was enough aspen cut out that it took over the area and the red pine residual is not high enough to shade it out. This will be the retention area for this stand. The remainder of the stand needs to be thinned. Maintain basal area. Habitat type is PARVAa.										

## SHINGLETON FOREST AREA

Proposed Treatments  
With NO Limiting Factors

Compartment: 60

Entry Year: 2009

Stand	Cover Type	Acres	Age	Site Index	Mgt Obj	Condition	Method Cut	Harvest Priority	Cultural Need	fdf Status
35	R6	2	47	56	red pine	immature	thinning	2		
comnts Fmd : Stand needs a first thinning. Stay out of adjacent plantation. Maintain basal area. Retain lesser occurring species where applicable.										
40	R9	6	57	64	red pine	immature	thinning	2		
comnts Fmd : Stand was part of a large plantation area consisting of red pine and jack pine strips approximately 3 chains wide or so. This strip is part of the residual red pine. Stand was thinned in 1993; Goliath Sale and again in 2001. Stand can use another thinning. Leave any other species that exist besides red pine for retention purposes. There may be light areas that can be walked through, maintain BA and concentrate on damaged trees. Habitat type is PARVAa.										
41	R9	2	57	64	red pine	immature	thinning	2		
comnts Fmd : Stand was part of a large plantation area consisting of red pine and jack pine strips approximately 3 chains wide or so. This strip is part of the residual red pine. Stand was thinned in 1993; Goliath Sale and again in 2001. Stand can use another thinning. Leave any other species that exist besides red pine for retention purposes. There may be light areas that can be walked through, maintain BA and concentrate on damaged trees. Habitat type is PARVAa.										
44	A6	18	49	52	aspen (upland)	mature	final harvest	2	natural regeneration	
comnts Fmd : Leave some red and white pine residual for retention all other species need to be cut to ensure adequate regeneration. A mix of the current species mix is acceptable for regenerating the stand. Habitat Type is PARVAa										
49	R9	22	57	64	red pine	immature	thinning	2		
comnts Fmd : Stand was part of a large plantation area consisting of red pine and jack pine strips approximately 3 chains wide or so. This strip is part of the residual red pine. Stand was thinned in 1993; Goliath Sale and again in 2001. Stand can use another thinning. Leave any other species that exist besides red pine for retention purposes. There may be light areas that can be walked through, maintain BA and concentrate on damaged trees. Habitat type is PARVAa.										
55	R6	99	47	64	red pine	immature	thinning	2		
comnts Fmd : Stand was row thinned last entry. Stand is ready for another thinning, maintain basal area. Concentrate on the damaged trees first. Retain lesser occurring species where applicable. Habitat type is PARVAa										
57	R4	23	37	50	grass	immature	final harvest	2	opening maintenance	
comnts Fmd : Stand was typed as G last entry, the stand was burned in spring 2000. However, the trees within stand did not die from the fire. Stand is being scheduled for a chipping operation to convert the stand back to grass. However, since the stand has char in it it may not sell, if this is the case inmates will cut the trees down by hand. Treat with adjacent stand 424 Compartment 42 and sell with larger chip job in compartment 59. Retain mast trees if they occur. Habitat type is PARV										
58	R9	2	57	64	red pine	immature	thinning	2		
comnts Fmd : Stand was part of a large plantation area consisting of red pine and jack pine strips approximately 3 chains wide or so. This strip is part of the residual red pine. Stand was thinned in 1993; Goliath Sale and again in 2001. However, the loggers never cut this stand the second time so its all marked in yellow. Leave any other species that exist besides red pine for retention purposes. Habitat type is PARVAa.										
69	R6	20	48	62	red pine	immature	thinning	2		
comnts Fmd : Stand has some sparse areas and this will be the first thinning. Maintain basal area even if it has to be every 4th row. Cut only trees in the rows and leave remaining to ensure retention in the future. Habitat type is PARVAa.										
74	M6	13	63	52	aspen (upland)	immature	final harvest	2	natural regeneration	
comnts Fmd : Stand is soft maple and aspen, maple stems outnumber the aspen but its not a quality site. Final Harvest stand and manage for aspen. Leave white pine where applicable and leave beech if possible for retention. TSI with inmates after sale is cut. The stand should convert nicely to aspen however if maple comes back vigorously it would be an acceptable alternative Management Objective. Habitat type is PARVAa.										
78	R9	2	57	64	red pine	immature	thinning	2		
comnts Fmd : Stand was part of a large plantation area consisting of red pine and jack pine strips approximately 3 chains wide or so. This strip is part of the residual red pine. Stand was thinned in 1993; Goliath Sale and again in 2001. Stand can use another thinning. Leave any other species that exist besides red pine for retention purposes. There may be light areas that can be walked through, maintain BA and concentrate on damaged trees. Habitat type is PARVAa.										
79	R9	6	57	64	red pine	immature	thinning	2		
comnts Fmd : Stand was part of a large plantation area consisting of red pine and jack pine strips approximately 3 chains wide or so. This strip is part of the residual red pine. Stand was thinned in 1993; Goliath Sale and again in 2001. Stand can use another thinning. Leave any other species that exist besides red pine for retention purposes. There may be light areas that can be walked through, maintain BA and concentrate on damaged trees. Habitat type is PARVAa.										

**SHINGLETON FOREST AREA**

**Proposed Treatments  
With NO Limiting Factors**

**Compartment: 60**

**Entry Year: 2009**

Stand	Cover Type	Acres	Age	Site Index	Mgt Obj	Condition	Method Cut	Harvest Priority	Cultural Need	FDF Status	
80	R9	5	57	64	red pine	immature	thinning	2			
comnts Fmd : Stand was part of a large plantation area consisting of red pine and jack pine strips approximately 3 chains wide or so. This strip is part of the residual red pine. Stand was thinned in 1993; Goliath Sale and again in 2001. Stand can use another thinning. Leave any other species that exist besides red pine for retention purposes. There may be light areas that can be walked through, maintain BA and concentrate on damaged trees. Habitat type is PArVAa.											
<b>Total Acres.....</b>		<b>692</b>									

**Proposed Treatments  
With Limiting Factors**

**Compartment: 60**

**Entry Year: 2009**

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<b>Stand</b>	<b>Cover Type</b>	<b>Acres</b>	<b>Age</b>	<b>Site Index</b>	<b>Mgt Obj</b>	<b>Condition</b>	<b>Method Cut</b>	<b>Harvest Priority</b>	<b>Cultural Need</b>	<b>FD Status</b>
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TREATMENT LIMITING FACTORS:

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**Total Acres.....**      **o**

Compartment 60  
 T43N, R15W, Sec. 20, 29, 32  
 County: Schoolcraft  
 Unit: Shingleton  
 YOE: 2009  
 Acres: 1,369 GIS Calculated  
 Stand Examiner: Robert Burnham  
 Map Revised: 12/06/2007  
 Map Phase: Pre-review

# Field Map

19

30

31

### Legend

- Miris Corners
- - - County Gravel
- - - Poor Dirt Roads
- ▭ Stand Boundary
- 053 - Release/Ground Application
- 111 - Final Harvest/Planting/Hand Tools
- 121 - Final Harvest/Opening Maintenance/Hand Tools
- 141 - Final Harvest/Natural Regeneration/Hand Tools
- 400 - Thinning

