

## Shingleton Forest Management Unit Compartment Review Presentation Compartment #50 Entry Year: 2013

Compartment Acreage: 2,671 County: Schoolcraft

**Revision Date:** 8/10/2011

**Stand Examiner:** Adam Petrelius

**Legal Description:** T43N R15W, Sections 1, 2, 3, 10, 11

RMU (if applicable): Compartment 50 lies within the Seney Manistique Swamp Management Area.

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

**Soil and Topography:** The topography within the compartment is mostly flat. Elevation values range between 702-715 feet. The eastern half of the compartment is mostly forested, while the western portion is mostly non-forest wetland. Forested land is a pretty even mixture between lowland hardwoods; poor quality northern hardwood, aspen, red pine, and lowland conifer cover types. The two most abundant soils are Markey Mucky Peat and Rousseau-Nocknish-Deford Complex.

Ownership Patterns, Development, and Land Use in and Around the Compartment: State land within this compartment was acquired between 1929 and 1960. The compartment boundary borders private and state land. The western boundary borders a mix of private parcels, many containing camps. The compartment receives very minimal use and is mostly inaccessible. Some of the pine islands closer to roads have signs of hunters.

**Watershed and Fisheries Considerations:** Fisheries Values: Poor. The West Branch Manistique River, Duck and Little Duck Creeks are all classified as Second Quality Warm Water (SQWW) through this area. Protecting these waters from encroachment by beaver isn't a high priority, but protection from increased sand bedload is a high priority.

Wildlife Habitat Considerations: This compartment lies within the Seney Sand Lake Plain ecological subsubsection. The growing season in this area is less than 100 days with extreme minimum winter temperatures of -46° F. Annual snowfall in this area averages between 120 and 140 inches. General Land Office (GLO) Surveyor notes show marsh and low pine ridges to be the dominant landforms. The ridges held primarily red pine and white pine with some aspen and white birch mixed in. Forested lowlands contained spruce, tamarack, and white birch. The open marshlands contained cranberry, and various grasses and sedges. Wildfire and windthrow appeared to be the primary types of natural disturbance within the compartment. Although jack pine is dominant along the Highwater Truck Trail, the remainder of the compartment appears to be quite similar to presettlement vegetation. Most of the ridges contain red and/or white pine with aspen and white birch mixed in. Inaccessibility is the primary reason for these stands remaining in tact. Wildlife habitat objectives include protecting the integrity of the marsh/ridge ecosystem, and increasing the availability of hard mast. Gray wolves (Federal and Michigan endangered) have been known to pass through this compartment. There may also be some potential for moose (Michigan special concern), sharp-tailed grouse (Michigan special concern), and yellow rail (Michigan threatened) to utilize this compartment. However, none of these three species have been documented within the compartment. Other wildlife species of interest include sand-hill crane, raven, meadow vole, and coyote.

Mineral Resource and Development Concerns and/or Restrictions: Surface sediments consist of lacustrine (lake) sand and gravel. There is insufficient data to determine the glacial drift thickness. The Ordovician Stonington Formation and Big Hill Dolomite subcrop below the glacial drift. These rocks could be used for stone. The nearest gravel pit is 4 miles to the southwest and potential appears to be limited. There is a clay pit 4 miles to the west. There is no commercial oil and gas production in the UP.

**Vehicle Access:** Vehicle access is very limited. Private land on the western edge of the compartment prevents access. The interior portions are road less. The eastern edge of the compartment borders the Highwater Truck Trail.

Survey Needs: Some treatments border private land and survey work may be needed.

**Recreational Facilities and Opportunities:** The Highwater Truck Trail is a snowmobile trail and travels through the northeastern portion of the compartment.

**Fire Protection:** Fire response time will be slow from any office. Much of the compartment is roadless access is difficult. Fuels within the compartment create potential for a large fire during periods of drought. Water sources are abundant.

- ➤ The following reports from the Inventory are attached:
  - **♦** Total Acres by Cover Type and Age Class
  - **♦** Proposed Treatment Summary
  - **♦** Proposed Treatments No Limiting Factors
  - **♦** Proposed Treatments With Limiting Factors
  - **♦** Stand Details (Forested and Nonforested)
  - **♦** Dedicated and Proposed Special Conservation Areas
- ➤ The following information is displayed, where pertinent, on the attached compartment maps:
  - ♦ Base feature information, stand boundaries, cover types, and numbers
  - **♦** Proposed treatments
  - ♦ Details on the road access system

Compartment 050 Year of Entry 2013

Shingleton Mgt. Unit

**Adam Petrelius : Examiner** 



							Age	Class									
	Hor	Do Joseph	0°2/	0.79	S. S		D. P.	\$5.05 /	8.0	R. j	\$ 6 P	8.00	on on one	70,70	, o s	AS /	,
Jack Pine	0	0	100	48	0	0	1	0	14	0	0	0	0	0	0	164	
Lowland Conifers	0	0	0	13	0	0	0	0	0	0	0	0	0	0	0	13	
Lowland Shrub	1773	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1773	
Lowland Spruce/Fir	0	0	0	0	14	0	0	0	0	0	0	0	0	0	0	14	
Mixed Upland Deciduous	0	0	0	0	0	0	0	10	0	0	0	0	0	0	0	10	
Natural Mixed Pines	0	0	0	0	0	0	31	4	132	99	0	0	0	0	0	266	
Red Pine	0	0	0	0	0	3	309	30	15	19	0	0	0	0	0	376	
Upland Conifers	0	0	0	13	0	0	0	0	0	0	0	0	0	0	0	13	
Upland Mixed Forest	0	0	0	0	0	0	0	6	0	0	11	0	0	0	0	17	
Water	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	
White Pine	0	0	0	0	0	0	2	0	13	0	0	0	0	0	0	16	
Total	1782	0	100	74	14	3	343	50	175	118	11	0	0	0	0	2671	



### **Table 2 – Proposed Treatment Summaries**

# Shingleton Mgt. Unit

Compartment 050 Year of Entry 2013 **Total Compartment Acres: 2671** 

### **Acres by Treatment Type**

Commercial Harvest - 205 Site Prep - 0 Tree Planting - 0 Prescribed Burn - 0 Other - 0

Habitat Cut - 0 Opening Maintenance - 0 Tree Seeding - 0 Pesticide - 0

### **Cover Type by Harvest Method**

		oover Type by Harvest Method									
		/	15 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	16 16 16 16 16 16 16 16 16 16 16 16 16 1	Se S	No N	in or other parts of the parts		S. R. S.		
Jack Pine		4	0	0	0	0	0	4			
Natural Mixed Pir	nes	91	26	55	0	0	0	173			
Red Pine		0	19	0	0	0	0	19			
Upland Mixed Fo	0	0	6	0	0	0	6				
White Pine	·	0	0	4	0	0	0	4			
	Total	95	45	65	0	0	0	205			

Table 3 -- Treatments Prescribed with No Limiting Factor

Compartment: 050 Year of Entry 2013

Deciduous

Pine

TOF NATURAL	630
DNR	100
ArichigaN .	/

t a n d	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
6	41050006-Cut	55.1	42290 - Natural Mixed Pine	Medium Density Log	85	Harvest	Seed Tree with Reserves	42200 - Natural White Pine	Cmpt. Review Proposal

Specs:

Prescription Remove red pine/white pine from overstory to release regeneration. Leave a few supercanopy red pine/white pine trees. If areas of younger poles

are found these can be thinned to allow for operability. Cut all other species. Reserve trees are hemlock and oak.

**Other** Comments:

Advanced regeneration present from harvest in 1988. Protect regeneration with timbersale spec. Retention: Areas lacking red pine/white pine in overstory were removed with creation of treatment boundary. Portions of these areas will serve as retention.

**Next** Steps:

s

Regeneration walkthrough during next inventory cycle. Acceptable regen is any mixture currently found onsite.

41050007-Cut 3.6 42200 - Natural High Density Pole 72 Harvest Seed Tree with 42200 - Natural Cmpt. Review White Pine Reserves White Pine Proposal

Prescription

Specs: Other\_

Stand is already on contract with timbersale in adjacent compartment.

Comments:

**Next** Steps:

> 41050012-Cut 4319 - Mixed Seed Tree with Cmpt. Review 59 High Density Pole Harvest 42201 - Natural White Pine, Mixed **Upland Forest** Reserves Proposal

> Prescription Mark red pine and white pine to 30 sq. ft. Leave some larger supercanopy seed trees for retention. Cut all other species except hemlock and oak.

Other\_ May need survey work, however adjacent property was recently harvested. Protect regeneration with timbersale spec.

Comments:

Regeneration walkthrough next inventory cycle. Acceptable regeneration is any mixture of species currently found onsite.

**Next** Steps:

Specs:

Cmpt. Review 41050014-Cut 42290 - Natural High Density Pole 60 Single Tree Selection 42290 - Natural 14 Harvest Mixed Pine Mixed Pine Proposal

Prescription Mark red pine/white pine to 80 sq. ft. where thicker poles exist. Cut all other species except hemlock and oak. Save some larger supercanopy pine for retention. Specs:

Other | Comments:

**Next** Regeneration walkthrough during next inventory cycle. Acceptable regeneration is any species mixture currently found onsite.

Steps:

28 41050028-Cut 18.8 42210 - Natural High Density Log Harvest Single Tree Selection 42210 - Natural Red Cmpt. Review Red Pine

Prescription Remove most of large red pine/white pine logs and poles from overstory. Cut all other species except hemlock and oak if present. Leave a few Specs: large supercanopy red pine and white pine along with most of the smaller poles.

Protect red pine regeneration with timbersale spec. Survey work may be needed. 50 foot no cut buffer along river and slough. Cutting can occur Other

Comments: 50 to 100 feet away from river/slough, but basal area should be left slightly higher. These river/slough buffers will serve as retention areas. Plant red pine in holes that develop from harvest. Acceptable regeneration is any mixture of red pine, white pine, and jack pine. <u>Next</u>

Steps:

Proposal

### Table 3 -- Treatments Prescribed with No Limiting Factor

Compart Year of

Cover Type	Approval
ar of Entry 2013	DNR
partment: 050	TO NATURAL PR

n	Treatment
d	Name
62	41050062 sm

s t а

Acres Stage1 CoverType

42290 - Natural

Mixed Pine

18.8

Size Density High Density Pole **Treatment** Type

Harvest

**Treatment** Method Single Tree Selection

Objective 42290 - Natural Mixed Pine

Status Cmpt. Review Proposal

Specs:

Prescription Mark red pine and white pine to 30 sq. ft. Create gaps in canopy for regeneration where pine exists. Areas that have thicker young poles can be marked to 80. Cut all other species except hemlock and oak if present.

Stand

Age

74

**Other** 

Access to stand is too dificult for continuous thinning every 10 years.

Comments:

Check regeneration during next inventory cycle. Acceptable regeneration is any species mixture currently found onsite.

<u>Next</u> Steps:

41050062-Cut

all-Cut

85.8 42290 - Natural Mixed Pine

High Density Pole

Harvest

Clearcut with Reserves

42290 - Natural Mixed Pine

Cmpt. Review Proposal

Prescription Cut all trees except hemlock and oak if any are present. Leave some good red pine seed trees.

Specs:

<u>Other</u> Comments: Make sure red pine is marked low enough to allow for scarification following harvest. Retention: Save 3% of stand for retention. These areas

could be left along the edge of stand since it is surrounded by marsh.

<u>Next</u>

Jack pine regeneration. Stand should be scarified or trenched and planted. Acceptable regeneration includes jack pine, red pine, black spruce,

Steps:

66 41050066-Cut 3.6

High Density Pole

Harvest

Clearcut with Reserves

6126 - Lowland Jack Pine

Cmpt. Review Proposal

Prescription Cut all trees except hemlock and oak if any are present.

6126 - Lowland

Jack Pine

Specs:

Other\_

Small stand, dying/water stressed trees. Retention will be snags and submerchantable trees remaining from harvest.

Comments: Next

Lowland stand, scarification not possible. Regeneration walkthrough during following inventory cycle. Acceptable regen includes any species

mixture currently found onsite.

72 41050072\_sm all-Cut

3.0 42290 - Natural Mixed Pine

High Density Pole

Harvest Single Tree Selection 42290 - Natural Mixed Pine

Cmpt. Review Proposal

Specs:

Steps:

Prescription Mark red pine and white pine to 30 sq. ft. Create gaps in canopy for regeneration where pine exists. Areas that have thicker young poles can be marked to 80. Cut all other species except hemlock and oak if present.

Other Comments:

Access to stand is difficult so continuous thinning every 10 years is not possible.

Next

Regeneration walkthrough during next inventory cycle. Acceptable regeneration includes any species mixture currently found onsite.

Steps:

41050072-Cut 72

5.5

42290 - Natural Mixed Pine

High Density Pole 74

Harvest

Clearcut with Reserves

42290 - Natural Mixed Pine

Cmpt. Review Proposal

Prescription Cut all trees except hemlock and oak if present.

Specs: Other

Trees are dying and water stressed in this low portion of the stand.

Comments:

Regeneration walkthrough during next inventory cycle. Acceptable regeneration includes any species mixture found onsite.

Next Steps:

**Total Treatment** 

Acreage Proposed:

204.6

S t a		Shingle	eton Mgt. Unit	Table 4		ents Prescrib ing Factor	Compartment: 050 Year of Entry 2013	DNR DNR DNR	
n d	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
			#Error						
Preso Spec	cription s:								
Othe Com	<u>r</u> ment:								
Next Steps	<u>5:</u>								
	ing Factor and N ment Reason	0							

Total Treatment
Acreage Proposed:

0

# Out of YOE -- Treatments Prescribed with No Limiting Factor

Year of Entry: 2013

**Treatment Acres** Stage1 Size Stand **Treatment Treatment Cover Type Approval** Density Method Objective Status Name CoverType Age Type 41022 OutOfY 35.6 Harvest Systematic Thinning 42110 - Planted Red Cmpt. Review OE-Cut Proposal Pine

<u>Prescription</u> 3rd row thinning. Cut all trees in designated rows. Rows can be spaced wider apart in areas with lower basal area. Do not cut hemlock and oak.

Specs:
Other

Do not cut any trees within 50 feet of the West Branch Manistique River.

Comments:

Next Thin next year of entry.

Steps:

41049\_OutOfY4.7HarvestSingle Tree Selection42290 - NaturalCmpt. ReviewOE\_1-CutMixed PineProposal

Prescription Mark red pine and white pine to 30 sq. ft. Create gaps in canopy for regeneration where pine exists. Areas that have thicker young poles can be

Specs: marked to 80. Cut all other species except hemlock and oak if present.

Other Access to stand is too difficult for continuous thinning.

Comments:

Regeneration walkthrough during next inventory cycle. Acceptable regeneration includes any species mixture currently found onsite.

<u>Next</u> Steps:

41053\_OutOfY 10.2 Harvest Single Tree Selection 42290 - Natural Cmpt. Review Mixed Pine Proposal

Prescription Mark red pine and white pine to 30 sq. ft. Create gaps in canopy for regeneration where pine exists. Areas that have thicker young poles can be

Specs: marked to 80. Cut all other species except hemlock and oak if present.

Other Access to stand is too difficult for continuous thinning.

Comments:

Regen walkthrough during next inventory cycle. Acceptable regeneration includes any species mixture currently found onsite.

Next Steps:

**Total Treatment** 

Acreage Proposed: 50.5

s t	Shingleto	Shingleton Mgt. Unit			orested Stands	Compartment: 050 Year of Entry: 2013
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
3	42290 - Natural Mixed Pine	High Density Pole	16.4	72	51-80	select cut in 1988
6	42290 - Natural Mixed Pine	Medium Density Log	87.3	85	51-80	Majority of stand was thinned in 1988.
7	42200 - Natural White Pine	High Density Pole	3.6	72	51-80	
8	42290 - Natural Mixed Pine	High Density Pole	2.3	72	81-110	select cut in 1988
10	42200 - Natural White Pine	High Density Pole	9.9	71	1-50	select cut in 1988
11	42210 - Natural Red Pine	High Density Pole	9.4	72	51-80	select cut in 1988
12	4319 - Mixed Upland Forest	High Density Pole	5.9	60	51-80	New stand added.
14	42290 - Natural Mixed Pine	High Density Pole	4.4	60	81-110	
16	42210 - Natural Red Pine	High Density Pole	36.5	51	81-110	
17	42290 - Natural Mixed Pine	High Density Pole	20.5	55	81-110	
18	42210 - Natural Red Pine	High Density Pole	4.2	53	51-80	
19	42210 - Natural Red Pine	High Density Pole	33.2	53	81-110	
20	42210 - Natural Red Pine	High Density Pole	13.3	55	111-140	
21	42210 - Natural Red Pine	High Density Pole	2.3	53	81-110	
22	42220 - Natural Jack Pine	High Density Pole	1.3	53		
23	42210 - Natural Red Pine	High Density Pole	1.6	53	51-80	
24	42210 - Natural Red Pine	High Density Pole	1.5	53	51-80	
 25	42210 - Natural Red Pine	High Density Pole	1.6	53	51-80	
-						

S t	Shingleton Mgt. Unit			5 – Fo	orested Stand	Compartment: 050 Year of Entry: 2013
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
26	4191 - Mixed Upland Deciduous with Conifer	High Density Pole	10.1	60		
28	42210 - Natural Red Pine	High Density Log	18.8	85	51-80	
29	42210 - Natural Red Pine	High Density Pole	6.1	70	51-80	Thinned in 1990
30	42210 - Natural Red Pine	High Density Pole	9.1	58	81-110	
31	42210 - Natural Red Pine	High Density Pole	6.2	53	81-110	
32	6122 - Black Spruce	High Density Pole	14.5	38		
33	6128 - Lowland Coniferous, Mixed Deciduous	High Density Sapling	6.7	23		clearcut in1988
34	429 - Mixed Upland Conifers	Medium Density	13.0	25		New stand added. beaver activity in past. open pockets
38	42210 - Natural Red Pine	High Density Pole	28.2	53	81-110	
39	42200 - Natural White Pine	Medium Density Log	2.1	59		
40	42210 - Natural Red Pine	High Density Log	3.1	58	81-110	
41	42290 - Natural Mixed Pine	High Density Pole	11.7	81		
42	42220 - Natural Jack Pine	High Density Pole	8.6	25		
43	42110 - Planted Red Pine	High Density Pole	2.9	47	81-110	Thinned with compartment 51 in fall 2005
<b>45</b>	42210 - Natural Red Pine	High Density Pole	4.6	58	81-110	
46	4319 - Mixed Upland Forest	High Density Pole	11.1	98		
47	42210 - Natural Red Pine	High Density Pole	112.0	59	51-80	thinned in 1990. Some areas of the stand were missed during previous thinning.
49	42210 - Natural Red Pine	High Density Pole	4.4	58	81-110	

s t	Shingleton Mgt. Unit			5 – Fo	orested Stand	Compartment: 050 Year of Entry: 2013
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
50	42220 - Natural Jack Pine	High Density Pole	24.0	23		clearcvt in1988
51	42210 - Natural Red Pine	High Density Pole	8.2	58	81-110	
52	42210 - Natural Red Pine	High Density Pole	1.9	56	51-80	
53	42210 - Natural Red Pine	High Density Pole	4.0	56	111-140	
<u> </u>	42210 - Natural Red Pine	High Density Pole	3.5	66	81-110	
55	42210 - Natural Red Pine	High Density Pole	17.4	55		
57	42290 - Natural Mixed Pine	High Density Pole	2.6	56	81-110	
58	6127 - Lowland Pine	Medium Density Pole	5.9	20		dead overstory of pine due to water levels.
59	42290 - Natural Mixed Pine	High Density Pole	8.0	58	81-110	
61	42210 - Natural Red Pine	Medium Density Pole	15.6	56	1-50	cvt winter 2010 frozen paint sale
62	42290 - Natural Mixed Pine	High Density Pole	104.6	74		
64	42210 - Natural Red Pine	High Density Pole	26.3	67	81-110	
66	6126 - Lowland Jack Pine	High Density Pole	3.6	74		
69	42220 - Natural Jack Pine	High Density Sapling	51.6	12		
71	42220 - Natural Jack Pine	High Density Sapling	48.7	12		
72	42290 - Natural Mixed Pine	High Density Pole	8.5	74	81-110	
73	42220 - Natural Jack Pine	High Density Pole	10.6	76		possibly add stand to east side duck sale. look at when doing inventory in compartment 49
<b>74</b>	42220 - Natural Jack Pine	High Density Sapling	15.6	25		

### 6 - Nonforested Stands

Compartment: 050 Year of Entry: 2013



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:	MICHIGAN
1	622 - Lowland Shrub	17.6	N\A	Unspecified		
2	622 - Lowland Shrub	3.8	N\A	Unspecified		
4	622 - Lowland Shrub	4.5	N\A	Unspecified		
5	622 - Lowland Shrub	2.3	N\A	Unspecified		
9	622 - Lowland Shrub	7.1	N\A	Unspecified		
13	622 - Lowland Shrub	9.8	N\A	Unspecified		
15	622 - Lowland Shrub	3.9	N\A	Unspecified		
27	622 - Lowland Shrub	1588.1	N\A	Unspecified		
35	50 - Water	5.4	N\A	Unspecified		
36	622 - Lowland Shrub	23.8	N\A	Unspecified		
37	622 - Lowland Shrub	1.4	N\A	Unspecified		
44	622 - Lowland Shrub	3.2	N\A	Unspecified		
48	622 - Lowland Shrub	2.2	N\A	Unspecified		
56	50 - Water	3.5	N\A	Unspecified		
60	622 - Lowland Shrub	2.3	N\A	Unspecified		
63	622 - Lowland Shrub	2.3	N\A	Unspecified		
65	622 - Lowland Shrub	2.9	N\A	Unspecified		
67	622 - Lowland Shrub	24.3	N\A	Unspecified		

### 6 - Nonforested Stands

Compartment: 050 Year of Entry: 2013



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
68	622 - Lowland Shrub	26.4	N\A	Unspecified	
70	622 - Lowland Shrub	46.7	N\A	Unspecified	

Compartment: 050 Year of Entry: 2013



### 7 - PROPOSED SPECIAL CONSERVATION AREA\* (SCA) DETAILS

\* This is a partial list of SCAs for this compartment. Not included are those areas identified under other Department initiatives (Natural Rivers, Deer Wintering Areas, etc.). Those will be identified in separate, future map and report products.

Stand	SCA Type	SCA Name	Acres	Comments

Compartment: 050 Year of Entry 2013



#### 8 - DEDICATED CONSERVATION AREA DETAILS

\* This is a list of Dedicated Biodiversity Areas for this compartment along with a 1/4 mile buffer surrounding the compartment. Refer to Dedicated Conservation Area Map for areas that the below listed Conservation Areas are located.

Conservation Type Description Area ERA = Ecological Reference Area HCVA = High Conservation Value Area SCA = Special Conservation Area





