

Shingleton Forest Management Unit Compartment Review Presentation

Compartment #114 Entry Year: 2014 Compartment Acreage: 1279 County: Schoolcraft

Revision Date: 8/6/12

Stand Examiner: Rick Hill

Legal Description: T46N R13W Sections 18, 19, 29 and 30.

RMU (if applicable): This compartment is within the Bullock Ranch Management Area.

Management Goals: Management of the compartment in accordance with the principles of sustainable forest ecosystem management, with emphasis on timber production, maintaining & enhancing wildlife habitat, and protection of riparian areas that help provide quality fish habitat.

Soil and Topography: The compartment consists of sandy soils. The west side of the compartment is a mix of sandy ridges and low Marshes with Organic soils.

Ownership Patterns, Development, and Land Use in and Around the Compartment: The southeast corner of the compartment is the village of Seney. The compartment also has the Seney Township Park and 120 acres of private property located within it.

Unique, Natural Features (include only non-site specific and non-sensitive information): There are Osprey, Goshawk and Frigga Fritillary to the southeast and Eagle and Loon to the southwest also Fir club moss to the southeast. There is Potential for Incurvate Emerald, ebony boghaunter, Frigga fritallry and Freija fritillary in bogs, potential for wood turtle along Fox River. Potential for wetland plants such as Canada rice grass, black sedge, Clinton's bulrush, Juncus vaseyi, sweetcoltsfoot.

Archeological, Historical, and Cultural Features: There are no known sites.

Special Management Designations or Considerations: The Fox River borders the compartment it's a natural river and as a result land in the vicinity of the river has to be managed in concert with the Fox River natural river plan

Watershed and Fisheries Considerations: Streams are classified from First Quality Cold Water (FQCW) down to Second Quality Warm Water (SQWW). In this area, the FQCW means an excellent trout fishery, one that is supplemented by a Fisheries Division annual stocking program. These waters are generally the famous ones, but also include somewhat smaller waters that are capable of supporting the fish population density necessary to provide a superior angling experience. SQCW implies a cold stream that supports a natural trout population, but is limited by either physical size or lack of spawning/foraging habitat. Its limitations mean that it will never support a heavy angling pressure and harvest, so Fisheries Division does not publicize the water. Local anglers, however, know what the streams support, and do fish them quite a bit. In-stream habitat is usually in the form of large woody debris, or downed trees. Fish need them because they provide protection from overhead predators and because they force water currents to scour holes under and around them. The holes provide more water volume in the stream, keeping it cooler, as well as giving the fish more volume to "hide" in. The woody structure also forces more eddy currents, breaking the "solid" water flow so that fish can get out of the current to rest. First Quality Warm Waters, (FQWW) are large,

productive waters capable of supporting a good fishery for either warm-water species or cool-water species. In the Upper Peninsula, the designation generally applies to walleye, pike, musky or smallmouth bass waters. SQWW means small, possibly stagnant, warm streams that produce little to no actual fishery. Although small, their warm temperatures and generally high nutrient levels imply generally a higher productivity than the more "fishable" streams. Their value is attained from the production of forage that migrates downstream into areas of either cold-water or warm-water sports fish populations. For that reason, they are NOT useless waters, and they should be protected somewhat for the aquatic invertebrate and fish forage that they produce. Beaver populations in these streams could be a benefit, as their dams will increase productivity as well as inhibit sand bedload migration. Fisheries Values Excellent. The Fox River is classified FQCW. This river gets hammered by anglers, even anglers from Australia and Europe. Fisheries Division has spent several hundred thousands of dollars stabilizing banks to re-expose gravel substrate and increase natural trout reproduction. Our stream enhancement work ten years ago is now starting to pay off, with somewhat less sand throughout the system, more exposed gravel, and deeper scour holes now present in the river. Consequently, we cut back our planting numbers by 50%. So far, there does not seem to be any negative impact from the reduced stocking. If numbers hold up in our near future fish survey, then we will consider completely abandoning the stocking effort to let natural reproduction sustain the fishery. Time will tell.

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 approximately 150 inches. The compartment falls within the Bullock Ranch Management Area which highlights the following Featured Species: Beaver, gray jay and sharp-tailed grouse. The Fox River forms the east boundary of this compartment. The majority of the compartment is lowland coniferous forest. General Land Office Surveyor notes show the pre-settlement forest in this compartment was dominated by tamarack, spruce, and red pine. White pine, white birch and hemlock were also recorded. Windthrow, fire, flooding, and beaver ponding were all likely contributors to the natural disturbance regime. Current upland forest stands in this compartment are dominated by jack pine. Aspen has also increased about pre-settlement levels. Wildlife habitat objectives in this compartment include providing age and structural diversity between conifer stands, and protecting the river corridor. Occasionally moose (Michigan special concern) use this compartment. There are no other known rare species within this compartment. Other wildlife species of interest that may utilize this compartment include black-backed woodpecker, spruce grouse, snowshoe hare and bobcat.

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 Utica Shale subcrops below the glacial drift. The Utica does not have an economic use. Gravel pits at not found in the general area and potential appears to be limited. There is no commercial oil and gas production in the UP.

Vehicle Access: The main road into the compartment is the Fox River Road, which runs along the eastern side of the compartment. The majority of the compartment is easily accessed by 2-track roads and the snowmobile trail. Although M-28 runs ¼ mile to the South of the compartment access to the Southwest corner is difficult due to the low ground in the area.

Survey Needs: There are some issues in the southeast side of the compartment. DNR surveyors are aware of the issues and working on solutions.

Recreational Facilities and Opportunities: The compartment has a lot of recreational use due to its location near to Seney. The Fox River Pathway and trailhead are located within the compartment. There is 2 miles of Snowmobile Trail 43 in the compartment. The Fox River has several areas which can be accessed and fished. The compartment also has a high amount of hunting opportunities.

Fire Protection: Fire response to the compartment should be quite fast due to its location near Seney. Most of the compartment is easily accessible by 2-track roads.

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

Compartment 114 Year of Entry 2014

Shingleton Mgt. Unit
Rick-James Hill: Examiner



Age Class

	Age Class															
		0°.9	\$2.0	62.		D. L.	\$5.05 /	80.00	, N	\$ 6.	85.	00' 100' 1	70,73	No. No.	AS /	, [®] , /
Aspen	0	0	12	33	0	0	0	0	0	0	0	0	0	0	45	ſ
Bog	4	0	0	0	0	0	0	0	0	0	0	0	0	0	4	
Jack Pine	66	114	63	30	10	21	51	0	7	0	0	0	0	0	361	
Low-Density Trees	120	0	0	0	0	0	0	0	0	0	0	0	0	0	120	
Lowland Conifers	0	9	0	22	0	0	0	0	0	0	0	0	0	0	30	
Lowland Deciduous	0	0	65	0	0	0	11	0	0	0	0	0	0	0	76	
Lowland Shrub	236	0	0	0	0	0	0	0	0	0	0	0	0	0	236	
Marsh	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3	
Mixed Upland Deciduous	0	0	0	0	0	0	0	4	0	0	0	0	0	0	4	
Natural Mixed Pines	0	128	8	0	0	0	4	34	47	0	0	0	0	0	221	
Red Pine	7	0	0	0	0	10	0	0	9	0	0	0	0	0	26	
Upland Conifers	0	0	0	0	0	110	0	0	0	0	0	0	0	0	110	
Urban	42	0	0	0	0	0	0	0	0	0	0	0	0	0	42	
Total	478	251	149	85	10	140	66	38	63	0	0	0	0	0	1279	ĺ



Table 2 – Proposed Treatment Summaries

Shingleton Mgt. Unit

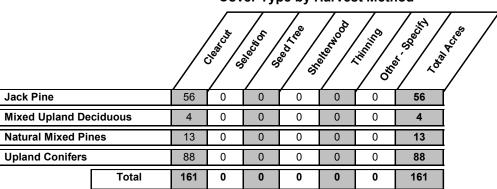
Compartment 114 Year of Entry 2014 **Total Compartment Acres: 1279**

Acres by Treatment Type

Commercial Harvest - 161 Site Prep - 0 Tree Planting - 120 Prescribed Burn - 0 Other - 0

Habitat Cut - 0 Pesticide - 7 Opening Maintenance - 0 Tree Seeding - 0

Cover Type by Harvest Method



Shingleton Mgt. Unit

Table 3 -- Treatments Prescribed with No Limiting Factor

BA

Compartment: 114 Year of Entry 2014

Treatment n Name d

CoverType Acres

Size Density Stand Age

Treatment Range Type

Treatment Method

Cover Type Objective

Approval Status

#Error

Prescription Specs:

s

<u>Other</u> Comments:

<u>Next</u> Steps:

Proposed

Start Date: #Error

> **Total Treatment** Acreage Proposed:

0

Shingleton Mgt. Unit Table 4 -- Treatments Prescribed with Compartment: 114 a Limiting Factor s Year of Entry 2014 Treatment CoverType Treatment Treatment **Cover Type** n Acres Size Stand BA **Approval** Name Method Objective Status Density Age Range Type d #Error Prescription Specs: <u>Other</u> Comment: <u>Next</u> Steps: <u>Proposed</u> Start Date: #Error

Total Treatment Acreage Proposed:

<u>Limiting Factor and No</u> <u>Treatment Reason</u>

0

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

Year of Entry: 2014

Incomplete

	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
	41009014- Cut1	5.2	6120 - Lowland Cedar	High Density Pole	141		Harvest	Patch or Strip Clearcut	6120 - Lowland Cedar	Cmpt. Review Proposal - Incomplete
	Prescription patch cut app. 5 acres, determined at time of prep Specs:									
Other Comm	ents:									
Next Steps:		according	to work instructions.							
Propos Start D		011								
4	11044_OutOfY OE-Cut	0.9					Harvest	Crown Thinning	42210 - Natural Red Pine	Cmpt. Review Proposal -

Prescription Mark red pine and white pine to 80 sq.ft. where densities are high enough. Cut all other species except hemlock, oak, and cedar.

Specs:

Other Retention will be a portion of the red pine and white pine trees remaining.

Comments:

<u>Next</u>

Possible regeneration harvest next year of entry. Steps:

<u>Proposed</u> 10/01/2013 Start Date:

> 41172002-Cut 4.4 49 Single Tree 4110 - Sugar Maple Cmpt. Review 4112 - Maple, High Harvest Beech, Cherry Density Selection Association Proposal

Association Pole

Prescription Treatment=Thin stand down to 80 BA on average while putting in regen gaps to promote species diversity and Sugar Maple. Put stand up with

Specs: adjacent hardwood in comp 169 in 2014.

MO=Un-even aged hardwoods with quality Sugar Maple stems

Retention=Residual BA

<u>Other</u> Comments:

Natural regen survey to follow harvest during the next inventory cycle. <u>Next</u>

Steps:

Proposed

10/01/2014 Start Date:

Total Treatment

10.5 Acreage Proposed:

s t	Shingleton Mgt. Unit			5 – Fo	orested Sta	Compartment: 114 Year of Entry: 2014
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	42220 - Natural Jack Pine	High Density Pole	12.3	56		This stand is in the Fox River natural river corridor due to this as well as water quality. Clearcutting must be avoided in these areas. Long term management should be focused on pushing white and red pine in this area.
2	42220 - Natural Jack Pine	High Density Pole	8.5	55		This is a mature jack pine stand. Its time to cut the stand as there is some mortality in the stand.
4	42220 - Natural Jack Pine	High Density Sapling	10.2	15		
6	42260 - Natural Pine, Mixed Deciduous	High Density Sapling	8.1	24		
7	42220 - Natural Jack Pine	High Density Pole	6.6	80		This stand is in the Fox River natural river corridor due to this as well as water quality. Clearcutting must be avoided in these areas. Long term management should be focused on pushing white and red pine in this area.
8	42220 - Natural Jack Pine	High Density Pole	4.1	65		This stand is on contract the sale name is Missing Jack Pine there is also a FTP for jack pine regen for this sale.
9	42120 - Planted Jack Pine	High Density Sapling	37.9	24		
10	42221 - Natural Jack Pine, Mixed Deciduous	High Density Sapling	15.2	16		
11	42220 - Natural Jack Pine	High Density Log	47.0	67		This is a mature jack pine stand. Its time to cut the stand as there is some mortality in the stand.
12	42220 - Natural Jack Pine	High Density Sapling	60.1	16		The stocking looks good stand is growing well.
14	42220 - Natural Jack Pine	High Density Pole	4.0	41		
15	6126 - Lowland Jack Pine	Medium Density	9.5	16		This stand is a mix of jack pine regen some older pine and lowland brush as well as some aspen it was split from the stand to the north due to the lower stocking.
16	42220 - Natural Jack Pine	High Density Pole	5.9	45		
19	4130 - Aspen	High Density Sapling	12.0	22		This stand looks ok with decent stocking and scattered wet areas.
20	42111 - Planted Red Pine, Mixed Deciduous	High Density Sapling	7.4	6		Planted red pine, may need a some work as there is some aspen recruitment in the stand.
21	6126 - Lowland Jack Pine	High Density Sapling	19.1	16		

S t	Shingleton Mgt. Unit			5 – Fo	orested Sta	Compartment: 114 Year of Entry: 2014
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
23	42290 - Natural Mixed Pine	High Density Log	9.6	88	51-80	This stand is an upland island in the mash there is mature jack pine as well as red pine and white pine. It could be harvested now if access can be found.
24	6127 - Lowland Pine	Medium Density	8.7	16		
25	6117 - Lowland Deciduous, Mixed Coniferous	Medium Density	49.9	22		
26	6126 - Lowland Jack Pine	High Density Pole	21.0	23		
27	42260 - Natural Pine, Mixed Deciduous	High Density Log	16.2	86		This stand was listed as red pine last YOE, While red pine has the majority of BA its only about 40-50 sf there is 30-40 sf of Aspen and jack pine as a result the stand should be managed for an aspen, jack pine and red pine mix.
28	42210 - Natural Red Pine	High Density Log	9.4	86	51-80	This stand has been cut in the last 20 years it should be held until the aspen is marketable.
29	429 - Mixed Upland Conifers	High Density Pole	110.1	51		
31	42210 - Natural Red Pine	High Density Log	9.6	58	141-170	This is a pole size red pine stand. It could be cut if access can be found. It can also hold if necessary as most of the stand is red pine.
32	6119 - Mixed Lowland Deciduous Forest	High Density Pole	10.7	67		
33	4136 - Aspen, Mixed Conifer	High Density Sapling	33.4	31		
34	42290 - Natural Mixed Pine	High Density Log	21.6	86	81-110	This is an old fire established series of Red pine islands; most of the pine have fire scars. There is some aspen and pockets of spruce and jack pine in the stand as well. Much of the jack pine has fallen out of the stand. This area may not be accessible as the marsh crossing is quite wet.
39	42290 - Natural Mixed Pine	High Density Sapling	127.8	15		This stand is low with a mix of pine aspen and low areas.
40	42221 - Natural Jack Pine, Mixed Deciduous	High Density Sapling	24.8	30		This area is patchy with wet areas that have not regenerated well.
43	6127 - Lowland Pine	High Density Pole	21.7	35		This stand was cut in the 1970s there is a lot of diversity in the stand, there are also some lowland brush scattered thought the stand. There is a pond in the stand marked with an OFS point.
44	42290 - Natural Mixed Pine	High Density Pole	4.1	67	81-110	This is a small triangle of land bordered by the township campground on the north the Fox River on the east the Fox River road on the west and a home on the south.

S t	Shingleto	n Mgt. Unit		5 – Fo	orested Sta	Ands Compartment: 114 Year of Entry: 2014
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
45	42260 - Natural Pine, Mixed Deciduous	High Density Pole	20.7	74	51-80	This stand is a mix of red pine ridges with aspen and tag alder in the low swales
46	6126 - Lowland Jack Pine	High Density Pole	4.9	35		This stand a mix of Aspen and Jack Pine with some low areas of tag alder mixed in.
47	42220 - Natural Jack Pine	Medium Density	65.9	7		Could need more regeneration work jack pine is coming back but is marginal TMS will make call on future cult work.
49	42220 - Natural Jack Pine	High Density Sapling	4.5	23		
51	6117 - Lowland Deciduous, Mixed Coniferous	High Density Pole	15.2	29		
54	42290 - Natural Mixed Pine	High Density Pole	12.8	79		This stand was left as a visual buffer it needs to be cut this year of entry. Some survey work will be needed also green up will have to be dealt with when the sale is prepped
56	4199 - Other Mixed Upland Deciduous	High Density Pole	4.0	79		

6 - Nonforested Stands

Compartment: 114 Year of Entry: 2014



Stand	Cover Type	Acres	Managed I Site	Management Priority (Objective)	General Comments:
3	622 - Lowland Shrub	8.1	N\A	Unspecified	
5	11 - Low Intensity Urban	1.7	N\A	Unspecified	
13	622 - Lowland Shrub	44.0	N\A	Unspecified	
17	622 - Lowland Shrub	1.9	N\A	Unspecified	
18	11 - Low Intensity Urban	17.6	N\A	Unspecified	
22	3302 - Low Density Conifer Trees	119.5	Natural Regen	Jack Pine	
30	622 - Lowland Shrub	161.8	N\A	Unspecified	
35	6225 - Bog	1.2	N\A	Unspecified	
36	622 - Lowland Shrub	12.2	N\A	Unspecified	
37	622 - Lowland Shrub	3.1	N\A	Unspecified	
38	6225 - Bog	1.5	N\A	Unspecified	
41	622 - Lowland Shrub	4.5	N\A	Unspecified	
42	6225 - Bog	1.7	N\A	Unspecified	
48	11 - Low Intensity Urban	10.3	N\A	Unspecified	
50	11 - Low Intensity Urban	6.0	N\A	Unspecified	
52	6239 - Mixed Emergent Wetland	2.8	N\A	Unspecified	
53	622 - Lowland Shrub	0.6	N\A	Unspecified	
55	11 - Low Intensity Urban	5.9	N\A	Unspecified	

Shingleton Mgt. Unit

Compartment: 114
Year of Entry: 2014



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

Shingleton Mgt. Unit

Compartment: 114
Year of Entry 2014

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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 Area	n Туре	Description	ERA = Ecological Reference Area HCVA = High Conservation Value Area SCA = Special Conservation Area			
SCA	Cold Water Stream	A coldwater stream has temperature and dissolved oxygen cond stocked trout populations and those of other coldwater fish speci year to year. Coldwater streams in Michigan typically provide the contributions of groundwater to their stream flows. Such streams designated as trout resources by Fisheries Order 210.	es (e.g., slimy sculpin) to persist from se conditions due to substantial			
SCA	Habitat Area	An area that provide some specific need for the life cycle of wildlife species, including State Wildlift and Waterfowl Production Areas, deer wintering complexes in lowland conifer communities, grass openings and savannas. Habitat areas are distinct from critical habitat designated for recovery of endangered or threatened species (such as Kirtland's warbler or piping plover areas) in that they a general in nature, are not primarily associated with threatened or endangered species, and are no covered by species recovery plans that are developed in cooperation with Federal agencies.				
HCVA	Natural Rivers	There are two Natural Rivers datasets which are derived from sp approved distance from the river centerlines. The Natural Rivers most Natural Rivers. The Vegetative Buffer ranges from 25 to 10 and Vegetative Buffers for each Natural River see the table locat folder.	Zoning District is a 400 foot buffer for 00 feet. To view specific Zoning Districts			

