

# **Shingleton Forest Management Unit Compartment Review Presentation**

Compartment #43 Entry Year: 2014 Compartment Acreage: 1,957 County: Schoolcraft

**Revision Date:** 7/16/2012

**Stand Examiner:** Adam Petrelius

**Legal Description:** T42N R15W, Sections 30, 31 : T42N R16W, Sections 1, 2, 12, 13, 24, 25, 36

**RMU** (if applicable): Compartment 43 lies within 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 variable and includes some steep ridges in the northeast. The majority of the southern end of the compartment is flat and low ground. Elevation values peak at 728 feet and drop to 607 at the Manistique River edge. With the exception of a few stands, most of the compartment is forested. Most common cover types are cedar and mixed swamp conifers. Carbondale/Lupton/Tawas is the most common soil type.

Ownership Patterns, Development, and Land Use in and Around the Compartment: State land within this compartment was acquired between 1926 and 1985. The compartment boundary borders private, state land, and some industry land. It is mostly used by hunters, ORV's, and snowmobiles.

**Special Management Designations or Considerations:** Most of the land is located within a deer wintering area.

Watershed and Fisheries Considerations: 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 Good. The upper Sturgeon Hole Creek is SQCW, while the Sturgeon Hole and Manistique River is classed SQWW. Fisheries does no active management here, but we have heard good reports from anglers. Protection from sand bedload is a high priority.

Wildlife Habitat Considerations: This compartment lies across the boundary of the Seney Sand Lake Plain and the Escanaba/Door Peninsula sub-subsections. The growing season is approximately 130 days. Extreme minimum temperatures are around -35 degrees F. Annual average snowfall is 1000 inches. The compartment falls within the Seney Manistique Swamp Management Area which highlights the following Featured Species: Moose, sharp-tailed grouse, snowshoe hare and white-tailed deer. General Land Office (GLO) Surveyor notes show the circa 1850 upland forest consisted of white pine, hemlock, red pine, spruce, fir, and red maple. Lowlands were dominated by cedar, spruce, and tamarack. Windthrow, fire, flooding, and beaver ponding were likely the major forms of natural disturbance. Current upland forests are substantially altered from pre-settlement conditions. Oak, aspen, and open grasslands are now the dominant cover types. Lowlands are similar in species composition to pre-settlement conditions. This compartment is located within a major deer yard. Wildlife habitat objectives are largely associated with maintaining closed canopy conifer forest, early successional forest for browse, and open grass lands for spring time grazing. Other wildlife species of interest that utilize this compartment include smooth green snake, red-backed salamander, great-horned owl and ruffed grouse.

Mineral Resource and Development Concerns and/or Restrictions: Surface sediments consist of lacustrine (lake) sand and gravel and peat and muck. There is insufficient data in part and up to 50 feet of glacial drift thickness. The Silurian Burnt Bluff Group, Cabothead Shale and Manitoulin Dolomite subcrop below the glacial drift. The Burnt Bluff and Manitoulin are used for stone and a quarry is located in Section 14. The nearest gravel pit is in Section 24, but potential appears to be limited. There is no commercial oil and gas production in the UP.

**Vehicle Access:** The Haywire Grade, M94, and the Low High Rollways Road provide good access to the compartment. There is a lack of woods roads though due to the lowland soils found throughout.

**Survey Needs:** Some stands are bordering private ownership and survey work may be needed.

**Recreational Facilities and Opportunities:** The Haywire Grade travels through the compartment. It is a designated snowmobile trail and ORV route.

**Fire Protection:** Response time to fire will be fairly fast due to good access and distance from Thompson office. Most of the fuels are low ground, dense cedar and swamp conifers. Numerous water sources exist.

#### **Additional Compartment Information:**

- **➤** 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 043 Year of Entry 2014

Shingleton Mgt. Unit
Adam Petrelius : Examiner

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#### Age Class

	Age Class															
		6.9	0.79	, R. J.	Si /	D. P.	\$5.05 \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	89.00	, R. /	\$ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	86.7	00,00	70,70	o Ju	AS /	, or
Aspen	0	0	39	0	0	0	0	0	0	0	0	0	0	0	39	
Cedar	0	0	0	0	0	0	119	0	5	265	266	0	0	0	656	
Herbaceous Openland	29	0	0	0	0	0	0	0	0	0	0	0	0	0	29	
Jack Pine	0	0	4	0	0	0	0	0	0	0	0	0	0	0	4	
Lowland Conifers	0	13	35	28	176	22	0	43	0	17	57	0	0	0	390	
Lowland Deciduous	14	0	0	0	0	0	20	0	0	0	0	0	0	0	33	
Lowland Mixed Forest	0	0	0	27	0	0	0	0	0	5	0	0	0	0	32	
Lowland Shrub	283	0	0	0	0	0	0	0	0	0	0	0	0	0	283	
Lowland Spruce/Fir	0	0	34	10	12	0	0	0	34	7	0	0	0	0	96	
Mixed Upland Deciduous	0	0	0	0	0	0	0	26	0	33	0	0	0	0	59	
Natural Mixed Pines	0	0	0	0	0	0	0	2	0	0	7	0	0	0	10	
Northern Hardwood	0	0	0	0	0	0	0	11	0	0	0	0	0	0	11	
Red Pine	0	0	0	0	91	17	0	18	0	9	0	0	0	0	135	
Tamarack	0	0	4	24	9	0	0	0	0	10	0	0	0	0	48	
Upland Conifers	0	0	0	0	0	0	0	0	0	26	0	0	0	0	26	
Upland Mixed Forest	0	0	83	0	0	0	0	0	0	0	0	0	0	0	83	
Urban	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2	
Water	21	0	0	0	0	0	0	0	0	0	0	0	0	0	21	1
Total	349	13	199	88	289	39	139	99	39	373	331	0	0	0	1957	1



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

## Shingleton Mgt. Unit

Compartment 043 Year of Entry 2014 **Total Compartment Acres: 1957** 

#### **Acres by Treatment Type**

Commercial Harvest - 158 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**

			COV	CI I y	De Dy I	iai ves	ot ivicti	iou	
		/	Min John John John John John John John Joh	10 0 O		O LINGUIS A	Otto Otto		S. R.
Lowland Conifers	S	12	0	0	0	0	0	12	
Lowland Decidud	ous	19	0	0	0	0	0	19	
Lowland Spruce/	Fir	41	0	0	0	0	0	41	
Northern Hardwo	ood	0	0	0	0	11	0	11	
Red Pine		0	0	9	0	33	0	41	
Tamarack		8	0	0	0	0	0	8	
<b>Upland Conifers</b>		25	0	0	0	0	0	25	
	Total	105	0	9	0	44	0	158	

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

Compartment: 043 Year of Entry 2014

Forest

1	OF NATURAL
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EPAR	DNR
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	**CHIGA

a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
24	41043024-Cut	8.6	42210 - Natural Red Pine	High Density Log	92	141-170	Harvest	Seed Tree with Reserves	42210 - Natural Red Pine	Cmpt. Review Proposal

Prescription Leave 30 sq. ft. of good seed trees where available. These can be red pine or white pine. Do not cut hemlock and oak. Cut all other species.

Specs: Other

s

Treatment boundary was drawn to exclude southwest corner which is cedar/spruce. This along with red pine and white pine seed trees will be the

Comments: retention. Old blue line is present.

Acceptable regeneration is red pine or white pine. Stand should be scarified to promote red pine regeneration. Write FTP for oak planting. <u>Next</u>

Steps:

**Proposed** 

10/01/2013 Start Date:

41043025-Cut 12 4 6129 - Mixed Medium 90 Harvest Clearcut with 6129 - Mixed Cmpt. Review Density Coniferous Lowland Reserves Coniferous Lowland Proposal

Forest Pole

Prescription Cut all trees except hemlock, oak, cedar. Areas of cedar that are too thick to operate should be excluded from sale with the red line or a retention

Specs:

Other | Stand is wet and will likely require winter harvesting. Survey work may be needed. Treatment boundary was drawn to exlude an area adjacent to Comments: M94 which will be saved as retention. This area is mostly thicker cedar. The snowmobile trail runs through the stand. Include specs in the

timbersale to operate with caution and minimize impact to the snowmobile trail.

<u>Next</u>

Check regeneration during next inventory cycle.

Steps:

**Proposed** 

10/01/2013 Start Date:

42210 - Natural 26 41043026-Cut 16.9 High 57 111-140 Harvest Systematic 42210 - Natural Cmpt. Review Thinning Red Pine Density Red Pine Proposal Pole

Prescription Mark rows heading through natural stand heading northeast from road to allow for operability. Red pine and white pine should be marked to cut, Specs:

and all other species except hemlock and oak should be designated for harvest.

Retention patch should be created somewhere in stand. Restrict to winter harvest for deeryard management. Unknown if survey will be needed. Other

Adjacent property appears to be cut and may have some linework already established. Comments:

Marking of red pine/white pine should be light enough to allow for successive thinnings every 10 years. Next

Steps:

Proposed

10/01/2013 Start Date:

42390 - Mixed Non-41043033-Cut 90 4319 - Mixed 33 25.0 High Harvest Clearcut with Cmpt. Review Pine Upland Density Reserves **Upland Forest** Proposal

Conifers Pole

Prescription Cut all trees except hemlock, oak, cedar. Mark some large canopy red pine and white pine to leave on ridgetops.

Specs:

Other Retention - Exclude areas containing cedar which are too thick to operate with red line or retention patch. Stand contains a mixture of low and Comments: high ground and will likely need to be cut in winter. Leave trees along M94 for visual management. The snowmobile trail runs through the stand.

Include specs in the timbersal to operate with caution and minimize impact to the snowmobile trail.

<u>Next</u> Steps: Check regeneration during next inventory cycle. Write FTP for oak planting on ridges.

Proposed

Start Date: 10/01/2013

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

Compartment: 043 Year of Entry 2014

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DNR	150
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a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
38	41043038-Cut	8.1	6121 - Tamarack	High Density Pole	90		Harvest	Clearcut with Reserves	6121 - Tamarack	Cmpt. Review Proposal

Prescription Cut all trees except hemlock, oak, and cedar.

Specs:

s

**Other** Treatment boundary was drawn to exclude a retention patch in the east and west. Some more could be left for visual management near M94 if

Comments:

**Next** Check regeneration during next inventory cycle. Any species mixture currently onsite is acceptable.

Steps:

**Proposed** 

10/01/2013 Start Date:

41043040-Cut 42210 - Natural High Crown Thinning 42210 - Natural Cmpt. Review 40 15.7 74 81-110 Harvest Red Pine **Density Log** Red Pine 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 remaining red pine and white pine trees.

Comments:

Possible regeneration harvest next year of entry. <u>Next</u>

Steps:

**Proposed** 

Start Date: 10/01/2013

82 58 41043058-Cut 33.8 6122 - Black Spruce High Harvest Clearcut with 6122 - Black Spruce Cmpt. Review Density Reserves Proposal

Pole

Prescription Cut all trees except hemlock, oak, cedar.

Specs:

<u>Other</u> Retention can be left along the edges of stand since it is surrounded by marsh. Access will be extremely difficult and may not be possible without very cold temperatures to freeze a road to stand. The snowmobile trail serves as the main access to this stand. If possible, use an alternate route Comments:

through private land to avoid any impacts to the snowmobile trail.

Next

Check regeneration during next inventory cycle.

Steps:

Proposed

10/01/2013 Start Date:

41043065-Cut 4119 - Mixed Harvest 65 11.1 High 75 111-140 Low Thinning 4119 - Mixed Cmpt. Review Northern Hardwoods

Pole

Density Northern Hardwoods Proposal

Prescription Thin stand to 80.

Specs:

Other\_ Avoid harvesting conifers on northeast ridge if possible. Restrict harvest to winter for deer yard managment. The snowmobile trail serves as the

Comments: main access to this stand. If possible, use an alternate route through private land to avoid any impacts to the snowmobile trail.

Regeneration is expected to recieve heavy browse pressure since it is a small stand surrounded by thick cedar cover in a deeryard. Evaluate Next

during next inventory cycle to see if a heavier harvest is needed. Steps:

Proposed

10/01/2013 Start Date:

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

Compartment: 043 Year of Entry 2014

1	TOF NATURAL	
ARTA	DNR	
130		1
	CHIGA	

a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
66	41043066-Cut	18.9	6117 - Lowland Deciduous, Mixed Coniferous	High Density Pole	65		Harvest	Clearcut with Reserves	6117 - Lowland Deciduous, Mixed Coniferous	Cmpt. Review Proposal

<u>Prescription</u> Cut all trees except cedar, hemlock, and oak.

Specs:

S

Buffer Manistique River 100 feet. Restrict harvest to winter for deeryard managment. Retention will be river buffer. Some rocky hills are present Other\_ which may be too steep to operate. If they are, these should be excluded. The snowmobile trail serves as the main access to this stand. If possible, use an alternate route through private land to avoid any impacts to the snowmobile trail. Comments:

<u>Next</u>

Check regeneration during next inventory cycle.

Steps:

Proposed

Start Date: 10/01/2013

**Total Treatment** 

150.6 Acreage Proposed:

s t		Shing	leton Mgt. Unit	Table 4		eatments imiting	s Prescribed Factor	with	Compartment: 043 Year of Entry 2014	DNR DNR
a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
52	41043052-Cut	7.1	6122 - Black Spruce	High Density Pole	92		Harvest	Clearcut	6122 - Black Spruce	Cmpt. Review Proposal
Pres Spec		trees exce	pt hemlock, oak, cedar.							
Othe Com	<u>r</u> No rete ment: stand.	ntion other	than submerchantable	spruce. Ac	cess is c	difficult due	e to wet soils and	private land. May	not be worth the effort to	harvest this
<u>Next</u> Step		regeneration	on during next inventory	cycle.						
Propo Start		013								
	ing Factor and I tment Reason		l: Blocked by physical ol g. upland stand in a low							
52	41043052-Cut	7.1	6122 - Black Spruce	High Density Pole	92		Harvest	Clearcut	6122 - Black Spruce	Cmpt. Review Proposal
Pres Spec		trees exce	pt hemlock, oak, cedar.							
Othe Com	<u>r</u> No rete <u>ment:</u> stand.	ntion other	than submerchantable	spruce. Ac	cess is c	difficult due	to wet soils and	private land. May	not be worth the effort to	harvest this
Next Step		regeneratio	on during next inventory	cycle.						
Propo Start		013								
	ing Factor and N tment Reason		l: Blocked by physical ol g. upland stand in a low							

Total Treatment

Acreage Proposed: 14.2

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

Year of Entry: 2014

	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
Presc Specs		ut app. 5 ac	cres, determined at tir	ne of prep						
Other Comn	- nents:									
<u>Next</u> Steps		according	to work instructions.							
Propo Start		011								
	41044_OutOfY OE-Cut	0.9					Harvest	Crown Thinning	42210 - Natural Red Pine	Cmpt. Review Proposal - Incomplete

<u>Prescription</u> 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:

nments.

Possible regeneration harvest next year of entry.

Next Stops:

Steps:

Proposed

Start Date: 10/01/2013

41172002-Cut4.44112 - Maple,<br/>Beech, CherryHigh<br/>Density49Harvest<br/>SelectionSingle Tree<br/>Selection4110 - Sugar Maple<br/>AssociationCmpt. Review<br/>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

Other Comments:

Next Natural regen survey to follow harvest during the next inventory cycle.

Steps:

Proposed 40/04/004

Start Date: 10/01/2014

Total Treatment

Acreage Proposed: 10.5

S t	Shingleton Mgt. Unit			5 – Fo	orested Sta	Compartment: 043 Year of Entry: 2014
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
2	6129 - Mixed Coniferous Lowland Forest	High Density Pole	27.5	75		if stand is ever cut look to the north in adjacent compartment to combine other stands.
3	6123 - Lowland Fir	High Density Sapling	15.1	27		
5	42360 - Upland Cedar	High Density Pole	246.7	101		
6	6139 - Mixed Lowland Forest	High Density Sapling	26.6	39		
7	6132 - Mixed Lowland Forest with Cedar	High Density Pole	5.1	90		
8	6120 - Lowland Cedar	High Density Pole	4.7	101		
9	42290 - Natural Mixed Pine	High Density Log	7.5	100		
10	4133 - Aspen, Mixed Pine	High Density Pole	5.5	25		
11	6129 - Mixed Coniferous Lowland Forest	High Density Pole	15.5	72		hold one more decade till spruce is mature
13	6128 - Lowland Coniferous, Mixed Deciduous	Medium Density Pole	16.0	40		Right of way on Haywire Grade is 100 feet wide and mostly forested.
15	6121 - Tamarack	High Density Pole	12.8	35		
16	6120 - Lowland Cedar	High Density Pole	15.0	101		
18	6128 - Lowland Coniferous, Mixed Deciduous	High Density Sapling	12.8	11		A trespass was discovered in a portion of the stand in 1999 and 2000. An 8 foot fence was constructed around the area harvested and cedar seedlings were planted. 2003 regen count on cedar showed 483 cedar trees.
19	6122 - Black Spruce	High Density Sapling	5.0	37		inside fence
20	42210 - Natural Red Pine	Medium Density Pole	69.4	40	1-50	Cut in spring 2005, X-Mass Buck Sale, 41-007-04-01. Residual basal areas were 25 ft red pine, 8 ft white pine. TSI never occurred. Center portion of the stand (about 10 acres) was not cut last time but is now very similar to adjacent stand and was lumped together.
 21	6122 - Black Spruce	Medium Density	4.6	37		

S t	omingioto.	ii iiigi. Oilit				Year of Entry: 2014
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
22	4191 - Mixed Upland Deciduous with Conifer	Low Density Sapling	25.6	75		burned in spring 2000
23	4133 - Aspen, Mixed Pine	High Density Sapling	26.1	25		west end is more sparse. appears to have had some habitat work in past
24	42210 - Natural Red Pine	High Density Log	9.4	92	141-170	harvested in 1986
25	6129 - Mixed Coniferous Lowland Forest	Medium Density Pole	16.5	90		lower stocked stand of tamarack/black spruce. some cedar present, but not inoperable
26	42210 - Natural Red Pine	High Density Pole	16.9	57	111-140	
27	4310 - Pine, Oak Mix	High Density Pole	83.0	25	1-50	oak is mature, rest of species are younger.
28	42210 - Natural Red Pine	Low Density Pole	21.8	40	1-50	Cut in spring 2005, X-Mass Buck Sale, 41-007-04-01. Residual basal areas were 31 ft red pine, 3 ft white pine. TSI complete in spring 2006.
29	6120 - Lowland Cedar	High Density Pole	21.8	95		
30	6120 - Lowland Cedar	High Density Pole	15.0	97		
33	42390 - Mixed Non- Pine Upland Conifers	High Density Pole	25.8	90		upland ridges with black spruce in the low areas surrounding ridge.
34	6120 - Lowland Cedar	High Density Pole	5.3	80		
35	42290 - Natural Mixed Pine	High Density Log	2.1	74	81-110	
36	6121 - Tamarack	Low Density Sapling	4.3	20		Stand swapped from Non-Forested to Forested.
38	6121 - Tamarack	High Density Pole	10.2	90		FTP 1488 for red osier dogwood planting was written in spring 2011.
39	6129 - Mixed Coniferous Lowland Forest	High Density Sapling	9.7	24		
40	42210 - Natural Red Pine	High Density Log	1.3	74	81-110	
41	6129 - Mixed Coniferous Lowland Forest	High Density Pole	46.4	46		cut in past. ridges and low areas

5 - Forested Stands

Shingleton Mgt. Unit

Compartment: 043

s t	Shingleton Mgt. Unit			5 – Fo	orested Sta	nds Compartment: 043 Year of Entry: 2014
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
42	6129 - Mixed Coniferous Lowland Forest	High Density Sapling	9.9	25		
43	42210 - Natural Red Pine	High Density Log	4.8	74	111-140	
44	6126 - Lowland Jack Pine	High Density Sapling	4.1	25		New stand added.
45	42210 - Natural Red Pine	Medium Density Log	1.8	74		large oak planted by wildlife in 2011
46	42210 - Natural Red Pine	High Density Log	9.8	75	81-110	
47	6122 - Black Spruce	Low Density Sapling	33.6	25		FTP 1488 for red osier dogwood planting was written in spring 2011. poor quality site, some areas are unproductive
48	6121 - Tamarack	High Density Pole	10.9	30		
49	6129 - Mixed Coniferous Lowland Forest	High Density Pole	56.9	101		FTP 1488 for red osier dogwood planting was written in spring 2011.
52	6122 - Black Spruce	High Density Pole	7.1	92		
53	6122 - Black Spruce	Medium Density	11.9	41		unproductived type
54	6120 - Lowland Cedar	High Density Pole	4.0	90		cedar pocket excluded from previous sale
56	6120 - Lowland Cedar	Low Density Pole	24.5	90		Stand was cut in winter 2006, Whitmans Landing Sale. Residual volumes were 20 feet of cedar. Stand was very wet and there was little slash to operate on. Major rutting occured during sale operations which was fixed with a bulldozer. regen is acceptable on higher areas . cattails in low areas
57	6128 - Lowland Coniferous, Mixed Deciduous	Low Density Pole	59.8	40		very wet.
58	6122 - Black Spruce	High Density Pole	33.8	82		
59	6121 - Tamarack	High Density Pole	9.5	41		
62	6120 - Lowland Cedar	High Density Pole	119.0	65		
63	6118 - Lowland Deciduous with Cedar	High Density Sapling	13.8	5		Stand was cut in 2006, Whitmans Landing. Residual basal area was 40 feet of cedar.

S t	Shingleton Mgt. Unit			5 – Fo	orested Sta	nds Compartment: 043 Year of Entry: 2014
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
64	4130 - Aspen	High Density Pole	7.7	24		very good site
65	4119 - Mixed Northern Hardwoods	High Density Pole	11.1	75	111-140	During inventory this year, compartment boundary was changed to include this stand. It was never apart of any compartment in the past.
66	6117 - Lowland Deciduous, Mixed Coniferous	High Density Pole	19.6	65		stand transitions from high stocked upland aspen to lower stocked bam in south.
67	6128 - Lowland Coniferous, Mixed Deciduous	Medium Density Pole	29.6	45	During inventory this year, compartment boundary was changed to include this stand. It was never apart of any compartment in the past.	
68	4190 - Mixed Upland Deciduous with Cedar	High Density Pole	6.8	90		During inventory this year, compartment boundary was changed to include this stand. It was never apart of any compartment in the past.
70	6120 - Lowland Cedar	High Density Pole	199.9	97		
72	6129 - Mixed Coniferous Lowland Forest	Low Density Pole	24.6	45		Haywire grade ROW
73	4190 - Mixed Upland Deciduous with Cedar	High Density Pole	26.7	90	During inventory this year, compartment boundary was change to include this stand. It was never apart of any compartment in the past.	
74	6128 - Lowland Coniferous, Mixed Deciduous	Medium Density Pole	22.0	56		Portions were cut in 1955.
75	6128 - Lowland Coniferous, Mixed Deciduous	Medium Density	28.3	34		Cedar strip cuts. alot of tag alder present according to previous inventory

#### 6 - Nonforested Stands

Compartment: 043 Year of Entry: 2014



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
1	622 - Lowland Shrub	5.3	N\A	Unspecified	
4	622 - Lowland Shrub	50.1	N\A	Unspecified	
12	310 - Herbaceous Openland	5.1	No	Unspecified	RDR has been written to deal with the ORV issue, but no good solution has been found.
14	622 - Lowland Shrub	2.3	N\A	Unspecified	
17	122 - Road/Parking Lot	2.0	N\A	Unspecified	
31	310 - Herbaceous Openland	8.3	Yes	High (NonForested)	
32	310 - Herbaceous Openland	9.4	Yes	High (NonForested)	
37	622 - Lowland Shrub	26.6	N\A	Unspecified	
50	622 - Lowland Shrub	12.5	N\A	Unspecified	
51	622 - Lowland Shrub	14.3	N\A	Unspecified	
55	310 - Herbaceous Openland	6.0	N\A	Unspecified	
60	622 - Lowland Shrub	152.5	N\A	Unspecified	
61	622 - Lowland Shrub	8.1	N\A	Unspecified	
69	50 - Water	3.1	N\A	Unspecified	
71	50 - Water	18.1	N\A	Unspecified	
76	622 - Lowland Shrub	11.4	N\A	Unspecified	

Compartment: 043 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	

### Compartment: 043 Year of Entry 2014



#### **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 Type	Description	HCVA = High Conservation Value Area SCA = Special Conservation Area				
SCA	Cold Water Stream	A coldwater stream has temperature and dissolved oxygen conditions that allow naturally-reproduced or stocked trout populations and those of other coldwater fish species (e.g., slimy sculpin) to persist from year to year. Coldwater streams in Michigan typically provide these conditions due to substantial contributions of groundwater to their stream flows. Such streams are established by Director's action and designated as trout resources by Fisheries Order 210.					
SCA	Habitat Area  An area that provide some specific need for the life cycle of wildlife species, including State Will and Waterfowl Production Areas, deer wintering complexes in lowland conifer communities, gra openings and savannas. Habitat areas are distinct from critical habitat designated for recovery endangered or threatened species (such as Kirtland's warbler or piping plover areas) in that the general in nature, are not primarily associated with threatened or endangered species, and are covered by species recovery plans that are developed in cooperation with Federal agencies.						
SCA \	Wild and Scenic Rivers	Wild and Scenic Rivers are established under authority of the Na Law 90-542, as amended. Each Wild and Scenic River has a riv and State agencies may enter into written cooperative agreemer for the management of Wild and Scenic Rivers that are upon Sta Federal designated Wild and Scenic Rivers that are located with	ver specific Federal management plan, nts with the administering Federal agency ate-owned lands. There are 18 miles of				





