SHINGLETON FOREST MANAGEMENT UNIT
COMPARTMENT REVIEW PRESENTATION

COMPARTMENT # 127 ENTRY YEAR: 2008

Compartment Acreage: 2,677 County: Schoolcraft

Revision Date: 10/09/2006

Stand Examiner: Jennifer Burnham

Legal Description: T47N R14W Sections 13-15, 22-24

RMU (if applicable):

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

Soil and Topography: The topography in this compartment is flat with a couple areas near old ponds and the lakes that have some slope to them. The soil types are mainly poor Rubicon sands with heavy fire influence and the Kalkaska Sands. The compartment is made up of the Kingston Outwash (Sections 22, 23, 24 & east ½ of 13) and Munising Moraine III (Sections 14, 15 and west half of 13) LTA's.

Ownership Patterns, Development, and Land Use in and Around the Compartment: Ownership within the compartment is mainly State lands with industrial private to the north. The surrounding lands are mainly state with only a few areas of private ownership.

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

Archeological, Historical, and Cultural Features (include only non-site specific and non-sensitive information): None known.

Special Management Designations or Considerations: Sharptail are actively managed in some parts of this compartment.

Watershed and Fisheries Considerations: A request of a 100' boundary around any lake for protection from sedimentation when treatments occur.

Wildlife Habitat Considerations: This compartment lies in the northcentral portion of the Danaher Plains and contains only two small water bodies; Duck Hole Lake and Sunken Lake. During the first survey of the area (circa 1851), the major forest tree species recorded included white pine, red pine, red maple, beech, and yellow birch. Hemlock and balsam fir occurred at moderate levels while sugar maple, white birch, and spruce were minor components. Interestingly, the surveyors noted that nearly all the timber within this compartment was dead and some had fallen over. Logging and hot fire circa 1900 severely altered the ecology of this compartment. Current land cover includes jack pine plantations, grassy opening containing sparse aspen and pine, as well as white pine and red pine stands. The compartment is situated north of the edge of the large opening complex corridor. Due to the difficulties associated with reforestation efforts, an

agreement has been reached with FMFMD to focus habitat management in a portion of this area on open land values. This will be accomplished by converting selected poorly stocked pine plantations to grass and replacing them with plantings in other locations on State Forest Lands. Additional goals include maintaining closed canopy conifer forests and dense aspen regeneration.

Mineral Resource and Development Concerns and/or Restrictions: Surface sediments consist of glacial outwash sand and gravel and postglacial alluvium and an end moraine of coarse-textured till. There is insufficient data to determine the glacial drift thickness. The Ordovician Black River Group subcrops below the glacial drift. The Black River is quarried for stone/dolomite elsewhere in the UP. Gravel pits at not found in the general area, but there should be potential. There is no commercial oil and gas production in the UP.

Vehicle Access: Overall access to the compartment is good. There are some areas on access roads where sand holes occur with repeated hauling. These are correctable with gravel.

Survey Needs: None at this time.

Recreational Facilities and Opportunities: There are no facilities in the compartment. However, Sunken Lake and Duck Hole Lake fall within the compartment. There are also hunting opportunities in the area.

Fire Protection: Fire response to the area would be out of the Seney Field Office. Access will be good because of the number of drivable trail roads through the compartment.

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: **127**

Table 3

(acres shown in boxes)

STAND AGE CLASS

COVER TYPE	Not Coded	0-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100-109	110-119	120-129	130-139	140-149	150-159	All Aged	Total
Aspen		101	238																339
Bog or Marsh	8																		8
Grass	20																		20
Jack Pine		157	190	30	686				36										1099
Marsh	23																		23
Paper Birch						10			5										15
Red Pine		48	67		18		2	52										317	504
Upland Hdwds																		72	72
Water	17																		17
White Pine		55			25													500	580
Total	68	361	495	30	729	10	2	52	41									889	2677

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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: **127**

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	339																										339
V Bog or Marsh			8																								8
G Grass					20																						20
J Jack Pine					136		963																				1099
N Marsh											23																23
B Paper Birch															15												15
R Red Pine					23											481											504
M Upland Hdwds																								72			72
Z Water																									17		17
W White Pine																										580	580
Total	339		8		179		963				23				15	481								72	17	580	2677

LAKE SUPERIOR STATE FOREST | SHINGLETON FOREST AREA | SCHOOLCRAFT COUNTY | COMPARTMENT: **127**

Table 10 - COMPARTMENT VOLUME SUMMARY - ALL STANDS

COMPARTMENT SUMMARY

TOTAL VOLUME		CUT VOLUME	
Hardwood	1867 Cds	Hardwood	205 Cds
Hardwood	43 Mbf	Softwood	2696 Cds
Softwood	11396 Cds	Softwood	346 Mbf
Softwood	2723 Mbf	Sum CutVol	3593 Cds
Sum TotVol	18795 Cds		

Total Cmpt Acres

2677

Acres Proposed For Cut..... 327

SHINGLETON FOREST AREA | **Proposed Treatments With NO Limiting Factors** | **Compartment: 127** | **Entry Year: 2008**

Stand	Cover Type	Acres	Age	Site Index	Mgt Obj	Condition	Method Cut	Harvest Priority	Cultural Need	FDF Status
3	**W9**	64		48	white pine	unevenaged	selection	1		
comnts Fmd :	Stand thinned in '92. Good regen coming in some places. Thin to release regen and to promote more white and red pine regen and spp diversity. There area some scattered balsam fir and black spruce, leave some for retention. Do not cut any oak or hemlock if present. 98= RP logs or WP pulp.									
10	**W9**	18		48	white pine	unevenaged	selection	1		
comnts Fmd :	Other spp were removed from cut in '92, pine was thinned at the same time. There are some scattered spruce, cherry on the edges of the stand, leave when cut for stand retention. Thin pine to promote regeneration of white pine with some red pine. Do not cut any oak or hemlock if present. F									
21	**R9**	4		49	red pine	unevenaged	selection	1	planting	
comnts Fmd :	Natural area- manage for the same spp mix that is listed. If opened up enough jack pine, aspen and white pine should also come in naturally. Hand plant red pine after sale to make sure a higher number of red pine are found in the understory.									
29	**J6**	36	77	47	jack pine	mature	final harvest	1	natural regeneration	
comnts Fmd :	This JP was not removed during the salvage cuts. Stand is natural, not fully stocked with some areas of open or aspen and white pine. Leave some white pine to meet retention. There is moderate to heavy budworm damage now. May need extra work for regenerating because of the heavy grass mat. A prescribed burn would also work in the regeneration process. Final harvest and regenerate to jack pine, any oak in the stand will be used for retention. Once the stand is regenerated aspen and white pine will once again fill in.									
46	**J6**	11	37	43	grass	high risk	final harvest	1		
comnts Fmd :	Heavy to moderate budworm damage. Stand was of fair quality. Red pine planted in '57, '62 then jack pine in '69. When cut leave the oak. Jack pine will be planted else where in the unit. 98= red and white pine pulp.									
52	**J5**	9	37	40	grass	immature	final harvest	1		
comnts Fmd :	Heavy budworm damage. The SI is very low. When cut leave the oak. Jack pine will be planted else where in the unit. Red pine planted in '57, '59, '62 then jack pine in '69.									
53	**J5**	10	37	40	grass	immature	final harvest	1		
comnts Fmd :	Heavy budworm damage. The SI is very low. When cut leave the oak. Jack pine will be planted else where in the unit. Red pine planted in '57, '59, '62 then jack pine in '69.									
54	**J5**	7	37	40	grass	immature	final harvest	1		
comnts Fmd :	Moderate budworm. Stand was not hit as hard with budworm as some, however the SI is very low. When cut leave the oak. Jack pine will be planted else where in the unit. Red pine planted in '57, '59, '62 then jack pine in '69.									
55	**J5**	6	37	40	grass	immature	final harvest	1		
comnts Fmd :	Heavy budworm damage. The SI is very low. When cut leave the oak. Jack pine will be planted else where in the unit. Red pine planted in '57, '59, '62 then jack pine in '69.									
56	**J5**	8	37	44	grass	immature	final harvest	1		
comnts Fmd :	Moderate budworm damage. When cut leave the oak. Jack pine will be planted else where in the unit. Red pine planted in '57, '59, '62 then jack pine in '69.									
57	**J6**	9	37	43	grass	immature	final harvest	1		
comnts Fmd :	Light budworm damage. Red pine planted in '57, '59, '62 then jack pine in '69. When cut leave the oak. Jack pine will be planted else where in the unit.									
58	**J5**	47	37	38	grass	immature	final harvest	1		
comnts Fmd :	Stand has been hit very hard with budworm. SI is very poor. When cut leave the oak. Jack pine will be planted else where in the unit. Red pine planted in '57, '59, '62 then jack pine in '69.									
61	**J5**	29	37	44	grass	immature	final harvest	1		
comnts Fmd :	Moderate budworm damage. When cut leave the oak. Jack pine will be planted else where in the unit. Red pine planted in '57, '59, '62 then jack pine in '69.									
70	**R9**	52	64	50	red pine	mature	shelterwood-seed	1	natural regeneration	
comnts Fmd :	There were some plots that had a BA of 170 (could use these areas for retention spots) some as low as 50. Thinning to an average of 50-60 will open the area up enough to allow red pine regeneration and not just white pine. Leave some JP, red maple and white birch for reserve trees, thin the pine to promote more pine regeneration. Some areas have a thick grass mat and may need more aggressive cultural work. Saw some sweet firn in places. Some of the jack pine had budworm damage.									

Stand	Cover Type	Acres	Age	Site Index	Mgt Obj	Condition	Method Cut	Harvest Priority	Cultural Need	FDF Status
74	**R8**	75		53	red pine	unevenaged		0	planting	

comnts Fmd **:** UPDATED TCR 1/12/99 -- 072-94-01
[7/21/06 jb] No real red pine regeneration coming in, only on the heavily used skid trails. In the holes from the cut the regen is white pine, jack pine and aspen. Scattered large white pine pulp and logs trees. Stand needs to be planted with red pine and maybe some jack pine. Machine plant where they can get to, open areas left should then be hand planted with inmates.

84	**R9**	12		48	red pine	unevenaged	selection	1	planting	

comnts Fmd **:** Thinned in '73 - Some jack pine, white birch and white pine are regenerating. Open area up enough to promote red pine regeneration. Leave any oak, some white birch and aspen for retention.

85	**B5**	5	70	47	paper birch	mature	seed tree	3	natural regeneration	

comnts Fmd **:** Steep slopes on most sides, top is flat. Treat stand to regenerate white birch with a mix of species that is present now. Leave some white birch and a couple red pine for a seed source. Stand is of low stocking and will remain that way unless cultural work is done. If burning can not be done some other scarification to the soil needs to occur to make sure the birch regenerates.

Total Acres..... **402**

Proposed Treatments With Limiting Factors

Compartment: 127 **Entry Year: 2008**

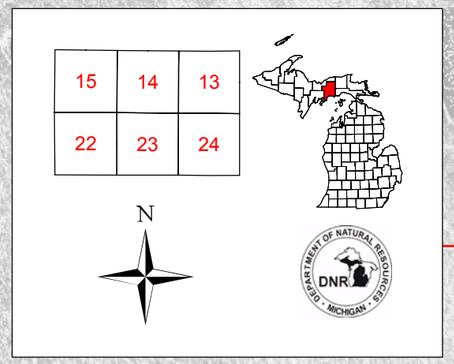
Stand	Cover Type	Acres	Age	Site Index	Mgt Obj	Condition	Method Cut	Harvest Priority	Cultural Need	FDF Status

TREATMENT LIMITING FACTORS:

Total Acres..... 0

Field Map

Compartment 127
T47N, R14W, Sec. 13-15, 22-24
County: Schoolcraft
Unit: Shingleton
YOE: 2008
Acres: 2,677 GIS Calculated
Stand Examiner: Jennifer Burnham
Map Revised: 10/16/2006
Map Phase: Pre-review



Legend

- RIs Corners
- Miris Corners
- Poor Dirt Roads
- Stand Boundary
- 016 - Planting
- 100 - Final Harvest
- 146 - Final Harvest/Natural Regeneration
- 347 - Shelterwood-seed/Natural Regeneration/Prescribed Burning
- 800 - Selection
- 811 - Selection/Planting/Hand Tools
- 816 - Selection/Planting