



**SHINGLETON FOREST MANAGEMENT UNIT
COMPARTMENT REVIEW PRESENTATION**

COMPARTMENT #129 ENTRY YEAR: 2007

Compartment Acreage: 2325 County: Schoolcraft

Revision Date: October 5, 2005

Stand Examiner: Robert Tylka

Legal Description: T47N R14W Sections 19, 20, 21, 28, 29 and 30

RMU (if applicable):

Management Goals: Management activities that coordinate multiple uses and benefits for the people of Michigan including recreation, timber production and protection/enhancement of wildlife habitat are desirable. Protection of the Fox River watershed per the Fox River Natural River Plan is mandated.

Soil and Topography: This area typically features rolling to hilly terrain, and most of this compartment is dry upland habitat on sandy soils including Rubicon sand and Proper fine sand. The lowland areas along the river flood plains, including the areas that support merchantable timber, are generally on much heavier loams and muck soils. Much of this compartment falls into either the PArV (white pine-red maple/blueberry) habitat type or one of its variants, or the PVE (white pine/blueberry-trailing arbutus) type. These types have the potential to produce jack, red and/or white pine timber, but generally will not produce quality wood products of other tree species. The deeper soils on the ridges, although still relatively dry, will produce considerably more volume per acre and better quality wood. This includes merchantable oak, bigtooth aspen and red maple. The habitat here is classified as PArVAa (white pine-red maple/blueberry-wild sasparilla). Without disturbance, red maple and white pine are likely to displace other species over time.

Ownership Patterns, Development, and Land Use in and Around the Compartment:

There is one private 40-acre parcel within this compartment. The compartment itself lies within a very large contiguous block of state-owned lands.

Unique, Natural Features (include only non-site specific and non-sensitive information):

Archeological, Historical, and Cultural Features (include only non-site specific and non-sensitive information):

Special Management Designations or Considerations: The Fox River and Little Fox River form the eastern and western boundaries of this compartment, and flow together at its southern tip. Both are included in the Fox River Natural River Plan.

Watershed and Fisheries Considerations: The Fox River and Little Fox River are found at the boundaries of this compartment. Both rivers are cold-water of high quality and support brook trout. The Fox River is currently stocked with brook trout, but natural reproduction is increasing and it is anticipated that the fishery may be able to support itself in the future. Both rivers are included in the Fox River Natural River Plan and are to be protected with 200' buffers.

Wildlife Habitat Considerations: This compartment lies between the Little Fox River and the Fox River. Pre-settlement records show the forest in this area contained a mix of beech, white pine, red pine, red maple, yellow birch, and balsam fir. Spruce, hemlock, and mountain ash were also minor components of the local forests. Currently the eastern 1/3rd of the compartment consist of large openings, aspen, oak, red pine, and white pine. The central portion of the compartment contains primarily plantation red pine, while the western portion of the compartment is dominated by aspen and jack pine. Wildlife habitat objectives include maintaining the large opening complex, promoting aspen and oak regeneration and protecting the integrity of the Fox and Little Fox River Corridors.

Mineral Resource and Development Concerns and/or Restrictions: Surface sediments consist of glacial outwash sand and gravel and postglacial alluvium. There is insufficient data to determine the glacial drift thickness. The Ordovician Trenton and Black River Groups subcrop below the glacial drift. These rocks are quarried for stone/dolomite. 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 Wagner-Taylor Dam Rd crosses the Little Fox River via a one-lane bridge on the southern edge of the compartment. Access to the rest of the area is generally good through the network of woods roads that connect to it.

Survey Needs: None at this time.

Recreational Facilities and Opportunities: Wagner-Taylor Dam Rd. is a designated snowmobile trail, and the Fox River Pathway follows the Little Fox River through the compartment. Several informal but regularly used campsites are found along the banks of both the Fox and Little Fox Rivers. No other developed recreational facilities exist in this compartment.

Fire Protection: Jack pine is common throughout the compartment, but very few dense stands exist. It is noteworthy that the current jack pine budworm outbreak is causing a lot of mortality in the western half of the compartment, which may lead to increased fuel buildup on the ground. The area generally features excessively-drained, sandy ground that is conducive to fire hazards throughout the summer months.

Additional Compartment Information:

Oak is common on the ridges here, and is managerially desirable for both wildlife and timber values. Treatments designed to maintain and regenerate oak should be implemented where possible, and have been successfully implemented in the recent past.

- **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: 129

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		132	29	29				108	131	52									481
Black Spruce			1			6			5			38							50
Bog or Marsh	68																		68
Grass	595																		595
Jack Pine				90	4	64	60												218
Mx Swmp Cnfr		28				5						5							38
Non Stocked	33																		33
Red Pine					29	1	13	107	490										640
Spruce Fir																		34	34
Swamp Hrdwds																		24	24
Upland Brush																		25	25
Water	33																		33
White Pine									86										86
Total	729	160	30	119	33	76	73	215	712	52		43						83	2325

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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: 129

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	481																										481
S Black Spruce		50																									50
V Bog or Marsh			68																								68
G Grass					595																						595
J Jack Pine					24		188									6											218
Q Mx Swmp Cnfr												38															38
X Non Stocked													33														33
R Red Pine					2		29									609											640
F Spruce Fir																			34								34
E Swamp Hrdwds																				24							24
U Upland Brush																								25			25
Z Water																									33		33
W White Pine																										86	86
Total	481	50	68		621		217					38	33			615			34	24				25	33	86	2325

LAKE SUPERIOR STATE FOREST

SHINGLETON FOREST AREA

SCHOOLCRAFT COUNTY

COMPARTMENT: 129

Table 10 - COMPARTMENT VOLUME SUMMARY - ALL STANDS

COMPARTMENT SUMMARY			
TOTAL VOLUME		CUT VOLUME	
Hardwood	4462 Cds	Hardwood	3190 Cds
Hardwood	58 Mbf	Hardwood	38 Mbf
Softwood	5827 Cds	Softwood	1912 Cds
Softwood	1784 Mbf	Softwood	9 Mbf
Sum TotVol	13973 Cds	Sum CutVol	5196 Cds
Total Cmpt Acres		Acres Proposed For Cut.....	
2325		471	

SHINGLETON FOREST AREA

Proposed Treatments
With NO Limiting Factors

Compartment: 129 Entry Year: 2007

Stand	Cover Type	Acres	Age	Site Index	Mgt Obj	Condition	Method Cut	Harvest Priority	Cultural Need	FD Status
4	J5	1	55	36	grass	mature	final harvest	3		
comnts Fmd : Set up for Dept. of Corrections to cut - Convert to grass.										
5	J5	1	55	36	grass	mature	final harvest	3	opening maintenance	
comnts Fmd : Set up for Dept. of Corrections to cut - Convert to grass.										
9	J5	1	55	36	grass	mature	final harvest	2	opening maintenance	
comnts Fmd : Convert to grass along with the opening maintenance in stand 422. All jack pine and others (except oak) including regen are to be cut.										
12	J5	2	55	36	grass	mature	final harvest	2	opening maintenance	
comnts Fmd : Convert to grass along with the opening maintenance in stand 422. All jack pine and others including regen (except oak) are to be cut.										
13	J5	1	55	36	grass	mature	final harvest	2	opening maintenance	
comnts Fmd : Convert to grass along with the opening maintenance in stand 422. All jack pine and others including regen (except oak) are to be cut.										
15	R8	1	75	50	grass	mature	final harvest	2	opening maintenance	
comnts Fmd : Convert to grass along with the opening maintenance in stand 422. All pine and others including regen (except oak) are to be cut.										
16	R8	1	75	50	grass	mature	final harvest	2	opening maintenance	
comnts Fmd : Convert to grass along with the opening maintenance in stand 422. All pine and others including regen (except oak) are to be cut.										
20	J5	9	55	45	grass	mature	final harvest	2	opening maintenance	
comnts Fmd : Convert to grass along with the opening maintenance in stand 422. All jack pine and others including regen (except oak) are to be cut.										
21	J5	1	55	45	grass	mature	final harvest	2	opening maintenance	
comnts Fmd : Convert to grass along with the opening maintenance in stand 401. All jack pine and others including regen (except oak) are to be cut.										
24	J5	4	55	45	grass	mature	final harvest	2	opening maintenance	
comnts Fmd : Convert to grass along with the opening maintenance in stand 409. All jack pine and others including regen (except oak) are to be cut.										
25	A6	108	65	55	aspen (upland)	mature	final harvest	1	natural regeneration	
comnts Fmd : Aspen is declining - time to cut this stand. Cut all aspen, birch, maple and jack pine. Sawlog volume consists of red & white pine and a few oak. Reserve all oak. Some of the red and white pine may be marked for cutting if spots with enough basal area to warrant thinning are found during timber sale preparation, but generally most of it should be kept to provide partial shade to help protect the oak regeneration. TSI is prescribed to clean up submerchantable hardwoods etc. after the cut is complete, but there are many oak seedlings and saplings present - special emphasis must be placed on protecting them. Protect advanced pine regeneration as well. The objective is to manage for a mix of aspen, pine and oak.										
26	J4	4	55	36	grass	mature	final harvest	2	opening maintenance	
comnts Fmd : Convert to grass along with the opening maintenance in stand 409. All jack pine and others including regen (except oak) are to be cut.										
27	W9	1	75	50	white pine	immature	thinning	2		
comnts Fmd : Stand featuring pine and a mix of aspen & red maple. Cut the aspen and red maple, and a few pine if necessary to remove poorer quality trees. Maintain most of the pine for aesthetics along the county road/snowmobile trail corridor, and protect the existing pine regeneration. Summer logging may provide enough scarification to produce additional pine regeneration. Do not cut any oak if encountered in this stand.										
28	J6	6	55	45	red pine	mature	shelterwood-seed	2	natural regeneration	
comnts Fmd : Cut all jack pine, aspen and maple. Maintain red & white pine for aesthetics along the county road/snowmobile trail. Do not cut any oak if encountered in this stand. Acceptable regeneration includes aspen, oak and all pines. Scarify to provide for additional pine regeneration.										

SHINGLETON FOREST AREA

Proposed Treatments
With NO Limiting Factors

Compartment: 129 Entry Year: 2007

Stand	Cover Type	Acres	Age	Site Index	Mgt Obj	Condition	Method Cut	Harvest Priority	Cultural Need	FD Status
32	R6	37	63	45	red pine	immature	shelterwood-seed	2	natural regeneration	
comnts Fmd : Stand with highly variable density and a variety of species present. Thin to remove aspen, jack pine, stray spruce & red maple plus the poorer quality red & white pine. Scarify to promote pine regeneration. Do not cut oak. Acceptable regeneration includes all pines, oak and aspen.										
36	J5	14	50	36	jack pine	high risk	final harvest	1	planting	
comnts Fmd : [8/15/03 RFT] 1500 jack pine were planted on 20 acres by inmates during the spring of 2003. This was done under FTP #C41-800 to fill in areas of the plantation that had failed. Schedule survival check for 2004. 2005: The mature jack pine is in trouble due to budworm damage/mortality, but the natural regeneration and those planted in 2003 appear to be surviving. Recommend attempting to salvage the jack pine and cutting the merchantable aspen. Protect the jack pine regen during the cut. More jack pine should be planted afterward, as this species appears to be much better suited to this site than the red pine. The existing red pine poles are growing slowly but appear to be healthy, so leaving them on site is acceptable. Serviceberry is also present. Acceptable regeneration includes all pines and aspen.										
37	R4	29	35	40	jack pine	sparse	final harvest	2	planting	
comnts Fmd : Budworm has almost wiped out the jack pine here, but it is probably still better suited to this site than red pine. Cut now - Recommend planting more jack pine, as the JP regen is surviving better than other species. Mixed pulpwood includes scattered aspen and red maple. Some semi-open pockets of aspen regen are included in the stand, and jack pine can be interplanted there as well. Acceptable regeneration includes all pines and aspen.										
46	R6	1	38	55	red pine	two aged	shelterwood-seed	2	natural regeneration	
comnts Fmd : This stand is a mix of red & jack pine poles 6-10" DBH and larger residual pine and oak 14-18" DBH. Some of the jack pine is up to 14" and in decline, and many of the red pine poles are suppressed. The age shown matches that of the adjacent jack pine stand. Recommend a shelterwood (seedtree) cut to salvage the jack pine and suppressed red pine, followed by scarification for natural regeneration. Do not cut oak. Acceptable regeneration includes all conifers, oak and aspen.										
49	S6	2	101	36	black spruce-swamp	mature	final harvest	3		
comnts Fmd : Cut now - evidence of decline is becoming apparent. Winter access only. Acceptable regeneration includes all conifers, lowland hardwoods, aspen and birch.										
55	R7	36	70	40	red pine	sparse		0	planting	
comnts Fmd : Semi-open stand on rolling terrain that was partially cut as recently as 1990, but very little regeneration has become established. The timber here tends to be in small fully-stocked pockets separated by open areas covered with lichens, ferns etc. Recommend handplanting either red pine, jack pine or a mix of both to utilize the open areas.										
57	Q5	5	101	36	mixed swamp conifer	high risk	final harvest	3		
comnts Fmd : Stand is breaking up - lots of blowdown occurring. Harvest if possible. The understory is fully stocked with balsam fir and black spruce. Acceptable regeneration includes all conifers, lowland hardwoods, aspen and birch.										
62	R4	169	75	50	red pine	sparse		0	other - specify in remarks	
comnts Fmd : [8/14/03 RFT] 29000 red pine were planted on 70 acres by inmates during the spring of 2003. This was done to re-stock a failed plantation under FTP #C41-809 - schedule survival check for 2004. 07/2005: Some of the red pine planted in 2003 have survived, but overall stocking on this harsh site remains poor. Evidence of budworm damage and mortality are present. Mixed pine pulpwood includes jack and white pines. A complete regeneration survey is needed to identify gaps in stocking, and fill in these areas by planting jack pine.										
64	S6	19	101	36	black spruce-swamp	mature	final harvest	2		
comnts Fmd : Ready to cut - beginning to break up. Mixed conifer pulp includes tamarack and cedar; mixed pine pulp includes red and white pine. Acceptable regeneration includes all conifers, lowland hardwoods, aspen and birch.										
66	J6	43	40	52	jack pine	two aged	shelterwood-seed	1	natural regeneration	
comnts Fmd : Jack pine is badly damaged and dying due to budworm damage - must salvage it quickly or lose it. Leave the red pine, but it's okay to mark a few as needed to allow logging access. Scarify and/or plant to regenerate jack pine. The Fox River Pathway also runs through this stand.										

SHINGLETON FOREST AREA

**Proposed Treatments
With NO Limiting Factors**

Compartment: 129 **Entry Year: 2007**

Stand	Cover Type	Acres	Age	Site Index	Mgt Obj	Condition	Method Cut	Harvest Priority	Cultural Need	fdf Status	
68	A6	128	70	50	aspen (upland)	mature	final harvest	2	natural regeneration		
<p>comnts Fmd : Cut all aspen, jack pine, red maple and birch. Leave the red & white pine and oak, and protect pine regeneration when possible. TSI with inmates to reduce red maple, but do not cut young oak and conifers. After the aspen regenerates, consider filling in any gaps with red and/or white pine. Acceptable regeneration includes aspen, oak and all conifers.</p>											
71	A6	43	84	56	aspen (upland)	mature	final harvest	3	natural regeneration		
<p>comnts Fmd : Much of the birch and aspen have died out - cut now to regenerate the early successional species. Retain all conifers and oak to promote diversity in the next stand. TSI with inmates to reduce red maple. Acceptable regeneration includes all conifers, oak, aspen and birch. After the aspen regenerates, consider filling in any gaps with red and/or white pine. The Fox River Pathway also runs through this stand. Do not cut trees marked as trail locators with blue paint.</p>											
75	A6	9	84	50	aspen (upland)	mature	final harvest	1	natural regeneration		
<p>comnts Fmd : Much of the birch has died out - cut now to regenerate the early successional species. Retain any oak encountered in the stand. The understory is a mix of white pine and red maple. TSI with inmates to reduce the red maple, but do not cut oak or conifer regeneration. Acceptable regeneration includes aspen, birch, oak and all conifers. After the aspen regenerates, consider filling in any gaps with red and/or white pine.</p>											
409	G0	26		40	grass	nonstocked		0	opening maintenance		
<p>comnts Fmd : Large grassy opening along Wagner-Taylor Dam Rd. that is filling in with slow-growing trees and upland brush. The road is a part of the snowmobile trail system. Perform opening maintenance using handtools and inmate labor. Leave all oak.</p>											
410	G0	8		40	grass	nonstocked		0	opening maintenance		
<p>comnts Fmd : Large grassy opening along Wagner-Taylor Dam Rd. that is filling in with slow-growing trees and upland brush. The road is a part of the snowmobile trail system. Perform opening maintenance using handtools and inmate labor. Leave all oak.</p>											
422	G0	132		40	grass	nonstocked		0	opening maintenance		
<p>comnts Fmd : Large grassy opening along Wagner-Taylor Dam Rd. that is filling in with slow-growing trees and upland brush. The road is a part of the snowmobile trail system. Perform opening maintenance using handtools and inmate labor. Leave all oak.</p>											
Total Acres.....		842									

**Proposed Treatments
With Limiting Factors**

Compartment: 129 Entry Year: 2007

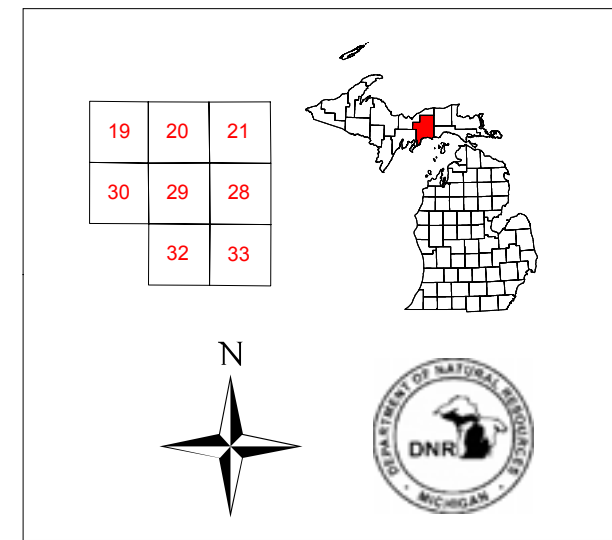
Stand	Cover Type	Acres	Age	Site Index	Mgt Obj	Condition	Method Cut	Harvest Priority	Cultural Need	FD Status
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TREATMENT LIMITING FACTORS:

Total Acres..... 0

Field Map

Compartment 129
 T47N, R14W, Sec. 19-21, 28-30, 32, 33
 County: Schoolcraft
 Unit: Shingleton
 YOE: 2007
 Acres: 2,325 GIS Calculated
 Stand Examiner: Jeff Stampfly
 Map Revised: 10/03/2005
 Map Phase: Pre-review



Legend

- Miris Corners
- Gravel Roads
- Poor Dirt Roads
- Trails
- Hiking Trails
- Stand Boundary
- Biodiversity/Old Growth Area
- 011 - Planting/Hand Tools
- 021 - Opening Maintenance/Hand Tools
- 098 - Other/Other
- 100 - Final Harvest
- 111 - Final Harvest/Planting/Hand Tools
- 121 - Final Harvest/Opening Maintenance/Hand Tools
- 141 - Final Harvest/Natural Regeneration/Hand Tools
- 345 - Shelterwood-seed/Natural Regeneration/Mechanical, other
- 400 - Thinning

Name Gravel Roads
 Name Trails
 Name Water Features

