



**SAULT FOREST MANAGEMENT UNIT
COMPARTMENT REVIEW PRESENTATION**

COMPARTMENT # 37 ENTRY YEAR: 2009

Compartment Acreage: 2371 County: Chippewa

Revision Date: October 5, 2007

Stand Examiner: Jason Caron, Jeff Wise

Legal Description: T45N R1W Sec 34; T44N R1W Sec 2, 3, 10, 11

Management Goals: This compartment with its many roads, red pine plantations, and northern hardwoods, is regularly managed with a variety of treatments each YOY. The goals this round will be red pine thinnings, final harvest of mature aspen and lowland hardwoods stands to enhance regeneration and wildlife diversity, and burning of the Oak seed orchard understory to facilitate collection of acorns. White Spruce plantations from the 1960's run on the border of success-fail. One such plantation, row thinned ten years ago, shows signs of failure, (and possibly bud worm), and is therefore slated for final harvest and conversion to red pine.

Soil and Topography: Soils are primarily Kalkaska-Rubicon association: Very deep nearly level to very steep, excessively drained, sandy soils on outwash plains and ground moraines. The east part has an area of Markey-Kinross-Croswell: Very deep, nearly level, very poorly drained to moderately well drained, mucky and sandy soils on outwash plains.

Ownership Patterns, Development, and Land Use in and Around the Compartment: Although largely a contiguous block of State land, there is some private in holdings on the north, east, and south sides consisting of homes and hunting camps. Dispersed recreation is generally the main land use. Regular management treatments occur here. The East 1/2 of the NE 1/4 of Section 11 is due to be acquired soon and will be added to this compartment.

Unique, Natural Features: MNFI has been consulted and comments received regarding potential and documented T & E species.

Archeological, Historical, and Cultural Features: Remnants of an old farmstead in the SW1/4 of Section 34 include openings and apple trees. No cuts here.

Special Management Designations or Considerations: Some stands on the south and east sides have been coded for Old Growth. Two stands are maintained as a seed orchard. There is a small area of deer yard in the NE corner.

Watershed and Fisheries Considerations: This compartment is within the Munuscong River watershed. Because there are no water bodies within the compartment, however, Fisheries Division has no comments.

Wildlife Habitat Considerations: This compartment contains abundant oak and pine which is important habitat to many species such as the Eastern bluebird, chipping sparrow, brown thrasher, ovenbird, jumping meadow mouse, badger, and red fox.

The oak mast is particularly critical in lieu of the prevalence of beech bark disease and the loss of hard mast as a result of beech mortality. Management which encourages and protects mast producing species such as oak will benefit numerous wildlife species such as white-tail deer, grouse, bear, rodents, and wild turkey.

The eastern portion of the compartment falls within a deer yard complex and management is focused on creating multiple age classes of aspen adjacent to conifer cover. Regeneration of hemlock is also encouraged and will benefit wintering deer. Less energy is expended as deer travel easily in lower snow depths beneath thick hemlock canopy cover.

Northern hardwood management will focus on reserving large diameter trees and snags for cavity, den, and foraging habitat and future dead and down woody debris.

Other avian species observed within the compartment were: wood thrush, red-breasted nuthatch, cedar waxwing, red-eyed vireo, and American redstart.

Mineral Resource and Development Concerns and/or Restrictions: Surface sediments consist of glacial outwash sand and gravel, postglacial alluvium, coarse-textured till and lacustrine (lake) clay, silt, sand & gravel. There is insufficient data to determine the glacial drift thickness. The Ordovician Stonington Formation and Utica Shale subcrop below the glacial drift. The Stonington could be used for stone. Kinross gravel pit is located in Sections 3 & 4, has potential and is currently leased. There is no current economic oil and gas production in the UP.

Vehicle Access: Roads are abundant here. There is virtually no place in this compartment that cannot be reached within a reasonable distance. Wilson Road is a county road and is maintained for two wheel drive traffic. Other state forest roads are in good shape and few require four wheel drive.

Survey Needs: None at this time.

Recreational Facilities and Opportunities: The Wilson Rd. is a snow trail in winter. There are an abundance of ORV trails which are maintained by Grant Sponsors each year. The Pine Bowl Cross Country Ski trail winds in and about through several stands and is maintained by the DNR. Deer, grouse, and rabbit hunting are the other main recreation activities. With unlimited public access, there is potential for other activities as well, such as mushroom picking, bird watching, Geo-caching, and trash dumping.

Fire Protection: Access is good to most of the compartment. Water sources are close by. Structure protection would be of some concern on the north and south boundary.

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

SAULT STE. MARIE MGT. UNIT

CHIPPEWA COUNTY

COMPARTMENT: 37

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		157	92	133	91	148	24	13										14	672
Black Spruce			7						35		15								57
Bog or Marsh	24																		24
Grass	86																		86
Jack Pine		17																	17
LowInd Brush	22																		22
LowInd Poplr			67																67
Marsh	6																		6
Mx Swmp Cnfr			14									12					86		112
Non Stocked	8																		8
Oak																		173	173
Paper Birch								11											11
Red Pine		80				412	79	7					2					32	612
Spruce Fir						50	47												97
Swamp Hrdwds										39		12							51
Treed Bog	6																		6
Upland Hdwds																		276	276
White Pine												54						20	74
Total	152	254	180	133	91	610	150	31	35	39	15	78	2				86	515	2371

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Michigan Department of Natural Resources - Operations Inventory System
Individual Compartment Report

LAKE SUPERIOR STATE FOREST

SAULT STE. MARIE MGT. UNIT

CHIPPEWA COUNTY

COMPARTMENT: 37

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	672																										672	
S Black Spruce		57																										57
V Bog or Marsh			24																									24
G Grass					86																							86
J Jack Pine							17																					17
L LowInd Brush									22																			22
P LowInd Poplr										67																		67
N Marsh											6																	6
Q Mx Swmp Cnfr												112																112
X Non Stocked													8															8
O Oak														173														173
B Paper Birch															11													11
R Red Pine																612												612
F Spruce Fir																22		75										97
E Swamp Hrdwds																				51								51
D Treed Bog																							6					6
M Upland Hdwds																									276			276
W White Pine																										74	74	
Total	672	57	24		86		17		22	67	6	112	8	173	11	634			75	51			6		276		74	2371

LAKE SUPERIOR STATE FOREST

SAULT STE. MARIE MGT. UNIT

CHIPPEWA COUNTY

COMPARTMENT: **37**

Table 10 - COMPARTMENT VOLUME SUMMARY - ALL STANDS

COMPARTMENT SUMMARY			
TOTAL VOLUME		CUT VOLUME	
Hardwood	8637 Cds	Hardwood	976 Cds
Hardwood	545 Mbf	Softwood	3657 Cds
Softwood	14894 Cds	Softwood	11 Mbf
Softwood	905 Mbf	Sum CutVol	4655 Cds
Sum TotVol	26431 Cds		
Total Cmpt Acres		Acres Proposed For Cut.....	407
2371			

Stand	Cover Type	Acres	Age	Site Index	Mgt Obj	Condition	Method Cut	Harvest Priority	Cultural Need	fdf Status
21	E6	12	106	56	swamp hardwoods	old growth (potential or actual)	selection	3		
comnts Fmd : SCA, deer yard, mature and ready, removal cut, treat in winter, reserve w pine, hemlock, cedar, yellow birch, regen of present species is acceptable, hemlock is concentrated on the east side so pockets could be left out of sale thus reducing sale acres, 99 is red maple and yellow birch.										
Wld : No cut on hemlock. In deer yard, winter cut optimal. Leave representation of species and size class.										
29	A6	14		57	aspen (upland)	mature	final harvest	1		
comnts Fmd : Mix of BT aspen and red maple, more maple actually, was part of 41, red maple is not worth marking, CC with reserves, do not cut oak and pine, regeneration of aspen and red maple desired, manage with 32 & 33.										
32	F6	7	47	46	spruce-fir (uplands- including upland black spruce)	immature	thinning	1		
comnts Fmd : Thinning , manage with 29, & 33, most trees have been pruned by a hunter who has claimed the area for years.										
33	E6	39	83	68	swamp hardwoods	mature	final harvest	1		
comnts Fmd : SCA, E1/2 deer yard, upland mix of aspen, red maple, white spruce and balsam fir with a mix of cedar and hemlock in lower areas, CC with reserves, treat in winter, reserve white pine, cedar, hemlock, and any oak or yellow birch that may be present, regeneration of present species acceptable, stand contains a considerable amount of hunting presence with ORV trails and shooting lanes.										
Wld : Mark around hemlock inclusions. No cut on hemlock. Reserve some large aspen. Retain representation of current species and size classes. In deer yard, winter cut optimal.										
34	S6	15	90	43	black spruce-swamp	old growth (potential or actual)	final harvest	3		
comnts Fmd : SCA, deer yard, scattered white pine and cedar, reserve when cut, CC with reserves, regeneration of present species is acceptable, harvest in winter or a dry year.										
Wld : No cut on hemlock. In deer yard, winter cut optimal. Leave representation of age and size class.										
44	R2	50	6	60	red pine	immature		0	release	prescribed for fdf treatment
comnts Fmd : Sale 007-99, replanted to red pine in 2001, manage with Stand 30, oak reserved, need srelease to kill cherry regen.										
45	O8	8		56	oak	unevenaged		0	cleaning & weeding	
comnts Fmd : Oak left and numbered from 1981 cut, part of acorn seed orchard, needs understory treatment, brushing or burning.										
50	R6	49	47	72	red pine	immature	thinning	1		
comnts Fmd : Pruned to 16 ft, row thinned 1989, ski trail, mark to 120 BA, cut east part in summer to avoid ski traffic.										
57	O8	25		60	oak	unevenaged		0	cleaning & weeding	stand with fdf potential
comnts Fmd : Part of red oak seed orchard, needs understory treatment , brushing or burning.										
62	R6	3	48	72	red pine	immature	thinning	1		
comnts Fmd : Mark to 120 BA, manage with 79 & 89										
67	R6	100	47	65	red pine	immature	thinning	1		
comnts Fmd : Patchy with low avg BA but pine is crowded and needs first row thinning, cut all species in the rows to be thinned.										
68	R6	51	47	55	red pine	immature	thinning	1		
comnts Fmd : Needs first row thinning, scattered w pine and oak, cut all species in rows to be thinned.										
72	R6	10	49	59	red pine	immature	thinning	1		
comnts Fmd : Needs first row thinning, cut one leave two, cut all species in cut rows.										
79	R6	4	48	72	red pine	immature	thinning	1		
comnts Fmd : Mark to 120 BA, crowded stand, ORV trail, manage with 62 & 89.										

SAULT STE. MARIE MGT. UNIT

**Proposed Treatments
With NO Limiting Factors**

Compartment: 37

Entry Year: 2009

Stand	Cover Type	Acres	Age	Site Index	Mgt Obj	Condition	Method Cut	Harvest Priority	Cultural Need	FDf Status	
80	F6	18	49	60	spruce-fir (uplands-including upland black spruce)	immature	thinning	1			
<p>comnts Fmd : Spruce plantation, needs row thinning, good quality pulp, cut two- leave two, cut all species on rows to be thinned, manage with 83 & 97, ski trail.</p> <p>Wld : Protect large sugar maples along ski trail at edge of plantation. Mark as no cut.</p>											
83	F6	6	47	60	spruce-fir (uplands-including upland black spruce)	immature	thinning	1			
<p>comnts Fmd : Sale 003-00, row thinned, oak reserved, thin lightly by marking a few trees, manage with 80 & 97, reserve oak.</p>											
85	M6	6		55	northern hardwood	unevenaged	selection	1			
<p>comnts Fmd : Small stand to manage but it is within a previous seed tree cut in stand 94, so it need its own treatment, manage with 98, select cut to 80 BA.</p>											
89	R6	51	47	72	red pine	immature	thinning	1			
<p>comnts Fmd : Ski trail parking lot, mark to 120 BA, manage with 62 & 79, ORV and ski trail, cut south part in summer to avoid ski traffic.</p>											
97	F5	22	49	60	red pine	immature	final harvest	1	planting		
<p>comnts Fmd : Poor quality spruce plantation, row thinned in 1998 to promote air exposure and prevent needle cast, looks bad , borders Tone Rd, cut and plant red pine, leave oak and pine, protect OTV trail.</p> <p>Wld : Mark out some oak to retain within stand. Mast from mature oaks important to numerous wildlife species especially in liu of hard mast lost across the landscape from beech bark disease.</p>											
Total Acres.....		490									

**Proposed Treatments
With Limiting Factors**

Compartment: 37

Entry Year: 2009

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

