



**NEWBERRY FOREST MANAGEMENT UNIT
COMPARTMENT REVIEW PRESENTATION**

COMPARTMENT # 86 ENTRY YEAR: 2008

Compartment Acreage: 3297 (GIS calculated) County: Luce

Revision Date: 10/17/06

Stand Examiner: E. Rice

Legal Description: T49N R 10W Sections 20, 21, 26, 27, 28, 29

RMU (if applicable):

Management Goals:

To promote improved timber growth and yield in hand with sustainability, while sustaining and improving wildlife habitat needs.

Soil and Topography:

The compartment is fairly divided east and west as to the uplands and the swamp/lowland. The west end shows a predominance of Kalkaska sands with associated Liminga – Alcona complex. The east end is almost entirely underplayed by Carbondale, Lupton, Tawas soils. The terrain is flat to rolling with short, steep slopes in the west half, graduating to flat and seasonally ponded in the east half lowlands.

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

The compartment is for the most part contiguous in state ownership with the exception of a single, isolated, private 80 acres entirely within the compartment boundary. Deer hunting by far demonstrates the most use patterns. At the southwest corner of the compartment, Oswald's Bear Ranch runs its business, catering to black bear viewing by the public. The majority of surrounding land is of state ownership, with some forest industry land enrolled in the CFA program. Private lands dominate the western side of the compartment.

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

None identified

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

None identified

Special Management Designations or Considerations:

None identified

Watershed and Fisheries Considerations

Fisheries Values

Minimal. Auger Creek, in the west end of this compartment, is classified as SQCW and is a designated trout stream. It supports a natural trout population, but Fisheries Division does not actively manage it. Stocking and survey work were discontinued in 1960, due to lack of fishing pressure, difficult walking through the

marsh and the number of beaver dams. Some of those beaver dams could provide good fishing, but Fisheries is not aware of any.

Wildlife Habitat Considerations:

Compartment 86 lies in the Seney Sand Lake Plain ecological sub-subsection in central Luce County. The western portion of the compartment is largely aspen and northern hardwoods while the eastern portion is predominantly swamp conifer and cedar. Species diversity in hardwood and aspen stands is good and wildlife travel corridors exist along several streams that extend into the compartment.

Conifer retention in hardwood thinnings will provide nesting and potential denning sites as well as forage and cover areas. Mast producing species will generally be left for food and snag production. Existing nest and den trees, snags, and woody debris will be maintained in stands where they exist. White-tailed deer, black bear, bobcat, coyote, gray wolf, ruffed grouse, fisher, marten, otter and mink are noteworthy wildlife species using this compartment.

Mineral Resource and Development Concerns and/or Restrictions:

Sections 20, 21 & 25 - 29, T47N-R10W, Luce County

Surface sediments consist of peat and muck, an end moraine of coarse-textured till and coarse-textured till. There is insufficient data to determine the glacial drift thickness. The Ordovician Utica and Collingwood Shales and the Trenton Group subcrop below the glacial drift. The Trenton is quarried for limestone/dolomite in the UP. There are no gravel pits in the area, but potential is good in the western upland. There is no economic oil and gas production in the UP.

Vehicle Access:

On road vehicle access is good in the southwestern area of the compartment, graduating to poor to no road vehicle access to the north or east. The roads in the northern areas of the compartment are overgrown and abandoned while the eastern sections of the compartment have no road/trail access whatsoever.

Survey Needs:

It appears that the SW 1/16 of section 29 has been obliterated due to woods road widening in the past. With this corner reestablished, appropriate boundary lines could be ran to the north and west for the proposed treatments.

Recreational Facilities and Opportunities:

A segment of the Silver Creek ORV trail runs through the compartment. Hunting activities make up the majority of recreational use.

Fire Protection:

Fires should be small and slow growing because of hardwood and swamp conifer types. There are some lakes and beaver ponds that could provide natural barriers to fire spread. Lowland soil types may challenge use of heavy equipment for suppression. Areas of this compartment may lend itself to modified suppression strategies, such as containment and monitoring.

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

NEWBERRY FOREST MGT UNIT

LUCE COUNTY

COMPARTMENT: 86

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		70	172	90	7	46													385
Black Spruce								7	32										39
Bog or Marsh	117																		117
Cedar						22	81	565	163										831
Grass	38																		38
Hemlock								5										29	34
Lowlnd Brush	56																		56
Mx Swmp Cnfr						60	76		509										645
Non Stocked	2																		2
Paper Birch								18										9	27
Red Pine					9	6	21												36
Spruce Fir					10	152	21												183
Swamp Hrdwds						55												91	146
Tamarack							8												8
Upland Brush	49																		49
Upland Hdwds			2				9	60										572	643
Water	58																		58
Total	320	70	174	90	26	341	216	655	704									701	3297

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

LAKE SUPERIOR STATE FOREST

NEWBERRY FOREST MGT UNIT

LUCE COUNTY

COMPARTMENT: 86

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	385																										385
S Black Spruce		10										7							22								39
V Bog or Marsh			117																								117
C Cedar				831																							831
G Grass					38																						38
H Hemlock						34																					34
L Lowlnd Brush									56																		56
Q Mx Swmp Cnfr												645															645
X Non Stocked													2														2
B Paper Birch				18															9								27
R Red Pine															36												36
F Spruce Fir																			183								183
E Swamp Hrdwds																				146							146
T Tamarack																					8						8
U Upland Brush																								49			49
M Upland Hdwds	23																							620			643
Z Water																									58		58
Total	408	10	117	849	38	34			56			652	2			36			214	146	8		49	620	58		3297

LAKE SUPERIOR STATE FOREST

NEWBERRY FOREST MGT UNIT

LUCE COUNTY

COMPARTMENT: **86**

Table 10 - COMPARTMENT VOLUME SUMMARY - ALL STANDS

COMPARTMENT SUMMARY			
TOTAL VOLUME		CUT VOLUME	
Hardwood	27981 Cds	Hardwood	3733 Cds
Hardwood	399 Mbf	Hardwood	86 Mbf
Softwood	25062 Cds	Softwood	238 Cds
Softwood	115 Mbf	Softwood	18 Mbf
Sum TotVol	54071 Cds	Sum CutVol	4179 Cds
Total Cmpt Acres		Acres Proposed For Cut.....	
3297		283	

NEWBERRY FOREST MGT UNIT

**Proposed Treatments
With NO Limiting Factors**

Compartment: 86

Entry Year: 2008

Stand	Cover Type	Acres	Age	Site Index	Mgt Obj	Condition	Method Cut	Harvest Priority	Cultural Need	FDF Status
27	A6	27	46	43	aspen (upland)	low quality	final harvest	2		
<p>comnts Fmd : Mature aspen and balsam fir. Very low quality r.maple and beech component. Scattered large w.pine pockets. Remove aspen, balsam fir, spruce, maple and majority of the beech. Leave 1-2 beech/ac for mast and future snags. Protect the non merch conifers as much as possible. Leave w. pine. Secondary MO is for mixed conifer type with associated hardwood regen.</p> <p>Wld : leave white pine and some beech</p>										
33	M6	12		50	northern hardwood	low quality	shelterwood-seed	3		
<p>comnts Fmd : Low quality mixed hardwood stand. High incidence of multiple stemmed trees, low limbs, seams and crook. Heavy maple and beech advanced sapling growth 3-10' tall. Shelterwood the stand to release the advanced regen and start the stand over. Mark to leave a target Ba of 50, concentrating on leaving healthy, windfirm maple and occasional beech. Remove all aspen. Retain a conifer component where possible. Expect mixed hardwood saplings to respond and aspen saplings to appear. Secondary MO is for Aspen. Access may be possible through the Luce County "40" and joining up the old grade on state land to the south.</p> <p>Wld : leave a conifer component if any.</p>										
46	M6	96		60	northern hardwood	unevenaged	thinning	2		
<p>comnts Fmd : Good form to the mixed hardwood poletimber/sawtimber. Low quality balsam sapling component. Thin to target of 80 ba, avoid vernal areas and pockets of advanced maple regen. Try to retain sawtimber trees excepting those with major defects given sawtimber diam classes are not well represented in the stand. In concentrations of beech, reduce beech to 10-20 Ba but not going below overall stand Ba target. Leave all aspen for present/future snags. Retain a conifer component where possible.</p> <p>Wld : leave some conifers</p>										
49	M6	23		63	aspen (upland)	unevenaged	final harvest	2		
<p>comnts Fmd : Low quality mix hardwood (mainly r.maple). Good quality mature aspen 5-7 stick heights, 10-14" dbhs. Balsam fir sapling component. B.cherry has heavy blacknot. Areas of low quality, poorly stocked poletimber over maple saplings. Remove the aspen, associated hardwoods and merchantable conifers excepting white pine, leave components of beech, b. cherry and oak if it occurs without hampering aspen regen with too much shade. Protect the non merchantable conifers. Expect a mix of aspen and mixed hardwood regen after management. Secondary MO is for mixed hardwood. ORV trail runs through stand. Soil:Liminga-Alcona complex</p> <p>Wld : leave white pine, oak and a beech component</p>										
57	M6	47		50	northern hardwood	unevenaged	thinning	2		
<p>comnts Fmd : Well formed hardwood stand, 4-14" dbhs, 4-6 stick merchantable heights. Balsam fir sapling component, and aspen associated throughout stand. Thin to 80-90 BA, concentrating on the poletimber size classes. Retain aspen inside the stand for present and future snags. Keep sale boundary out of mature aspen/small diameter mixed hardwood poletimber at the SE side of the stand, adjacent to St. 59. Retain a conifer component where possible. ORV trail runs though stand. Soil: Liminga-Alcona complex</p> <p>Wld : leave any conifers, a beech, cherry and birch component</p>										
61	M6	39		65	northern hardwood	unevenaged	thinning	2		
<p>comnts Fmd : Well formed poletimber stand. Good heights to first limbs. Small aspen inclusions throughout the stand and pockets of good advanced h.maple regen. Thin to 80 BA, trying to move poletimber into sawtimber diam classes with the stand lacking larger diam structure. Leave the aspen for present and future snags, most of the aspen is broken up already. Leave b.cherry, conifer and beech components. ORV trail runs through stand. Soil: Liminga-Alcona complex</p> <p>Wld : leave some conifers and birch</p>										
Total Acres.....		244								

NEWBERRY FOREST MGT UNIT

**Proposed Treatments
With Limiting Factors**

Compartment: 86

Entry Year: 2008

Stand	Cover Type	Acres	Age	Site Index	Mgt Obj	Condition	Method Cut	Harvest Priority	Cultural Need	FDF Status
10	M6	30		60	northern hardwood	unevenaged	thinning	3		

TREATMENT LIMITING FACTORS: Adjacent landowner denies access

comnts Fmd : Fair to good form h.maple - good heights, straight boles. First limbs at 30-40', 4-12" dbh, 3-6 merch sticks. Very few trees in any sawtimber diam class. Large diameter aspen are present, scattered throughout - retain for wildlife snags . Balsam sapling component. Short, fairly steep valleys run N-S, N part of stand slopes to creek/lowland swamp to the N. S. part of stand is much lower quality - heavy to beech with component of r.maple. Thin to 80 ba/ac., concentrating on the mid range poletimber size classes in order to move trees into sawtimber classes. Retain a beech and yellow birch component. Retain a conifer component. Maintain a buffer to the low ground/water courses at the N. end of the stand. Access must be gained/researched from the private landowner/s to the west.

Wld : leave yellow birch and beech components

93	R6	9	36	55	red pine	immature	thinning	3		
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TREATMENT LIMITING FACTORS: Other Dept./Div. procedures or practices (describe in comment)

comnts Fmd : Good r.pine plantation, 6-12" dbhs, 3 stick merch height. N.end is slightly more open grown - larger diameters and more b.cherry saplings and bracken. Stand is just showing signs of limb self pruning. No sweet fern present. Stand is part of the same plantation as the adjacent r.pine to the south in compartment 87. Delay this stand's treatment now to prescribe with the adjacent r.pine plantation in compartment 87 when C.87 's next inventory cycle occurs (2012). Row thin by removing every third row. It appears the stand was planted at roughly a 8 foot row spacing, so maneuverability should not be a problem. Soil: Paquin Sand

Total Acres..... 39

