



**NEWBERRY FOREST MANAGEMENT UNIT
COMPARTMENT REVIEW PRESENTATION**

COMPARTMENT #48 ENTRY YEAR: 2009

Compartment Acreage: 2,157 County: Luce

Revision Date: 7/19/2007

Stand Examiner: Theresa Sysol

Legal Description: T48N R08W Section(s) 17-20

RMU (if applicable):

Management Goals: To maintain forest health and sustainability while enhancing diversity, with emphasis on wildlife, recreation, and fisheries needs. Cover types include ~ 75% hardwoods (mainly upland, but does include some lowland), 13% spruce and swamp conifers, 8% aspen and 4% misc. brush, grass, water, bog.

Soil and Topography: Primarily Kalkaska loamy sand, with some silt loams (Bodi, Auger, Zandi, Annanias), on rolling upland hardwoods, and muck/peat (Carbondale/Lupton/Tawas, Dawson/Greenwood/Loxley, Spot-Finch, Caffey, and Hendrie) on lowland sites.

Ownership Patterns, Development, and Land Use in and Around the Compartment: Private land development is increasing along the west boundary, and there is also a tract of private land in the SE corner (Halifax Club). Isolated private 40 along highway has been managed for timber.

Unique, Natural Features (include only non-site specific and non-sensitive information): MNFI has identified the potential for red-shouldered hawk, great blue heron rookery, spruce grouse, eagle, osprey, and goshawk. Potential for moose and wolf. Potential for wood turtle.

Archaeological, Historical, and Cultural Features (include only non-site specific and non-sensitive information): Bureau of History has identified a site. Area does contain large blocks of second growth hardwoods which resulted from clearcutting by the Charcoal Company from 1918 -1926.

Special Management Designations or Considerations: None

Watershed and Fisheries Considerations: Fisheries Values:

Excellent. All branches of Linton Creek are classified as Type 1 trout. Brook trout populations are all adequate for the few knowledgeable anglers, and are naturally produced, but the streams are too small to support heavy fishing pressure. Fisheries Division does not actively manage or stock those waters. Again, any additional sand bedload from poor logging practices will seriously impair this natural fishery.

Wildlife Habitat Considerations: Compartment 48 lies in the northern portion of Luce county and is in the Grand Marais Sandy End Moraine and Outwash ecological sub-subsection. The compartment is dominated by upland hardwood stands and has swamp conifer, aspen and swamp hardwood componetns scattered throughout. Several creeks run through the compartment and provide excellent wildlife travel corridors. Species diversity of most stands is quite good.

Species diversity will be achieved in thinned hardwoods by retaining hard mast and conifer components to provide food sources, nest and den trees and cover. Several stands have abundant, ideal raptor nest trees that will be preserved after harvest. Buffer zones along streams and rivers will be established to preserve travel corridors and wetland wildlife values and habitats. Species of special interest potentially using this compartment include white-tailed deer, moose, black bear, gray wolf, coyote, marten, fisher and snowshoe hare.

Mineral Resource and Development Concerns and/or Restrictions: Sections 16 - 20 & 30, T48N-R8W, Luce Co.

Surface sediments consist of an end moraine of coarse-textured till and lacustrine (lake) sand and gravel. There is insufficient data to determine the glacial drift thickness. The Ordovician Prairie du Chien (PdC) and the Cambrian Trempealeau Formation subcrop below the glacial drift. The PdC & Trempealeau could be used for stone. Gravel pits are located in Section 18 & 22 and potential is good on the uplands. There is no economic oil and gas production in the UP.

Camp 7 gravel pit (more sand than gravel composition)

Vehicle Access: ~ 21 miles north of Newberry on M-123. The Camp 7 Road, which is a State-maintained, good gravel road, provides main access into large hardwood blocks through the center of the compartment. Needs periodic grading and maintenance. There are numerous two-track and abandoned roads connecting with it. Along the east side of the compartment, the Halifax Road, a poor quality gravel road, provides access to lower ground and private club lands.

Survey Needs: None

Recreational Facilities and Opportunities: The Camp 7 Road doubles as the snowmobile trail during the winter months, and also provides access for numerous landowners and hunters.

Fire Protection: Large fire potential will be minimal with the absence of pine fuel types. The two track and abandoned roads will require substantial work for suppression equipment access to some areas. Linton Creek drainages will restrict access by heavy equipment to some areas because of soft ground. Private property risk surrounding compartment should be low.

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: 48

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		66	75	4														23	168
Black Spruce										13									13
Cedar										15									15
Grass	15																		15
Hemlock										14									14
LowInd Brush	66																		66
Mx Swmp Cnfr									1	9		27						167	204
Non Stocked	4																		4
Sand Dune	3																		3
Spruce Fir						11												13	24
Swamp Hrdwds										13								57	70
Treed Bog	3																		3
Upland Hdwds									67	38								1450	1555
Water	3																		3
Total	94	66	75	4		11			68	102		27						1710	2157

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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: 48

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	168																										168
S Black Spruce		13																									13
C Cedar				15																							15
G Grass					15																						15
H Hemlock						14																					14
L Lowlnd Brush									66																		66
Q Mx Swmp Cnfr												204															204
X Non Stocked													4														4
Y Sand Dune																		3									3
F Spruce Fir																			24								24
E Swamp Hrdwds																				70							70
D Treed Bog																						3					3
M Upland Hdwds																								1555			1555
Z Water																									3		3
Total	168	13		15	15	14			66			204	4					3	24	70		3		1555	3		2157

LAKE SUPERIOR STATE FOREST

NEWBERRY FOREST MGT UNIT

LUCE COUNTY

COMPARTMENT: **48**

Table 10 - COMPARTMENT VOLUME SUMMARY - ALL STANDS

COMPARTMENT SUMMARY			
TOTAL VOLUME		CUT VOLUME	
Hardwood	27103 Cds	Hardwood	3861 Cds
Hardwood	1141 Mbf	Hardwood	204 Mbf
Softwood	3000 Cds	Softwood	218 Cds
Softwood	316 Mbf	Sum CutVol	4487 Cds
Sum TotVol	33017 Cds		
Total Cmpt Acres		Acres Proposed For Cut.....	
2157		596	

NEWBERRY FOREST MGT UNIT

**Proposed Treatments
With NO Limiting Factors**

Compartment: 48

Entry Year: 2009

Stand	Cover Type	Acres	Age	Site Index	Mgt Obj	Condition	Method Cut	Harvest Priority	Cultural Need	fdf Status
2	M6	21		55	northern hardwood	unevenaged	thinning	3		
<p>comnts Fmd : Overmature patches of A,B to remove. Hardwood contains many stem defects, heavy forking, beech scale, and multiple clumps - low quality. Area has potential to grow some quality maple, but will require intensive treatment to obtain desired reproduction. Soils are Bodi-Chesbrough. 1999: stand 2</p> <p>Wld : Leave conifers (few are present) and a component of aspen and birch in varying diameters. Can harvest fir</p>										
7	M6	54		55	northern hardwood	unevenaged	thinning	3		
<p>comnts Fmd : Low quality stand - nearly all pulp (twisted, borer damage, nectria). Overmature A,B within; would be relatively easy to identify small retention areas to leave within stand (M5 with F), as well as mark a few large A,B to leave. Beech with heavy scale. Patches of smaller diameter maple within. Soils are Bodi - Chesbrough. 1999: stand 2, part of 1</p> <p>Wld : leave conifers (not many present) and a component of aspen and birch in various diameters. Can harvest fir</p>										
20	M6	11		50	northern hardwood	unevenaged	thinning	3		
<p>comnts Fmd : T. sale #08-89 - cut in 1992 (aspen only removed). Stand falls along M-123 Heritage Route. Lots of dead/down log material on the ground - heavy defects within stand. Heavy beech scale present - beech is all pulp quality. Some WS,WP within. Soils are Bodi silt loam. 1999: stand 9</p> <p>Wld : leave conifers and a birch and beech component, of various diameters. Can harvest fir</p>										
22	M6	49		50	northern hardwood	unevenaged	thinning	3		
<p>comnts Fmd : A lot of poor quality (crook, fork, stain) trees that originated from stump sprouts in stand. There are a few sawlog sized trees of quality. Patch of hemlock along A2 cut. Mixed spps include: H, beech, A, PB, YB; beech with heavy scale. Old red paint noted, in places - sale unknown. Leave most YB. Soils are Bodi and Zandi silt loam. 1999: stand 14</p> <p>Wld : leave conifers and a paper birch, beech and yellow birch component of various diameters. Encourage hemlock where you can. Can harvest fir</p>										
38	S6	13	83	35	black spruce-swamp	mature	shelterwood-seed	2		
<p>comnts Fmd : Remove spruce, and manage for mixed spruce, H, W regeneration. Winter cut only. Some dead tops on H. Soils are Hendrie Mucky peat. 1999: stand 30</p>										
39	E6	26		50	swamp hardwoods	unevenaged	shelterwood-seed	3		
<p>comnts Fmd : Area was partially clearcut from 1976 (#15-73A), so stand is very variable. North end contains more PB, small red and sugar maple; south end, more cedar, H and thicker BF regeneration. Improve stand by removing low quality red and sugar maple, aspen, paper birch and BF. Mark leave tree PB, RM and SM, though. Leave all YB, H,C, WP, and WS. Winter cut would be best. Soils are Hendrie mucky peat. 1999: stand 31</p> <p>Wld : leave yellow birch, hemlock, cedar, white pine and white spruce. Leave a component of paper birch, and red and sugar maple.</p>										
42	Q6	13		45	mixed swamp conifer	unevenaged	seed tree	3		
<p>comnts Fmd : Partially clearcut in 1976 (#15-73A). Red maple is of low quality; spruce with galls. Remove most of stand, leaving only C,WS, YB,H, and WP to provide seed source and cover for regeneration. Pockets of small spruce with leatherleaf ground cover. Soils are Hendrie mucky peat. Winter cut only. Connects with small portion of C. 49, stand 31 1999: stand 32</p> <p>Wld : leave cedar, hemlock, yellow birch, white spruce, white pine and a few aspen.</p>										
43	M6	13		50	northern hardwood	unevenaged	thinning	3		
<p>comnts Fmd : Lots of lower areas with depressions of water during the spring - extremely saturated soils. Maple is forked, stained, twisted; nectria present. Low,low quality! Occasional PB; aspen pocket along road. Some W. spruce, cedar, hemlock within. Thin maple hard, leaving the best crop trees possible, and leave all H,WS,C. Ground cover of club moss, trout lily. Soils are Auger-Annianias. 1999: stand 31</p> <p>Wld : leave all hemlock, white spruce and cedar and a component of paper birch.</p>										
53	M6	108		55	northern hardwood	unevenaged	thinning	2		
<p>comnts Fmd : Lots of defect still within stand even after commercial and non-commercial treatments (t.sale #25-76A and FTP163/I-15 completed summer, 1977). Heavy forking, clumps, stain to sawlogs, sweep, crook, nectria, eutypella and beech scale. Mixed hardwood includes: YB, RM, A, beech, cherry. South end contains more poles versus remainder of stand - nice HM. 1999: stand 44</p> <p>Wld : leave conifers (can harvest fir)and a component of beech, cherry and yellow birch of various diameters. Watch for raptor nests</p>										
54	M6	105		55	northern hardwood	unevenaged	thinning	3		
<p>comnts Fmd : Stand has previously been thinned w/firewood permits and Title X crews (FTP C-167/I-15 completed Sp/Su 1977). Mixed hardwood includes: YB, BC. Soils are Kalkaska and Auger-Annianias. 1999: stand 63</p> <p>Wld : Less diversity in this stand, leave young submerchantable conifers and yellow and paper birch. Watch for raptor nests</p>										

NEWBERRY FOREST MGT UNIT

**Proposed Treatments
With NO Limiting Factors**

Compartment: 48

Entry Year: 2009

Stand	Cover Type	Acres	Age	Site Index	Mgt Obj	Condition	Method Cut	Harvest Priority	Cultural Need	FDF Status
56	M6	46		55	northern hardwood	unevenaged	thinning	3		
<p>comnts Fmd : Stand was marked (orange) and prepared as part of "123/Camp 7 Hardwoods" sale #5-99. Unit (4) was never cut. Some red maple, beech, YB, cherry within - occasional WP,H. 1999: stand 8</p> <p>Wld : leave conifers (can harvest fir) and a component of yellow birch, cherry and beech (various diameters). Try to leave some trees with forks greater than half way up.Watch for raptor nests</p>										
57	M6	137		50	northern hardwood	unevenaged	thinning	3		
<p>comnts Fmd : Lots of defective maple (borer damage, fork, crook) left from earlier harvests. Heavy maple top dieback. Beech within contains heavy scale, twisted; yellow birch with large crowns, and mostly pulp-quality. Some W,F/S and scattered H within. BA can fluctuate anywhere from 50-120 sq ft, esp with dead/dying trees within. Ground pine and club moss ground cover noted. Adjacent private property has been thinned, and is starting to be developed. 1999: stand 58</p> <p>Wld : leave spruce and hemlock and a component of yellow birch,and beech, aiming at retaining various diameters and some forked trees.Watch for raptor nests</p>										
Total Acres.....		596								

**Proposed Treatments
With Limiting Factors**

Compartment: 48

Entry Year: 2008

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 048
 T48N, R08W, Sec. 17-20
 County: Luce
 Unit: Newberry
 YOE: 2009
 Acres: 2,157 GIS Calculated
 Stand Examiner: Theresa Sysol
 Map Revised: 12/06/2007
 Map Phase: Pre-Review

- Legend**
- RLS Corners
 - Miris Corners
 - Highways
 - County Paved Roads
 - Gravel Roads
 - Poor Dirt Roads
 - Trails
 - Closed Roads
 - Water Features
 - Cabins
 - Gates
 - State Highway
 - Snowmobile Trails
 - Stand Boundary
 - 200 - Seed Tree
 - 300 - Shelterwood seed
 - 400 - Thinning

18 17
 19 20

N

