



**NEWBERRY FOREST MANAGEMENT UNIT
COMPARTMENT REVIEW PRESENTATION**

COMPARTMENT #26 ENTRY YEAR: 2007

Compartment Acreage: 1,630 (GIS Calculated) County: Luce

Revision Date: 10/26/2005

Stand Examiner: Theresa Sysol

Legal Description: T49N R10W Section(s) 19-22, 29-31

RMU (if applicable):

Management Goals:

To maintain and enhance forest health and diversity while incorporating recreational, wildlife, fire, and any additional special concerns.

Soil and Topography:

Primarily Rubicon sand, including organic matter phase, with some Dawson and Carbondale muck associations. Topography goes from flat to gently rolling sand ridges, with large scattered marshy bog areas. Forest cover types are dominated primarily by jack and red pine (50% of the compartment), with minor components of white pine, aspen, paper birch, spruce/fir and upland hardwoods. The remaining 20% of the compartment is marsh, bog, and lowland brush.

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

Primarily State lands, with private parcels scattered along the Two-Hearted River corridor.

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

MNFI has identified the potential for pine drops, climbing fumitory, and false violet in pines. Canada rice-grass possible in jack pine openings. Potential for sweet coltsfoot, Wiegand's sedge, English sundew, round-leaved orchis, black crowberry, yellow pitcher plant, or paniced screwstem, in bogs. Potential for great blue heron rookery, spruce grouse, eagle, osprey, red-shouldered hawk, merlin and goshawk. Potential for moose and wolf. Potential for wood turtle. Potential for incurvate emerald and ebony boghaunter in boggy areas.

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

Site of the old "Superior CCC camp" is located within the compartment.

Special Management Designations or Considerations:

The Two-Hearted River has been designated as a Natural River, and thus has special management guidelines to follow.

Watershed and Fisheries Considerations

Fisheries Values

Excellent. The Two-Hearted River in this compartment is designated trout water, and provides excellent fishing for brook trout. We have also seen chinook, coho and pink salmon at the High Bridge, in addition to steelhead. This segment of the river is not open during the extended season, which only designates the main branch from Lake Superior upstream to the Reed and Green Bridge.

Wildlife Habitat Considerations:

Compartment 26- This compartment is located in the Grand Marais Sandy End Moraine and Outwash ecological sub-subsection. The two-hearted river makes up portions of the southern boundary of the compartment. The eastern portion of this compartment has excellent vegetative diversity and is comprised of red and white pine, aspen and birch stands, jack pine, upland hardwoods, and a bog component. The western portion is less diverse and is largely red, jack and scotch pine stands. This compartment appears to have less red and jack pine than occurred during presettlement times and an increase in hardwoods, aspen, and white pine.

Hemlock, red, and white pine will be left in harvested jack and scotch pine stands to promote structural and habitat diversity of stands. Likewise, conifer cover will be retained in aspen harvests. Wildlife travel corridors in this compartment should be abundant. Wildlife species likely to use this compartment include black bear, white-tailed deer, moose, gray wolf, fisher, marten, and otter and mink.

Mineral Resource and Development Concerns and/or Restrictions:

Sections 19 – 22, 29 & 30, T49N-R10W, Luce County

Surface sediments consist of lacustrine (lake) sand and gravel and minor end moraine of coarse-textured till. There is insufficient data to determine the glacial drift thickness. The Cambrian Munising Group and Precambrian Jacobsville Sandstone subcrops below the glacial drift. These rocks have been used as a building stone in the past. There are no gravel pits in the area, but there may be some potential. There is no economic oil and gas production in the UP, although there was a recent well drilled in Schoolcraft County.

Vehicle Access:

From Newberry, take M-123 north to Co Rd 407. Follow Co Rd 407 north for ~ 18 miles to the southwest end of the compartment at the Two-Hearted River. Interior compartment roads are mostly poor sand two-tracks.

Survey Needs:

None at this time, although some research may be needed for the parcel adjoining the High Bridge State Forest Campground.

Recreational Facilities and Opportunities:

The Two-Hearted ORV trail and snowmobile trail both run through the compartment. High Bridge State Forest Campground, and rustic Canoe Camp, are both found within the compartment boundary. Immediately adjacent to the compartment are two additional State Forest Campgrounds (Headquarters Lake and Perch Lake) and the ORV staging area.

Fire Protection:

The Compartment is part of the Two Hearted Zone Dispatch Area. The road and fire lane system provides adequate access for fire suppression activities. The scattered marsh, bog and lowland brush areas may impact fire suppression efforts. Private property in section 29 could be at risk because of continuous Jack Pine cover type in sections 29 and 30.

Additional Compartment Information:

None

- **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: 26

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		60	63							19		15							157
Black Spruce											10	46							56
Grass	2																		2
Jack Pine		142	13	52	112	17	5	43	12	18								5	419
Local Name											39								39
LowInd Brush	35																		35
Marsh	50																		50
Mx Swmp Cnfr										18									18
Paper Birch		15							21										36
Red Pine		30						117	80			59						36	322
Spruce Fir								12											12
Swamp Hrdwds																		10	10
Treed Bog	238																		238
Upland Hdwds											41							79	120
White Pine									43									73	116
Total	325	247	76	52	112	17	5	172	156	55	90	120						203	1630

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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: 26

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	157																										157
S Black Spruce		56																									56
G Grass					2																						2
J Jack Pine							402								17												419
I Local Name							34	5																			39
L LowInd Brush									35																		35
N Marsh											50																50
Q Mx Swmp Cnfr												18															18
B Paper Birch															36												36
R Red Pine																322											322
F Spruce Fir																			12								12
E Swamp Hrdwds																				10							10
D Treed Bog																						238					238
M Upland Hdwds																								120		120	
W White Pine																										116	116
Total	157	56			2		436	5	35		50	18			36	339			12	10		238		120		116	1630

LAKE SUPERIOR STATE FOREST

NEWBERRY FOREST MGT UNIT

LUCE COUNTY

COMPARTMENT: 26

Table 10 - COMPARTMENT VOLUME SUMMARY - ALL STANDS

COMPARTMENT SUMMARY			
TOTAL VOLUME		CUT VOLUME	
Hardwood	3441 Cds	Hardwood	436 Cds
Hardwood	30 Mbf	Softwood	2765 Cds
Softwood	7877 Cds	Softwood	242 Mbf
Softwood	1379 Mbf	Sum CutVol	3685 Cds
Sum TotVol	14136 Cds		
Total Cmpt Acres		Acres Proposed For Cut.....	303
1630			

NEWBERRY FOREST MGT UNIT

**Proposed Treatments
With NO Limiting Factors**

Compartment: 26

Entry Year: 2007

Stand	Cover Type	Acres	Age	Site Index	Mgt Obj	Condition	Method Cut	Harvest Priority	Cultural Need	FD Status
9	R6	19	67	53	red pine	immature	shelterwood-seed	2		
<p>comnts Fmd : Stand runs along snowmobile trail route. There is a component of larger, older red pine within from pre-1930's logging. Some of the stand appears to have been planted, although there is no record of this. This may have occurred, though, since entire 40's to the north were planted in 1940. Several ridges to contend with. Aspen and paper birch should both be removed from the stand at this time, and also lightly thin remaining pine. This will allow some aspen and paper birch to regenerate back into the stand, while encouraging white and red pine reproduction, and maintaining stand diversity. MO2= W,A 1997: stand 39</p> <p>Wld : leve white pine and oak</p>										
10	R6	13	64	45	red pine	immature	shelterwood-seed	3		
<p>comnts Fmd : Includes portion of S. facing slope, which transitions into W type. Moderate topography to deal with throughout - access for logging could be a challenge. There is a minor component of PB,RM,BF,S,J and BTA within. Some white pine regeneration is up to 3" dbh (south end), and looks good. MO2= W 1997: stand 46</p> <p>Wld : leave white pine except for maneuverability issues, leave paper birch and red maple</p>										
17	J6	12	64	43	red pine	mature	final harvest	3	natural regeneration	
<p>comnts Fmd : Stand is located in a depression/frost pocket with predominately jack pine; more red and white pine occupy the stand sides/edges, though. Some larger residual red and white pine from pre-1930's present. Soils are rubicon, organic matter phase. Stand may not support change of MO to red pine, due to location. MO2=J,W. Harvest access may be somewhat difficult. Thin a small amount of red and white pine, if necessary, for maneuvering within the stand, and cut any aspen which may be present. 1997: stand 42</p> <p>Wld : leave oak if any and red and white pine except for maneuverability needs</p>										
33	R6	40	68	55	red pine	immature	shelterwood-seed	2		
<p>comnts Fmd : Stand contains two different planting years: N1/2 of stand was planted S, 1940 with 2 - 0 J,W and 3 - 0 R; S1/2 planted F, 1949 with 2 - 0 R,J. Remove jack pine, and thin larger red pine. Some misc O,A,B, and red maple within - can be left within stand for diversity, unless BA creates problems for equipment. The ORV trail runs along a portion of the east stand boundary. MO2= J,W 1997: stand 25</p> <p>Wld : leave oak, aspen, birch, maple and white pine except for maneuverability needs</p>										
36	R6	23	65	43	red pine	immature	shelterwood-seed	2		
<p>comnts Fmd : Portion of the stand (W. end) planted F, 1949 w/2 - 0 R,J. Some beech within. ORV and snowmobile trail influence. Remove jack pine and thin red pine, where needed. MO2= W,M,J 1997: stand 29</p> <p>Wld : leave oak, whie pine and a beech component</p>										
37	J6	31	67	54	jack pine	mature	final harvest	2	natural regeneration	
<p>comnts Fmd : Planted S, 1940 with 2 -0 W,J and 3 - 0 R. Stand is influenced by both ORV and snowmobile trail. Fairly steep terrain, in places. South end of stand contains more W,R - patch of scotch pine within. Cut scotch pine, and thin pine, if needed, for maneuvering. Understory contains F,M. Mixed sps include: A,W,O. MO2= R,W 1997: stand 59</p> <p>Wld : leave white pine, oak and a paper birch component. Do not cut hemlock</p>										
44	J6	5	80	53	jack pine	mature	final harvest	1	natural regeneration	
<p>comnts Fmd : Stand was a part of stand 1 last entry and was left as a buffer (new stand = 61) when stand was harvested. Harvest stand now, but leave all paper birch and red/white pine for visual purposes. MO2= A,B,R,W 1997: stand 61</p> <p>Wld : leave paper birch and red and white pine</p>										
48	J6	13	80	45	jack pine	mature	final harvest	2	natural regeneration	
<p>comnts Fmd : The snowmobile trail runs along portion of stand boundary; also, the ORV trail crosses stand. East end of stand turns into more WP; edges along treed bog are heavier to spruce. Leave red and white pine, and paper birch. MO2= F,R,W 1997: stand 19</p> <p>Wld : leave red and white pine and paper birch</p>										
51	R9	59	98	48	red pine	two aged	thinning	3		
<p>comnts Fmd : Stand has quite a bit of variability; along snowmobile trail route, stand contains more mixed red pine. Some planted pine within SESW of section 20 (S,1940). Further to the east, and intermixing with low marsh pockets, stand becomes more of a white pine type, with ridges and rolling topography. Untreated finger (of stand 52) was included here, as that portion of stand contained more white pine, with large aspen, p. birch and spruce/fir. Some sidehills to deal with here. Remove aspen, p. birch and spruce/fir with this harvest, and thin pine, if needed. Leatherleaf marsh stands were identified to show excluded acres, but no add'l red lines should be needed for sale prep. Some cedar to leave. MO2= W 1997: stand 24,63</p> <p>Wld : leave cedar, paper birch component, and white pine except for maneuverability</p>										

NEWBERRY FOREST MGT UNIT

**Proposed Treatments
With NO Limiting Factors**

Compartment: 26

Entry Year: 2007

Stand	Cover Type	Acres	Age	Site Index	Mgt Obj	Condition	Method Cut	Harvest Priority	Cultural Need	FDF Status
61	J5	7	74	50	jack pine	mature	final harvest	2	natural regeneration	
<p>comnts Fmd : Stand appears to have a few different age classes of J. Harvest and return to even age mgmt. A few red and white pine noted; leave when harvest. The snowmobile trail runs along the stand boundary. 1997: stand 10</p> <p>Wld : leave red and white pine and paper birch</p>										
65	I8	9	90	50	jack pine	two aged	final harvest	2	planting	
<p>comnts Fmd : Eliminate scotch pine and regenerate to jack pine. Stand was planted in 1915 with 2-0 R and 1-0 Scotch pine, and in 1916 with 2-0 W and 1-0 J. Understory contains J and M also. MO2= R,W 1997: stand 4</p> <p>Wld : leave any white pine</p>										
66	J6	5	73	53	jack pine	mature	final harvest	1	natural regeneration	
<p>comnts Fmd : Stand planted F, 1934 with 2 - 0 J,R. Some scotch pine within. Remove jack and scotch pine, and leave red pine for visual influence and natural seed source. Jack pine stand directly to the east (stand 67) is ~ 2 feet in height - should have sufficient height by the time this stand is harvested. Stand across road contains both I3 and J0. MO2= R,W. 1997: stand 62</p> <p>Wld : leave white pine and paper birch and red pine</p>										
70	J5	5		50	red pine	sparse	seed tree	3	natural regeneration	
<p>comnts Fmd : Small patch of timber left when adjacent stand was harvested. Jack pine is growing mostly in patches with some smaller jack pine seeding in around and through an old, open stump field. The open area also contains sawtimber sized red pine, oak with large, spreading crowns, and paper birch clumps, most of which are dying. A very mixed bag of stuff. Regeneration noted includes: red and white pine, oak, spruce/fir. The stand falls within the Two-Hearted Nat'l Rivers guidelines for management. Cut stand only if adjacent stand is harvested - insufficient volumes to support a sale on its own. 1997: (part of) stand 8</p> <p>Wld : leave oak, red pine, and white pine</p>										
73	A6	19	85	55	aspen (upland)	mature	final harvest	2		
<p>comnts Fmd : Stand will be affected by Two-Hearted Natural River guidelines when harvest boundaries are placed. Care will need to be taken around powerline within stand also. Although MO=A, long term management would be better as red or white pine (due to proximity of river and potential beaver prbs); maintaining diversity of species within the stand will still be desirable, though, so some aspen clones should still be encouraged to regenerate. Mixed softwood includes: red and white pine, white spruce, balsam fir, and scotch pine. Leave all red and white pine, paper birch and spruce. 1997: (part of) stand 58</p> <p>Wld : leave all white and red pine, paper birch, spruce and hemlock</p>										
74	I6	22	90	53	jack pine	mature	final harvest	1	planting	
<p>comnts Fmd : Stand planted F, 1917 with 2 - 0 scotch pine and 1 - 0 JP. Harvest all scotch and jack pine, leave red and white pine. In order to eliminate as much scotch pine regeneration from the new stand as possible, plant with jack pine. The ORV trail runs through this stand, so maintain trail integrity during harvest. 1997: stand 6</p> <p>Wld : leave birch and red and white pine</p>										
75	I6	5	90	53	local use	mature	selection	1		
<p>comnts Fmd : Planted F, 1917 with 2 - 0 Scotch pine and 1 - 0 JP. Stand falls along county road influence, as well as adjacent to ORV trail staging area and snowmobile trail route. Use selection cut (as was done with adjacent compartment) to minimize the visual effects of the harvest, with eventual mgmt goal of removing all scotch pine from stand - convert to either jack or red pine mgmt. Leave all red and white pine. 1997: stand 6</p> <p>Wld : leave red and white pine and birch</p>										
76	R6	13	73	50	red pine	immature	thinning	3		
<p>comnts Fmd : Stand was planted F, 1934 with 2 - 0 R,J. Jack pine is mature and should be removed from stand. There is also a component of scotch pine, which should also be harvested. Mixed spp include: H, RM, PB. Special care will need to be taken near road influence, and also around powerline, which is present. Falls under Two-Hearted River guidelines. 1997: (part of) stand 58</p> <p>Wld : leave white pine, hemlock and paper birch</p>										
Total Acres.....		300								

NEWBERRY FOREST MGT UNIT

**Proposed Treatments
With Limiting Factors**

Compartment: 26

Entry Year: 2007

Stand	Cover Type	Acres	Age	Site Index	Mgt Obj	Condition	Method Cut	Harvest Priority	Cultural Need	FDf Status
64	17	3	90	50	jack pine	two aged	final harvest	3	planting	

TREATMENT LIMITING FACTORS: Scenic values/visual values
Delayed treatment for age/size class diversity

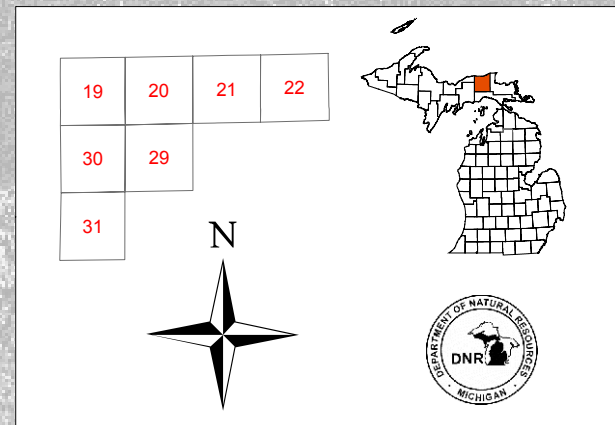
comnts Fmd : Stand planted in 1915 with R, Scotch pine and 1916 with J,W. I3 understory is ~ 3-4" dbh. Leave stand for now?; stand across Co Rd has been harvested and is in the process of regenerating. Possibly wait until stand is established before harvesting this one. If cut, plant to jack pine. 1997: stand 4

Wld : leave any white pine

Total Acres..... 3

Compartment 26
 T49N, R10W, Sec. 19-22, 29-31
 County: Luce
 Unit: Newberry
 YOE: 2007
 Acres: 1,630 GIS Calculated
 Stand Examiner: Theresa Sysol
 Map Revised: 12/06/2005
 Map Phase: Pre-review

Field Map



Legend

- RLS Corners
- GPS Corners
- County Paved Roads
- County Gravel Roads
- Poor Dirt Roads
- Closed Roads
- Trails
- Powerlines
- Water Features
- Campgrounds
- Snowmobile Trails
- ORV Trails
- Stand Boundary
- Biodiversity/Old Growth Area
- 100 - Final Harvest
- 116 - Final Harvest/Planting
- 145 - Final Harvest/Natural Regeneration/Mechanical, other
- 245 - Seed Tree/Natural Regeneration/Mechanical, other
- 300 - Shelterwood-seed
- 400 - Thinning
- 800 - Selection

Name County Paved Roads
Name County Gravel Roads
Name Public Dirt Roads
Name Water Features

