



**NEWBERRY FOREST MANAGEMENT UNIT
COMPARTMENT REVIEW PRESENTATION**

COMPARTMENT # 121 ENTRY YEAR: 2007

Compartment Acreage: 2130 (GIS Calculated) County: Luce

Revision Date: 10/18/05

Stand Examiner: Jason Tokar

Legal Description: T45N R9W Sections 1, 2, 11, 12, 13 & 14

RMU (if applicable):

Management Goals:

Wildlife habitat along with some timber management and recreation are the main uses of this area. The goal is to maintain and improve the forest health and diversity, while subsequently improving wildlife habitat through proper management. If conditions warrant, expanded timber management is recommended. Increasing management activity will provide an increase in diversity and wildlife habitat.

Soil and Topography:

The soil in this compartment is predominantly Carbondale, Lupton and Tawas mucks. Cover types associated with these soils include cedar, black spruce, and mix swamp conifer. The areas of slightly higher ground found near M-28, and in the southern portion of the compartment, are comprised of a heavy silt loam soil, mainly Pickford silt loam. On these soils, aspen, low quality hardwoods, white birch, and lowland brush make up the cover types. The topography is level throughout the entire compartment.

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

The compartment is almost entirely State land. The private property within the compartment is along Highway M-28 and one 80 acre parcel is situated along the Sage River. State land borders the compartment to the north, west and south. To the east, private corporate land borders the compartment north of M-28 and State land borders the compartment to the south of M-28. Due to the lowland nature of the compartment and surrounding State land, land use and development are minimal to moderate. The private parcels along M-28 do have both seasonal and permanent residences on them. The area is used primarily for deer hunting.

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

MNFI lists no features within the compartment boundaries. There is the potential for numerous unique plants such as the round-leaved orchid and limestone oak fern. Moose, wolves, eagle, osprey, wood turtle and re-shouldered hawk are potential wildlife in the area.

The Sage River runs along the west and north border of the compartment. This river was altered in the past for possible farming in the adjacent forested stands.

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

There are no records of historical features within the compartment (Bureau of History).

Special Management Designations or Considerations:

Stands that are within the deer yard boundaries have been designated as a Special Conservation Area (SCA). Being located within the boundaries of the deer yard, management decisions shall be dictated by the promotion and enhancement of the desired characteristics associated with the winter yarding habitat. Conifer canopies should remain undisturbed. Harvesting in these areas will take place during winter months. Any prescribed treatments that take place near the Sage River will incorporate BMP guidelines.

Watershed and Fisheries Considerations**Fisheries Values**

Good. The West Branch Sage River and the Big Ditch are designated for trout. After they combine, the resulting Sage River is designated as second quality warm water. Even so, trout are found in there during the cooler seasons. Trout could live in the lower Sage year-round, but the temperatures and habitat also make it acceptable for northern pike, northern muskellunge and walleyes. Populations of those large predators are generally incompatible with a good population of brook trout. When spring and late season water levels allow, anglers can successfully fish for the large predators upstream to the point where the Big Ditch and the West Branch Sage combine.

Wildlife Habitat Considerations:

Compartment 121 lies in the Seney Sand Lake Plain ecological sub-subsection and also within the historic Sage River Deer yard which supports high numbers of deer during stressful winter periods. The west branch of the Sage River runs along the western and northern borders of the compartment. The northern portion of the compartment is predominately spruce interspersed with cedar. Birch, aspen, swamp hardwoods and swamp conifer stands are interspersed with cedar in the central and southern portions of the compartment and tend to have a high component of cedar throughout.

Conifer canopies should not be disturbed in this compartment to maintain the wildlife values and thermal cover of those stands. Forested corridors should be maintained to facilitate ease of movement between upland and lowland areas. Buffer zones along streams and rivers should be sustained to preserve travel corridors and wetland wildlife values and habitats. Wildlife objectives will be achieved by the retention of conifers, hard and soft mast producing trees, wildlife den and nest trees and snags in stands and the preservation of conifer components in aspen stands. White-tailed deer, moose, black bear, fisher, American marten, snowshoe hare, ruffed grouse and woodcock, gray wolf, otter and mink are noteworthy wildlife species using this compartment.

Mineral Resource and Development Concerns and/or Restrictions:

Sections 1, 2, 11 – 14, T45N-R9W & Section 36, T46N-R9W, Luce County

Surface sediments consist of peat and muck and lacustrine clay and silt. There is either insufficient data to determine the glacial drift thickness or 10 to 50 feet of till. The Silurian Manitoulin Dolomite and Ordovician Queenston Shale, Big Hill Dolomite and Stonington Formation subcrop below the glacial drift. The Manitoulin and Big Hill could be quarried for stone. Gravel pits are not located in the area and potential is limited. There is no economic oil and gas production in the UP, although there was a recent well drilled in Schoolcraft County.

Vehicle Access:

The compartment is located 9 miles east of Newberry. Highway M-28 runs east and west through the center of the compartment while County Road 393 (Borgstrom Road) runs south from M-28 along the east side. One poor quality two track road enters the compartment in Section 1 from the east. However, private property limits access to this road. There is no other vehicle access to the compartment other than by boat via the Sage River on the west and north compartment boundaries.

Survey Needs:

The following corners are needed: S1/16 and Center of Section 12; NW1/16, W1/16 and Center of Section 13.

Recreational Facilities and Opportunities:

There are no established recreational facilities within the compartment. Recreational opportunities would include hunting, fishing and hiking.

Fire Protection:

Fires should remain small except in periods of increased drought conditions. Access for fire suppression activities will be tough with conventional equipment because of soft ground.

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: 121

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				7	16		13		46	18									100
Black Spruce				95				165			661								921
Cedar								52	9	20	294	26	68						469
Grass	2																		2
LowInd Brush	193																		193
LowInd Poplr									6										6
Mx Swmp Cnfr				7	11			45		77	28								168
Non Stocked	5																		5
Paper Birch						14		67	9	22									112
Spruce Fir				13	4														17
Swamp Hrdwds				28						39									67
Tamarack											2								2
Upland Hdwds				7						20								41	68
Total	200			157	31	14	13	329	70	196	985	26	68					41	2130

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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: 121

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	100																										100
S Black Spruce		921																									921
C Cedar				469																							469
G Grass					2																						2
L LowInd Brush									193																		193
P LowInd Poplr										6																	6
Q Mx Swmp Cnfr												168															168
X Non Stocked													5														5
B Paper Birch															112												112
F Spruce Fir																			17								17
E Swamp Hrdwds																				67							67
T Tamarack																					2						2
M Upland Hdwds																								68			68
Total	100	921		469	2				193	6		168	5		112				17	67	2			68			2130

LAKE SUPERIOR STATE FOREST

NEWBERRY FOREST MGT UNIT

LUCE COUNTY

COMPARTMENT: 121

Table 10 - COMPARTMENT VOLUME SUMMARY - ALL STANDS

COMPARTMENT SUMMARY			
TOTAL VOLUME		CUT VOLUME	
Hardwood	5593 Cds	Hardwood	2197 Cds
Softwood	25149 Cds	Softwood	5958 Cds
Sum TotVol	30742 Cds	Sum CutVol	8155 Cds
Total Cmpt Acres		Acres Proposed For Cut.....	278
2130			

NEWBERRY FOREST MGT UNIT

**Proposed Treatments
With NO Limiting Factors**

Compartment: 121 **Entry Year: 2007**

Stand	Cover Type	Acres	Age	Site Index	Mgt Obj	Condition	Method Cut	Harvest Priority	Cultural Need	fdf Status
39	A6	19	68	67	aspen (upland)	old growth (potential or actual)	final harvest	2		
<p>comnts Fmd : SCA - winter deer yard. Mature aspen, some decay and rot showing. Open areas mixed in with clones of aspen. Northern portion has smaller aspen with poor quality red maple. Patches of balsam. Will need a permit for driveway from MDOT - could be a limiting factor. Rudyard silt loam.</p>										
41	A6	8	68	67	aspen (upland)	mature	final harvest	2		
<p>comnts Fmd : Mature aspen, some decay and rot showing. Open areas mixed in with clones of aspen. Northern portion has smaller aspen with poor quality red maple. Patches of balsam. Will need a permit for driveway from MDOT - could be a limiting factor. Rudyard silt loam.</p>										
54	A6	4	68	55	aspen (upland)	old growth (potential or actual)	final harvest	2		
<p>comnts Fmd : SCA - winter deer yard. Stand has a lot of species variability. Areas of primarily aspen, others of dense cedar. Real mix of species within the stand (red maple, white birch, spruce, aspen and cedar). More of a conifer component to this stand than that of stands 56 and 57. Aspen is mature and starting to decline in quality. Blowdown in some cedar areas. Deer browsing on maple saplings. Stand is scheduled for harvest. Leave pockets of dense cedar. Set up for sale with stands 57, 56, 39 and 41. Access/driveway from M-28 will need to be permitted (new drive) from MDOT. Pickford silt loam soil.</p>										
56	A6	2	68	55	aspen (upland)	old growth (potential or actual)	final harvest	2		
<p>comnts Fmd : SCA - winter deer yard. Stand has a lot of species variability. Areas of primarily aspen, others of dense cedar. Real mix of species within the stand (red maple, white birch, spruce, aspen and cedar). Aspen is mature and starting to decline in quality. Blowdown in some cedar areas. Deer browsing on maple saplings. Stand is scheduled for harvest. Leave pockets of dense cedar. Set up for sale with stands 54, 57, 39 and 41. Access/driveway from M-28 will need to be permitted (new drive) from MDOT. Pickford silt loam soil.</p>										
57	A6	13	68	55	aspen (upland)	old growth (potential or actual)	final harvest	2		
<p>comnts Fmd : SCA - winter deer yard. Stand has a lot of species variability. Areas of primarily aspen, others of dense cedar. Real mix of species within the stand (red maple, white birch, spruce, aspen and cedar). Aspen is mature and starting to decline in quality. Blowdown in some cedar areas. Edge of stand along the highway is more red maple, spruce and cedar. Deer browsing on maple saplings. Stand is scheduled for harvest. Leave pockets of dense cedar. Set up for sale with stands 54, 56, 39 and 41. Access/driveway from M-28 will need to be permitted (new drive) from MDOT. Pickford silt loam soil.</p>										
Total Acres.....		46								

Stand	Cover Type	Acres	Age	Site Index	Mgt Obj	Condition	Method Cut	Harvest Priority	Cultural Need	FDF Status
24	S6	27	92	43	black spruce-swamp	mature	final harvest	3		
TREATMENT LIMITING FACTORS: Too wet Road needed (resources not presently available)										
comnts Fmd : Nice dense black spruce stand. Healthy. Scattered tamarack throughout stand. Blowdown along edges of the stand. Plot data is from stands 24, 29, and 36. Access could be a problem due to wet ground to go through to get to the stand. Possible via old ice road on a good winter. Possible to harvest with stands 29, 36, and 35. Much of the area appears to be dying out when compared to the 1953 and 1964 photos. If access is possible, manage these stands before they decline. Carbondale, Lupton and Tawas mucks.										
Wld : leave all cedar and do not go into cedar pockets to harvest anything. Will assess prior to open house										
29	S6	57	92	43	black spruce-swamp	mature	final harvest	3		
TREATMENT LIMITING FACTORS: Too wet Road needed (resources not presently available)										
comnts Fmd : Nice dense black spruce stand. Healthy. Scattered tamarack throughout stand. Blowdown along edges of the stand. Plot data is from stands 24, 29, and 36. Access could be a problem due to wet ground to go through to get to the stand. Possible via old ice road on a good winter. Possible to harvest with stands 29, 36, and 35. Much of the area appears to be dying out when compared to the 1953 and 1964 photos. If access is possible, manage these stands before they decline. Carbondale, Lupton and Tawas mucks.										
Wld : do not cut cedar and do not harvest anything within cedar pockets.										
33	B6	25	63	55	paper birch	old growth (potential or actual)	final harvest	3		
TREATMENT LIMITING FACTORS: Too wet Deer yards										
comnts Fmd : SCA - winter deer yard. Small diameter white birch with a real mix of species (balsam, cedar, red maple and spruce). Slightly higher ground than surrounding cedar stands. Balsam and spruce understory. Access could be a problem for harvesting this stand. Old ice road through stand 34 would be access route. Carbondale, Lupton and Tawas muck soils.										
Wld : do not cut cedar and do not go into cedar thickets to harvest anything. Do not disturb the conifer canopy.										
35	T6	2	92	53	tamarack	old growth (potential or actual)	final harvest	3		
TREATMENT LIMITING FACTORS: Deer yards Inadequate volume due to small acreage										
comnts Fmd : SCA - winter deer yard. Large diameter tamarack over cedar. Tamarack is mature. Harvest only if we harvest with spruce stands to the east due to small acreage. Access is questionable due to wet ground and driveway needed off of M-28. Carbondale, Lupton and Tawas mucks.										
Wld : do not cut cedar and do not go into cedar thickets to harvest anything										
36	S6	22	92	43	black spruce-swamp	old growth (potential or actual)	final harvest	3		
TREATMENT LIMITING FACTORS: Too wet Road needed (resources not presently available)										
comnts Fmd : SCA - winter deer yard. Nice dense black spruce stand. Healthy. Scattered tamarack throughout stand. Blowdown along edges of the stand. Plot data is from stands 24, 29, and 36. Access could be a problem due to wet ground to go through to get to the stand. Possible via old ice road on a good winter. Possible to harvest with stands 29, 36, and 35. Much of the area appears to be dying out when compared to the 1953 and 1964 photos. If access is possible, manage these stands before they decline. Carbondale, Lupton and Tawas mucks.										
Wld : do not cut cedar and do not go into cedar thickets to harvest anything										
49	B6	42	63	55	paper birch	old growth (potential or actual)	final harvest	3		
TREATMENT LIMITING FACTORS: Too wet Deer yards										
comnts Fmd : SCA - winter deer yard. Most of the white birch is healthy. Nice tall white birch. Pockets of large cedar throughout. Areas of blowdown. Patches of aspen. Red maple saplings have browsing. More of a conifer component in the eastern portion of the stand. Access off of M-28 via an old ice road is questionable. Would need the right winter weather. Wet ground. Recommend for harvest if access can be gained. Fish Division requests a 300 ft buffer from the water's edge (Sage River) - beaver management - per phone call with Jim Waybrant on 4/6/05. Carbondale, Lupton and Tawas muck.										
Wld : do not cut any cedar and do not reach into cedar pockets to harvest anything. Do not disturb the conifer canopy										

NEWBERRY FOREST MGT UNIT

**Proposed Treatments
With Limiting Factors**

Compartment: 121 **Entry Year: 2007**

Stand	Cover Type	Acres	Age	Site Index	Mgt Obj	Condition	Method Cut	Harvest Priority	Cultural Need	FDf Status
68	S6	24	93	43	black spruce-swamp	old growth (potential or actual)	final harvest	2		

TREATMENT LIMITING FACTORS: Land survey needed
Adjacent landowner denies access

comnts Fmd : SCA - winter deer yard. Areas in stand with blowdown and mortality. Thick F3 understory in open areas. Tall black spruce. Eastern portion of the stand has more cedar mixed in. Stand appears to have grown very slow for 20-25 years. Access would be through private land to the northeast. Harvest this stand along with stand 75 as one sale due to access through private. Pickford silt loam.

Wld : do not cut cedar and do not reach into cedar thickets to harvest anything

75	S6	33	90	30	black spruce-swamp	old growth (potential or actual)	final harvest	2		
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TREATMENT LIMITING FACTORS: Adjacent landowner denies access
Land survey needed

comnts Fmd : SCA - winter deer yard. Nice tall spruce with a high component of cedar throughout the entire stand. Pockets where cedar basal area is higher than spruce. Open understory. Access to the stand would have to be through the private property to the north. Harvest with stand 68 if we gain access. Will need to harvest the cedar within the stand for maneuverability concerns. Pickford silt loams.

Wld : do not cut cedar and do not harvest anything by reaching into cedar pockets.

Total Acres..... 232

