



**NEWBERRY FOREST MANAGEMENT UNIT
COMPARTMENT REVIEW PRESENTATION**

COMPARTMENT # 109 ENTRY YEAR: 2008

Compartment Acreage: 1713 (GIS calculated) County: Luce

Revision Date: 10/17/06

Stand Examiner: E. Rice

Legal Description: T45N R10W sections 29, 30, 31, 33

RMU (if applicable):

Management Goals:

Promote multiple aged and diversified tree species where possible to reduce forest pest impacts and improve conditions for wildlife species. Retain/enhance the quality of recreational uses of the area. Provide for consistent, sustainable wood fiber production over the long term.

Soil and Topography:

Kalkaska soils are most commonly found throughout the compartment with areas underlaid by Menominee – Graverat Complex soils. Lowland pockets are found on Carbondale – Lupton mucks. The topography is largely level to shallow rolling hills.

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

Private lands bound the compartment on the north and largely on the eastern sides. To the west, state lands are adjacent. The area receives heavy use by hunters and both ORV and snowmobile trails run through 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
None.

Wildlife Habitat Considerations:

Compartment 109 lies in southern Luce County in the St. Ignace sub-subsection. Northern hardwoods and aspen comprise much of the compartment with a few swamp conifer and fir stands and lowland areas scattered around. Pre-settlement vegetation data suggests that conifers might have been more prevalent in the past than occurs in the forest today.

Wildlife objectives will be achieved by the retention of hard and soft mast producing trees, wildlife den and nest trees and snags in harvested stands and the preservation of conifer components in aspen and hardwood stands. Forested corridors should be maintained to facilitate ease of movement between upland and lowland areas. Gray wolves, white-tailed deer, black bear, coyotes, ruffed grouse and marten are noteworthy wildlife species potentially using this compartment.

Mineral Resource and Development Concerns and/or Restrictions:

Sections 29 – 33, T45N-R10W, Luce County

Surface sediments consist of lacustrine sand and gravel and coarse-textured till. There is insufficient data to determine the glacial drift thickness. The Silurian Cabothead Shale and Manitoulin Dolomite subcrop below the glacial drift. The Manitoulin could be quarried for stone. A gravel pit is located in Section 21 and potential is good. There is no economic oil and gas production in the UP.

Vehicle Access:

On road vehicle access is considered to be excellent. A maintained, county gravel road forms the southern boundary for much of the compartment. Woods roads, both two wheel drive passable and four wheel drive passable exist throughout the compartment. State highway M -117 splits the compartment into western and eastern ends.

Survey Needs:

The 1/4 corner between sections 19 and 30 needs to be set in order that forest management can proceed. Likewise, the west 1/16 corner of section 29 is needed.

Recreational Facilities and Opportunities:

ORV and snowmobile trails

Fire Protection:

Fires should be small and slow growing because of hardwood and swamp conifer types. Lowland soil types may limit the use of heavy equipment for suppression.

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: 109

Table 3

(acres shown in boxes)

STAND AGE CLASS

COVER TYPE	Not	STAND AGE CLASS														All Aged	Total		
	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
Aspen		50	243				14		45										352
Black Spruce					10		56		27										93
Bog or Marsh	10																		10
Grass	60																		60
Lowlnd Brush	19																		19
Mx Swmp Cnfr						58	9	32										14	113
Paper Birch					5														5
Spruce Fir					8	8	11	11											38
Treed Bog	62																		62
Upland Hdwds						38	29		15		17							852	951
Water	10																		10
Total	161	50	243		23	104	119	43	87		17							866	1713

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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: 109

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	352																										352
S Black Spruce		93																									93
V Bog or Marsh			10																								10
G Grass					60																						60
L Lowlnd Brush									19																		19
Q Mx Swmp Cnfr												113															113
B Paper Birch																			5								5
F Spruce Fir																			38								38
D Treed Bog																						62					62
M Upland Hdwds																								951			951
Z Water																									10		10
Total	352	93	10		60				19			113							43			62		951	10	1713	

LAKE SUPERIOR STATE FOREST

NEWBERRY FOREST MGT UNIT

LUCE COUNTY

COMPARTMENT: **109**

Table 10 - COMPARTMENT VOLUME SUMMARY - ALL STANDS

COMPARTMENT SUMMARY			
TOTAL VOLUME		CUT VOLUME	
Hardwood	22940 Cds	Hardwood	2684 Cds
Hardwood	1932 Mbf	Hardwood	222 Mbf
Softwood	5626 Cds	Softwood	33 Cds
Softwood	8 Mbf	Sum CutVol	3161 Cds
Sum TotVol	32446 Cds		
Total Cmpt Acres		Acres Proposed For Cut.....	
1713		292	

NEWBERRY FOREST MGT UNIT

**Proposed Treatments
With NO Limiting Factors**

Compartment: 109 Entry Year: 2008

Stand	Cover Type	Acres	Age	Site Index	Mgt Obj	Condition	Method Cut	Harvest Priority	Cultural Need	FD Status
10	A6	14	57	55	aspen (upland)	two aged	final harvest	2		
<p>comnts Fmd : Mature aspen, 6-12"dbh, 4-7 stick heights. Associated p.birch poletimber is showing mortality and in most places already dead - good for wildlife snags. Steep ridges throughout the stand, most looked to have access to the tops, for the most part, inoperable hillsides. Scattered throughout the stand are wet pockets at the bottoms of ridges - harvesting operations should avoid unless under well frozen conditions. Remove all merchantable aspen and maple, along with merchantable spruce/fir. Reserve advanced balsam/spruce sapling regen as much as possible, along with any p.birch (mainly dead anyway). Reserve any associated red or white pine, and cedar if encountered. MO is for aspen, secondary MO for mixed balsam fir/spruce. Stand is adjacent to Co. Rd. 405. Protect adjacent snowmobile trail to the west.</p> <p>Wld : leave any pine and cedar</p>										
25	M6	69		60	northern hardwood	unevenaged	selection	2		
<p>comnts Fmd : Short hardwood sawlog heights - 1 log average. Mixed hardwood poletimber, 4-10" dbh, 4-6 stick heights. Black cherry, beech component, black knot prevalent on cherry. Little mixed hardwood regen, balsam sapling understory. Stand has nearly a closed canopy. Inclusion of hemlock 4-10"dbh, low/wet ground (reserve from harvest area). Thin to 80-90 ba/ac. Leave a beech, y birch, conifer and cherry component. MO is for northern hardwoods.</p> <p>Wld : leave a beech and cherry component and hemlock</p>										
36	M6	88		52	northern hardwood	unevenaged	selection	2		
<p>comnts Fmd : Good to excellent form to H. maple sawtimber 12-16"dbh, 1-3 log heights. Good form to mixed hardwood poletimber 4-10"dbh, 3-7 stick heights (lacking good stocking of 4-8"diam classes). Sawlog sized trees have large crowns - treatments should watch in opening the crown too much which could result in dessication. Scattered areas of high beech stocking. Widely scattered inclusions of advanced hardwood regeneration. Overall, the stand is lacking any sort of seedling/sapling component. Pockets of aspen at the north end of the stand. Black cherry has high incidence of black knot. Remove 1/3 of the basal area and/or thin to 80-90 ba/acre. Retain a component of black cherry, y birch, conifers, and beech. Protect any hemlock, thinning around those present to provide for seedling establishment. Leave associated aspen for wildlife snags. AFPO habitat type. MO is for northern hardwoods. ORV trail through stand.</p> <p>Wld : leave a cherry, beech, yellow birch and conifer component</p>										
51	M6	14		55	northern hardwood	unevenaged	thinning	2		
<p>comnts Fmd : Stand has fair to good form to trees overall. Dbh ranges 8-20", 3-5 stick poletimber heights, 1 log average. R. maple has a high incidence of defect. E. side of stand has balsam fir understory. H.maple, ironwood saplings 6-8' tall. Scattered y.birch and a component of beech. Thin to 80-90 ba, keep a component of yellow birch and beech, though reduce beech to 10ba/ac where possible without going below the 80-90ba/ac. MO is for northern hardwoods.</p> <p>Wld : leave a yellow birch and beech component. Leave a conifer component if present</p>										
55	A6	14	72	60	aspen (upland)	high risk	final harvest	1		
<p>comnts Fmd : Stand is overall overmature aspen, large dbhs, 10-18", 4-7 stick heights. There are areas of lower stocking and lesser quality where black cherry and mix hardwood poletimber are growing in. The east side of the stand picks up a conifer component as it transitions to the lowland conifer to the north. Remove all merchantable trees, retaining the small diam conifers. Retain any associated white pine, hemlock, or cedar. Keep the stand well buffered from the conifer swamp to the north - turns to wet ground quickly and for travel corridor in the transitional area. MO is for aspen, secondary MO for spruce/fir, areas of mixed hardwood regen (stump sprouting) are expected also. Soil = Solona</p> <p>Wld : leave white pine, cedar and hemlock</p>										
56	M6	20		62	northern hardwood	unevenaged	thinning	2		
<p>comnts Fmd : Mixed hardwood sawtimber 12"dbh, 1 log heights. Poletimber 4-8"dbhs 4-6 stick heights. Heavy mix hardwood saplings at field edges along with balsam fir. Scattered aspen 12-16" through stand, greater occurrence at field edges. West side of stand is poorer quality and more open grown, apply very light thinning, removing the obvious defective trees. Retain most of the sawtimber for future size class distribution. Retain 10ba/ac beech. Where aspen is inside the hardwood stand, retain for wildlife trees. Remove aspen at the field edges. Thin stand to 80-90 ba/ac, protect the hardwood saplings where possible. Make sure producer minimumizes skid trails when accessing the stand from field edges to protect the heavy mix hardwood saplings.</p> <p>Wld : leave a beech component and a conifer component where it exists.</p>										
57	A6	22	76	65	aspen (upland)	mature	final harvest	2		
<p>comnts Fmd : Mature aspen around field edges. Aspen is 12-18"dbh, 6-8 sticks height. Balsam fir sapling understory and scattered r. maple poletimber. Along the east line is a mixed hardwood inclusion. Remove merchantable trees, leave small diameter mixed conifers. Leave associated w.pine, hemlock, or cedar. MO is for aspen, secondary is for spruce/fir.</p> <p>Wld : leave a conifer component, white pine, cedar and hemlock</p>										
Total Acres.....		241								

NEWBERRY FOREST MGT UNIT

**Proposed Treatments
With Limiting Factors**

Compartment: 109 **Entry Year: 2008**

Stand	Cover Type	Acres	Age	Site Index	Mgt Obj	Condition	Method Cut	Harvest Priority	Cultural Need	FD/ Status
1	M6	35		55	northern hardwood	unevenaged	thinning	2		

TREATMENT LIMITING FACTORS: Adjacent landowner denies access

comnts Fmd : Good to fair poletimber, 4-6 stick heights. Scattered H.maple sawtimber 12-18"dbh, 1-3 log heights. High stocking of 2" H.maple saplings 20-30' heights. Areas of heavy B.cherry stocking. Thin to 80-90 ba/ac. Stand is lacking 10-14" diam classes. High stocking in 6-8"diam classes - removals should try to concentrate on these classes along with lighter removals in the larger diam class of sawtimber to furthur the stand to regulation. MO is for northern hardwoods. Access must be gained through private land (landowner has not been contacted as of 1/06). Road from the east off of Co. Rd 405 runs near to the S. edge of the stand/compartment boundary.

Wld : leave conifers, watch out for vernal ponds in the stands

4	M6	16		60	northern hardwood	unevenaged	thinning	2		
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TREATMENT LIMITING FACTORS: Adjacent landowner denies access

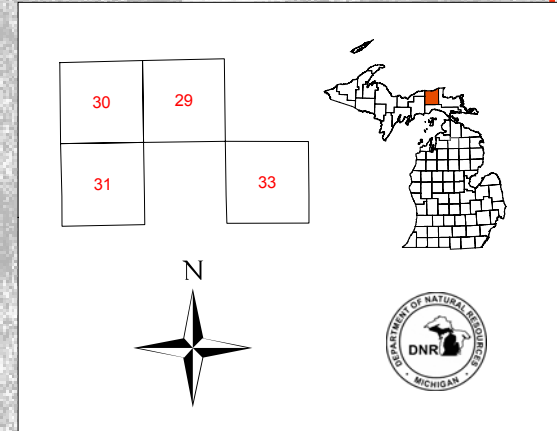
comnts Fmd : Poletimber stand, 6-10"dbh, 2-4 stick heights. Many areas of high stocking of B. cherry (60-100 ba/ac). Scattered sawtimber and sawtimber pockets. Where present, sawtimber is well formed, 1-2 logs. Scattered Hemlock sawtimber sized trees. South end of stand is densely stocked poletimber - 120 ba/ac, N. end of stand more widely spaced (larger trees, taller heights). Thin to 80-90 ba/ac and/or remove 1/3 of the stand. MO is for northern hardwoods. Access would be through private land (as of 1/06, landowner has not been contacted). Road system runs along southern edge of the compartment from Co. Rd. 405 to the east.

Wld : leave hemlock

Total Acres..... 51

Field Map

Compartment 109
 T45N, R10W, Sec. 29-31, 33
 County: Luce
 Unit: Newberry
 YOE: 2008
 Acres: 1,713 GIS Calculated
 Stand Examiner: Edward Rice
 Map Revised: 11/8/2006
 Map Phase: Pre-review



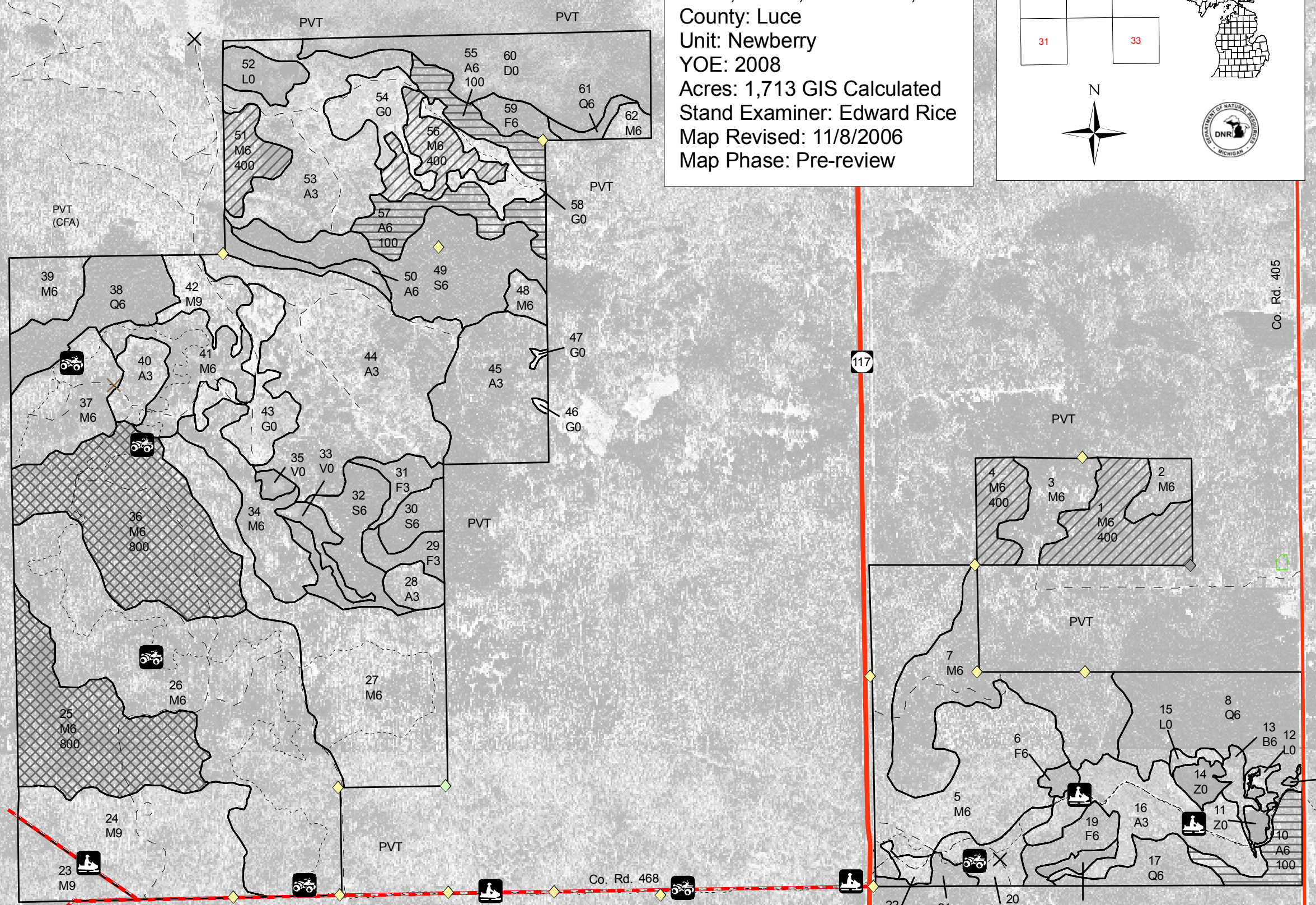
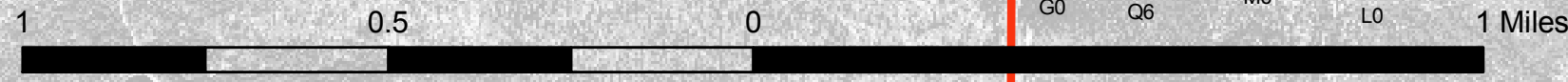
Legend

- RLS Corners
- Approx. Corners
- PVT Corners
- Highways
- County Paved Roads
- County Gravel Roads
- Poor Dirt Roads
- Trails
- Berms
- Gates
- Residences
- ORV Trails
- Snowmobile Trails
- State Highway
- Stand Boundary
- 100 - Final Harvest
- 400 - Thinning
- 800 - Selection

Co. Rd. 425

Co. Rd. 405

Co. Rd. 468



State

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