

CADILLAC FOREST MANAGEMENT UNIT



COMPARTMENT REVIEW PRESENTATION

COMPARTMENT # 127 ENTRY YEAR: 2009

Compartment Acreage (GIS Acres): 3101 County: Wexford

Revision Date: 09/27/2007 4:06 PM

Stand Examiner: Andy Church, Forester, Cadillac OSC

Legal Description: T24N, R09W, Sec 5-8. T24N, R10W, Sec 1-3, 11-12.

RMU (if applicable): 237. Key Value Mix/Use

Management Goals: Maintain a variety of cover types and age class diversity which favor game and non-game species. Maintain visual resource and recreational value along river.

Soil and Topography: Wide variety of sands including Au Gres, Croswell, Allendale, Manistee and Montcalms. Soils are Histosols near river.

Ownership Patterns, Development, and Land Use in and Around the Compartment: Solid state ownership with a few parcels of private landowners. Consumers Power has timber rights to pieces along river.

Unique, Natural Features (include only non-site specific and non-sensitive information): High quality pine barrens* (Walton Marsh) occurs in compartment in T24N, R09W, section 5 (primarily in ne quarter).

Archeological, Historical, and Cultural Features:

Special Management Designations or Considerations: Red-shouldered hawk documented in the NE 1/4 of section 8. Bald eagle to the NE and S. Wood turtle documented to the SW. Historic ginseng record in section 9. Hill's thistle to the E in section 4, also to the N. Potential for rare plants of cedar swamp: limestone oak fern, ram's head lady's-slipper and calypso orchid. Potential for ginseng in mesic slopes along Manistee River. Potential for great blue heron rookery, osprey, eagle, goshawk, red-shouldered hawk. Potential for wood turtle, massasauga, and Blanding's turtle. Potential for ebony boghaunter and secretive locust. Potential for persius duskywing, frosted elfin, dusted skipper, grizzled skipper, and red legged spittlebug in grassy openings. Potential for pine tree cricket in white pine stands. Visual management techniques shall be considered with respect to the North Country Trail.

Watershed and Fisheries Considerations: The Manistee River, Walton Creek, and a number of small, unnamed streams flow through Compartment 127. The Manistee River and Walton Creek are Designated Trout Streams. While the state natural river designation ends at the Missaukee/Wexford County line, Fisheries, Forest Management, and Wildlife Division entered into an agreement to adopt and utilize the Upper Manistee River state natural river zoning ordinance. The vegetative buffer on the mainstream is 175 feet, again unless the proposed treatment meets one of the exceptions (page 40 of the Upper Manistee River Natural River Plan). Both branches of Walton Creek were sampled in August, 2004, and both branches held wild brook trout and rainbow trout. No active management should take place within 100 feet of either of these streams, per MDNR BMPs. For Stand 36 along the West Branch of Walton Creek, a substantial buffer

should be left to avoid beaver colonization due to regenerated aspen. For management along the unnamed streams in the compartment, a 100 foot buffer should be maintained per MDNR BMPs. –M. Tonello, 9/25/2007.

Wildlife Habitat Considerations: Priority wildlife species are deer, ruffed grouse, woodcock, aquatic furbearers, and waterfowl. There are 13 compartments in this RMU. Agreements called for a decrease of 200 acres in red pine/white pine and an increase of 200 acres in aspen. (L. Smith, 9/24/07)

Mineral Resource and Development Concerns and/or Restrictions: Sections 5-8, T24N-R9W & Sections 1–3 & 10-12, T24N-R10W, Wexford County

Surface sediments consist of glacial outwash sand and gravel and postglacial alluvium. The glacial drift thickness varies between 200 and 400 feet. Beneath the glacial drift are the Mississippian Michigan Formation, Marshall Sandstone and Coldwater Shale. The Michigan is quarried for gypsum in other areas of the State and the Marshall was used as a building stone. A gravel pit is located in Section 4 and there should be potential. This area is located six miles southeast of the prolific Silurian Niagaran reef trend. Oil and gas has limited potential in the Compartment and none of the State lands are leased for oil and gas exploration.

Vehicle Access: A forest road access plan is detailed on the compartment map. Identified are state and county roads as well as forest roads and trails under the jurisdiction of the DNR. Also indicated are forest roads and trails under the jurisdiction of the DNR that are proposed for abandonment. These roads were determined to be in excess of the access needs in the area, are a threat to the resources, or are a concern environmentally.

Survey Needs: None.

Recreational Facilities and Opportunities: The Old US 131 campground has 25 camping sites and a canoe launch. Needed repairs and concerns are cited in the Old US 131 campground inspection form. The Mis-Kal snowmobile trail is located in Section 8. The North Country Trail runs the length of the compartment mostly along the river. Also, there are two trailheads for the North Country Trail. One located in US 131 campground, and another in the SESE of Section 1. The North Country National Scenic Trail Organization helps maintain the trail and trailheads.

Fire Protection: There is potential for large fire growth within this compartment. Much of this compartment is within the Zone 6 dispatch area, with Manton Field Office being some of the IA resources to this area. There are also some urban interface areas within the compartment.

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

PERE MARQUETTE STATE FOREST

CADILLAC MGT UNIT

WEXFORD COUNTY

COMPARTMENT: 127

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		207	319		131	328	91	71	67	4									1218
Bog or Marsh	25																		25
Cedar											22	83							105
Grass	136																		136
Jack Pine						37	76		22										135
Lowlnd Brush	29																		29
Mx Swmp Cnfr								93				203	157						453
Oak				5				137			123	140							405
Red Pine					25		91	189											305
Swamp Hrdwds										37		12						44	93
Upland Hdwds											4	8						44	56
Water	74																		74
White Pine						24	5				36	2							67
Total	264	207	319	5	156	389	263	490	89	41	185	448	157					88	3101

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

PERE MARQUETTE STATE FOREST

CADILLAC MGT UNIT

WEXFORD COUNTY

COMPARTMENT: 127

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	1203																									15	1218	
V Bog or Marsh			25																								25	
C Cedar				105																							105	
G Grass					136																						136	
J Jack Pine							135																				135	
L Lowlnd Brush									29																		29	
Q Mx Swmp Cnfr												453															453	
O Oak														405													405	
R Red Pine																304									1		305	
E Swamp Hrdwds	11																			82							93	
M Upland Hdwds																									56		56	
Z Water																									74		74	
W White Pine																										67	67	
Total	1214		25	105	136		135		29			453		405		304				82					57	74	82	3101

PERE MARQUETTE STATE FOREST

CADILLAC MGT UNIT

WEXFORD COUNTY

COMPARTMENT: **127**

Table 10 - COMPARTMENT VOLUME SUMMARY - ALL STANDS

COMPARTMENT SUMMARY			
TOTAL VOLUME		CUT VOLUME	
Hardwood	18012 Cds	Hardwood	5921 Cds
Hardwood	1496 Mbf	Hardwood	435 Mbf
Softwood	21144 Cds	Softwood	847 Cds
Softwood	1468 Mbf	Softwood	406 Mbf
Sum TotVol	45084 Cds	Sum CutVol	8450 Cds
Total Cmpt Acres		Acres Proposed For Cut.....	563
3101			

CADILLAC MGT UNIT

**Proposed Treatments
With NO Limiting Factors**

Compartment: 127 Entry Year: 2009

Stand	Cover Type	Acres	Age	Site Index	Mgt Obj	Condition	Method Cut	Harvest Priority	Cultural Need	FDF Status
7	A6	12	44	70	aspen (upland)	mature	final harvest	1	natural regeneration	
comnts Fmd : Final Harvest. Leave all Cedar and Hemlock. RETENTION: Within Stand. ALTERNATIVE ACCEPTABLE REGEN: Maple										
10	A6	5	56	55	aspen (upland)	mature	final harvest	1	natural regeneration	
comnts Fmd : Final Harvest. Leave all Hemlock and Cedar. RETENTION: Along County RD. ALTERNATIVE ACCEPTABLE REGEN: Maple										
22	O9	91	88	54	oak	two aged	shelterwood-seed	1	release	
comnts Fmd : Mark to a RBA of 30 in areas where regeneration is needed. Within areas that have adequate advanced regeneration, remove overstory. Cut all: Aspen, Maple, and Fir. Leave all: Cedar, Hemlock. Protect advanced regeneration. Resulting stand will be a mix of Oak and Pine. RETENTION: Within Stand. ALTERNATIVE ACCEPTABLE REGEN: Maple/Pine										
28	O9	88	99	55	oak	mature	seed tree	1	natural regeneration	
comnts Fmd : Reserve tree mark Oak to a RBA of 10-30. Cut other spp. Expand Aspen clones. Include Aspen/Fir strip along southern border. RETENTION: Within stand. ALTERNATIVE ACCEPTABLE REGEN: Maple/Pine										
36	A6	11	59	55	aspen (upland)	mature	final harvest	1	natural regeneration	
comnts Fmd : Final Harvest. Leave all Oak. RETENTION: Buffer Creek to South ALTERNATIVE ACCEPTABLE REGEN: Maple										
40	J6	22	70	63	jack pine	mature	final harvest	1	natural regeneration	
comnts Fmd : Leave all Cedar, Hemlock, and Oak. Small Cedar pocket in middle of stand. Stand is more of a Maple/Aspen/Fir stand to the South. RETENTION: Within stand. ALTERNATIVE ACCEPTABLE REGEN: Maple/Fir										
44	W9	11	97	45	white pine	mature	thinning	1	thinning	
comnts Fmd : LARGE DIAMETER PINES. Thin. Cut all Aspen, Maple, Fir. Leave all Hemlock, and Cedar. Hemlock pocket on the West side of stand. Do not include White Pine polestand to South. RETENTION: Within Stand.										
49	A6	39	53	68	aspen (upland)	mature	final harvest	2	natural regeneration	
comnts Fmd : Final Harvest. Leave all Hemlock, Cedar and Oak. Wet areas throughout, mostly in center and SE. RETENTION: Middle of stand where drainage crosses road. ALTERNATIVE ACCEPTABLE REGEN: Maple/Pine.										
54	M9	29		58	northern hardwood	unevenaged	thinning	1	thinning	
comnts Fmd : Thin. Leave all Hemlock. Spec cut Aspen and Ironwood. RBA range 50-90. Cut heavier in areas with poor quality. Beavers active on East side of stand. RETENTION: Within Stand.										
64	A6	67	70	65	aspen (upland)	two aged	final harvest	2	natural regeneration	
comnts Fmd : Final Harvest. Leave all Oak, Hemlock and Cedar. Many different spp. Some wet pockets throughout. Not able to be harvested spring. RETENTION: Within Stand. ALTERNATIVE ACCEPTABLE REGEN: Maple										
66	A6	21	44	62	aspen (upland)	mature	final harvest	2	natural regeneration	
comnts Fmd : Final Harvest. Leave all Oak, Hemlock, and Cedar. Retain some Pine where no Aspen is present. Mix of young and old Aspen. Hemlock and Cedar pocket in middle of stand. RETENTION: Hemlock/Cedar/Aspen pocket in middle of stand. ALTERNATIVE ACCEPTABLE REGEN: Maple										
85	R6	7	60	50	red pine	immature	thinning	3	thinning	
comnts Fmd : Thin. Remove at most 25% due to windthrow concerns. Trees are small diameter, but straight and tall. RETENTION: Within Stand.										
90	A6	45	66	65	aspen (upland)	mature	final harvest	1	natural regeneration	
comnts Fmd : Final Harvest. Leave all Cedar, Hemlock, and Oak. Winter cut only. Many wet pockets of Tag Alder and Swamp Hardwoods throughout. Use North Country Trail as southern border of stand. RETENTION: Buffer creek to West. ALTERNATIVE ACCEPTABLE REGEN: Maple/Fir										
99	A6	15	60	43	white pine	two aged	thinning	2	thinning	
comnts Fmd : Thin Pine. Leave all Hemlock, Cedar, and Oak. Cut all Aspen, RM, and Fir. Not able to be harvested in springtime. RETENTION: Within Stand.										
116	R9	1	49	54	northern hardwood	mature	final harvest	2	natural regeneration	
comnts Fmd : Final harvest this plantation. No retention due to small acreage, and poor quality. RETENTION: none. ALTERNATIVE ACCEPTABLE REGEN: Maple.										
117	R6	7	49	54	red pine	immature	thinning	2	thinning	
comnts Fmd : 2nd thinning. RETENTION: Within Stand.										

CADILLAC MGT UNIT

**Proposed Treatments
With NO Limiting Factors**

Compartment: 127 **Entry Year: 2009**

Stand	Cover Type	Acres	Age	Site Index	Mgt Obj	Condition	Method Cut	Harvest Priority	Cultural Need	fdf Status
120	A6	4	49	58	aspen (upland)	mature	final harvest	2	natural regeneration	
comnts Fmd : Final Harvest. Low quality. Protect drainage to east for retention. RETENTION: Drainage to East. ALTERNATIVE ACCEPTABLE REGEN: Maple										
121	R6	5	49	54	red pine	immature	thinning	2	thinning	
comnts Fmd : 2nd thinning. Cut all Aspen and Maple. RETENTION: Within Stand.										

Total Acres..... 480

CADILLAC MGT UNIT

**Proposed Treatments
With Limiting Factors**

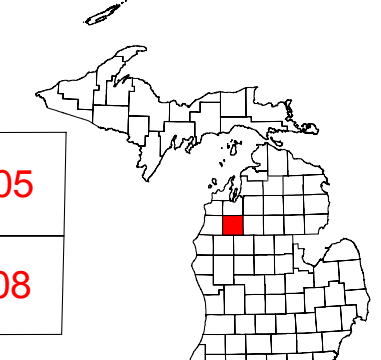
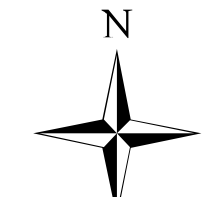

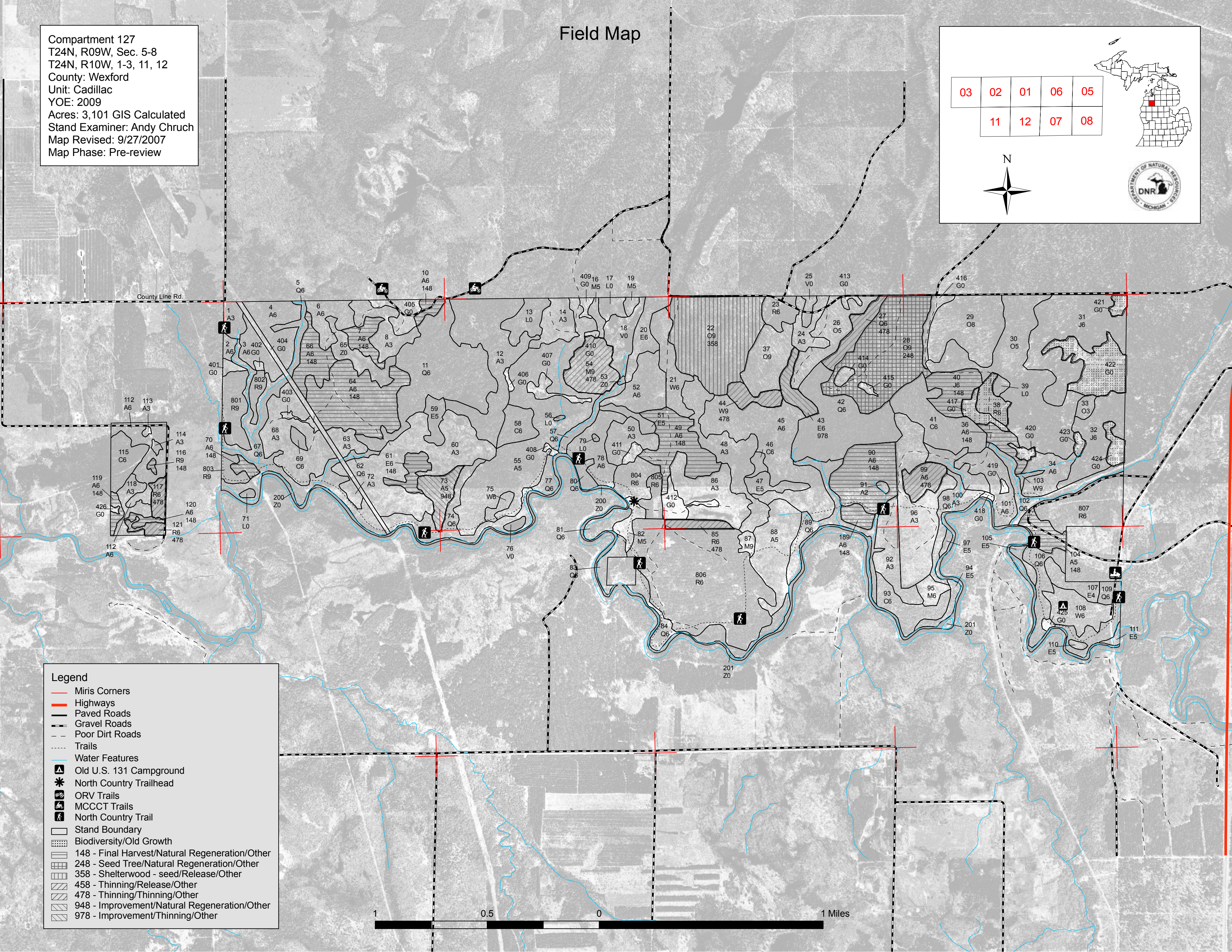
Compartment: 127 Entry Year: 2009

Stand	Cover Type	Acres	Age	Site Index	Mgt Obj	Condition	Method Cut	Harvest Priority	Cultural Need	FDF Status	
27	Q6	14	110	40	mixed swamp conifer	mature	thinning	3	thinning		
TREATMENT LIMITING FACTORS: Too wet Water quality/bmps Too steep											
comnts Fmd : Too wet to harvest commercially because of creek in middle of stand. Habitat Cut.											
43	E6	12	99	48	swamp hardwoods	high risk	improvement	3	thinning		
TREATMENT LIMITING FACTORS: Too wet											
comnts Fmd : Drainage from Riplow Marsh runs through middle of stand. No defined bed and bank, but very wet. Some scattered large diameter Pines. Aspen falling apart. Habitat Cut.											
61	E6	11	84	54	aspen (upland)	sparse	final harvest	3	natural regeneration		
TREATMENT LIMITING FACTORS: Too wet											
comnts Fmd : Heavy to Black Ash in North. Sparse Aspen in South. Wet. Habitat cut.											
70	A6	4	80	68	aspen (upland)	mature	final harvest	3	natural regeneration		
TREATMENT LIMITING FACTORS: Blocked by other physical obstacle											
comnts Fmd : Final Harvest. Habitat cut.											
73	A5	16	8	61	aspen (upland)	sparse	improvement	3	natural regeneration		
TREATMENT LIMITING FACTORS: Inadequate volume due to low stocking/small diameter/etc. Water quality/bmps											
comnts Fmd : Final harvest. Leave all Hemlock, Cedar, Oak. Buffer creek East. Northern portion of stand harvested in 1999, but did not take all trees. Terrain slopes toward Manistee river in the middle of the stand. Below slope is more of an Aspen/Maple stand. Habitat cut pending Fisheries approval.											
104	A5	14	51	60	aspen (upland)	mature	final harvest	3	natural regeneration		
TREATMENT LIMITING FACTORS: Water quality/bmps											
comnts Fmd : Final harvest. Fine sandy soils. Not able to be harvested due to runoff into the Manistee river concerns. Aspen falling apart. More Pine and Balsam in the South.											
119	A6	4	49	58	aspen (upland)	mature	final harvest	3	natural regeneration		
TREATMENT LIMITING FACTORS: Blocked by other physical obstacle											
comnts Fmd : Habitat Cut. Creek on East side of stand.											
189	A6	8	45	58	aspen (upland)	two aged	final harvest	3	natural regeneration		
TREATMENT LIMITING FACTORS: Too steep Too wet Water quality/bmps											
comnts Fmd : Habitat cut pending Fisheries approval. Too sensitive for equipment.											
Total Acres.....		83									

Field Map

Compartment 127
 T24N, R09W, Sec. 5-8
 T24N, R10W, 1-3, 11, 12
 County: Wexford
 Unit: Cadillac
 YOE: 2009
 Acres: 3,101 GIS Calculated
 Stand Examiner: Andy Chruh
 Map Revised: 9/27/2007
 Map Phase: Pre-review

03	02	01	06	05
11	12	07	08	

Legend

- Miris Corners
- Highways
- Paved Roads
- Gravel Roads
- Poor Dirt Roads
- Trails
- Water Features
- Old U.S. 131 Campground
- North Country Trailhead
- ORV Trails
- MCCCT Trails
- North Country Trail
- Stand Boundary
- Biodiversity/Old Growth
- 148 - Final Harvest/Natural Regeneration/Other
- 248 - Seed Tree/Natural Regeneration/Other
- 358 - Shelterwood - seed/Release/Other
- 458 - Thinning/Release/Other
- 478 - Thinning/Thinning/Other
- 948 - Improvement/Natural Regeneration/Other
- 978 - Improvement/Thinning/Other

