



GRAYLING FOREST MANAGEMENT UNIT COMPARTMENT REVIEW PRESENTATION

COMPARTMENT # 183 ENTRY YEAR: 2009

Compartment Acreage: 1511 County: Crawford

Revision Date: 3/7/07

Stand Examiner: Patrick Cotant

Legal Description: T26NR4W Sections 16, 17, 18 Grayling Township

Management Goals: This compartment is comprised of Hanson Reserve Lands which contain the following deed restrictions: 1) The lands are to be used as a permanent encampment and maneuvering ground for the military, 2) it is to serve as a game preserve for the breeding and protection of game, and 3) it is to serve as a forest reserve. The management goal is to maintain forest health, productivity, sustainability, species diversification, and structural diversity throughout the compartment while meeting the deed restrictions.

Soil and Topography: Topography in this compartment is mostly flat with some swales present throughout the Bear Swamp, mainly near the eastern reaches, in close proximity to Lake Margrethe. There are also numerous hills with some steep slopes at the southern edge of the compartment. One named hill, Thompson Hill, rises abruptly from the swamp interface, approximately 300' to its highest point which is actually just south of the compartment border. The dominant soil type present is Tawas-Lupton muck which makes up the entire bear Swamp Area. This soil type is characterized by its extremely poorly drained nature. Management concerns include windthrow, seedling mortality and equipment limitation. The southern areas of the compartment transition away from the Bear Swamp through the Kinross-AuGres complex and eventually to the Graycalm-Rubicon Complex. The soils are rapid to somewhat excessively drained and have similar management concerns including equipment limitation on slopes, erosion on slopes and seedling mortality.

Ownership Patterns, Development, and Land Use in and Around the Compartment: The entire Bear Swamp area is publicly owned land and is part of the National Guard's Hanson Reserve. Hanson Reserve Lands were given to the National Guard, DMA by Rasmus Hanson in 1913, with several deed restrictions as outlined under the management objective. These restrictions have tasked the DNR is with managing the natural resources on these lands as long as management activities do not conflict with military needs. In addition, hunting is prohibited on these lands.

Unique, Natural Features (include only non-site specific and non-sensitive information): The Bear Swamp is quite a large uninterrupted swamp complex with many unique aspects. Bald Eagle, Loon, Osprey, Secretive Locust, and Massasauga Rattlesnakes have been observed within this compartment. There is potential for dusted skipper, Blandings turtle, goshawk, red shouldered hawk, Boreal bronchiorhynca, American bittern, wood turtle, Hill's thistle, Canda ricegrass, Prairie dropseed, Vasey's rush, Norther prostrate clubmoss, Alleghany plum, Houghton's goldenrod, and rough fescue. There is a high quality (AB rank) Northern wet-mesic prairie--Portage Creek Complex--to the northeast of the compartment. One of only three northern wet-mesic prairies in the state. The compartment also contains an intermittent wetland and Lake Margrethe to the northeast. There is also potential for calypso orchid, ram's head orchid, and limestone oak fern in conifer swamp.

Watershed and Fisheries Considerations: The Bear Swamp is integral to the maintenance of water quality in the Lake Margrethe and Manistee River watersheds. Numerous springs and creeks that feed both Portage Creek and Lake Margrethe originate within the boundaries of the Bear Swamp.

Wildlife Habitat Considerations: Wildlife habitat within this compartment and the surrounding lands is abundant. The Bear Swamp is considered a major deer yard during the winter months, and the oak ridges to the south provide mast and cover throughout the year. An Eagles nest was found within this compartment. Therefore, any management activities in the area should take this into account.

Mineral Resource and Development Concerns and/or Restrictions: Development within this compartment is nonexistent. The entire compartment is under state ownership and military activities are minimal. The Camp Grayling National Guard Base water filter beds lie within this compartment as does the Lake Margrethe Access Site and Sate Forest Campground. These two areas provide the only access points to the compartment. Surface sediments consist of glacial outwash sand and gravel and postglacial alluvium. The glacial drift thickness varies between 400 and 600 feet. Beneath the glacial drift are the Coldwater Shale and Marshall Sandstone. The Marshall was previously used as a building stone. Gravel pits are not located in the area, but there is potential on the uplands to the south. The compartment, part of Camp Grayling, is not leased for oil and gas development

Vehicle Access: As mentioned above, the roads to the access site at Lake Margrethe and the Filter Beds for the National Guard Base provide the only year-round access to this compartment. There is a small foot bridge that crosses Portage Creek to the north of the compartment and then follows the county line/survey line which provides foot travel access to the western portions of the Bear Swamp.

Survey Needs: Survey work throughout this compartment is thorough. There are numerous established corners, although many are very difficult to access.

Recreational Facilities and Opportunities: Hunting is prohibited on Hanson Reserve Lands due to deed restrictions. There are no designated recreational trails in the compartment. Lake Margrethe State Forest Campground is located just north of section 16.

Additional Compartment Information: The Bear Swamp offers a unique opportunity to access a large cedar swamp with abundant wildlife viewing possibilities.

- **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

AUSABLE STATE FOREST

GRAYLING FOREST MGT UNIT

CRAWFORD COUNTY

COMPARTMENT: 183

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
Black Spruce									9	118									127
Cedar												747							747
Jack Pine			4					10		36									50
Local Name	13																		13
Mx Swmp Cnfr									20										20
Non Stocked	23																		23
Oak										164									164
Red Pine											12								12
Swamp Hrdwds										64									64
Tamarack										142									142
Upland Brush	9									5									14
Upland Hdwds												95							95
White Pine															40				40
Total	45		4					10	29	529	12	842			40				1511

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

AUSABLE STATE FOREST

GRAYLING FOREST MGT UNIT

CRAWFORD COUNTY

COMPARTMENT: 183

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
S Black Spruce		127																									127
C Cedar				747																							747
J Jack Pine							50																				50
I Local Name								13																			13
Q Mx Swmp Cnfr												20															20
X Non Stocked													23														23
O Oak														164													164
R Red Pine																12											12
E Swamp Hrdwds																			64								64
T Tamarack																					142						142
U Upland Brush																								14			14
M Upland Hdwds																								95			95
W White Pine																									40	40	
Total		127		747			50	13				20	23	164		12				64	142			14	95	40	1511

AUSABLE STATE FOREST

GRAYLING FOREST MGT UNIT

CRAWFORD COUNTY

COMPARTMENT: **183**

Table 10 - COMPARTMENT VOLUME SUMMARY - ALL STANDS

COMPARTMENT SUMMARY			
TOTAL VOLUME		CUT VOLUME	
Hardwood	4567 Cds	Softwood	184 Cds
Hardwood	730 Mbf	Sum CutVol	184 Cds
Softwood	22380 Cds		
Softwood	1790 Mbf		
Sum TotVol	31987 Cds		
Total Cmpnt Acres		Acres Proposed For Cut.....	
1511		0	

**Proposed Treatments
With NO Limiting Factors**

Compartment: 183

Entry Year: 2009

Stand	Cover Type	Acres	Age	Site Index	Mgt Obj	Condition	Method Cut	Harvest Priority	Cultural Need	FD Status
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Total Acres..... 0

**Proposed Treatments
With Limiting Factors**

Compartment: 183

Entry Year: 2009

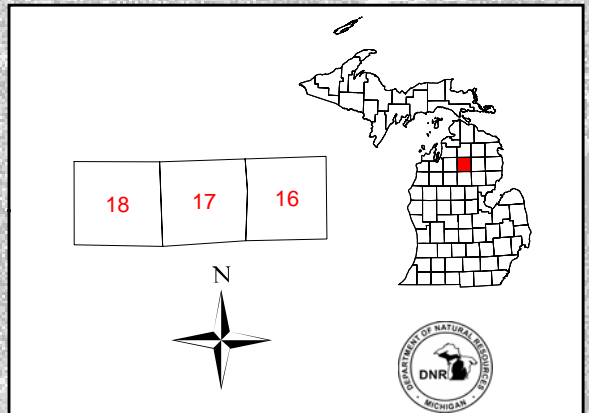
Stand	Cover Type	Acres	Age	Site Index	Mgt Obj	Condition	Method Cut	Harvest Priority	Cultural Need	FD Status
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TREATMENT LIMITING FACTORS:

Total Acres..... 0

Field Map

Compartment 183
 T26N, R4W, Sec. 16-18
 County: Crawford
 Unit: Grayling
 YOE: 2009
 Acres: 1,511 GIS Calculated
 Stand Examiner: Patrick Cotant
 Map Revised: 8/28/2007
 Map Phase: Pre-Review



Legend

- RLS Corners
- Miris Corners
- Paved Roads
- Poor Dirt Roads
- Stand Boundary
- Special Conservation Areas

