



## GRAYLING FOREST MANAGEMENT UNIT COMPARTMENT REVIEW PRESENTATION

COMPARTMENT # 206 ENTRY YEAR: 2009

GIS Compartment Acreage: 1576 County: Crawford

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**Revision Date:** April 6, 2007

**Stand Examiner:** Lucas Merrick

**Legal Description:** T27N, R04W, Sections 24, 25, and 36 South Fredric Township

**Management Goals:** To improve forest health, productivity, sustainability, species and structural diversity throughout the State of Michigan by actively managing flora and fauna, while providing for multiple use and visual management. The State ownership is under a 20-year management agreement with the Michigan National Guard. This agreement allows for camping and maneuvers, but does not allow use of heavy equipment or high intensity live ammunition firing. Tracked vehicles are prohibited on these lands except to cross on designated tank trails. Wheeled vehicles are restricted to existing trails and are not to be driven cross country. Michigan Department of Natural Resources management activities take precedence on these lands, though management activities are often tailored to be compatible with National Guard training needs.

**Soils and Topography:** The topography is flat in the south with rolling hills in the north. Soils are primarily Grayling sands. These are excessively drained soils with moderate equipment limitation. The common trees found on this type of soil are jack pine, northern pin oak, white oak, red pine, white pine, and aspen.

**Ownership Patterns, Development, and Land Use in and Around the Compartment:** Public lands found in Section 36 are owned by the Department of Military and Veteran Affairs. On these lands military training has precedence over resource management activities. The DNR will coordinate all prescribed activities with the National Guard to ensure they are compatible with military training needs. Public lands found in Sections 24 and 25 are under the 1935 long-term lease agreement L-1479 (Act 154 P.A. 1935) with the Michigan National Guard, Department of Military and Veteran Affairs. The Grayling High School is found in the SE1/4 of Section 25. A portion of The Camp Grayling Air Field is found in the southern part of this compartment.

**Unique, Natural Features:** There is potential for dry prairie plants in grassy openings: Hill's thistle, rough fescue, Alleghany plum and pale agoseris. There is potential for several animals of concern in this compartment: Kirtland's warbler, prairie warbler, secretive locust, dusted skipper, grizzled skipper, and the red legged spittle bug.

**Archeological, Historical, and Cultural Features:** Two 20<sup>th</sup> Century structural foundations are found within the compartment. Both have been badly disturbed and are common site types.

**Special Management Designations or Considerations:** This compartment has heavily traveled roads, encompasses the Grayling High School, and is adjacent to the Crawford County Fair Grounds. Section 36 contains part of the National Guard Airfield. Aesthetics should be considered for all prescriptions.

**Watershed and Fisheries Considerations:** None at this time.

**Wildlife Habitat Considerations:** There is a diverse range of habitat found within the compartment including Grassy openings, wet fens, upland brush, oak stands, aspen stands and mixed pine stands of varying age classes. The large oak stands provide excellent mast sources. The current prescriptions in these oak types will encourage the oak regeneration and help to maintain this cover type, while also providing a browse source and cover for wildlife.

**Mineral Resource and Development Concerns and/or Restrictions:** Surface sediments consist of ice-contact and glacial outwash sand and gravel and postglacial alluvium. The glacial drift thickness varies between 400 and 600 feet. Beneath the glacial drift is the Marshall Sandstone. The Marshall was previously used as a building stone. A gravel pit is located in Section 20, and potential is excellent on the upland areas. The compartment is not leased for oil and gas development, but Section 13 to the north is leased.

**Vehicle Access:** County Road Old 27 and the several two-track trails which spur off from it provide adequate access to the area. Access is restricted to Airfield property. The Military is currently planning a tank trail that is to run just south of the section line of Sections 25 and 36 and will cross at the Old 27 and M-93 intersection.

**Survey Needs:** None at this time.

**Recreational Facilities and Opportunities:** Snowmobile Trails #7 and #47 intersect the compartment. There are currently no ORV facilities. Dispersed recreational use occurs throughout.

**Fire Protection:** This compartment is in close proximity to resource protection equipment and is easily accessed. The potential for frequent fire events is elevated by the Military use and the railroad. Section 36 poses the highest fire danger risks.

**Additional Compartment Information:** The S1/2 of the SE of Section 36 is USA ownership, located within the confines of the national guard airfield.

**LOTS Compartment Acreage:** 1517 acres

- **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: 206

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	229																									35	264
V Bog or Marsh			9																								9
G Grass					20																						20
J Jack Pine							355																				355
Q Mx Swmp Cnfr												7															7
X Non Stocked													29														29
O Oak														215													215
R Red Pine															495												495
U Upland Brush																								175			175
W White Pine																										7	7
Total	229		9		20		355					7	29	215	495									175		42	1576

AUSABLE STATE FOREST

GRAYLING FOREST MGT UNIT

CRAWFORD COUNTY

COMPARTMENT: **206**

**Table 10 - COMPARTMENT VOLUME SUMMARY - ALL STANDS**

COMPARTMENT SUMMARY			
TOTAL VOLUME		CUT VOLUME	
Hardwood	4177 Cds	Hardwood	1698 Cds
Hardwood	816 Mbf	Hardwood	257 Mbf
Softwood	5993 Cds	Softwood	1232 Cds
Softwood	1072 Mbf	Softwood	158 Mbf
Sum TotVol	13946 Cds	Sum CutVol	3760 Cds
<b>Total Cmpt Acres</b>		Acres Proposed For Cut.....	286
1576			

**GRAYLING FOREST MGT UNIT**

**Proposed Treatments  
With NO Limiting Factors**

**Compartment: 206 Entry Year: 2009**

Stand	Cover Type	Acres	Age	Site Index	Mgt Obj	Condition	Method Cut	Harvest Priority	Cultural Need	fdf Status
<b>3</b>	<b>R6</b>	25	67	57	red pine	immature	thinning	2		stand with fdf potential
comnts Fmd : Plantation. Rolling topography. Below average quality. Red pine might be a little to limby to be considered for future high quality utility poles. Rows are difficult to identify in areas. Several open (failed) areas also. Remove majority of jack pine(in decline, several areas w/ dead pockets) - leave some jack for retention. Mark red pine to remove in thicker pockets (try to keep BA of stand in the 80-90 range). Protect the healthy oaks found in stand. Scattered aspen and mixed hdwds also present.										
<b>10</b>	<b>O9</b>	63	88	55	oak	mature	seed tree	2	natural regeneration	
comnts Fmd : Stand was treated 20 yrs ago. All of the red maple and aspen were removed. Areas with little oak canopy have dense A3 20' tall. Heavy browse on oak regen. Average quality oak with some decent sawlogs. Seed tree stand (20 BA) but leave 5% of stand in scattered untouched islands. Try to leave trees that will last a couple more entry years. Avoid leaving the smaller diameter oak, these have better odds of stump sprouting. Leave the bigger sawlog Red pine (apply a diameter limit on the sale). These trees will provide added vertical structure and will provide a good seed source. Management objective is a mixed stand. A mixture of natural regen with an oak component should be considered a success. Acceptable species are maple, aspen, red pine, white pine, jack pine and oak. If natural regen fails the stand will be planted w/ mixed pine species.										
<b>13</b>	<b>A6</b>	39	59	50	aspen (upland)	mature	final harvest	2		
comnts Fmd : Variable stand. Looks like it has seen it share of disturbances. A few areas of decent quality, other areas w/ poor quality trees and hypox. Final harvest with reserves. Leave retention islands along the snowmobile trail to help with aesthetics. Cut everything 2" and up outside of the islands except for a few wildlife trees. Management objective is aspen. Any moderate to fully stocked stand with pockets of aspen will be a success. If natural regen fails the stand should be planted w/ mixed pine.										
<b>25</b>	<b>O6</b>	57	83	53	oak	mature	final harvest	2	natural regeneration	
comnts Fmd : Majority of the bigger oaks are from old stump sprouts. Majority of stand is 80+ yrs old. Final harvest with reserves. Leave 6-10% of stand uncut in islands. Avoid pockets of aspen in the leave islands. Also leave a few scattered healthy oak in the sale area (1 tree for every couple acres). This stand has a few hills in it. Poor understory, browse is a concern. The management objective is oak, but any natural regeneration at moderate to full stocking w/ an oak components should be considered a success. If natural regeneration fails this stand should be planted w/ mixed pine.										
<b>26</b>	<b>R6</b>	13	68	55	red pine	mature	thinning	3		
comnts Fmd : This portion of the red pine was not entered with stand 28. Thin to about 70 -90 BA. Take out some of the current economically mature pine, mark for future poles. Clean up areas around healthy looking oak. Remove the poor quality and suppressed oak. Rolling hills. The purpose of this treatment is to improve the current cover type.										
<b>33</b>	<b>J6</b>	36	69	49	jack pine	mature	final harvest	2	planting	
comnts Fmd : 2007: This stand is patchy. Open u-type in some areas. Some better quality red pine present in stand. Blowdown through out stand. Hawthorne covers the understory. Final Harvest with reserves. Use stand 133 for retention and as an aesthetic buffer. Leave a few scattered healthy looking oak or red pine within stand for "green" vertical structure. Replant stand to jack pine. Protect the open u-types and try to maintain them after planting (ie leave some brushy areas).										
<b>42</b>	<b>J5</b>	38	72	45	jack pine	mature	final harvest	3	natural regeneration	
comnts Fmd : 1997: Jack pine red pine mix. Majority of jack pine is over mature. The red pine is limby and open grown. Open patches of upland brush scattered through out stand. These open areas are covered in hawthorne. Stand is bordered by the High school and a snowmobile trail. Final Harvest w/ reserves. Final harvest everything except red pine and oak. There are some small aspen clones that should expand w/ a harvest. De-limb then whole tree skid to landing. Try to scatter as much of the cones as possible. There should be about 20BA of residual. Leave small scattered clumps or islands of jack pine for retention. Stand should regenerate to a mixed stand of jack pine, red pine, red maple, and aspen with super canopy red pine. Any mixture of these species at moderate to full stocking is a success. Replant to jack pine/red pine mix if natural regen fails. 1997: BUFFER FOR THE HIGH SCHOOL Per WD at prereview, do not plant through upen U type areas.										
<b>46</b>	<b>J5</b>	15	84	50	jack pine	mature	final harvest	2		
comnts Fmd : Stand looks like your typical overmature jack pine stand. Blow down every where. Above average oak regen w/ some mixed pine regen as well. Scattered sawlogs of various species. Saw a bunch of squirrel and deer activity. Would like to remove the jack pine and leave the oak and red pine -protect all regen- Propped military tank trail would cut through the north edge of stand. Final harvest w/ reserves. Stand should regenerate to a mixed pine oak stand. A moderate to fully stocked stand consisting of jack pine, red pine, oak, and aspen is acceptable. If natural regen fails-replant stand with stand 44 when it or portions of it are harvested next year of entry. Per WD at prereview, do not plant through upen U type areas.										

**Total Acres..... 286**

**Proposed Treatments  
With Limiting Factors**

**Compartment: 206**

**Entry Year: 2009**

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

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**Total Acres..... 0**

