



GRAYLING FOREST MANAGEMENT UNIT COMPARTMENT REVIEW PRESENTATION

COMPARTMENT # 280 ENTRY YEAR: 2009

GIS Compartment Acreage: 1,840

County: Crawford

Revision Date: September 4, 2007

Stand Examiner: Joan Charlebois

Legal Description: T26N R1W Sections 5 – 8 northeast South Branch Township
T27N R1W Section 31 southeast Lovells Township

Management Goals: To maintain forest health, productivity, sustainability, species and structural diversity throughout the compartment while providing for multiple use and visual management.

Soils and Topography: The terrain varies widely, from river floodplain in the south to glacial outwash plains in the north. Bogs and marshes are interspersed throughout the compartment but occur with the greatest frequency south of Conner's Flat Road, in association with the conifer swamp types.

Ownership Patterns, Development, and Land Use in and Around the Compartment: The compartment is made up of solid blocks of state ownership, with a mix of state and private property along its boundaries. The private interface is residential, with most of that being seasonal. Five seasonal cabins occur within the compartment itself on former Consumers Power lease properties that were conveyed to the state as part of the Ludington Pump Storage Settlement. The leases are due to expire in 2011.

Unique, Natural Features: The compartment contains habitats with the potential to support Hill's thistle, rough fescue, Alleghany plum, pale agoseris, Kirtland's warbler, prairie warbler, dusted skipper, grizzled skipper, red legged spittlebug, secretive locust, goshawk, red-shouldered hawk, eagle, osprey, great blue heron rookery, Eastern massasauga rattlesnake, wood turtle and Blanding's turtle. Part of the Dyer Red Pines, a tract of old-growth red pine, occurs within the compartment. This tract has been identified as an Ecological Reference Area (ERA) and is also documented as an example of a Dry Northern Forest community type by the Michigan Natural Features Inventory.

Archeological, Historical, and Cultural Features: Evidence of historic logging activity was noted within the compartment.

Special Management Designations or Considerations: A draft management plan for the Dyer Red Pine ERA has been developed and will be reviewed this fall. The AuSable River is part of a designated Natural Rivers watershed. That part of the compartment lying south of Conner's Flat Road has been proposed for inclusion in the Eastern Massasauga Rattlesnake Candidate Conservation Agreement with Assurances (CCAA) program, administered by the U.S. Fish & Wildlife Service. The program's goal is to identify, conserve and enhance critical habitat in order to reverse the rattlesnake's declining population trend.

Watershed and Fisheries Considerations: The compartment's southern edge is bordered by the AuSable, a designated Natural River. Several small streams originate within the compartment and flow into the AuSable.

Wildlife Habitat Considerations: The compartment's wide range of cover types – from riparian zone lowland conifer swamp to upland aspen, oak and old-growth pine – provide habitat for game species such as deer, grouse and turkey, and also have the potential to support a variety of rare bird, reptile and insect species.

Mineral Resource and Development Concerns and/or Restrictions: Surface sediments consist of glacial outwash sand and gravel and postglacial alluvium. The glacial drift thickness varies between 200 and 600 feet. Beneath the glacial drift is the Marshall Sandstone. The Marshall was previously used as a building stone. Gravel pits are not located in the area, but there could be some potential. This area is not currently leased for oil and gas and part of the land is surface-ownership only. There are oil and gas leases located just to the north involved with Prairie du Chein production.

Vehicle Access: County roads within the compartment include Dyer Truck Trail to the north, Conner's Flat Road through the center, and Polly Trail at the south end. Two-track roads run along most section lines north of Conner's Flat Road, but access south of there is limited by a lack of stream crossings.

Survey Needs: None at this time.

Recreational Facilities and Opportunities: The White Pine State Forest Campground, a canoe-in only facility maintained by the Roscommon Management Unit – is located on the AuSable River. Five recreational cabins with leases due to expire in 2011 are currently being maintained and used along the river. Hunting, trapping and canoeing are the primary forms of dispersed recreation within the compartment.

Fire Protection: Access to the compartment's dry upland forest types is generally good. South of Conner's Flat Road, access for suppression equipment will be hindered by wet ground and a lack of stream crossings.

LOTS Compartment Acreage: 1899

- **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: 280

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			6		37	277													320
Bog or Marsh	18																		18
Cedar										5	9	64	187						265
Grass	21																		21
Jack Pine		124	221		87	188		57											677
LowInd Brush	13																		13
Marsh	45																		45
Mx Swmp Cnfr										7	20	11							38
Non Stocked	7																		7
Oak		6							32		10								48
Red Pine			91			18	53	4	47		23						31		267
Swamp Hrdwds										22									22
Treed Bog	23																		23
Upland Brush		15	6																21
Water	14																		14
White Pine			22		8							11							41
Total	141	145	346		132	483	53	61	79	34	62	86	187				31		1840

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

AUSABLE STATE FOREST

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CRAWFORD COUNTY

COMPARTMENT: 280

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	320																										320
V Bog or Marsh			18																								18
C Cedar				265																							265
G Grass					21																						21
J Jack Pine							677																				677
L Lowlnd Brush									13																		13
N Marsh											45																45
Q Mx Swmp Cnfr												38															38
X Non Stocked													7														7
O Oak														48													48
R Red Pine															267												267
E Swamp Hrdwds																			22								22
D Treed Bog																						23					23
U Upland Brush																								21			21
Z Water																									14		14
W White Pine																										41	41
Total	320		18	265	21		677		13		45	38	7	48	267				22			23	21		14	41	1840

AUSABLE STATE FOREST

GRAYLING FOREST MGT UNIT

CRAWFORD COUNTY

COMPARTMENT: **280**

Table 10 - COMPARTMENT VOLUME SUMMARY - ALL STANDS

COMPARTMENT SUMMARY			
TOTAL VOLUME		CUT VOLUME	
Hardwood	4684 Cds	Hardwood	2580 Cds
Hardwood	915 Mbf	Hardwood	226 Mbf
Softwood	5097 Cds	Softwood	410 Cds
Softwood	2625 Mbf	Softwood	276 Mbf
Sum TotVol	16861 Cds	Sum CutVol	3994 Cds
Total Cmpnt Acres		Acres Proposed For Cut.....	229
1840			

Stand	Cover Type	Acres	Age	Site Index	Mgt Obj	Condition	Method Cut	Harvest Priority	Cultural Need	FDF Status
3	J6	57	66	44	jack pine	two aged	shelterwood-seed	2	natural regeneration	
<p>comnts Fmd : Multiple age & size classes of JP, with RP as scattered individuals and in pockets. Very poor condition NPO mixed in. Harvest JP 5" and up, leave all RP & NPO. Cut to regenerate the few aspen stems. Cut when ground isn't frozen to maximize scarification. Evaluate & consider leaving a retention island in SE of stand to address visual impact of sale as seen from co. rd. A mix of pine regen is acceptable, as is a lower initial stocking density since this stand took decades to regenerate naturally and reach this state of stocking. Previous SI: 32-1939-47. More redpine is to the north part of stand, mmore sparse red pine on south part of stand.. Treating stand differently than when we treated nearby std 126- 126 regenerated very poorly due to poor soils, so we are leaving smaller diameter established regeneration here.</p>										
12	A6	119	39	80	aspen (upland)	immature	final harvest	1	natural regeneration	
<p>comnts Fmd : Diverse aspen stand on low & high ground with a lot of Q interface. Hillside seeps and small (1-3' wide) streams cross through it. Primarily TA, with some BTA clones on the high ground and a little BAM on the lowest ground. F1-F3 understory on the lower ground, giving way to more open understory in the uplands, with RP & RP saw in the NW1/3 of the stand. Has small Q and L inclusions. Large cull RM saw common, with v. poor NPO scattered and in small pockets (good potential ISR). Aspen large saps/small poles are weeding out. Hypoxylon in some TA clones on poorer soils in the stand's NW. Deeryard influence zone. Will need 3 culverts installed to access the stand. Old comments: "cut over in 1968 . . . Scattered mature A-O-M & J were left". Treatment occurred prior to state acquisition from Consumers Power.</p>										
39	U1	6	16	55	upland brush	sparse	final harvest	3		
<p>comnts Fmd : Cut in '89-'91 under #26-89. U/G with scattered clumps of J3, BF, 1-stick WP & scattered aspen. Maintain as an opening by removing all stems 2" & up at the same time as stand 46 (or stand 12). This section & sec 8 have very little area in upland opening. Adjacent to deeryard.</p>										
46	A6	47	39	73	aspen (upland)	immature	final harvest	1	natural regeneration	
<p>comnts Fmd : Old comments noted: "cut over in 1968 . . . Scattered mature A-O-M & J were left". Cut when most of the stand was still owned by Consumers Power Company. Stand has TA & BTA clones with scattered RP, RM & NPO saw, & 2 NPO inclusions that would be good potential ISR. The N peninsula near stand 51 also has potential for ISR. A 3' wide stream runs through the stand -- will need a culvert to cross it on the 2-track at the stand's N edge. Deeryard influence zone. Per Pre-review consensus 8-14-07: Divide stand 46 along the stream into two stands: hold the west end (new stand 146) and treat it along with stand 37 in the future. Treat the remaining east portion of stand 46 this YOE along with stand 12. This split will hold more aspen acreage for the future and better balance the type's age class diversity within the compartment. A stream crossing will be needed to access stands 46 and 12. If a culvert is installed it will be pulled when harvesting is complete; if left in place, beaver would likely plug it and cause water to back up and wash out the crossing. A portable bridge could also be used for this temporary crossing. When harvesting is complete, close the two-track where it forks off of Polly Trail in stand 146. The area sees heavy illegal ORV activity; design the closure with that in mind.</p>										

Total Acres..... 229

GRAYLING FOREST MGT UNIT

**Proposed Treatments
With Limiting Factors**

Compartment: 280 **Entry Year: 2009**

Stand	Cover Type	Acres	Age	Site Index	Mgt Obj	Condition	Method Cut	Harvest Priority	Cultural Need	FDI Status
35	R9	12	193	58	red pine	old growth (potential or actual)		0	cleaning & weeding	

TREATMENT LIMITING FACTORS: Quiet area/natural area/wilderness

comnts Fmd : Sign on north side of Dyer Truck Trail states: "Crawford Red Pines Natural Area (Dyer Red Pines) origin circa 1814. Camping & motor vehicles prohibited." SCA. The type also crosses into compt 278 to the N. Some oak was salvaged in '95 under #720339401. The stand has 3 main pockets of super-canopy red pine, with RM, JP & WP in between, and overmature TA along the S edge. 6 acres of the west part of the stand were underburned on May 18, 2005 (the remainder of stand was excluded due to high impact that would have resulted when trying to put control lines in the heavy balsam area. See FTP C72-506. SJ Thiel). RM regen was top-killed; it has re-sprouted at the base and is ready to be burned again. Used previous SI and set the year of origin to 1814. Previous comments indicate that this is a proposed natural area.

Total Acres..... 12

