



**TRAVERSE CITY FOREST MANAGEMENT UNIT  
COMPARTMENT REVIEW PRESENTATION**

**COMPARTMENT # 161 ENTRY YEAR: 2009**

**Compartment Acreage: 1927      County: Kalkaska**

---

**Stand Examiner:** G.R.Grieve

**Legal Description:** T27N, R8W, Sec. 25, 26 & 27; T27N, R7W, Sec. 30

**Management Goals:** Maintain timber types & age class diversity.

**Soil and Topography:** Grayling Sand on the uplands, then as the elevation begins to drop towards the river the soil composition changes to Rubicon and Saugatuck sands. When entering the flood plain of the North Branch Boardman River and its tributaries, the soil composition changes again to a mixture of rifle peat and Griffin Sandy Loam.

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

Mostly State ownership with some private in holdings in section 27 and 26. Section 30 is mostly private land with 211 acres of state. This compartment contains a large percentage of jack pine; it also has had extensive oil & gas development in the past. Many of these wells are now abandoned. Some secondary recovery is on going & some interest in gas storage is developing. The North Branch of the Boardman River, Crofton creek & Failing Creek run through this compartment. The stte land between the road & the privete forty in section 26 is being sold to the multiple land owners of the forty.

**Unique, Natural Features (include only non-site specific and non-sensitive information):** This compartment falls within landtype associations (LTA) **5111** of sub-subsection VII.2.2. **LTA 5111** is characterized by broad flat outwash plains with few kettle lakes and excessively drained sand. GLO surveyors frequently reported the occurrence of large wildfires within **LTA 5111**. These fires were among the largest in the state, covering several square miles.

The North Branch Boardman River, Crofton Creek & Failing Creek are a designated natural river and tributaries. A 100 foot buffer must be left along each tributary. The old RMU called for more red pine acres & less jack pine acres.

**Archeological, Historical, and Cultural Features (include only non-site specific and non-sensitive information):** HAL has concerns in this compartment.

**Special Management Designations or Considerations:** The Boardman Valley Snowmobile Trail runs through the compartment. Unorganized camping along the North Branch exists. Also, a great deal of fishing & hunting occurs in this compartment.

**Watershed and Fisheries Considerations:** This compartment contains a variety of unique and critical watershed components as described in the Unique, Natural Features section. Therefore, please conform to all the BMPs listed in the Water Quality Management Practices on Forest Land (1994) handbook and the Natural Rivers vegetative buffers. In addition, do not harvest any trees in riparian areas that have the potential to provide woody debris to the streams within this compartment. The vegetation buffer should

compliment the natural contours and vegetation components of the Boardman River valley. Therefore, Fisheries Division recommends at least a 100 foot vegetation buffer within stands 26, 38, and 44.

**Wildlife Habitat Considerations:** Compartment 161 is located in western Kalkaska County. The glacial geology underlying this area consists entirely of excessively drained sandy outwash plain (5111). However, the North Branch of the Boardman River, as well as Tailing Creek run through the compartment and both are important riparian corridors. The area that these streams drain supports a mix of wetland communities including, coniferous and hardwood forests, brush, and some emergent marshes. These lowland habitats are important for species like whitetail deer, bear, woodcock, Northern saw-whet owl, Swainson's thrush, and brown snake.

The sandy soil found outside the riparian corridors was often the setting for large wildfires. These fires sustained a variety of fire driven communities, mainly conifer forests at the time of the GLO surveys. Present habitat types include some aspen stands of various ages interspersed with a few grassy openings, upland brush stands, natural and planted pine, and several oak communities. Timber harvests should be designed to mimic wildfires of various intensities, when possible. Several aspen, oak, and pine stands will have cutting prescriptions this entry period. The creation of dead and down logs and residual trees for mast and cover will be included in some sales. Standing dead timber is usually left during harvest operations unless deemed a safety hazard. Several openings are abandoned oil wells pads and have been prescribed for planting. Prescribed fire and brush hogging are also proposed for maintaining a mosaic of non-forested communities. Some species found in these early to mid-successional communities include: white-tailed deer, ruffed grouse, eastern bluebird, smooth green snake, long-tailed weasel, and red-tailed hawk.

**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 400 and 600 feet. Beneath the glacial drift is the Mississippian Coldwater Shale. The Coldwater does not have a current economic use. Gravel pits are not located in the area and potential appears to be limited. The Compartment is within the prolific Niagaran reef trend and most State minerals are leased.

**Vehicle Access:**

**Survey Needs:**

**Recreational Facilities and Opportunities:**

**Fire Protection:**

**Additional Compartment Information:**

**\*\*\*\* Cover type details, proposed treatments and stands designated as FDF are listed in the attached reports:**

**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 on the attached compartment maps:**

**Base feature information, stand numbers, cover types**  
**Proposed treatments**  
**Proposed road access system**

## **Suggested potential old growth**

11/19/2007 10:48:34 AM

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

PERE MARQUETTE STATE FOREST

TRAVERSE CITY FOREST MGT UNIT

KALKASKA COUNTY

COMPARTMENT: 161

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		42	45		134	75		14	14										324
Cedar								9		76									85
Grass	19																		19
Jack Pine		129	3		41	322	61	154	45										755
Lowlnd Brush	52																		52
Marsh	4																		4
Mx Swmp Cnfr								3	15	74									92
Non Stocked	5																		5
Oak								23		107									130
Red Pine										15								75	90
Swamp Hrdwds						99	11		9	13								21	153
Upland Brush	105				12	21													138
Upland Hdwds					32		39												71
White Pine							3											6	9
<b>Total</b>	<b>185</b>	<b>171</b>	<b>48</b>		<b>219</b>	<b>517</b>	<b>114</b>	<b>203</b>	<b>83</b>	<b>285</b>								<b>102</b>	<b>1927</b>

PERE MARQUETTE STATE FOREST

TRAVERSE CITY FOREST MGT UNIT

KALKASKA COUNTY

COMPARTMENT: 161

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	324																										324	
C Cedar				85																							85	
G Grass					19																						19	
J Jack Pine							755																				755	
L Lowlnd Brush									52																		52	
N Marsh											4																4	
Q Mx Swmp Cnfr												92															92	
X Non Stocked													5														5	
O Oak														130													130	
R Red Pine															90												90	
E Swamp Hrdwds																			153								153	
U Upland Brush																								138			138	
M Upland Hdwds																									71		71	
W White Pine																										9	9	
<b>Total</b>	324			85	19		755		52		4	92	5	130		90				153				138	71		9	1927

PERE MARQUETTE STATE FOREST

TRAVERSE CITY FOREST MGT UNIT

KALKASKA COUNTY

COMPARTMENT: **161**

*Table 10 - COMPARTMENT VOLUME SUMMARY - ALL STANDS*

COMPARTMENT SUMMARY			
TOTAL VOLUME		CUT VOLUME	
Hardwood	6552 Cds	Hardwood	1263 Cds
Hardwood	1063 Mbf	Hardwood	338 Mbf
Softwood	7441 Cds	Softwood	1722 Cds
Softwood	1006 Mbf	Softwood	59 Mbf
Sum TotVol	18131 Cds	Sum CutVol	3779 Cds
<b>Total Cmpt Acres</b>		Acres Proposed For Cut.....	
1927		317	

**TRAVERSE CITY FOREST MGT UNIT**

**Proposed Treatments  
With NO Limiting Factors**

**Compartment: 161 Entry Year: 2009**

Stand	Cover Type	Acres	Age	Site Index	Mgt Obj	Condition	Method Cut	Harvest Priority	Cultural Need	FDF Status
<b>2</b>	<b>A6</b>	24	42	55	aspen (upland)	mature	final harvest	1		
comnts Fmd : 9/26/2007 Wildlife would like 1/2 of this stand left as retention. (Grieve) 1/24/07 Needs a cut, starting to go bad. Access from north off of state. Leave one to two fingers in to the E-type for retention. (Grieve) 1997 Same as stand 36 (Lemmien)										
<b>38</b>	<b>R9</b>	3		50	red pine	unevenaged	thinning	1		
comnts Fmd : 1/23/07 Natural stand of red pine. Mark red pine logs & oak logs. Also take out red maple & poor white birch. (Grieve)										
<b>39</b>	<b>O9</b>	23	62	49	oak	mature	shelterwood-seed	1		
comnts Fmd : 9/26/2007 Per Wildlife request, leave any white oak. (Grieve) 1/23/07 Remove all jack pine, aspen, red maple & marked oak. Some oak looks bad & needs to be removed. Jack pine not much better. Will expect some jack pine aspen & red maple to come back in this stand. No retention is this stand because the stand is bordered on three sides by jack pine with aspen & red maple in these stands. (Grieve) 1997 SCATTERED OAK IN THIS (Lemmien)										
<b>44</b>	<b>O9</b>	54	85	56	oak	mature	shelterwood-prep	2		
comnts Fmd : 9/26/2007 No total tree harvest at Wildlife request for CWD. (Grieve) 1/4/2007 Old pine stumps. Shealterwood this stand. Remove aspen, red maple & marked oak. Take some of the larger oak, it is starting to decline. Old rail road grade through stand. (Grieve)										
<b>60</b>	<b>O9</b>	18	85	56	oak	mature	shelterwood-prep	2		
comnts Fmd : 1/4/2007 Old pine stumps. Shealterwood this stand. Remove aspen, red maple & marked oak. Take some of the larger oak, it is starting to decline. (Grieve)										
<b>61</b>	<b>J6</b>	54	62	52	jack pine	mature	final harvest	1	planting	
comnts Fmd : 1/17/2007 This is the same stand as 43. The stand was split in two to break up the age classes. 61 will be cut this time with 43 cut in ten years. The older trees are starting to die. Re-plant to jack pine. (Grieve) 1997 SCATTERED ASPEN THROUGHOUT (Lemmien)										
<b>63</b>	<b>O9</b>	10	85	56	oak	mature	shelterwood-prep	2		
comnts Fmd : 1/4/2007 Old pine stumps. Shealterwood this stand. Remove aspen, red maple & marked oak. Take some of the larger oak, it is starting to decline. (Grieve)										
<b>73</b>	<b>O9</b>	20	85	56	oak	mature	shelterwood-prep	2		
comnts Fmd : 9/26/2007 Per Wildlife request, leave any white oak. (Grieve) 1/4/2007 Old pine stumps. Shealterwood this stand. Remove aspen, red maple & marked oak. Take some of the larger oak, it is starting to decline. (Grieve)										
<b>82</b>	<b>J5</b>	45	72	50	jack pine	high risk	final harvest	1	planting	
comnts Fmd : 9/26/2007 Clumps will be left as uncut retention. Try for at least 5 clumps. (Grieve) 1/17/2007 High Risk. Cut jack pine but leave clumps of oak & any red pine in the oak clumps. Jack pine is falling down. (Grieve)										
<b>88</b>	<b>J6</b>	52	57	42	jack pine	mature	final harvest	1	planting	
comnts Fmd : 9/26/2007 Per Wildlife request. Leave one payment unit (1/3 more or less of stand) with cherry uncut. (Grieve) 1/3/2007 J-1, W-1, Old white pine stumps. Some scattered oak & red pine. This stand is starting to get on the old side. And I want to hold the stands to the north & south for ten more years. So I will cut this now. It also borders a yet to be clearcut stand in compartment 160 but only for a very shot distance & that sale is a small one. Best to live with the cut now than have greater problems with three over aged stands in ten years. Replant to jack pine. Leave 2 to 5 acres retention on the far west side of stand where it comes in contact with compartment 160. (Grieve) 1997 SCATTERED RED PINE SAWLOGS (Lemmien)										
<b>405</b>	<b>G0</b>	2			grass	nonstocked		0	opening maintenance	
comnts Fmd : 10/15/2007 Wildlife wants to re-veg to better grass. (Grieve) 1/3/2007 Abandon well site. Plant to red or jack pine. Stand has little regeneration. More moss than anything else. Some sweet fern patches. (Grieve)										
<b>Total Acres.....</b>		<b>305</b>								

Stand	Cover Type	Acres	Age	Site Index	Mgt Obj	Condition	Method Cut	Harvest Priority	Cultural Need	FDI Status
26	A6	14	60	54	aspen (upland)	high risk	final harvest	3		

TREATMENT LIMITING FACTORS: Bridge needed (portable bridge not available or inadequate)  
 Adjacent landowner denies access  
 Scenic values/visual values

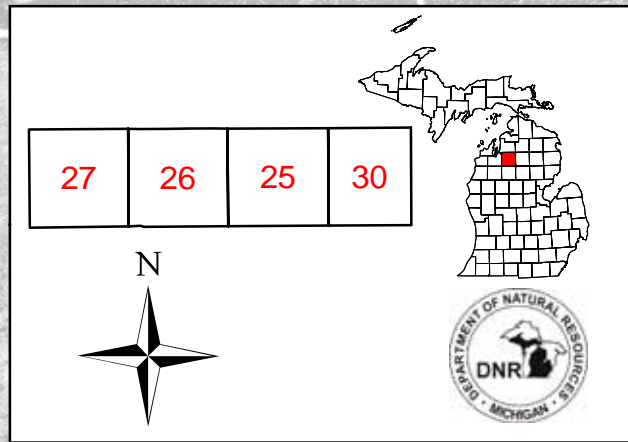
comnts Fmd : 1/19/2007 High Risk, starting to fall over. Would need a temporary bridge, but span maybe to long. Limiting factor are Natural Rivers, access over L-type & access through private land. This is a highland island in the middle of a swamp. No road access to this site. Unlikely it could ever be harvested. (Grieve)

---

**Total Acres..... 14**

Compartment: 161  
 T27N, R08W, Sec. 25, 26, 27  
 T27N, R07W, Sec. 30  
 County: Kalkaska  
 Unit: Traverse City  
 YOE: 2009  
 Acres: 1,927 GIS Calculated  
 Stand Examiner: Gerald Grieve  
 Map Revised: 11/19/2007  
 Map Phase: Pre-review

# Field Map



- ### Legend
- RIs Corners
  - Miris Corners
  - Highway
  - Gravel
  - Poor Dirt
  - Railroad
  - Trails
  - Water Features
  - Snowmobile Trails
  - Stand Boundary
  - 011 - Planting/Hand Tools
  - 100 - Final Harvest
  - 118 - Final Harvest/Planting/Other
  - 300 - Shelterwood - seed
  - 400 - Thinning
  - 700 - Shelterwood - prep

