



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

COMPARTMENT # 151 ENTRY YEAR: 2009

Compartment Acreage: 1922 County: Kalkaska

Stand Examiner: Donna Hagan

Legal Description: T25N, R6W, Sec. 34-36

Management Goals: This compartment was part of the 75% quarter township research cuts of the early 1970's, therefore the management goal would be to increase the age class diversity in the aspen stands.

Soil and Topography: Roselawn and Rubicon sands and Newton loamy sand comprise the compartment. Generally the terrain is flat with some small rolling hills near Big Cannon Creek.

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

Ownership is all State owned except for half a section south of section 35. No development in or around the compartment. Land use is mainly hunting with snowmobile and ORV use being a secondary use.

Unique, Natural Features (include only non-site specific and non-sensitive information): This compartment falls within landtype associations (LTAs) **3111** and **5111** of sub-subsection VII.2.2. **LTA 3111** and **LTA 5111** occur throughout the compartment in an interlacing fashion. **LTA 3111** is characterized by irregular ice-contact ridges, few kettle lakes, and excessively drained loamy sand. **LTA 5111** is characterized by broad flat outwash plains with few kettle lakes and excessively drained sand. For a brief description of the vegetation circa 1800, current land cover, and prevalent disturbance of **LTAs 3111**, and **5111** please refer to the comments for *Compartment 51 (LTA 5111)* and *Compartment 145 (LTA 3111)*.

Wood turtle.

Archeological, Historical, and Cultural Features (include only non-site specific and non-sensitive information): Multiple archaeological sites are listed for this compartment.

Special Management Designations or Considerations: Big Cannon Creek flows north through section 35. There are several archaeological sites throughout the compartment. This compartment was also part of the 75% quarter township research cuts of the early 1970's. The 2004 agreement with The Department of Military and Veteran Affairs covers this entire compartment. This agreement is a renewable ten year agreement that may be terminated by mutual agreement at any time.

Watershed and Fisheries Considerations: Big Cannon Creek flows through Compartment 151. It is a Designated Trout Stream. Big Cannon Creek has naturally reproducing populations of brook, brown, and rainbow trout. For treatments close to this stream (Stand 55), the Natural Rivers (and MDNR BMP) buffer of 100' should be adhered to.

Wildlife Habitat Considerations: Compartment 151 is located along the Missaukee County line in south-central Kalkaska County. Big Cannon Creek bisects this compartment and adds diversity to this dry and sandy landscape. Also, several small isolated wetland communities can be found within this compartment. Generally, the landscape undulates between flat sandy outwash plains (LTA 5111) and low, sandy ice-

contact ridges (LTA 3111). The well drained soils of this compartment support communities of aspen, jack pine, oak, open barrens, as well as minor occurrences of several other cover types. Forest treatments should maintain a variety of successional stages of pine-oak-aspen forest and grass-shrub openings, with some mid to late successional forest in places, which is typical of a fire driven landscape. The well drained soils of this compartment support communities of aspen, jack pine, oak, open barrens, as well as minor occurrences of several other cover types. Forest treatments should maintain a variety of successional stages of pine-oak-aspen forest and grass-shrub openings, with some mid to late successional forest in places, which is typical of a fire driven landscape.

The barrens communities should be treated with prescribed fire. Burning will benefit these communities by setting back woody encroachment, stimulating native herbaceous vegetation and berry production, and recycling nutrients. Aspen harvests should be designed to mimic wildfires of various intensities. This creates a mosaic of age classes and increases structural diversity within an area. The creation of dead and downed logs should be incorporated into timber prescriptions to provide habitat for various wildlife species. Standing dead timber is usually left during harvest operations unless deemed a safety hazard. Species associated with pine, oak and aspen mixed upland forests and openland habitats, such as deer, badger, wild turkey, scarlet tanager, hog-nosed snake, ruffed grouse, Cooper's hawk, red-backed salamander, and gray squirrel will benefit from management here.

Mineral Resource and Development Concerns and/or Restrictions: Surface sediments consist of ice-contact outwash sand and gravel. The glacial drift thickness varies between 100 and 400 feet. Beneath the glacial drift is the Mississippian Michigan Formation. The Michigan is quarried for gypsum elsewhere in the State. A gravel pit is located in Section 34 and there is good potential. The Fletcher Field is located to the northeast of the Compartment. The field produces from the Ordovician PdC. None of the State's minerals are leased in this Compartment.

Vehicle Access: Many two-tract roads are located within the compartment. Many of these need to be blocked off.

Survey Needs: None needed at this time.

Recreational Facilities and Opportunities: About 1.5 miles of the Miss-Kal. Snowmobile Trail is in section 35 of this compartment. The North Missaukee ORV Trail and Route has a total of 8.5 miles of trail in the compartment. Hunting and fishing are also high use recreational activities.

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

PERE MARQUETTE STATE FOREST

TRAVERSE CITY FOREST MGT UNIT

KALKASKA COUNTY

COMPARTMENT: 151

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	754																										754
S Black Spruce		9																									9
V Bog or Marsh			11																								11
G Grass					8																						8
J Jack Pine							47							76													123
L Lowlnd Brush									62																		62
Q Mx Swmp Cnfr												67															67
X Non Stocked													4														4
O Oak														213													213
R Red Pine																21											21
U Upland Brush																								597			597
M Upland Hdwds																									8		8
W White Pine																										45	45
Total	754	9	11		8		47		62			67	4	289		21								597	8	45	1922

PERE MARQUETTE STATE FOREST

TRAVERSE CITY FOREST MGT UNIT

KALKASKA COUNTY

COMPARTMENT: **151**

Table 10 - COMPARTMENT VOLUME SUMMARY - ALL STANDS

COMPARTMENT SUMMARY			
TOTAL VOLUME		CUT VOLUME	
Hardwood	13412 Cds	Hardwood	2266 Cds
Hardwood	55 Mbf	Hardwood	25 Mbf
Softwood	3650 Cds	Softwood	2108 Cds
Softwood	204 Mbf	Sum CutVol	4424 Cds
Sum TotVol	17580 Cds		
Total Cmpnt Acres		Acres Proposed For Cut.....	
1922		247	

TRAVERSE CITY FOREST MGT UNIT

**Proposed Treatments
With NO Limiting Factors**

Compartment: 151 Entry Year: 2009

Stand	Cover Type	Acres	Age	Site Index	Mgt Obj	Condition	Method Cut	Harvest Priority	Cultural Need	FDF Status
3	A6	6	46	80	aspen (upland)	mature	final harvest	2	natural regeneration	
comnts Fmd : 1997 - Grieve - Cut in ten years. Give diversity to age class in compartment. 2007 - Hagan - CC w/ reserves. Leave any pine.										
4	U0	43			upland brush	nonstocked		0	opening maintenance	
comnts Fmd : 2007-Hagan-West part heavy to cherry.										
6	R9	18	55	68	red pine	mature	selection	2		
comnts Fmd : 2007-Hagan-Remove red maple and any jack pine.										
7	J5	76	51	57	oak	mature	delayed removal	1		
comnts Fmd : 2007-Hagan-Take out jack and any aspen and red maple.										
9	A6	4	62	55	aspen (upland)	mature	selection	1	natural regeneration	
comnts Fmd : 2007-Hagan-Take out aspen and red maple. Oak could also be a MO.										
10	A6	6	62	55	aspen (upland)	mature	selection	1	natural regeneration	
comnts Fmd : 2007-Hagan-Take out aspen and red maple. Oak could also be a MO.										
11	A6	3	62	55	aspen (upland)	mature	selection	1	natural regeneration	
comnts Fmd : 2007-Hagan-Take out aspen and red maple. Oak could also be a MO.										
13	U0	87			upland brush	nonstocked		0	opening maintenance	
comnts Fmd : Heavy cherry in areas.										
16	U0	64			upland brush	nonstocked		0	opening maintenance	
comnts Fmd : 2007-Hagan-A mixture of sweet fern and grass for ground cover. Heavy to cherry in most places.										
23	U2	127			upland brush	nonstocked		0	opening maintenance	
comnts Fmd : Coming back to cherry. 2007-Hagan- Heavy cherry in this stand.										
24	A6	6	33	65	aspen (upland)	immature	final harvest	2	natural regeneration	
comnts Fmd : 2007-Hagan- Stand could be cut now to start breaking up age classes in this compartment. Clearcut w/reserves.										
25	A6	12	33	65	aspen (upland)	immature	final harvest	2	natural regeneration	
comnts Fmd : 2007 - Hagan - Could cut this stand to break up the age classes in the compartment. Clearcut w/reserves. Maple or oak would also be an acceptable management objective also. 1997 - Grieve - This is a nice stand but the SI worked out to be an 88. I don't believe that one. Used an est. of 65 SI.										
26	A6	8	33	65	aspen (upland)	immature	final harvest	2	natural regeneration	
comnts Fmd : 2007-Hagan- Stand could be cut now to start breaking up age classes in this compartment. Some pine present in stand. Leave any pine. Clearcut w/reserves.										
28	M9	5	72	60	northern hardwood	two aged	selection	1	natural regeneration	
comnts Fmd : 2007 - Hagan - Variable stand. Leave all oak and pine.										
41	A6	19	33	65	aspen (upland)	immature	final harvest	2	natural regeneration	
comnts Fmd : 2007 - Hagan - A1 & M2 in understory also in places. CC w/reserves. May want to cut this stand a little early to break up age classes.										
47	J6	2	60	49	jack pine	mature	final harvest	1	natural regeneration	
comnts Fmd : 2007 - Hagan - Stand is too small for retention. Leave all oak. Oak would also be a MO.										
51	J6	1	60	49	jack pine	mature	final harvest	1	natural regeneration	
comnts Fmd : 1997 - Grieve - Small patches of jack pine cut in ten years. 2007 - Hagan - Leave one patch for retention. Leave any oak. Leave tops for natural regeneration after prescribed burn.										

TRAVERSE CITY FOREST MGT UNIT

**Proposed Treatments
With NO Limiting Factors**

Compartment: 151 Entry Year: 2009

Stand	Cover Type	Acres	Age	Site Index	Mgt Obj	Condition	Method Cut	Harvest Priority	Cultural Need	fdf Status	
52	J6	2	60	49	jack pine	mature	final harvest	1	natural regeneration		
comnts Fmd : 1997 - Grieve - Small patches of jack pine cut in ten years. 2007 - Hagan - Leave one patch for retention. Leave any oak. Leave tops for natural regeneration after prescribed burn.											
55	J6	32	60	49	jack pine	mature	final harvest	1	natural regeneration		
comnts Fmd : 1997 - Grieve - Small patches of jack pine cut in ten years. 2007 - Hagan - Leave one patch for retention. Leave any oak. Leave tops for natural regeneration after prescribed burn.											
56	J6	5	60	49	jack pine	mature	final harvest	1	natural regeneration		
comnts Fmd : 1997 - Grieve - Small patches of jack pine cut in ten years. 2007 - Hagan - Leave one patch for retention. Leave any oak and cherry. Leave tops for natural regeneration after prescribed burn.											
59	U0	147			upland brush	nonstocked		0	opening maintenance		
60	J6	5	60	49	jack pine	mature	final harvest	1	natural regeneration		
comnts Fmd : 1997 - Grieve - Small patches of jack pine cut in ten years. 2007 - Hagan - Leave one patch for retention. Leave any oak and cherry. Leave tops for natural regeneration after prescribed burn.											
61	A6	10	33	65	aspen (upland)	immature	final harvest	2	natural regeneration		
comnts Fmd : 2007-Hagan- Stand could be cut now to start breaking up age classes in this compartment. Clearcut w/reserves.											
62	A6	23	33	65	aspen (upland)	immature	final harvest	2	natural regeneration		
comnts Fmd : 2007-Hagan- Stand could be cut now to start breaking up age classes in this compartment. Clearcut w/reserves.											
89	A6	4	33	65	aspen (upland)	immature	final harvest	2	natural regeneration		
comnts Fmd : 2007-Hagan- Stand could be cut now to start breaking up age classes in this compartment. Clearcut w/reserves.											
Total Acres.....		715									

**Proposed Treatments
With Limiting Factors**

Compartment: 151

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

