



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

COMPARTMENT # 164 ENTRY YEAR: 2008

Compartment Acreage: 1725 County: Kalkaska

Stand Examiner: G.R.Grieve

Legal Description: T27N, R8W, Sec 13, 14 & 15.

Management Goals: Maintain timber types and age class diversity. Multiple Use with high recreation values.

Soil and Topography: Soils range from Grayling Sand to Kalkaska Loamy Sands. Terrain is generally flat, with a few small rolling hills & shallow lakes.

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

Mostly solid state ownership. Village of Kalkaska is one mile to the east of compartment. The east edge of section 13 is in the hands of a developer who at this time plans residential development. Mostly solid state ownership on the other three sides of the compartment with fractured private ownership next to county roads. A great deal of organized recreation occurs in the compartment. WinterFest dog sled races, Iceman Cometh, ORV trails, Shore to Shore Hiking Riding Trail/North Country Trail, Boardman Valley Snowmobile Trail & High School Cross County.

Unique, Natural Features (include only non-site specific and non-sensitive information):

None listed by MNFI

Archeological, Historical, and Cultural Features (include only non-site specific and non-sensitive information): None listed at this time.

Special Management Designations or Considerations: 400 ft of private land separates this compartment to the state land to the east in Compartment 163. A number of recreational trails cross from the village to this area. For a number of years contact has been made with the present & previous land owners of the private parcel. To date, no transfer of the land or a permanent corridor has been made. If in the future this does occur, movement of the snowmobile trail off of Island Lake Road & West Kalkaska Road to this corridor would be accomplished, along with the permanent establishment of the number of other trails now used in this area.

Watershed and Fisheries Considerations: There are several kettle lakes within this compartment, including Smith Lake. Please conform to all BMPs in the Water Quality Management Practices on Forest Land (1994) handbook within lake riparian areas. In addition, do not cut any trees in riparian areas that have the potential to contribute woody debris to these lakes.

Wildlife Habitat Considerations:

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. A State leased pit is located in Section 14 and potential is considered good on the uplands. The Compartment is within the prolific Niagaran reef trend and all State minerals are leased.

Vehicle Access: No new access needed at this time. Parts of the Winterfest Trail are winter use only. No new roads need to be closed at this time.

Survey Needs: Non needed at this time.

Recreational Facilities and Opportunities: WinterFest dog sled races, Iceman Cometh, ORV trails, Shore to Shore Hiking Riding Trail/North Country Trail, Boardman Valley Snowmobile Trail & High School Cross County. For a number of years contact has been made with the present & previous land owners of the private parcel. To date, no transfer of the land or a permanent corridor has been made. If in the future this does occur, movement of the snowmobile trail off of Island Lake Road & West Kalkaska Road to this corridor would be accomplished, along with the permanent establishment of the number of other trails now used in this area.

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

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

PERE MARQUETTE STATE FOREST

TRAVERSE CITY FOREST MGT UNIT

KALKASKA COUNTY

COMPARTMENT: 164

Table 3

(acres shown in boxes)

STAND AGE CLASS

COVER TYPE	Not	STAND AGE CLASS																Total	
	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
Aspen		14	12	60	24														110
Grass	44																		44
Jack Pine		93	18		19	128	82	101	44										485
Marsh	31																		31
Non Stocked	13																		13
Oak					9				222	46								23	300
Red Pine		67	34				6	52		1	2							99	261
Upland Brush	149																		149
Upland Hdwds					4	15	21	43										49	132
Water	30																		30
White Pine				3	24	106		17		20									170
Total	267	174	64	63	80	249	109	213	266	67	2							171	1725

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

PERE MARQUETTE STATE FOREST

TRAVERSE CITY FOREST MGT UNIT

KALKASKA COUNTY

COMPARTMENT: 164

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	110																										110	
G Grass					41		3																				44	
J Jack Pine							478									7											485	
N Marsh											31																31	
X Non Stocked													13														13	
O Oak														198												102	300	
R Red Pine																261											261	
U Upland Brush																								149			149	
M Upland Hdwds																									132		132	
Z Water																									30		30	
W White Pine																										170	170	
Total	110				41		481				31		13	198		268								149	132	30	272	1725

PERE MARQUETTE STATE FOREST

TRAVERSE CITY FOREST MGT UNIT

KALKASKA COUNTY

COMPARTMENT: **164**

Table 10 - COMPARTMENT VOLUME SUMMARY - ALL STANDS

COMPARTMENT SUMMARY			
TOTAL VOLUME		CUT VOLUME	
Hardwood	5327 Cds	Hardwood	1275 Cds
Hardwood	1667 Mbf	Hardwood	556 Mbf
Softwood	6813 Cds	Softwood	2464 Cds
Softwood	2335 Mbf	Softwood	11 Mbf
Sum TotVol	20144 Cds	Sum CutVol	4873 Cds
Total Cmpt Acres		Acres Proposed For Cut.....	388
1725			

TRAVERSE CITY FOREST MGT UNIT

**Proposed Treatments
With NO Limiting Factors**

Compartment: 164 **Entry Year: 2008**

Stand	Cover Type	Acres	Age	Site Index	Mgt Obj	Condition	Method Cut	Harvest Priority	Cultural Need	FDf Status
2	O9	6	80	45	oak	immature	shelterwood-seed	2		
comnts Fmd : 4/15/2006 Shealterwood cut. Oak is 80 years old & just about all old sprouts. Aspen & maple come & go through stand. Nice white pine coming in understory. Cut all red maple & aspen. Mark some of the oak. Let the white pine come in, should have a mix of white pine, red maple, aspen & oak in the final stand. (Grieve)										
Wld : Wildlife reserves the right to fell 1-2 trees per acre for coarse woody debris if timber sale is total tree harvested.										
4	R9	2	95	40	red pine	mature	thinning	2		
comnts Fmd : 4/15/2006 SI is not a true reading for this stand. It does not take in to consideration the first 50 years of growth. Red pine tops are rounding off at about 50 years. Thin to release the white pine understory. Cut all red maple & any aspen. Mark red pine & oak. Should come back heavy to white pine. Would be nice if some red pine & oak seeded in, but this is not the target. (Grieve)										
10	R6	50		54	red pine	unevenaged	thinning	1		
comnts Fmd : 3/20/2006 Found one beech tree, sapling. All age stand. Cut red maple, aspen & jack pine. Leave red pine, white pine & oak. High value recreation area. (Grieve)										
14	J5	101	59	38	jack pine	mature	final harvest	1	planting	
comnts Fmd : 3/20/2006 Stopped putting on growth in the last 15 years. Red pine goes up 50 feet than stops growing. Cut, remove all jack pine & red maple. Leave white pine, red pine & oak except in those areas where they are in large clumps. Manage for recreation trails & pine/oak. (Grieve)										
22	O6	10		55	oak	unevenaged	delayed removal	1		
comnts Fmd : 3/28/2006 Release, cut all aspen, white & red pine logs, & 1/2 the oak. Also cut out the red maple. All age stand. Old white pine stumps. This stand will come back as oak, or the white pine may take over when released. Both would me fine. (Grieve)										
30	U0	29			upland brush	nonstocked		0	opening maintenance	
comnts Fmd : 3/29/2006 Mostly scrub cherry. (Grieve)										
Wld : Burn mutiple years per entry cycle to recycle nutrients, stimulate existing warm season grasses and blueberry, increase species diversity, and set back woody encroachment.										
34	U0	43			upland brush	nonstocked		0	opening maintenance	
comnts Fmd : 3/29/2006 Scattered scrub cherry & hilly. (Grieve)										
Wld : Burn mutiple years per entry cycle to recycle nutrients, stimulate existing warm season grasses and blueberry, increase species diversity, and set back woody encroachment. Remove some timber prior to burning to facilitate keeping this area as an upland mast producing shrub community. Leave small islands of timber/brush for cover within the stand. Retain mast producing trees and shrubs as much as possible. Burn along with stand 35.										
35	U2	70			upland brush	nonstocked		0	opening maintenance	
comnts Fmd : 3/31/2006 Very thick up-land brush. All species but really bushy. Some poor form aspen clones forming. (Grieve)										
Wld : Burn mutiple years per entry cycle to recycle nutrients, stimulate existing warm season grasses and blueberry, increase species diversity, and set back woody encroachment. Remove some timber prior to burning to facilitate keeping this area as an upland mast producing shrub community. Leave small islands of timber/brush for cover within the stand. Retain mast producing trees and shrubs as much as possible. Burn along with stand 34.										
40	O9	28	72	62	oak	immature	shelterwood-seed	1		
comnts Fmd : 3/29/2006 Old white pine stumps. Shealterwood cut. Select mark oak, remove the rest. Oak is the target, but white pine, red maple or aspen will work also. Part of this stand is in the old blow down area. (Grieve)										
Wld : Wildlife reserves the right to fell 1-2 trees per acre for coarse woody debris if timber sale is total tree harvested.										
49	J1	1	4	55	red pine	nonstocked		0	planting	
comnts Fmd : 3/31/2006 TS# 193-98-1; Plant to red pine. (Grieve)										
50	J1	6	4	55	red pine	nonstocked		0	planting	
comnts Fmd : 3/31/2006 TS# 193-98-1; Plant to red pine. (Grieve)										
52	J6	37	68	42	jack pine	mature	final harvest	1	planting	
comnts Fmd : 3/31/2006 Stand is ready for harvest Re-plant to jack pine. (Grieve)										
Wld : Leave any oak or cherry uncut for diversity.										

TRAVERSE CITY FOREST MGT UNIT

**Proposed Treatments
With NO Limiting Factors**

Compartment: 164 Entry Year: 2008

Stand	Cover Type	Acres	Age	Site Index	Mgt Obj	Condition	Method Cut	Harvest Priority	Cultural Need	FDF Status
53	O9	45	72	62	oak	immature	shelterwood-seed	1		
comnts Fmd : 3/29/2006 Old white pine stumps. Shealterwood cut. Select mark oak, remove the rest. Oak is the target, but white pine, red maple or aspen will work also. (Grieve)										
Wld : Leave several approximately 2 acre clones of aspen on border with stand 28 for retention of mature aspen component.										
58	O6	102	71	53	white pine	two aged	delayed removal	1		
comnts Fmd : 3/31/2006 Remove oak log over story & release pine & cut aspen. Cut all oak 12" & up DBH. (Grieve)										
Wld : Wildlife to mark scattered log oak for mast producing residual. Also, expand aspen component by creating small clear cuts around pockets of viable aspen. Wildlife will mark and GPS.										
62	J6	7	68	42	jack pine	mature	final harvest	1	planting	
comnts Fmd : 3/31/2006 Stand is ready for harvest Re-plant to jack pine. (Grieve)										
402	G0	2			grass	nonstocked		0	opening maintenance	
comnts Fmd : 3/29/2006 Abandon well site & facility. Was rehabbed in June of 2005. Planted to grass & red pine. Most of the red pine died. May have been dead at the time of planting. Will try and replant fall of 2006 or the following spring. (Grieve)										
Wld : Retain as grass type within larger surrounding upland brush community. Fertilize and supplantally seed existing herbaceous vegetation. May need to repeat multiple years until grass cover is established.										
404	G0	2			grass	nonstocked		0	opening maintenance	
comnts Fmd : 3/29/2006 Abandon well site. Bare sand & sweetfern . Plant to jack pine for some kind of cover. No red pine. (Grieve)										
Wld : Stand is partially degraded. Portion with vegetation has bracken, sweetfern, little bluestem, poverty grass, blueberry, and other grasses. Plant and fertilize degraded portion to herbaceous cover.										
405	G0	1			jack pine	nonstocked		0	planting	
comnts Fmd : 3/29/2006 Abandon well site. Bare sand & sweetfern . Plant to jack pine for some kind of cover. No red pine. Hill on north side of stand has ORV problems. Plant this also. (Grieve)										
Wld : Hill climb and sand. Some vegetation in corners of stand. Concur with FMFM.										
406	G0	9			grass	nonstocked		0	opening maintenance	
comnts Fmd : 3/28/2006 Looks like an old wildlife opening. Top soil has be pushed to the side. Needs lime. Lots of sweetfern. (Grieve)										
Wld : There are a few scattered black cherry and jack pine poles and saps within opening. Found one clump of choke cherry. Current ground cover is thick Pennsylvania sedge. Redistribute topsoil from edges of field and eliminate sedge. Fertilize and plant to grass and clover for wildlife food and cover, .										
407	G0	2			jack pine	nonstocked		0	planting	
comnts Fmd : 3/29/2006 Abandon well site. Sweetfern, no bare soil. Pine is starting to move in from sides. Good place for a landing. (Grieve)										
Wld : Will be used as timber landing for surrounding timber sale.										
409	G0	5			grass	nonstocked		0	opening maintenance	
comnts Fmd : 3/29/2006 Grass & sweetfern. South aspect. Even one juniper plant. (Grieve)										
Wld : Burn to stimulate existing warm season grasses. Post burn seed in big bluestem and/or switch grass. Burn again after establishment of additional grass species.										
410	G0	3			grass	nonstocked		0	opening maintenance	
comnts Fmd : 3/31/2006 Oil/gas well. Active or looks active. (Grieve)										
Wld : Several pipes above ground. Evidence of grass planting probably by well company. If well company is done with site: Retain as grass type within larger surrounding upland brush community. Fertilize and supplantally seed existing herbaceous vegetation. May need to repeat multiple years until grass cover is established.										
414	G0	2			grass	nonstocked		0	opening maintenance	
comnts Fmd : 4/2/2006 Abandon well site. Reindeer lichen, bracken, grass & some seeding in of pine in that order. (Grieve)										
Wld : This will make a nice forest opening. Fertilize and plant degraded portions to herbaceous vegetation.										
415	G0	7			grass	nonstocked		0	opening maintenance	
comnts Fmd : 4/2/2006 Some bracken. (Grieve)										
Wld : Mow and fertilize at least as needed for maintenance of herbaceous component.										

TRAVERSE CITY FOREST MGT UNIT

**Proposed Treatments
With NO Limiting Factors**

Compartment: 164 **Entry Year: 2008**

Stand	Cover Type	Acres	Age	Site Index	Mgt Obj	Condition	Method Cut	Harvest Priority	Cultural Need	FDF Status
416	G0	4			grass	nonstocked		0	opening maintenance	
comnts Fmd : 4/2/2006 Some bracken. (Grieve) Wld : Plant and fertilize to cool season grasses for wildlife food and cover. Bracken and several exotics (spotted knapweed, sheep sorel, mullin) are currently found in opening.										
Total Acres.....		574								

**Proposed Treatments
With Limiting Factors**

Compartment: 164 **Entry Year: 2008**

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

Total Acres..... 0

Field Map

Compartment 164
 T27N, R08W, Sec. 13, 14, 15
 County: Kalkaska
 Unit: Traverse City
 YOE: 2008
 Acres: 1,725 GIS Calculated
 Stand Examiner: Gerald Grieve
 Map Revised: 11/09/2006
 Map Phase: Pre-review

Legend

- GPS Corners
- Miris Corners
- Paved Roads
- Gravel Roads
- Poor Dirt Roads
- Closed Roads
- Trails
- State Highway
- Dog Sled Trails
- ORV Trails
- Hiking Trails
- Horse Trails
- Stand Boundary
- 011 - Planting/Hand Tools
- 026 - Opening Maintenance
- 027 - Opening Maintenance/Prescribed Burning
- 111 - Final Harvest/Planting/Hand Tools
- 300 - Shelterwood - Seed
- 400 - Thinning
- 600 - Delayed Removal

