



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

COMPARTMENT # 172 ENTRY YEAR: 2010

Compartment Acreage: 1950 County: Kalkaska

Stand Examiner: G.R.Grieve

Legal Description: T28N, R7W, Sections 19, 20, 21, 22 & 23

Management Goals: Habitat/vegetative timber intensive.

Soil and Topography: kalkaska loamy sand, Mancelona gravely sandy loam & Newton sandy loam.

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

State land exist in large contiguous blocks. Private inholdings exist in Section 23.

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

No known MNFI features.

Archeological, Historical, and Cultural Features (include only non-site specific and non-sensitive information): A number of old homesteads are in the compartment.

Special Management Designations or Considerations: Rapid River in sections 21 & 22.

Watershed and Fisheries Considerations: There are no treatments within the riparian areas of water bodies prescribed for this compartment.

Wildlife Habitat Considerations:

Mineral Resource and Development Concerns and/or Restrictions: Surface sediments consist of an end moraine of coarse-textured till and glacial outwash sand and gravel and postglacial alluvium. The glacial drift thickness varies between 200 and 600 feet. Beneath the glacial drift is the Mississippian Coldwater Shale. The Coldwater does not have a current economic use. Gravel pits are located in the area and potential is good. The Compartment is located north of the Niagaran reef trend. The Antrim Shale gas play is being developed in this area. Most of the Compartment is currently under lease.

Vehicle Access:

Survey Needs: None needed at this time.

Recreational Facilities and Opportunities: Leetsville ORV Trail passes through section 23. General hunting & some fishing.

Fire Protection: DNR protection is from the Kalkaska Field Office. VFD protection is from the Kalkaska Fire Dept. Travel time is good, this compartment is located just a few miles from the Kalkaska DNR office.

Access is also acceptable, although the Rapid River could possibly present a problem in sections 21 and 22. Cover type does not contribute to catastrophic fires. Urban innerface is not too much of an issue in this compartment.

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: 172

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		11	7	9	2	28													57
Bog or Marsh	2																		2
Cedar														195					195
Grass	93																		93
Jack Pine			66																66
LowInd Brush			10																10
Non Stocked	6																		6
Red Pine				39			90												129
Swamp Hrdwds												33							33
Upland Brush	160																		160
Upland Hdwds			8	11					55	18								999	1091
White Pine							108												108
Total	261	11	91	59	2	28	198		55	18		33		195				999	1950

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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: 172

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	57																										57
V Bog or Marsh			2																								2
C Cedar				195																							195
G Grass					91										2												93
J Jack Pine							66																				66
L Lowlnd Brush									10																		10
X Non Stocked													6														6
R Red Pine															129												129
E Swamp Hrdwds																				33							33
U Upland Brush																								160			160
M Upland Hdwds																								1091			1091
W White Pine																									108	108	
Total	57		2	195	91		66		10				6		131					33			160	1091		108	1950

PERE MARQUETTE STATE FOREST

TRAVERSE CITY FOREST MGT UNIT

KALKASKA COUNTY

COMPARTMENT: **172**

Table 10 - COMPARTMENT VOLUME SUMMARY - ALL STANDS

COMPARTMENT SUMMARY			
TOTAL VOLUME		CUT VOLUME	
Hardwood	18300 Cds	Hardwood	2747 Cds
Hardwood	2755 Mbf	Hardwood	624 Mbf
Softwood	9682 Cds	Softwood	2216 Cds
Softwood	1872 Mbf	Softwood	195 Mbf
Sum TotVol	37236 Cds	Sum CutVol	6601 Cds
Total Cmpt Acres		Acres Proposed For Cut.....	569
1950			

Stand	Cover Type	Acres	Age	Site Index	Mgt Obj	Condition	Method Cut	Harvest Priority	Cultural Need	fdf Status
6	M6	19		55	northern hardwood	unevenaged	selection	2		
comnts Fmd : 3/10/2008 Lots of ironwood, would like to hold but stem count say's to selective cut now. (Grieve)										
10/1998 ORV trail bisects the stand. Part of stand thinned previously. May hold for 10 years due to low BA. (Rouston)										
10	M6	13		53	northern hardwood	unevenaged	selection	3		
comnts Fmd : 3/12/2008 ready for a selection cut, poor quality, low priority. (Grieve)										
45	R6	13	57	60	red pine	immature	thinning	1		prescribed for fdf treatment
comnts Fmd : 3/12/2008 Twice has had a thinning. Either clearcut & replant or do one more thinning before final harvest. Than re-plant to red pine. Because of the location of these stands on both sides of US-131, it would be best to let the R3 stand get a little bigger before final harvest. This would be a much better visual effect. (Grieve) 2/18/2003 TS# 059-00-1 (Grieve) 10/98 Planted in spring 1951 with 2-0 Red Pine stock. Every third row was removed in 1990. Core samples taken in 1998 indicated that thinning is needed since the growth was not what I expected. (Rouston)										
46	R6	12	57	60	red pine	immature	thinning	1		prescribed for fdf treatment
comnts Fmd : 3/12/2008 Twice has had a thinning. Either clearcut & replant or do one more thinning before final harvest. Than re-plant to red pine. Because of the location of these stands on both sides of US-131, it would be best to let the R3 stand get a little bigger before final harvest. This would be a much better visual effect. (Grieve) 2/18/2003 TS# 059-00-1 (Grieve) 10/98 Planted in spring 1951 with 2-0 Red Pine stock. Every third row was removed in 1990. Core samples taken in 1998 indicated that thinning is needed since the growth was not what I expected. (Rouston)										
47	R6	9	57	60	red pine	immature	thinning	1		prescribed for fdf treatment
comnts Fmd : 3/12/2008 Twice has had a thinning. Either clearcut & replant or do one more thinning before final harvest. Than re-plant to red pine. Because of the location of these stands on both sides of US-131, it would be best to let the R3 stand get a little bigger before final harvest. This would be a much better visual effect. (Grieve) 2/18/2003 TS# 059-00-1 (Grieve) 10/98 Planted in spring 1951 with 2-0 Red Pine stock. Every third row was removed in 1990. Core samples taken in 1998 indicated that thinning is needed since the growth was not what I expected. (Rouston)										
48	R6	8	57	60	red pine	immature	thinning	1		prescribed for fdf treatment
comnts Fmd : 3/12/2008 Twice has had a thinning. Either clearcut & replant or do one more thinning before final harvest. Than re-plant to red pine. Because of the location of these stands on both sides of US-131, it would be best to let the R3 stand get a little bigger before final harvest. This would be a much better visual effect. (Grieve) 2/18/2003 TS# 059-00-1 (Grieve) 10/98 Planted in spring 1951 with 2-0 Red Pine stock. Every third row was removed in 1990. Core samples taken in 1998 indicated that thinning is needed since the growth was not what I expected. (Rouston)										
49	R6	3	57	60	red pine	immature	thinning	1		prescribed for fdf treatment
comnts Fmd : 3/12/2008 Twice has had a thinning. Either clearcut & replant or do one more thinning before final harvest. Than re-plant to red pine. Because of the location of these stands on both sides of US-131, it would be best to let the R3 stand get a little bigger before final harvest. This would be a much better visual effect. (Grieve) 2/18/2003 TS# 059-00-1 (Grieve) 10/98 Planted in spring 1951 with 2-0 Red Pine stock. Every third row was removed in 1990. Core samples taken in 1998 indicated that thinning is needed since the growth was not what I expected. (Rouston)										
57	R6	2	57	60	red pine	immature	thinning	1		prescribed for fdf treatment
comnts Fmd : 3/12/2008 Twice has had a thinning. Either clearcut & replant or do one more thinning before final harvest. Than re-plant to red pine. Because of the location of these stands on both sides of US-131, it would be best to let the R3 stand get a little bigger before final harvest. This would be a much better visual effect. (Grieve) 2/18/2003 TS# 059-00-1 (Grieve) 10/98 Planted in spring 1951 with 2-0 Red Pine stock. Every third row was removed in 1990. Core samples taken in 1998 indicated that thinning is needed since the growth was not what I expected. (Rouston)										
58	R6	6	57	60	red pine	immature	thinning	1		prescribed for fdf treatment
comnts Fmd : 3/12/2008 Twice has had a thinning. Either clearcut & replant or do one more thinning before final harvest. Than re-plant to red pine. Because of the location of these stands on both sides of US-131, it would be best to let the R3 stand get a little bigger before final harvest. This would be a much better visual effect. (Grieve) 2/18/2003 TS# 059-00-1 (Grieve) 10/98 Planted in spring 1951 with 2-0 Red Pine stock. Every third row was removed in 1990. Core samples taken in 1998 indicated that thinning is needed since the growth was not what I expected. (Rouston)										

Stand	Cover Type	Acres	Age	Site Index	Mgt Obj	Condition	Method Cut	Harvest Priority	Cultural Need	fdf Status
59	R6	10	57	60	red pine	immature	thinning	1		prescribed for fdf treatment
comnts Fmd : 3/12/2008 Twice has had a thinning. Either clearcut & replant or do one more thinning before final harvest. Than re-plant to red pine. Because of the location of these stands on both sides of US-131, it would be best to let the R3 stand get a little bigger before final harvest. This would be a much better visual effect. (Grieve) 2/18/2003 TS# 059-00-1 (Grieve) 10/98 Planted in spring 1951 with 2-0 Red Pine stock. Every third row was removed in 1990. Core samples taken in 1998 indicated that thinning is needed since the growth was not what I expected. (Rouston)										
61	R6	12	57	60	red pine	immature	thinning	1		prescribed for fdf treatment
comnts Fmd : 3/12/2008 Twice has had a thinning. Either clearcut & replant or do one more thinning before final harvest. Than re-plant to red pine. Because of the location of these stands on both sides of US-131, it would be best to let the R3 stand get a little bigger before final harvest. This would be a much better visual effect. (Grieve) 2/18/2003 TS# 059-00-1 (Grieve) 10/98 Planted in spring 1951 with 2-0 Red Pine stock. Every third row was removed in 1990. Core samples taken in 1998 indicated that thinning is needed since the growth was not what I expected. (Rouston)										
63	R6	2	57	60	red pine	immature	thinning	1		prescribed for fdf treatment
comnts Fmd : 3/12/2008 Twice has had a thinning. Either clearcut & replant or do one more thinning before final harvest. Than re-plant to red pine. Because of the location of these stands on both sides of US-131, it would be best to let the R3 stand get a little bigger before final harvest. This would be a much better visual effect. (Grieve) 2/18/2003 TS# 059-00-1 (Grieve) 10/98 Planted in spring 1951 with 2-0 Red Pine stock. Every third row was removed in 1990. Core samples taken in 1998 indicated that thinning is needed since the growth was not what I expected. (Rouston)										
65	R6	3	57	60	red pine	immature	thinning	1		prescribed for fdf treatment
comnts Fmd : 3/12/2008 Twice has had a thinning. Either clearcut & replant or do one more thinning before final harvest. Than re-plant to red pine. Because of the location of these stands on both sides of US-131, it would be best to let the R3 stand get a little bigger before final harvest. This would be a much better visual effect. (Grieve) 2/18/2003 TS# 059-00-1 (Grieve) 10/98 Planted in spring 1951 with 2-0 Red Pine stock. Every third row was removed in 1990. Core samples taken in 1998 indicated that thinning is needed since the growth was not what I expected. (Rouston)										
67	R6	1	57	60	red pine	immature	thinning	1		prescribed for fdf treatment
comnts Fmd : 3/12/2008 Twice has had a thinning. Either clearcut & replant or do one more thinning before final harvest. Than re-plant to red pine. Because of the location of these stands on both sides of US-131, it would be best to let the R3 stand get a little bigger before final harvest. This would be a much better visual effect. (Grieve) 2/18/2003 TS# 059-00-1 (Grieve) 10/98 Planted in spring 1951 with 2-0 Red Pine stock. Every third row was removed in 1990. Core samples taken in 1998 indicated that thinning is needed since the growth was not what I expected. (Rouston)										
72	R6	3	57	60	red pine	immature	thinning	1		prescribed for fdf treatment
comnts Fmd : 3/12/2008 Twice has had a thinning. Either clearcut & replant or do one more thinning before final harvest. Than re-plant to red pine. Because of the location of these stands on both sides of US-131, it would be best to let the R3 stand get a little bigger before final harvest. This would be a much better visual effect. (Grieve) 2/18/2003 TS# 059-00-1 (Grieve) 10/98 Planted in spring 1951 with 2-0 Red Pine stock. Every third row was removed in 1990. Core samples taken in 1998 indicated that thinning is needed since the growth was not what I expected. (Rouston)										
74	R6	2	57	60	red pine	immature	thinning	1		prescribed for fdf treatment
comnts Fmd : 3/12/2008 Twice has had a thinning. Either clearcut & replant or do one more thinning before final harvest. Than re-plant to red pine. Because of the location of these stands on both sides of US-131, it would be best to let the R3 stand get a little bigger before final harvest. This would be a much better visual effect. (Grieve) 2/18/2003 TS# 059-00-1 (Grieve) 10/98 Planted in spring 1951 with 2-0 Red Pine stock. Every third row was removed in 1990. Core samples taken in 1998 indicated that thinning is needed since the growth was not what I expected. (Rouston)										
76	R6	3	57	60	red pine	immature	thinning	1		prescribed for fdf treatment
comnts Fmd : 3/12/2008 Twice has had a thinning. Either clearcut & replant or do one more thinning before final harvest. Than re-plant to red pine. Because of the location of these stands on both sides of US-131, it would be best to let the R3 stand get a little bigger before final harvest. This would be a much better visual effect. (Grieve) 2/18/2003 TS# 059-00-1 (Grieve) 10/98 Planted in spring 1951 with 2-0 Red Pine stock. Every third row was removed in 1990. Core samples taken in 1998 indicated that thinning is needed since the growth was not what I expected. (Rouston)										

TRAVERSE CITY FOREST MGT UNIT

**Proposed Treatments
With NO Limiting Factors**

Compartment: 172 Entry Year: 2010

Stand	Cover Type	Acres	Age	Site Index	Mgt Obj	Condition	Method Cut	Harvest Priority	Cultural Need	fdf Status
78	R6	1	57	60	red pine	immature	thinning	1		prescribed for fdf treatment
comnts Fmd : 3/12/2008 Twice has had a thinning. Either clearcut & replant or do one more thinning before final harvest. Than re-plant to red pine. Because of the location of these stands on both sides of US-131, it would be best to let the R3 stand get a little bigger before final harvest. This would be a much better visual effect. (Grieve) 2/18/2003 TS# 059-00-1 (Grieve) 10/98 Planted in spring 1951 with 2-0 Red Pine stock. Every third row was removed in 1990. Core samples taken in 1998 indicated that thinning is needed since the growth was not what I expected. (Rouston)										
86	W6	21	50	65	white pine	immature	thinning	2		
comnts Fmd : 3/12/2008 Poor form, going to go to hardwoods could hold next thinning for ten years. Boarderline to thin or not, so thin now and move to hardwoods faster. (Grieve) 2/18/2003 TS# 026-00-1 (Grieve) 10/98 Stand was planted in spring of 1960 with 2-0 & 3-0 stock. Rows were planted East-West and a few stems have just reached sawlog size.(Rouston)										
91	M6	268		55	northern hardwood	unevenaged	selection	1		
comnts Fmd : 8/19/2008 This stand although a marginal stand for growing northern hardwoods, would grow excellent northern red oak or red pine. When marking, mark 10, 5 acres blocks scattered thought out the stand to a BA of 40. After harvest plant or drill this blocks with oak. Regeneration of oak should be 10% white oak & 90% northern red oak. (Grieve) 3/17/2008 Weak stand more so in the middle. But still needs a selection cut for improvement. Harvest this time around. This stand was multiple stands the last two inventories. I have lumped them all into one for this time around so they will all be harvested. A good selection harvest is need throughout to start some regeneration. (Grieve) 10/98 Smaller dbh than other hardwood stands in the area. Wait 10 years - then thin. (Rouston)										
92	W6	7	51	60	white pine	immature	thinning	2		
comnts Fmd : 3/17/2008 2nd thinning, will need to be marked. (Grieve) 2/18/2003 TS# 026-00-1 (Grieve) 10/98 Stand was planted in spring 1960 with 3-0 stock. One quarter of the stand was replanted in 1966 with 3-0 stock. Rows are planted North/South. Evidence of weevil damage is still apparent. The old aerial photos show that this spot was once an orchard. (Rouston)										
96	W6	31	51	60	white pine	immature	thinning	2		
comnts Fmd : 3/17/2008 2nd thinning, will need to be marked. (Grieve) 2/18/2003 TS# 026-00-1 (Grieve) 10/98 White pine planted in spring of 1960 (2-0 & 3-0 stock). Some replanting in 1963 and 1966 (3-0 stock). Remove every third row to thin out the stand in the year 2000. An old homestead foundation is located along the roadway and should not be disturbed. A few Red Pine mixed in. Evidence of weevil damage in the past. (Rouston)										
97	M6	71		69	northern hardwood	unevenaged	selection	2		
comnts Fmd : 8/19/2008 Standard selection cut, leave mast bearing trees of good form. Leave den trees. (Grieve) 3/17/2008 TS# 17-91-1, Time for a selection cut for regeneration. (Grieve) 10/98 P-2 (Rouston)										
103	W6	49	50	54	white pine	immature	thinning	2		
comnts Fmd : 4/19/2008 Ready along with stands 96, 92, & 86. (Grieve) 2/18/2003 TS# 026-00-1 (Grieve) Stand was planted in 1960 with 3-0 stock. There is weevil damage apparent on the stem. Take every third row in this first thinning.										
104	M6	8		71	northern hardwood	unevenaged		0	cleaning & weeding	prescribed for fdf treatment
comnts Fmd : 4/17/2008 Stand was selectively harvested ten years ago. This stand is being taken over by ironwood. 90% of new growth is ironwood with 9% beech. Herbicide the understory. Drill some acorns after application. This is a good oak site. Removal of ironwood will allow maple to seed in. Look at for selective cut in ten years. The seedlings of any other species are being browsed off. Ironwood is also pushing out indicator species. (Grieve) 2004 TS# 15-00-1 (Grieve) 10/98 Site index taken from adjacent stand. (Rouston)										
106	M6	63		71	northern hardwood	unevenaged		0	cleaning & weeding	prescribed for fdf treatment
comnts Fmd : 4/17/2008 Stand was selectively harvested ten years ago. This stand is being taken over by ironwood. 90% of new growth is ironwood with 9% beech. Herbicide the understory. Drill some acorns after application. This is a good oak site. Removal of ironwood will allow maple to seed in. Look at for selective cut in ten years. The seedlings of any other species are being browsed off. Ironwood is also pushing out indicator species. (Grieve) 2/18/2003 TS# 015-00-1 (Grieve)										
401	G0	2			red pine	nonstocked		0	planting	
comnts Fmd : 3/10/2008 Some knapweed, to much snow to see how much. Plat to red pine. (Grieve) 10/1998 Former well drilling site that is now restored to a grassy opening. From observations of the surrounding timber stands, this in all probability was not a very productive timber stand. (Rouston)										
403	G0	23		50	grass	nonstocked		0	opening maintenance	
comnts Fmd : 4/3/2008 Moving to a U-type. (Grieve) 10/98 Opening with scattered Black Cherry and a few wolfy Hard Maple sawlog size trees. (Rouston)										

Total Acres..... 665

**Proposed Treatments
With Limiting Factors**

Compartment: 172

Entry Year: 2010

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:

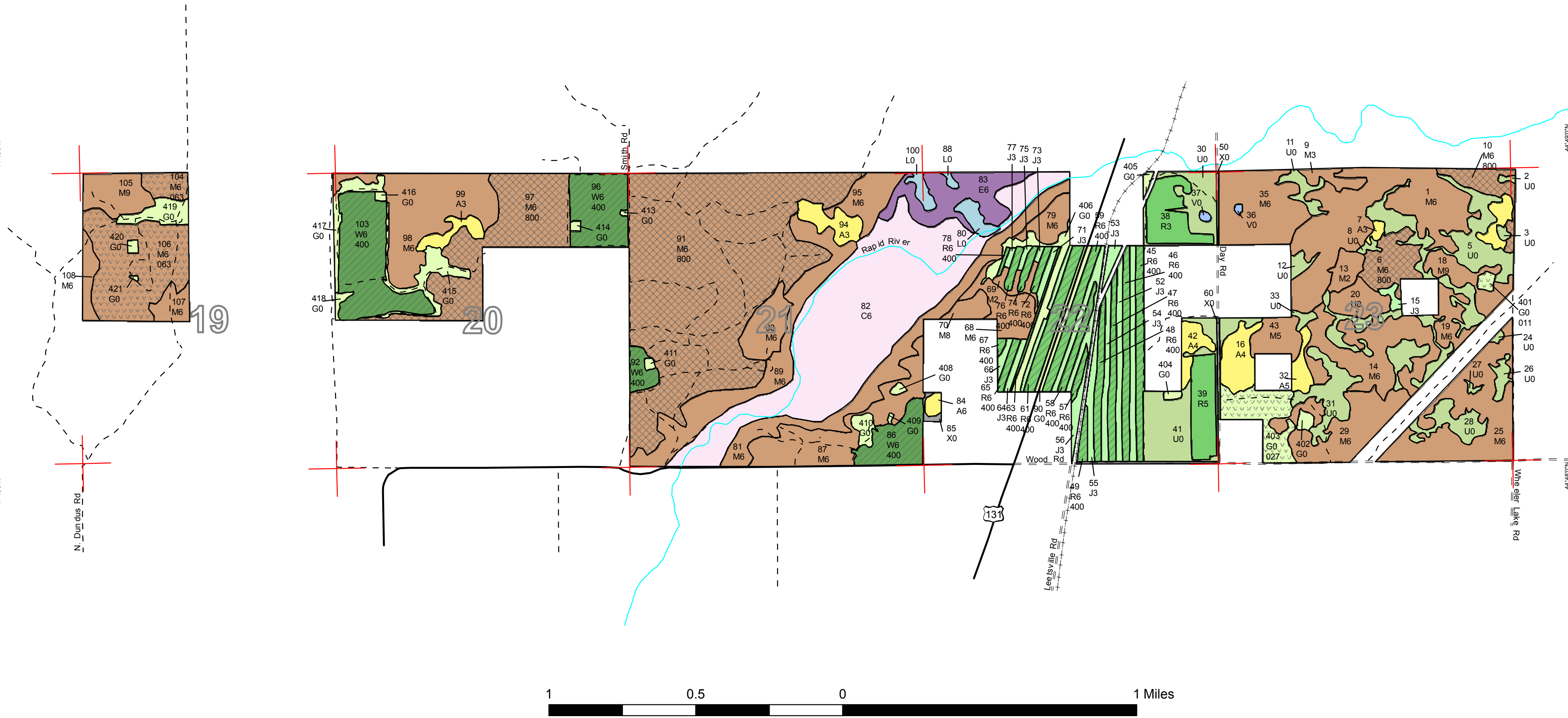
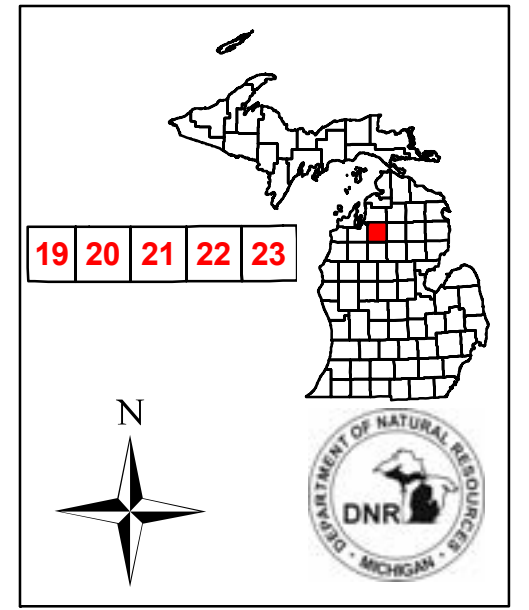
Total Acres..... 0

Covertypes & Treatment Map

Compartment 172
 T28N, R07W, Sec. 19-23
 County: Kalkaska
 Unit: Traverse City
 YOY: 2010
 Acres: 1,950 GIS Calculated
 Stand Examiner: Gerald Grieve
 Map Revised: 8/19/2008
 Map Phase: Pre-review

Legend

- ◆ Rls Corners
- Miris Corners
- Paved Roads
- == Gravel Roads
- - - Poor Dirt Roads
- +++ Railroads
- Water Features
- Stand Boundary
- ▨ 011 - Planting/Hand Tools
- ▨ 027 - Opening Maintenance/Prescribed Burning
- ▨ 063 - Cleaning - weeding/Ground Application
- ▨ 400 - Thinning
- ▨ 800 - Selection
- A - Aspen
- C - Northern White Cedar
- E - Swamp Hardwoods
- G - Grass
- J - Jack Pine
- L - Lowland Brush
- M - Northern Hardwoods
- R - Red Pine
- U - Upland Brush
- V - Bog or Muskeg
- W - White Pine
- X - Non-Stocked



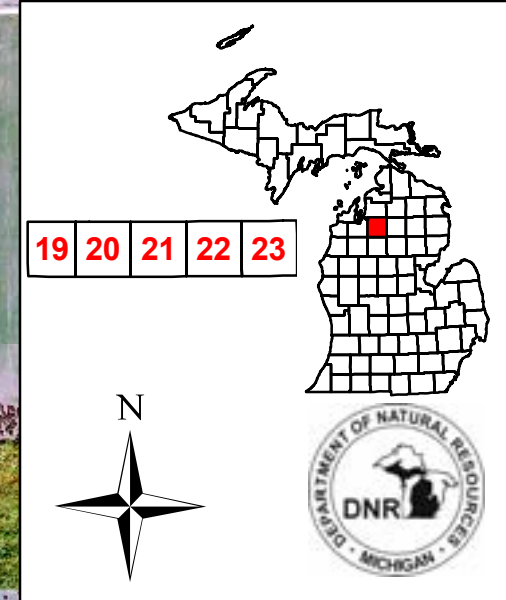
85°13'0"W 85°12'0"W 85°11'0"W 85°10'0"W 85°9'0"W 85°8'0"W 85°7'0"W

44°50'0"N 44°49'0"N 44°48'0"N 44°47'0"N

Stand Boundary Map

Compartment 172
T28N, R07W, Sec. 19-23
County: Kalkaska
Unit: Traverse City
YOE: 2010
Acres: 1,950 GIS Calculated
Stand Examiner: Gerald Grieve
Map Revised: 8/19/2008
Map Phase: Pre-review

- Legend**
- ◆ Ris Corners
 - Miris Corners
 - Paved Roads
 - == Gravel Roads
 - - Poor Dirt Roads
 - +++ Railroads
 - Water Features
 - Stand Boundary



19

20

21

22

23

131



