

CADILLAC FOREST MANAGEMENT UNIT**COMPARTMENT REVIEW PRESENTATION****COMPARTMENT # 105 ENTRY YEAR: 2004****Compartment Acreage (GIS Acres): 1,480 County: Missaukee**

Revision Date: 10/29/2002 1:56 PM**Stand Examiner:** Steven Eisele, Forest Technician**Legal Description:** T21N R5W, Sections 19, 20, 21**RMU 230** Habitat – Vegetative, Timber Intensive**Management Goals:** Maintain cover types and age class diversity.**Soil and Topography:** Sections 19 and 20 are flat and contain some wet swampy areas. Section 21 is gently rolling and is all upland. Soil series consist of Rubicon sand, Montcalm-Graycalm complex, Roscommon mucky sand, Iosco loamy sand.**Ownership Patterns, Development, and Land Use in and Around the Compartment:** Sections 20 and 21 are solid State ownership. Section 19 is interspersed with private ownership consisting of farms and residences. Lands listed for acquisition are in section 19 E ½ SE.**Unique, Natural Features:** Potential for secretive locust in the v and n types. Potential for Red Shouldered Hawk and Goshawk in the M types.**Archeological, Historical, and Cultural Features:** None listed with the Bureau of History. Several old railway grades traverse the compartment.**Special Management Designations or Considerations:** Oak mortality from previous years of drought and gypsy moth has been reduced by timber sales and salvage harvests. Remaining areas will be treated this year of entry.**Watershed and Fisheries Considerations:** No water in the compartment.**Wildlife Habitat Considerations:** This compartment is one of nine in RMU 230. Since the agreement for this RMU was made, the aspen acreage has remained relatively stable, as agreed to, but there has been a large increase in the red pine/white pine acreage at the expense of the oak type. This RMU is valuable wildlife habitat for many upland species. This compartment provides a very, good mix of timber types and mixed, age classes providing habitat for numerous upland game and non-game species. There has been a large amount of oak die-off in recent years and there has been little success in regenerating the oak type. Management efforts should continue to support maintaining early successional, habitat types and age class diversity with improved efforts to regenerate the oak component. Efforts to control the encroachment of white pine, as agreed to within the Pere Marquette Plan, should continue. (L.Smith, 9/20/02)

Mineral Resource and Development Concerns and/or Restrictions: Great Lakes Pipeline runs north/south through section 20. No wells within the compartment. Surface sediments consist of ice-contact outwash sand and gravel and coarse-textured glacial till. Glacial drift thickness varies between 600 and 800 feet. There is approximately 150 feet of relief within the compartment. Beneath the glacial drift are the Pennsylvanian Grand River and Saginaw Formations. The Saginaw is quarried for clay/shale in other parts of the State. A gravel pit is located in Section 19. Gravel potential is considered good especially the upland areas. The compartment is located one mile northeast of Cranberry Lake Field. The field is a Stray Sandstone gas storage area (7.7 Bcf) and a Richfield secondary recovery operation (1.7 MBO). There are no State leases currently, but there may be potential.

Vehicle Access: A forest road access plan is detailed on the compartment map. Identified are state and county roads as well as forest roads and trails under the jurisdiction of the DNR. Also indicated are forest roads and trails under the jurisdiction of the DNR that are proposed for abandonment. These roads were determined to be in excess of the access needs in the area, are a threat to the resources, or are a concern environmentally. Proposed new roads or roads recommended for substantial improvement are noted below:

Survey Needs: Survey lines and corners are adequate for required uses.

Recreational Facilities and Opportunities: The Leota ORV trail traverses the compartment in sections 20 and 21. Dispersed hunting within compartment.

Fire Protection: Good access through out the compartment, except in the swampy areas.

Additional Compartment Information:

- **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

PERE MARQUETTE STATE FOREST

CADILLAC MGT UNIT

MISSAUKEE COUNTY

COMPARTMENT: 105

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 | 985 | | | | | | | | | | | | | | | | | | | | | | | | | | 985 |
| V Bog or Marsh | | | 3 | | | | | | | | | | | | | | | | | | | | | | | | 3 |
| G Grass | | | | | 38 | | | | | | | | | | | | | | | | | | | | | | 38 |
| H Hemlock | | | | | | 11 | | | | | | | | | | | | | | | | | | | | | 11 |
| J Jack Pine | | | | | | | 13 | | | | | | | | | | | | | | | | | | | | 13 |
| L LowInd Brush | | | | | | | | | 3 | | | | | | | | | | | | | | | 17 | | | 20 |
| P LowInd Poplr | | | | | | | | | | 20 | | | | | | | | | | | | | | | | | 20 |
| N Marsh | | | | | | | | | | | 70 | | | | | | | | | | | | | | | | 70 |
| Q Mx Swmp Cnfr | | | | | | | | | | | | 14 | | | | | | | | | | | | | | | 14 |
| X Non Stocked | | | | | | | | | | | | | 16 | | | | | | | | | | | | | | 16 |
| O Oak | | | | | | | | | | | | | | 130 | | | | | | | | | | | | | 130 |
| R Red Pine | | | | | | | | | | | | | | | | 87 | | | | | | | | | | | 87 |
| M Upland Hdwds | 7 | | | | | | | | | | | | | | | | | | | | | | | 66 | | | 73 |
| Total | 992 | | 3 | | 38 | 11 | 13 | | 3 | 20 | 70 | 14 | 16 | 130 | | 87 | | | | | | | | 17 | 66 | | 1480 |

PERE MARQUETTE STATE FOREST

CADILLAC MGT UNIT

MISSAUKEE COUNTY

COMPARTMENT: **105**

Table 10 - COMPARTMENT VOLUME SUMMARY - ALL STANDS

| COMPARTMENT SUMMARY | | | |
|-------------------------|-----------|--|----------|
| TOTAL VOLUME | | CUT VOLUME | |
| Hardwood | 11968 Cds | Hardwood | 4287 Cds |
| Hardwood | 1874 Mbf | Hardwood | 744 Mbf |
| Softwood | 2786 Cds | Softwood | 1036 Cds |
| Softwood | 344 Mbf | Softwood | 144 Mbf |
| Sum TotVol | 19190 Cds | Sum CutVol | 7099 Cds |
| Total Cmpt Acres | | Acres Proposed For Cut..... | 346 |
| 1480 | | Acres Meeting Silv Criteria..... | 405 |
| | | Acres Not Meeting Silv Criteria..... | 1075 |
| | | Acres Unable to Determine Silv Criteria For..... | |

CADILLAC MGT UNIT

**Proposed Treatments
With NO Limiting Factors**

Compartment: 105 **Entry Year: 2004**

| Stand | Cover Type | Acres | Age | Site Index | Mgt Obj | Condition | Method Cut | Harvest Priority | Cultural Need | FDf Status |
|--|------------|-------|-----|------------|---|-----------|---------------|------------------|---------------|------------|
| 3 | R6 | 19 | 46 | 60 | red pine | immature | thinning | 1 | | |
| 22 | P9 | 11 | 61 | | balsam poplar & swamp aspen and swamp white birch | mature | final harvest | 1 | | |
| comnts Fmd : Habitat cut 5 acres or less. | | | | | | | | | | |
| 29 | A6 | 24 | 65 | | aspen (upland) | mature | final harvest | 1 | | |
| comnts Fmd : Final harvest. 2" spec. | | | | | | | | | | |
| 37 | A9 | 12 | 65 | | aspen (upland) | mature | final harvest | 1 | | |
| comnts Fmd : Final Harvest | | | | | | | | | | |
| 53 | R9 | 17 | 46 | | red pine | mature | thinning | 1 | | |
| comnts Fmd : Do a second thin. | | | | | | | | | | |
| 65 | A9 | 14 | 75 | | aspen (upland) | mature | final harvest | 1 | | |
| comnts Fmd : Final Harvest. | | | | | | | | | | |
| 68 | R6 | 11 | 46 | | red pine | immature | thinning | 1 | | |
| comnts Fmd : Do a second thin. | | | | | | | | | | |
| 69 | A9 | 60 | 65 | | aspen (upland) | mature | final harvest | 1 | | |
| comnts Fmd : Final Harvest aspen, leave oak, individual and clumps of 6 to 20 trees. | | | | | | | | | | |
| 74 | A6 | 4 | 56 | | aspen (upland) | mature | final harvest | 2 | | |
| comnts Fmd : Final Harvest. | | | | | | | | | | |
| 75 | A9 | 18 | 70 | | aspen (upland) | mature | final harvest | 1 | | |
| comnts Fmd : Final harvest. | | | | | | | | | | |
| 80 | A9 | 20 | 70 | | aspen (upland) | mature | final harvest | 1 | | |
| comnts Fmd : Cut all but on west end leave oak and pine. | | | | | | | | | | |
| 81 | A9 | 38 | 70 | | aspen (upland) | mature | final harvest | 1 | | |
| comnts Fmd : Same treatment as stand 69. | | | | | | | | | | |
| 93 | M8 | 15 | 60 | | northern hardwood | immature | final harvest | 2 | | |
| comnts Fmd : Treat up to vernal pond. Leave red pine. | | | | | | | | | | |
| 94 | A9 | 12 | 70 | | aspen (upland) | mature | final harvest | 1 | | |
| comnts Fmd : Final Harvest. | | | | | | | | | | |
| 95 | A9 | 36 | 75 | | aspen (upland) | mature | final harvest | 1 | | |
| comnts Fmd : Leave red pine and oak. | | | | | | | | | | |
| 99 | O9 | 19 | 72 | | oak | mature | selection | 2 | | |
| comnts Fmd : Do a firewood/salvage cut. | | | | | | | | | | |
| 101 | A9 | 16 | 70 | | aspen (upland) | mature | final harvest | 1 | | |
| comnts Fmd : Final, leave red pine and oak. | | | | | | | | | | |

Total Acres..... 346

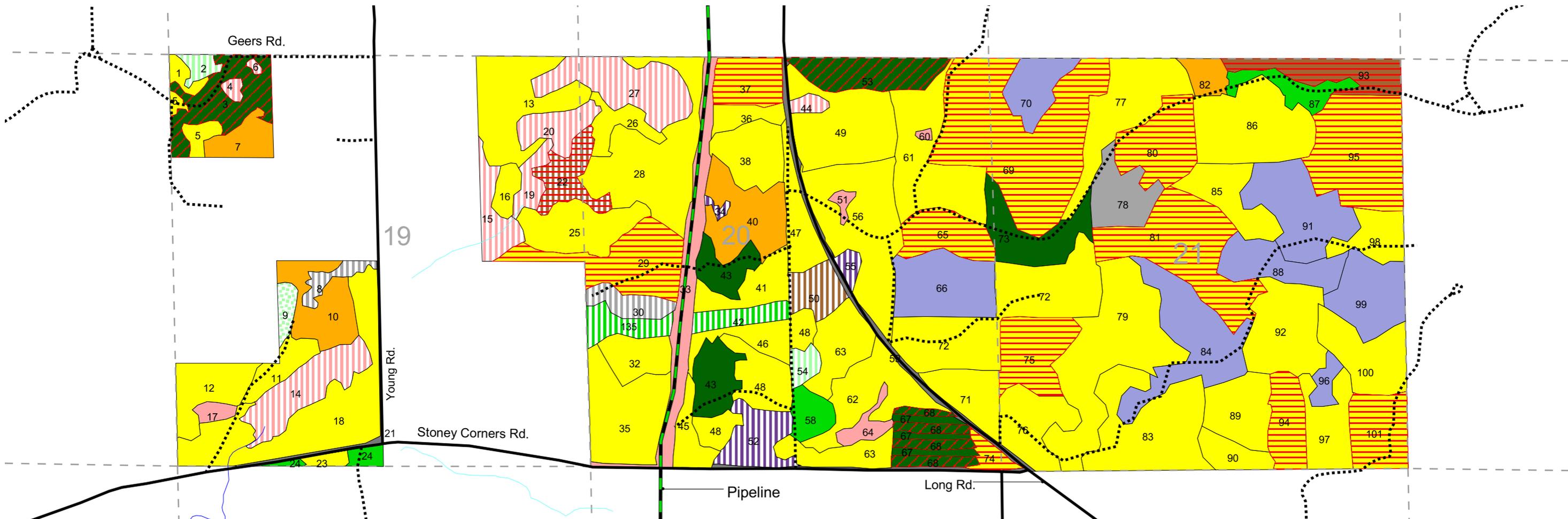
**Proposed Treatments
With Limiting Factors**

Compartment: 105 **Entry Year: 2004**

| Stand | Cover Type | Acres | Age | Site Index | Mgt Obj | Condition | Method Cut | Harvest Priority | Cultural Need | FD Status |
|--------------|-----------------------|--------------|------------|-----------------------|--------------------|------------------|-----------------------|-----------------------------|--------------------------|----------------------|
|--------------|-----------------------|--------------|------------|-----------------------|--------------------|------------------|-----------------------|-----------------------------|--------------------------|----------------------|

TREATMENT LIMITING FACTORS:

Total Acres..... 0



- Roads**
- Two-Track
 - County Roads
- Hydrology**
- Drains and Intermittent Streams
 - Rivers and Streams
- Pipeline**
- Pipeline
- Section Lines**
- Section Lines
- Treatment**
- Final Harvest
 - Thinning
- Cover Types**
- Aspen Types
 - Emergent Wetland
 - Herbaceous Openland
 - Lowland Coniferous Forest
 - Lowland Deciduous Forest
 - Lowland Mixed Forest
 - Lowland Shrub
 - Mixed Non-Forested Wetland
 - Mixed Upland Deciduous
 - Natural Pines
 - Northern Hardwood
 - Oak Types
 - Planted Pines
 - Road/Parking Lot
 - Upland Mixed Forest
 - Upland Shrub
 - Low Density Trees

Compartment 105
T21N, R5W, Sec.19,20,21
Missaukee County
Cadillac Mgt. Unit
YOE 2004
1480 Acres



4 inches = 1 mile