



**Crystal Falls FOREST MANAGEMENT UNIT
COMPARTMENT REVIEW PRESENTATION**

**COMPARTMENT # 169 ENTRY YEAR 2010
Compartment Acreage: 927 County: Iron**

Revision Date: April 2008

Stand Examiner: Cynthia Cooper

Legal Description: T 42N, R32W, SEC 23,24,26 and 28

Management Goals: This year of entry, maintain aspen and improve northern hardwoods.

Soil and Topography: Soils range from muck to sandy loam and loamy sands. Topography - lowlands to moderately rolling hills.

Ownership Patterns, Development, and Land Use in and Around the Compartment: State land scattered throughout four sections with camps and timber industry lands surrounding.

Unique, Natural Features:

Archeological, Historical, and Cultural Features:

Special Management Designations or Considerations:

Watershed and Fisheries Considerations:

Wildlife Habitat Considerations:

MINERAL, OIL AND GAS CONSIDERATIONS:

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 50 and 100 feet. The Precambrian Hemlock Formation, Intrusive and Archean Volcanic and Sedimentary Rock subcrop below the glacial drift. There is not a current economic use for these rocks. Abandoned iron mines at Crystal Falls are located five miles to the northwest. Half of this Compartment is currently leased for metallic exploration. A gravel pit is located six miles to the north and there should be potential. There is no economic oil and gas production in the UP.

Vehicle Access: Access to stand 12 will need new road to harvest. Landowner to the south denies access. All else is good.

Survey Needs: Will need a corner in the NW $\frac{1}{4}$ of the SE $\frac{1}{4}$ section 23.

Recreational Facilities and Opportunities: Hunting.

Fire Protection:

Additional Compartment Information:

- **The following 5 reports from the Operations Inventory System (OIPC) are attached:**
 - ◆ **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, 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

COPPER COUNTRY STATE FOREST

CRYSTAL FALLS FOREST MGT UNIT

IRON COUNTY

COMPARTMENT: 169

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 | | 35 | | 229 | 22 | 187 | | | | | 10 | | | | | | | | 483 |
| Black Spruce | | | | | | | | | | 13 | | | | | | | | | 13 |
| Grass | 4 | | | | | | | | | | | | | | | | | | 4 |
| Lowlnd Brush | 24 | | | | | | | | | | | | | | | | | | 24 |
| Mx Swmp Cnfr | | | | | | | | | | 3 | | | | 63 | | | | | 66 |
| Oak | | | | | | | | | | | | | | | | | | 63 | 63 |
| Spruce Fir | | | | | | | | | | | | | | | | | | 12 | 12 |
| Treed Bog | 3 | | | | | | | | | | | | | | | | | | 3 |
| Upland Hdwds | | | | | | | | | | | | | | | | | | 243 | 243 |
| Water | 16 | | | | | | | | | | | | | | | | | | 16 |
| Total | 47 | 35 | | 229 | 22 | 187 | | | | 16 | 10 | | | 63 | | | | 318 | 927 |

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

COPPER COUNTRY STATE FOREST

CRYSTAL FALLS FOREST MGT UNIT

IRON COUNTY

COMPARTMENT: 169

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 | 483 | | | | | | | | | | | | | | | | | | | | | | | | | | 483 | |
| S Black Spruce | | 13 | | | | | | | | | | | | | | | | | | | | | | | | | | 13 |
| G Grass | | | | | 4 | | | | | | | | | | | | | | | | | | | | | | | 4 |
| L Lowlnd Brush | | | | | | | | | 24 | | | | | | | | | | | | | | | | | | | 24 |
| Q Mx Swmp Cnfr | | | | | | | | | | | | 66 | | | | | | | | | | | | | | | | 66 |
| O Oak | | | | | | | | | | | | | | 63 | | | | | | | | | | | | | | 63 |
| F Spruce Fir | | | | | | | | | | | | | | | | | | | 12 | | | | | | | | | 12 |
| D Treed Bog | | | | | | | | | | | | | | | | | | | | | | 3 | | | | | | 3 |
| M Upland Hdwds | | | | | | | | | | | | | | | | | | | | | | | | 243 | | | | 243 |
| Z Water | | | | | | | | | | | | | | | | | | | | | | | | | 16 | | | 16 |
| Total | 483 | 13 | | | 4 | | | | 24 | | | 66 | | 63 | | | | | 12 | | | 3 | | 243 | 16 | | 927 | |

COPPER COUNTRY STATE FOREST

CRYSTAL FALLS FOREST MGT UNIT

IRON COUNTY

COMPARTMENT: **169**

Table 10 - COMPARTMENT VOLUME SUMMARY - ALL STANDS

| COMPARTMENT SUMMARY | | | |
|--------------------------|-----------|-----------------------------|---------|
| TOTAL VOLUME | | CUT VOLUME | |
| Hardwood | 9186 Cds | Hardwood | 476 Cds |
| Hardwood | 961 Mbf | Hardwood | 18 Mbf |
| Softwood | 1319 Cds | Sum CutVol | 512 Cds |
| Softwood | 110 Mbf | | |
| Sum TotVol | 12647 Cds | | |
| Total Cmpnt Acres | | Acres Proposed For Cut..... | 40 |
| | 927 | | |

CRYSTAL FALLS FOREST MGT UNIT

**Proposed Treatments
With NO Limiting Factors**

Compartment: 169 Entry Year: 2010

| Stand | Cover Type | Acres | Age | Site Index | Mgt Obj | Condition | Method Cut | Harvest Priority | Cultural Need | fdf Status |
|-------|------------|-------|-----|------------|-------------------|------------|------------|------------------|---------------|--------------------------|
| 2 | M6 | 30 | | 55 | northern hardwood | unevenaged | selection | 2 | | stand with fdf potential |

comnts Fmd : RECENT THIN. OAKS IN SHELTER NOT DOING WELL(1998) Schedule for regeneration check after harvest(2008)

| | | | | | | | | | | |
|----|----|----|----|----|----------------|--------|---------------|---|--|--|
| 12 | A6 | 10 | 89 | 60 | aspen (upland) | mature | final harvest | 1 | | |
|----|----|----|----|----|----------------|--------|---------------|---|--|--|

comnts Fmd : Blowdown in stand. Buffer creek.

Total Acres..... 40

**Proposed Treatments
With Limiting Factors**

Compartment: 169

Entry Year: 2010

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

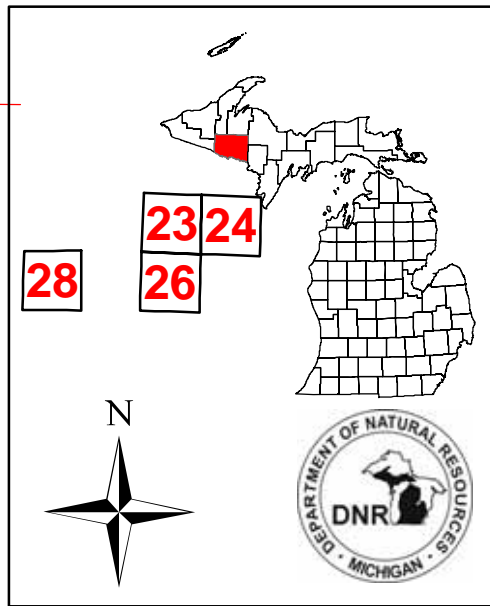
TREATMENT LIMITING FACTORS:

Total Acres..... 0

Compartment 169
 T42N, R31W, Sec. 23, 24, 26, 28
 County: Iron
 Unit: Crystal Falls
 YOE: 2010
 Acres: 927 GIS Calculated
 Stand Examiner: Cynthia Cooper
 Map Revised: 8/06/2008
 Map Phase: Pre-Review

Legend

-  Miris Corners
-  Paved Roads
-  Poor Dirt Roads
-  Water Features
-  Stand Boundary
-  100 - Final Harvest
-  800 - Selection
-  A - Aspen
-  D - Treed Bog
-  F - Upland Spruce or Fir
-  G - Grass
-  L - Lowland Brush
-  M - Northern Hardwoods
-  O - Oak
-  Q - Mixed Swamp Conifers
-  S - Black Spruce Swamp
-  Z - Water



Covertime & Treatment Map

46°10'N

46°00'N

88°11'0"W

88°10'0"W

88°9'0"W

88°8'0"W

88°7'0"W

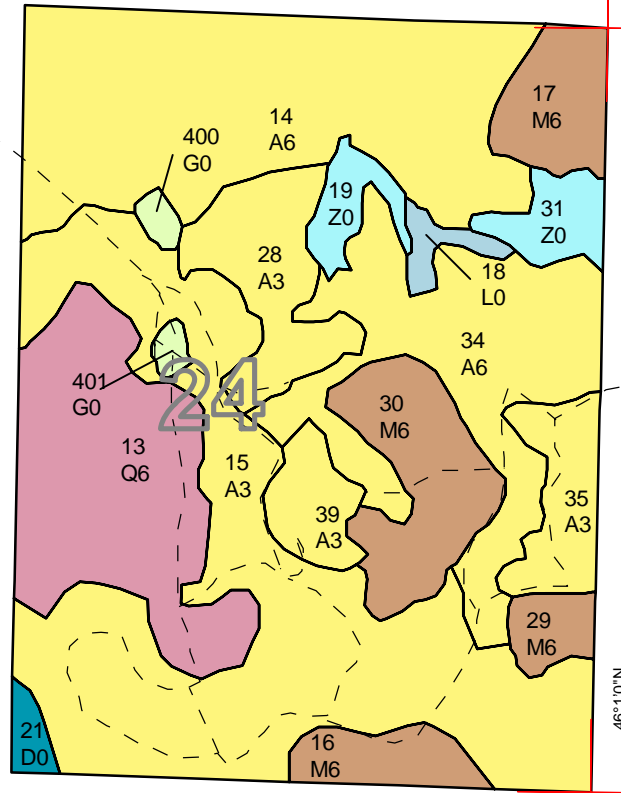
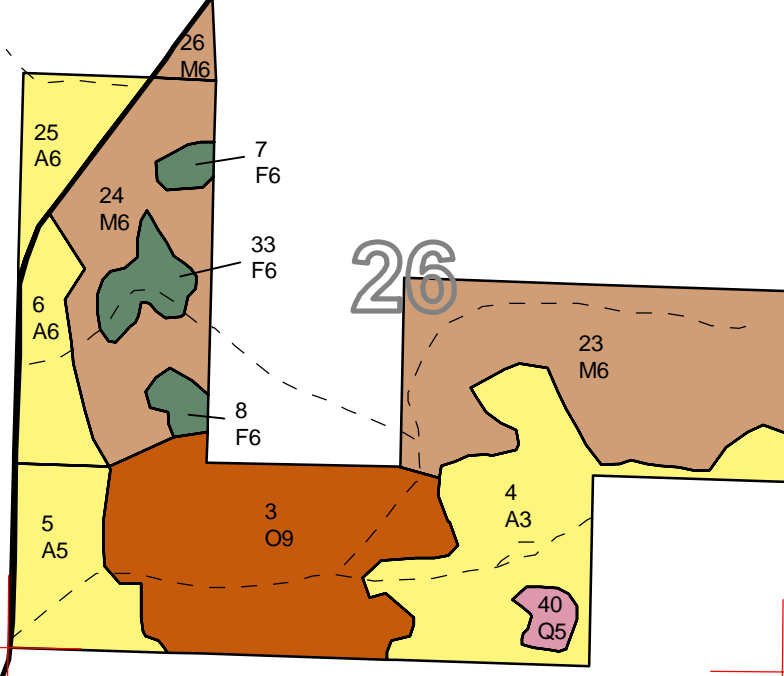
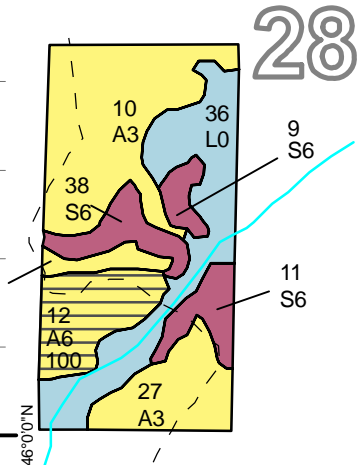
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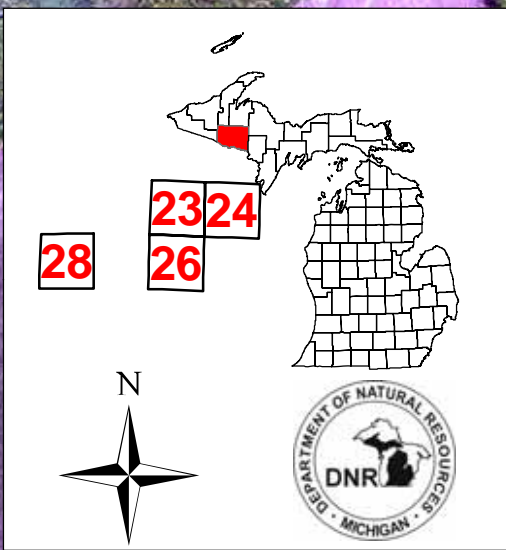
1 Miles

46°10'N



Stand Boundary Map

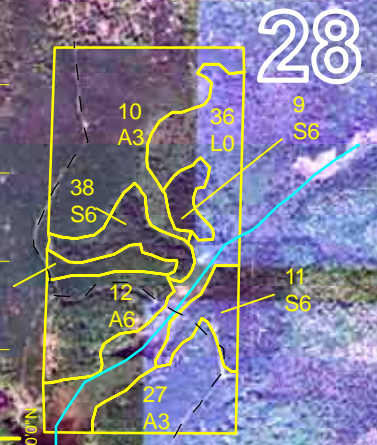
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- Legend**
- Miris Corners
 - Paved Roads
 - Poor Dirt Roads
 - Water Features
 - Stand Boundary

46°10'N

46°10'N



46°0'N

46°0'N

88°11'0"W

88°10'0"W

88°9'0"W

88°8'0"W

88°7'0"W

88°11'0"W

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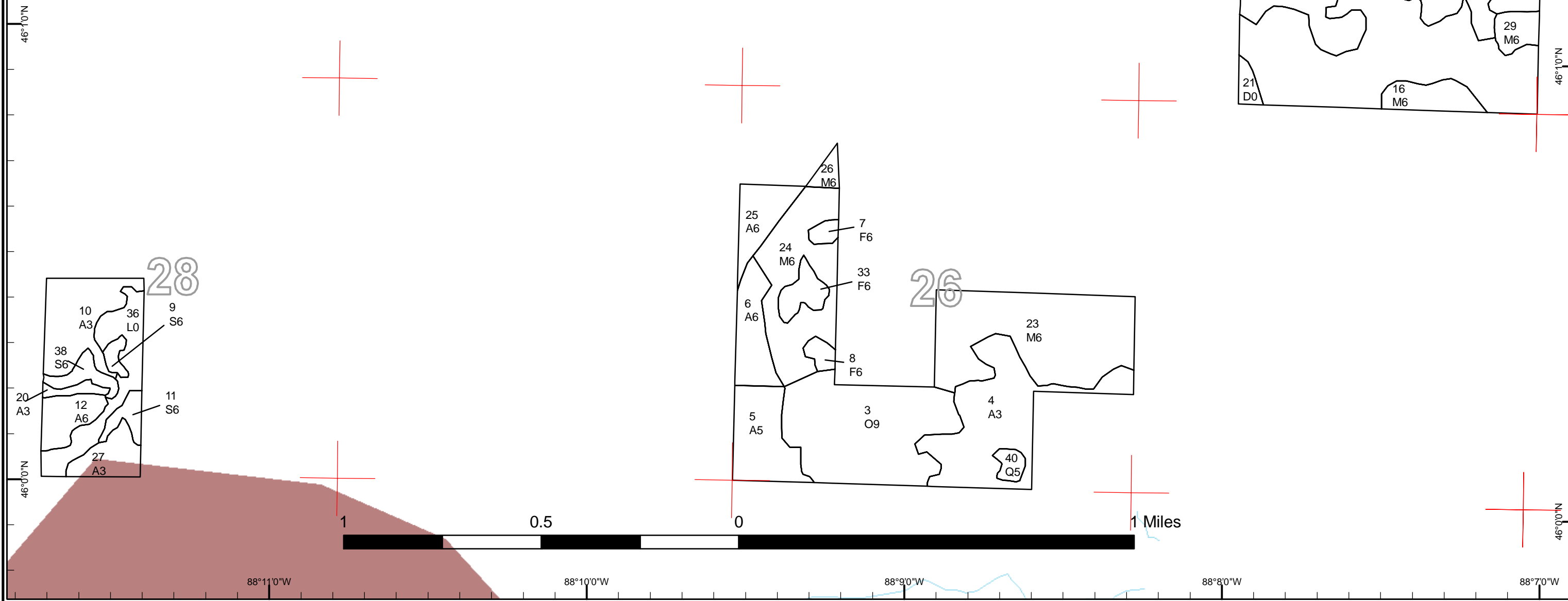
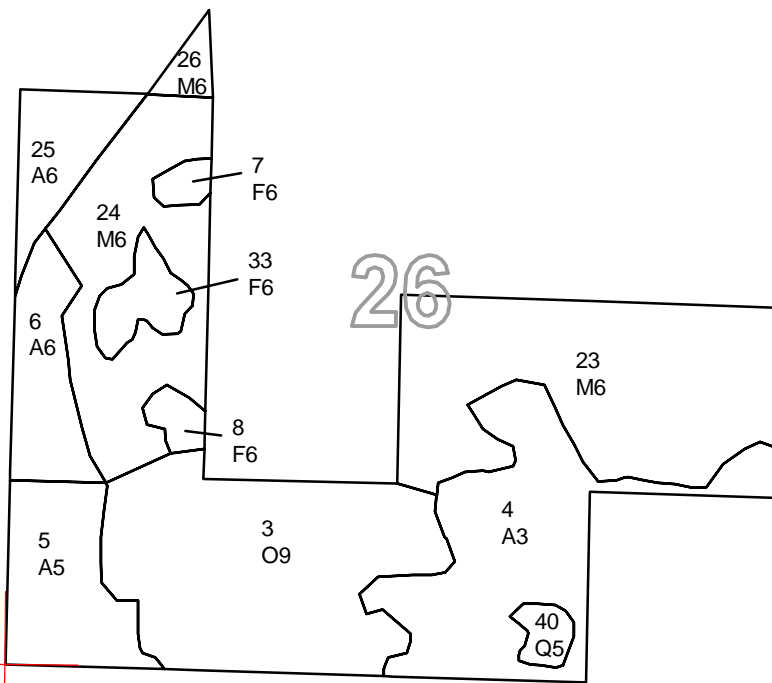
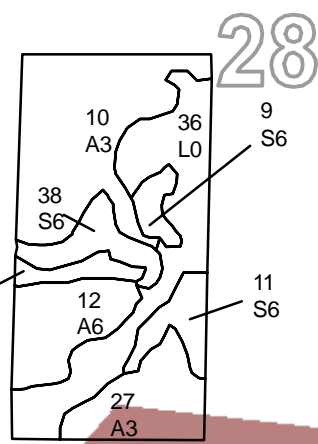
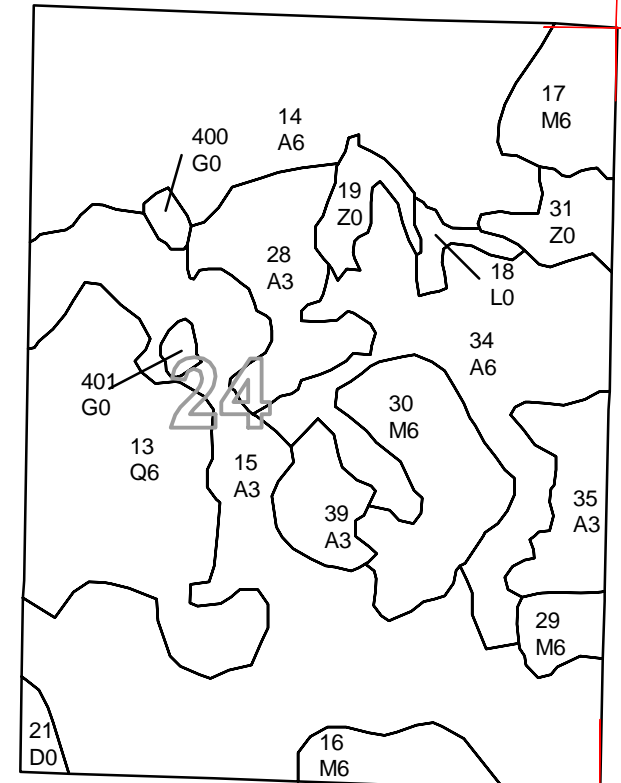
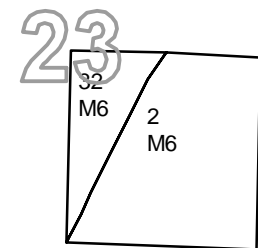
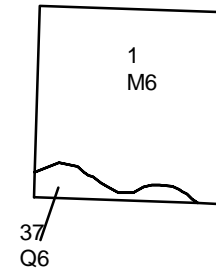
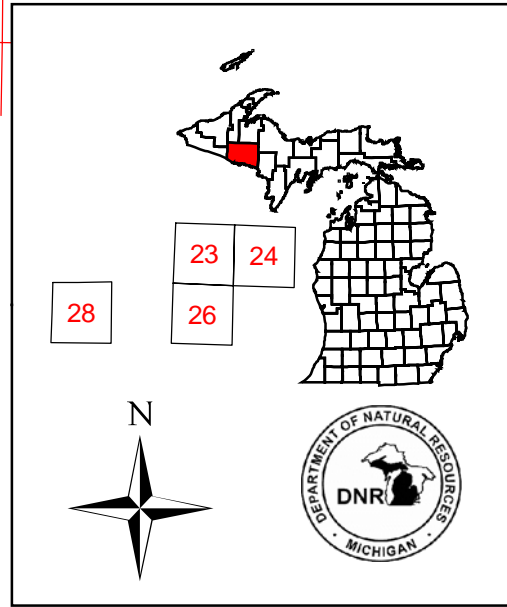
88°7'0"W

88°11'0"W

Dedicated & Proposed Special Conservation Area Map

Compartment 169
 T42N, R31W, Sec. 23, 24, 26, 28
 County: Iron
 Unit: Crystal Falls
 YOE: 2010
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 Stand Examiner: Cynthia Cooper
 Map Revised: 8/06/2008
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- Legend**
-  Miris Corners
 -  Stand Boundary
 -  Cold Water Streams
 -  Deer Wintering Areas





DEDICATED CONSERVATION AREA DETAILS

* This is a list of Dedicated Biodiversity Areas for this compartment along with a 1/4 mile buffer surrounding the compartment. Refer to Dedicated Conservation Area Map for areas that the below listed Conservation Areas are located.

ERA = Ecological Reference Area
HCVA = High Conservation Value Area
SCA = Special Conservation Area

| Conservation Area | Type | Description |
|-------------------|---------------------|---|
| SCA | Archaeological Site | An aquatic or terrestrial area of the State that contains physical remains of human occupation. These are sites of cultural and historical significance that may occur upon terrestrial areas and Great Lakes bottomlands. They include thousands of Native American settlements and burial sites, as well as French and British outposts, nineteenth century logging camps, mines and homesteads. Beneath the waters of the Great Lakes, there are shipwrecks and other remains documenting the maritime trade. Such sites may be identified by Natural heritage data from the State Historic Preservation Office. Proposed treatments in this compartment will be implemented in such a manner as to maintain the integrity of these sites. Due to the sensitive nature of this information, no further detail about location is available. |
| SCA | Cold Water Stream | A coldwater stream has temperature and dissolved oxygen conditions that allow naturally-reproduced or stocked trout populations and those of other coldwater fish species (e.g., slimy sculpin) to persist from year to year. Coldwater streams in Michigan typically provide these conditions due to substantial contributions of groundwater to their stream flows. Such streams are established by Director's action and designated as trout resources by Fisheries Order 210. |
| SCA | Habitat Area | An area that provide some specific need for the life cycle of wildlife species, including State Wildlife Areas and Waterfowl Production Areas, deer wintering complexes in lowland conifer communities, grassland openings and savannas. Habitat areas are distinct from critical habitat designated for recovery of endangered or threatened species (such as Kirtland's warbler or piping plover areas) in that they are more general in nature, are not primarily associated with threatened or endangered species, and are not covered by species recovery plans that are developed in cooperation with Federal agencies. |