

# CADILLAC FOREST MANAGEMENT UNIT



## COMPARTMENT REVIEW PRESENTATION

COMPARTMENT # 032 ENTRY YEAR: 2014

County: Osceola

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**Revision Date:** 10/08/2012 11:58 AM

**Stand Examiner:** Michael Lesinski, Forester

**Legal Description:** T18N, R08W, Sections 5, 6.

**Management Goals:** Mixed Use.

**Soil and Topography:** Compartment soils are a predominately Chelsea, Rubicon, and McBride sand and sandy loam association. In general, the topography is rolling hills.

**Ownership Patterns, Development, and Land Use in and Around the Compartment:** The compartment ownership is contiguous and 100% State owned. Private (mainly recreational) ownership adjoins to the east and northeast of the compartment.

**Unique, Natural Features (include only non-site specific and non-sensitive information):** This compartment has some potential for nesting habitat for the Red Shouldered Hawk and the Goshawk.

**Archeological, Historical, and Cultural Features (include only non-site specific and non-sensitive information):** There are no known significant historical features in this compartment.

**Special Management Designations or Considerations:** Continue to manage this compartment towards mixed age class and diversity.

**Watershed and Fisheries Considerations:** These two sections contain no surface waters so Fisheries Division has no specific recommendations on this compartment..

**Wildlife Habitat Considerations:** Primary wildlife interests are in maintaining the aspen and northern hardwood types, regenerating red oak, and establishing age class diversity in the aspen. Smaller treatment areas, following the existing terrain is preferred to avoid regeneration problems because of frost problems in the very hilly topography. Regeneration of the oak component within the aspen and northern hardwood types are a concern. Red maple and cherry generally regenerate in thinned stands. In some large cut-over areas from earlier treatments, no mast producing oaks or beech were left. Featured species guidance will be considered for pileated woodpecker, ruffed grouse, and white-tailed deer. (E. Victory 9/2012)

**Mineral Resource and Development Concerns and/or Restrictions:** Surface sediments in this compartment consist of an end moraine of coarse-textured till. The glacial drift thickness varies between 600 and 1,000 feet. Beneath the glacial drift are the Jurassic Red Beds and the Pennsylvanian Grand River and Saginaw Formations. The Saginaw is quarried for clay/shale in other parts of the State. The nearest gravel pit is three miles to the south and gravel potential is considered to be good. The compartment lies three miles north of Evert Field. The field has produced over 3.8 million BO from the Devonian Dundee Limestone and

over 5 Bcf gas from the Stray sandstone. All State land is currently leased for oil and gas development and also for potash exploration.

**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.

**Survey Needs:** None known at this time.

**Recreational Facilities and Opportunities:** The Evert motorcycle trail runs through the center of section 6. This 40" wide trail has a Directors Order which designates use for travel by 2 wheeled ORV's only. Timber management, and subsequent harvesting practices impacting this trail should include trail protection specifications that will enable the trail to remain narrow, and tight to uphold the intent of the Directors Order. This isolated block of state land receives heavy hunting and has many dispersed camping sites throughout the compartment. (T.M.N. 8-28-12)

**Fire Protection:** The rolling terrain and hardwood forest of this compartment may hinder some resources from accessing a wildfire. Several forest roads and old logging trails can be found in the compartment. Normal dispersed camping and the cycle trail will both be a concern during a wildfire or prescribed burn. Water access is very limited (BET 8-1-12).

#### **Additional Compartment Information:**

##### **The following 9 Inventory reports from are attached:**

- ◆ Table 1 - Cover Type by Age Class
- ◆ Table 2 - Treatment Type Summary
- ◆ Table 3 – Treatments with No Limiting Factors
- ◆ Table 4 – Treatments with Limiting Factors
- ◆ Table 5 – Out of YOE Treatments (when applicable)
- ◆ Tables 6 & 7- Forested and Nonforested stands
- ◆ Tables 8 & 9 – Proposed and Dedicated Special Conservation Areas

##### **The following information is displayed, where pertinent, on the attached compartment maps:**

- ◆ Base feature information, stand numbers, cover types
- ◆ Proposed treatments
- ◆ Suggested potential and current SCA's

**Table 1 – Total Acres by Cover Type and Age Class**

Michael Lesinski : Examiner



	Age Class													Total	
	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 +		Uneven Age
Aspen	53	128	86	117	277	0	0	0	0	0	0	0	0	0	660
Herbaceous Openland	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Low-Density Trees	22	0	0	0	0	0	0	0	0	0	0	0	0	0	22
Marsh	11	0	0	0	0	0	0	0	0	0	0	0	0	0	11
Mixed Upland Deciduous	0	48	0	0	0	0	82	0	0	0	0	0	0	0	130
Northern Hardwood	21	32	0	0	0	0	0	0	0	0	0	0	0	0	54
Oak	0	0	0	0	126	46	0	0	171	0	0	0	0	0	344
<b>Total</b>	<b>109</b>	<b>209</b>	<b>86</b>	<b>117</b>	<b>403</b>	<b>46</b>	<b>82</b>	<b>0</b>	<b>171</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1224</b>



## Table 2 – Proposed Treatment Summaries

**Cadillac Mgt. Unit**  
**Year of Entry 2014**

**Compartment 032**  
**Total Compartment Acres: 1224**

### Acres by Treatment Type

Commercial Harvest - 217	Site Prep - 0	Tree Planting - 0	Prescribed Burn - 0	Other - 0
Habitat Cut - 0	Opening Maintenance - 0	Tree Seeding - 0	Pesticide - 0	

### Cover Type by Harvest Method

	<i>Clearcut</i>	<i>Selection</i>	<i>Seed Tree</i>	<i>Shelterwood</i>	<i>Thinning</i>	<i>Other - Specify</i>	<i>Total Acres</i>
<b>Aspen</b>	110	0	0	0	0	0	110
<b>Oak</b>	0	0	0	107	0	0	107
<b>Total</b>	110	0	0	107	0	0	217



S t a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
2	63032002-Cut	26.6	4123 - Red Oak	High Density Log	81	81-110	Harvest	Shelterwood	4199 - Other Mixed Upland Deciduous	Cmpt. Review Proposal
<u>Prescription</u> Treat area east of two track that splits stand. Reduce stand BA to 30 to 40 square feet, leaving a mix of red and white oak. Leave some <u>Specs:</u> scattered beech for wildlife (unless showing signs of BBD).  Retention: Unharvested stand acreage. Alternate acceptable regeneration: Mixed upland deciduous.  <u>Other</u> <u>Comments:</u> Consider creating VMS spec to leave high maple stumps to reduce stump sprouting. Re-close two track north of NF opening post timber sale.  <u>Next</u> <u>Steps:</u> Periodic post harvest RX burns to reduce red maple competition.  <u>Proposed</u> <u>Start Date:</u> 10/01/2013										
3	63032003-Cut	39.3	4123 - Red Oak	High Density Log	86	141-170	Harvest	Shelter Wood with Reserves	4199 - Other Mixed Upland Deciduous	Cmpt. Review Proposal
<u>Prescription</u> Reduce stand BA to 30 to 40 square feet, leaving a mix of red and white oak. Expand aspen clones where applicable. Leave some scattered <u>Specs:</u> beech for wildlife (unless showing signs of BBD).  Retention: Residual stand BA. Acceptable alternate regeneration: Upland mixed deciduous.  <u>Other</u> <u>Comments:</u> Consider creating VMS spec to leave high red maple stumps to reduce stump sprouting. Protect (green ring) some trees along the motorcycle trail to ensure trail placement and integrity. Limit the amount of skidder crossings on the trail to protect the trail bed.  <u>Next</u> <u>Steps:</u> Periodic post harvest RX burns to reduce red maple competition.  <u>Proposed</u> <u>Start Date:</u> 10/01/2013										
5	63032005-Cut	41.0	4124 - Red with White Oak	High Density Log	86	111-140	Harvest	Shelter Wood with Reserves	4199 - Other Mixed Upland Deciduous	Cmpt. Review Proposal
<u>Prescription</u> Reduce stand BA to 30 to 40 square feet, leaving a red and white oak mix. Leave some scattered beech for wildlife (unless showing signs of <u>Specs:</u> BBD). Clearcut aspen along edges of stand (in particular near Sunrise Lake Rd.).  Retention: Residual stand BA. Alternate acceptable regeneration: Mixed upland deciduous.  <u>Other</u> <u>Comments:</u> Consider creating VMS spec to leave high stumps on maple, hopefully reducing stump sprouting. Harvest acreage may differ from treatment acreage due to variable density along edges of stand.  <u>Next</u> <u>Steps:</u> Evaluate for post harvest RX burn to reduce red maple competition.  <u>Proposed</u> <u>Start Date:</u> 10/01/2013										
16	63032016-Cut	109.9	4130 - Aspen	High Density Pole	42	171-200	Harvest	Clearcut with Reserves	4130 - Aspen	Cmpt. Review Proposal
<u>Prescription</u> Final harvest area north of two track that splits stand. Leave some scattered oak and beech (unless showing signs of BBD) where applicable. <u>Specs:</u> Apply grouse specifications through timber sale specs.  Retention: Unharvested acreage & scattered oak and beech.  <u>Other</u> <u>Comments:</u> Harvest acreage may differ from treatment acreage due to topography and stem density.  <u>Next</u> <u>Steps:</u>  <u>Proposed</u> <u>Start Date:</u> 10/01/2013										

**Total Treatment  
Acreage Proposed: 216.8**

**Table 4 -- Treatments Prescribed with a Limiting Factor**



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Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
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#Error

Prescription Specs:

Other Comment:

Next Steps:

Proposed Start Date: #Error

Limiting Factor and No Treatment Reason

**Total Treatment Acreage Proposed: 0**

**Out of YOE -- Treatments  
Prescribed with No Limiting Factor**

Year of Entry: 2014



Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
	5.2	Unspecified				Harvest	Unspecified	Unspecified	Cmpt. Review Proposal - Incomplete
<u>Prescription Specs:</u> <u>Other Comments:</u> <u>Next Steps:</u> <u>Proposed Start Date:</u>									
	3.5	Unspecified				Harvest	Unspecified	Unspecified	Cmpt. Review Proposal - Incomplete
<u>Prescription Specs:</u> <u>Other Comments:</u> <u>Next Steps:</u> <u>Proposed Start Date:</u>									
	0.1	Unspecified				Harvest	Unspecified	Unspecified	Cmpt. Review Proposal - Incomplete
<u>Prescription Specs:</u> <u>Other Comments:</u> <u>Next Steps:</u> <u>Proposed Start Date:</u>									
	0.0	Unspecified				Harvest	Unspecified	Unspecified	Cmpt. Review Proposal - Incomplete
<u>Prescription Specs:</u> <u>Other Comments:</u> <u>Next Steps:</u> <u>Proposed Start Date:</u>									

**Out of YOE -- Treatments  
Prescribed with No Limiting Factor**

Year of Entry: 2014



Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
63086083-Cut	10.2	4123 - Red Oak	High Density Log	80		Harvest	Shelter Wood with Reserves	4124 - Red with White Oak	Cmpt. Review Proposal

Prescription Mark red and white oak in groups reducing basal area down to an average of 30 sq.ft.(range from 20-50).

Specs:

Other This is a natural continuation of stand 1 in Comp 79 (also prescribed).

Comments:

Next Follow harvest with roller chopping of red maple in gaps from previous harvest. Goal is to decrease red maple and cause enough scarification with harvest to create a seedbed for adjacent pine to seed in, as well as oak. Stump sprout oak is not expected, but would be welcome. Regen survey per work instructions.

Proposed  
Start Date: 10/01/2013

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**Total Treatment  
Acreage Proposed: 19.0**

S t a n d	Cadillac Mgt. Unit		5 – Forested Stands			Compartment: 032 Year of Entry: 2014	General Comments:
	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range		
1	4131 - Aspen, Oak	Medium Density	42.7	11			Some mixed patches of larger diameter trees.
2	4123 - Red Oak	High Density Log	57.5	81	81-110		Previously thinned oak stand. Some areas are open, others have heavy red maple understory.
3	4123 - Red Oak	High Density Log	39.3	86	141-170		Single track trail in portion of stand.
4	4130 - Aspen	High Density Pole	34.0	28	141-170		Not ready for commercial harvest.
5	4124 - Red with White Oak	High Density Log	42.4	86	111-140		Higher quality red oak. Clones of aspen through stand.
7	4130 - Aspen	Low Density Sapling	33.9	3			Some scattered seed tree oak.
8	4130 - Aspen	High Density Pole	51.9	28	81-110		Not ready for commercial harvest.
10	4139 - Aspen, Mixed Deciduous	High Density Sapling	14.6	13			
12	4130 - Aspen	High Density Sapling	19.2	15			
14	4130 - Aspen	High Density Sapling	19.5	16			
15	4130 - Aspen	High Density Pole	73.6	37	81-110		Not ready for commercial harvest.
16	4130 - Aspen	High Density Pole	251.1	42	171-200		Stand can be commercially harvested.
18	4119 - Mixed Northern Hardwoods	Medium Density	32.5	13			Previous seedtree /shelterwood (1999). Around 20 BA scattered overstory oak.
19	4199 - Other Mixed Upland Deciduous	High Density Sapling	48.5	12			
21	4130 - Aspen	High Density Pole	25.7	43	111-140		Hold 10 years for age class diversity.
22	4130 - Aspen	High Density Pole	31.8	19	51-80		Not ready for commercial harvest.
23	4130 - Aspen	Medium Density	10.9	4			4 year old aspen regen.
24	4126 - White, Black, N. Pin Oak	Low Density Log	24.0	83	1-50		Shelterwood harvest last YOE.



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## Cadillac Mgt. Unit

## 5 – Forested Stands

Compartment: 032  
Year of Entry: 2014

	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
<b>25</b>	4119 - Mixed Northern Hardwoods	High Density Sapling	21.1	7		Seedtree last YOE. X-Log scattered oak.
<b>26</b>	4130 - Aspen	High Density Sapling	7.7	6		
<b>27</b>	4123 - Red Oak	Medium Density Log	8.0	83		Stand thinned 4 years ago. Not ready for another thinning.
<b>28</b>	4130 - Aspen	High Density Pole	43.9	33	81-110	Not ready for commercial harvest.
<b>29</b>	4123 - Red Oak	Medium Density Log	126.4	43	1-50	Shelterwood harvest 2001. Regen heavy to red maple.
<b>30</b>	4199 - Other Mixed Upland Deciduous	Low Density Pole	82.0	66	1-50	Previous shelterwood -- 10 year old regen. Stand variable in density and composition.
<b>31</b>	4123 - Red Oak	Low Density Pole	46.1	53	1-50	Shelterwood harvest approximately 2 years ago.



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
6	3105 - Mixed Upland Herbaceous	1.7	No	Unspecified	Some scattered low density cherry. Mainly sedge and sweet fern.
9	6239 - Mixed Emergent Wetland	3.6	No	Unspecified	
11	3301 - Low Density Deciduous Tree	1.1	No	Unspecified	
13	3301 - Low Density Deciduous Tree	4.3	No	Unspecified	
17	3301 - Low Density Deciduous Tree	17.1	No	Unspecified	Low density trees with some sweetfern and sedge.
20	6230 - Cattail	7.8	No	Unspecified	



### 7 – PROPOSED SPECIAL CONSERVATION AREA\* (SCA) DETAILS

\* This is a partial list of SCAs for this compartment. Not included are those areas identified under other Department initiatives (Natural Rivers, Deer Wintering Areas, etc.). Those will be identified in separate, future map and report products.

Stand	SCA Type	SCA Name	Acres	Comments
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### 8 – 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
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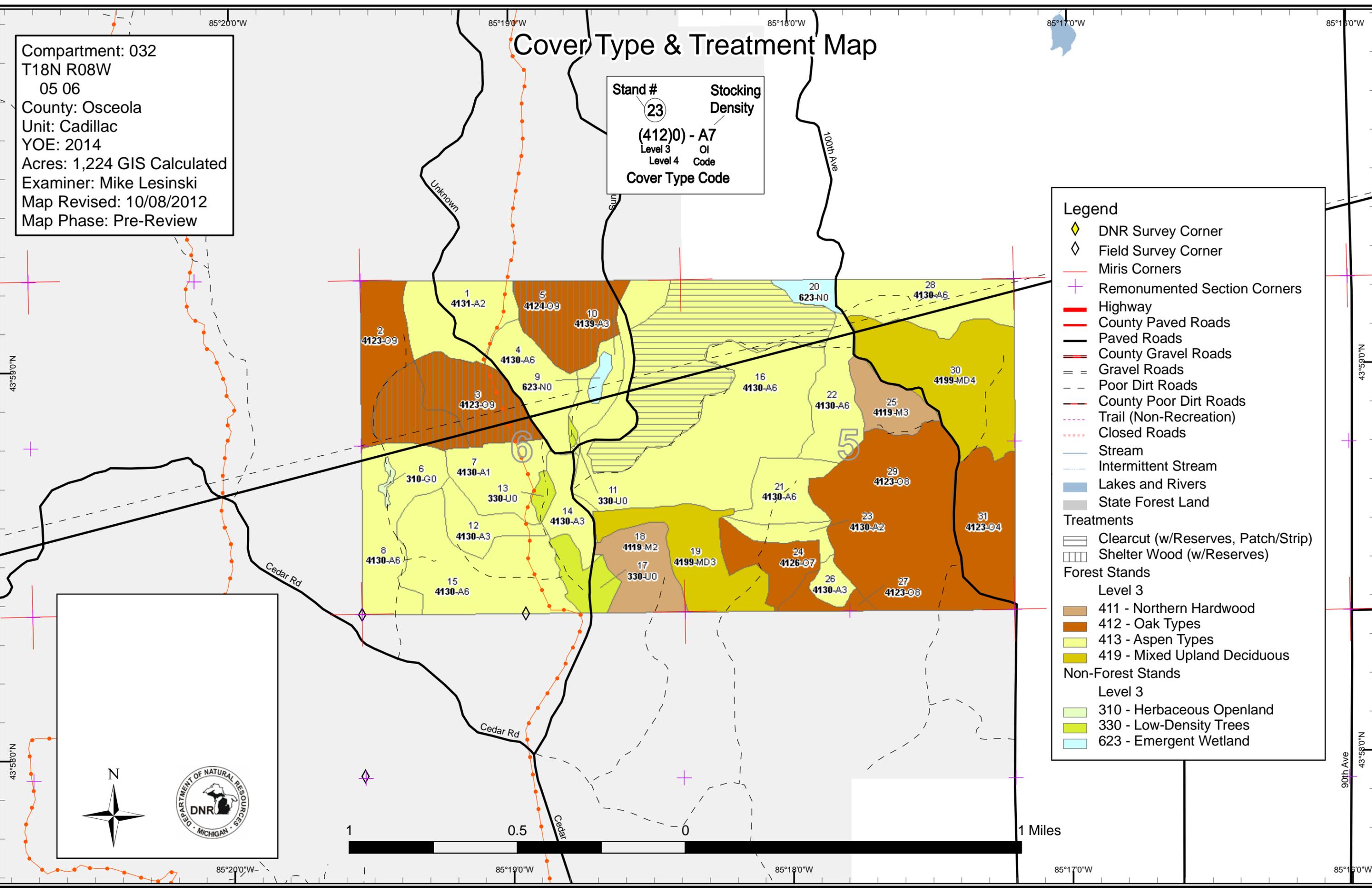
# Cover Type & Treatment Map

Compartment: 032  
 T18N R08W  
 05 06  
 County: Osceola  
 Unit: Cadillac  
 YOE: 2014  
 Acres: 1,224 GIS Calculated  
 Examiner: Mike Lesinski  
 Map Revised: 10/08/2012  
 Map Phase: Pre-Review

**Stand #**  
 23  
**Stocking Density**  
 (4120) - A7  
 Level 3 OI  
 Level 4 Code  
**Cover Type Code**

## Legend

- DNR Survey Corner
- Field Survey Corner
- Miris Corners
- Remonumented Section Corners
- Highway
- County Paved Roads
- Paved Roads
- County Gravel Roads
- Gravel Roads
- Poor Dirt Roads
- County Poor Dirt Roads
- Trail (Non-Recreation)
- Closed Roads
- Stream
- Intermittent Stream
- Lakes and Rivers
- State Forest Land
- Treatments**
- Clearcut (w/Reserves, Patch/Strip)
- Shelter Wood (w/Reserves)
- Forest Stands**
- Level 3**
- 411 - Northern Hardwood
- 412 - Oak Types
- 413 - Aspen Types
- 419 - Mixed Upland Deciduous
- Non-Forest Stands**
- Level 3**
- 310 - Herbaceous Openland
- 330 - Low-Density Trees
- 623 - Emergent Wetland



A north arrow is located in the bottom left corner. To its right is the official logo of the Michigan Department of Natural Resources (DNR), featuring a moose head and the text "DEPARTMENT OF NATURAL RESOURCES" and "DNR MICHIGAN".



Compartment: 032  
 T18N R08W  
 05 06  
 County: Osceola  
 Unit: Cadillac  
 YOE: 2014  
 Acres: 1,224 GIS Calculated  
 Examiner: Mike Lesinski  
 Map Revised: 10/08/2012  
 Map Phase: Pre-Review

# Stand Boundary Map

**Stand #**  
 23  
**Stocking Density**  
 (412)0 - A7  
 Level 3 OI  
 Level 4 Code  
**Cover Type Code**

**Legend**

- DNR Survey Corner
- Field Survey Corner
- Remonumented Section Corners
- Miris Corners
- Highway
- County Paved Roads
- Paved Roads
- County Gravel Roads
- Gravel Roads
- Poor Dirt Roads
- County Poor Dirt Roads
- Trail (Non-Recreation)
- Closed Roads
- Stream
- Intermittent Stream
- Stand Boundaries

**Forest Stands**

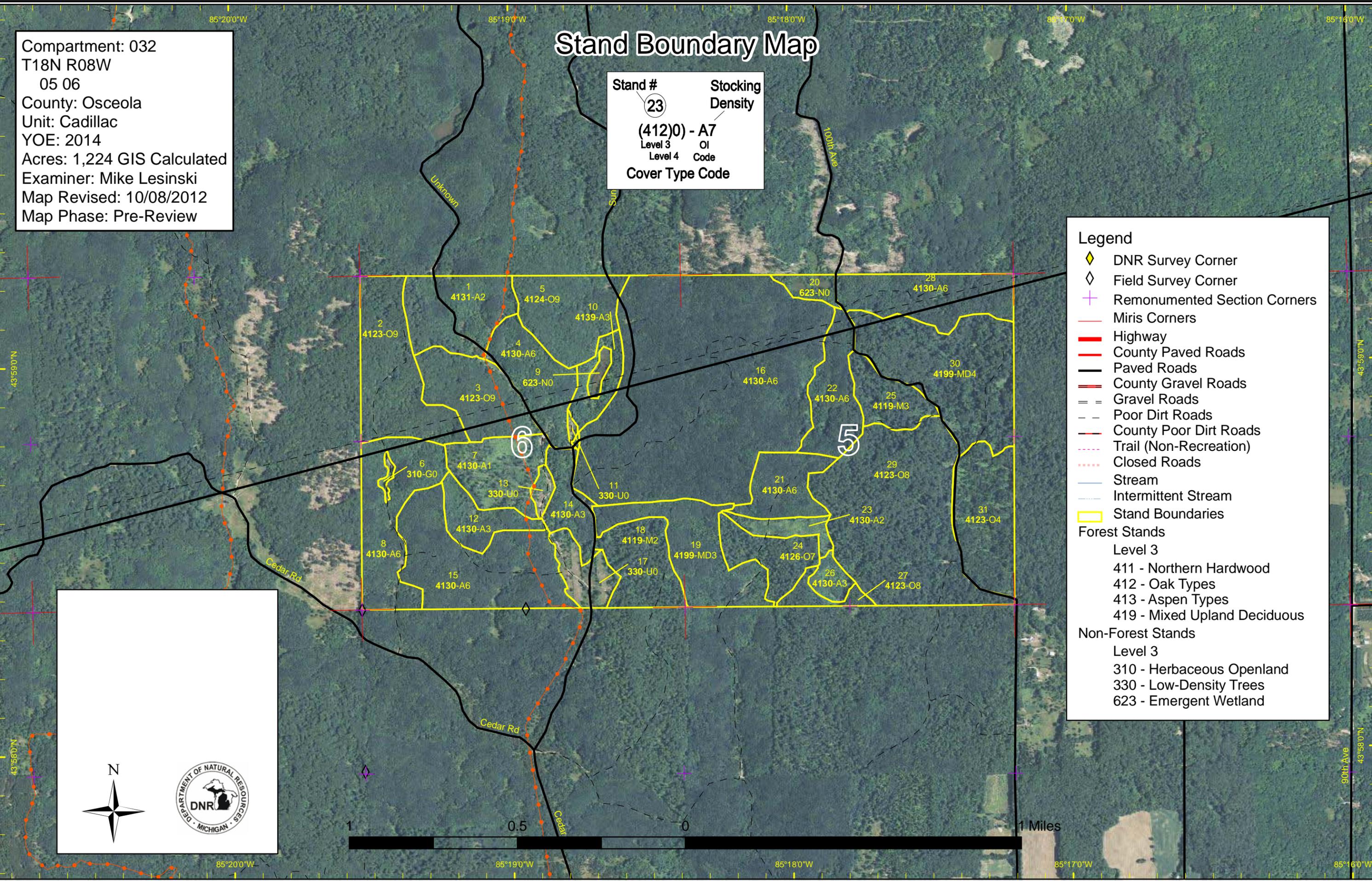
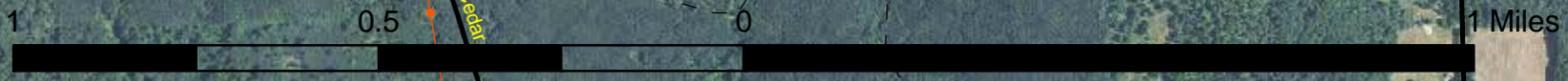
Level 3

- 411 - Northern Hardwood
- 412 - Oak Types
- 413 - Aspen Types
- 419 - Mixed Upland Deciduous

**Non-Forest Stands**

Level 3

- 310 - Herbaceous Openland
- 330 - Low-Density Trees
- 623 - Emergent Wetland

# Dedicated & Proposed Special Conservation Area Map

Compartment: 032  
 T18N R08W  
 05 06  
 County: Osceola  
 Unit: Cadillac  
 YOE: 2014  
 Acres: 1,224 GIS Calculated  
 Examiner: Mike Lesinski  
 Map Revised: 10/08/2012  
 Map Phase: Pre-Review

**Stand #**  
 23  
**Stocking Density**  
 (4120) - A7  
 Level 3 OI  
 Level 4 Code  
**Cover Type Code**

**Legend**

- Miris Corners
- + Remonumented Section Corners
- Proposed Special Conservation Areas
- ▨ SCA - Special Conservation Area
- ▩ SCA Removal
- ▭ Stand Boundaries

