



# Compartment Review Presentation

## Grayling Forest Management Unit

Compartment 230

Entry Year 2016

Acreage: 1,305

County Crawford

Management Area: Ogemaw Hills

**Revision Date:** 01/21/2014

**Stand Examiner:** Thomas Barnes

### Legal Description:

T25N R3W Sections 3, 10, and 15  
Beaver Creek Township, Crawford County

### Identified Planning Goals:

To maintain species and structural diversity while managing for health, productivity, and sustainability throughout the compartment. To provide multiple use opportunities and incorporate any visual management needed to optimize these uses.

### Soil and topography:

The soils are Grayling and Graycalm sands. The area is flat to a few rolling hills in the southern portion of the compartment.

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

This compartment consists of contiguous state ownership except for a few private parcels located in sections 3 and 10. Most of the residential development is located along Five Mile Road in section 3. Penn Central Railroad bisects compartment in sections 3 and 10.

### Unique Natural Features:

MNFI has record of a "Pine Barrens" natural community containing a threatened plant, rough fescue, (*Festuca scabrella*) along the Pen Central railroad in sections 3 and 10 in this compartment.

### Archeological, Historical, and Cultural Features:

No Archeological, Historical, or Cultural Features known.

### Special Management Designations or Considerations:

None at this time.

### Watershed and Fisheries Considerations:

No watercourses or lakes are located within the boundaries of the compartment.

### Wildlife Habitat Considerations:

With its diverse mix of pine, oak and aspen cover types, this compartment supports a variety of wildlife species including hare, grouse, turkey and deer

### Mineral Resource and Development Concerns and/or Restrictions

Surface sediments consist of ice-contact and glacial outwash sand and gravel and post-glacial alluvium. The glacial drift thickness varies between 400 and 600 feet. Beneath the glacial drift is the Michigan Formation. The Michigan Formation gypsum is quarried for elsewhere in the State. A gravel pit is located in Section 16, State's 7 Mile Pit, and potential is good on the upland areas. The nearest production is Beaver Creek Field, located six miles to the west. The field has produced over 21 MBO from the Devonian Richfield and over 5 Bcf gas from the Ordovician Prairie du Chien. The closest leases are in Section 4. Currently there are no active well sites located within this compartment.

### Vehicle Access:

County roads include Cemetary Xing (section 10 & 15), and Trail East Railroad Trail (section 3) (seasonally maintained), 5-Mile Road, 7- Mile Road and Beasley Ave. One State trail road/Power line functions solely as driveway for two seasonal cottages in section 10. The power line is located on private and not indicated on the compartment map. Most permanent residences are accessed mainly off, 5-Mile Road, 7- Mile Road and Beasley Ave.

### Survey Needs:

None at this time.

### Recreational Facilities and Opportunities:

The compartment does contains one designated recreational trail called the Beaver Creek Trail, a Michigan Cross Country Cycle Trail (sections of trail run on county roads, requiring road licensing by Secretary of State) located in Section 15. The compartment does support dispersed recreation in the form of hunting, as evidenced by the number of tree stands located throughout the compartment.

**Fire Protection:**

Access throughout the compartment is adequate. 5-Mile Road, 7- Mile Road and Beasley Ave are county roads and maintained year round. Multiple 2-tracks provide good access throughout the rest of the compartment, and with the current cover, type fire protection should be adequate. There is no body of water which can be used to re-supply water tankers located in the compartment. The best source would be the Beaver Creek Fire Station located at the corner of Old 76 and 7-Mile Road.

**Additional Compartment Information:**

**The following reports from the Inventory are attached:**

- Total Acres by Cover Type and Age Class**
- Cover Type by Harvest Method**
- Proposed Treatments – No Limiting Factors**
- Proposed Treatments – With Limiting Factors**
- Stand Details (Forested and Nonforested)**
- Dedicated and Proposed Special Conservation Areas**
- Site Condition Details**

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

- Base feature information, stand boundaries, cover types, and numbers**
- Proposed treatments**
- Site condition boundaries**
- Details on the road access system**

# Cover Type & Treatment Map

Compartment: 230  
 T25N R03W Sec. 03, 10, 15  
 County: Crawford  
 Unit: Grayling  
 YOE: 2016  
 Acres: 1,305 GIS Calculated  
 Examiner: Thomas Barnes  
 Map Revised: 08/26/2014  
 Map Phase: Pre-Review

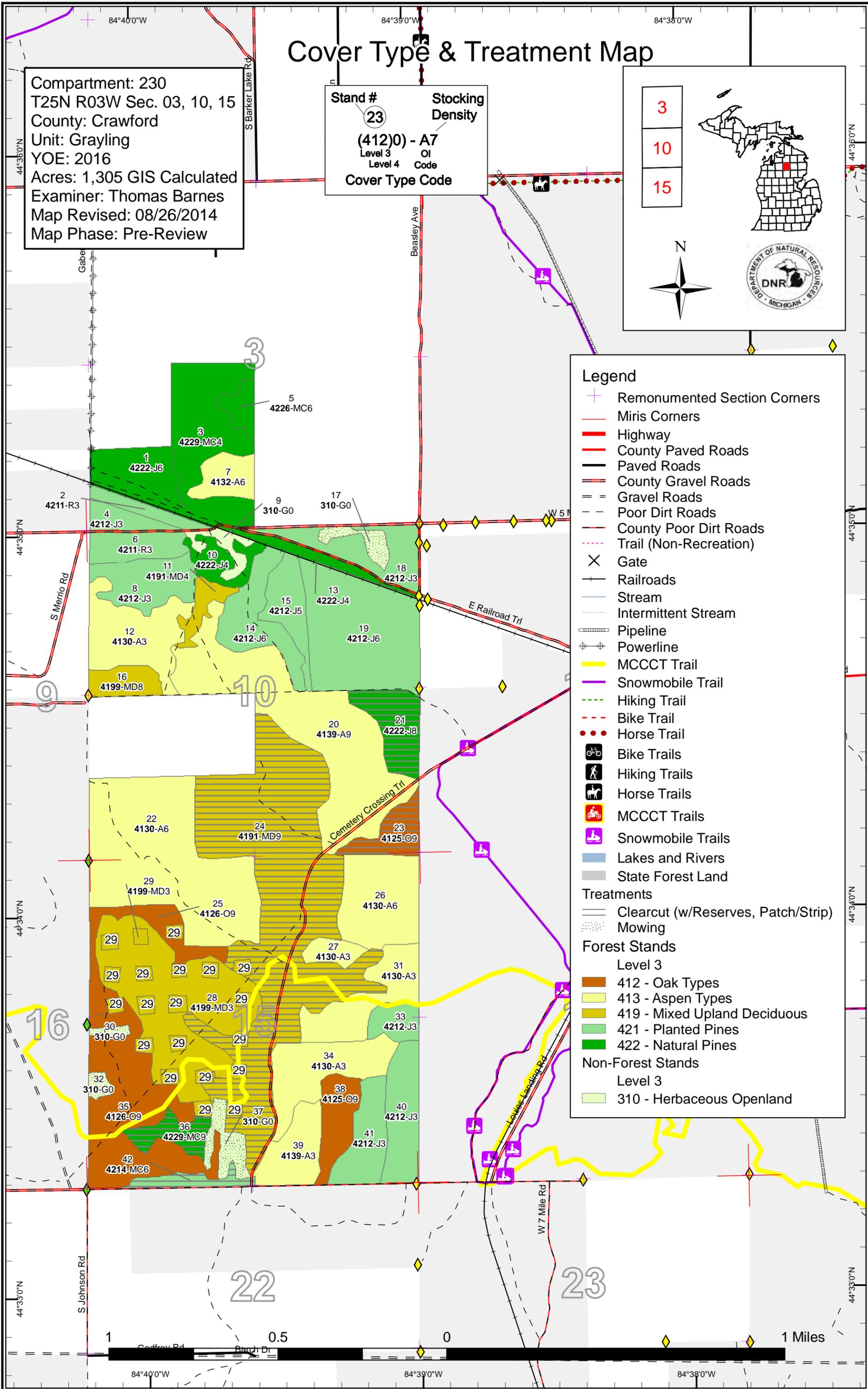
**Stand #**  
 23  
**Stocking Density**  
 (412)0 - A7  
 Level 3 OI  
 Level 4 Code  
**Cover Type Code**

3  
 10  
 15



## Legend

- ✦ 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)
  - ✕ Gate
  - Railroads
  - Stream
  - Intermittent Stream
  - Pipeline
  - Powerline
  - MCCCT Trail
  - Snowmobile Trail
  - Hiking Trail
  - Bike Trail
  - Horse Trail
  - Bike Trails
  - Hiking Trails
  - Horse Trails
  - MCCCT Trails
  - Snowmobile Trails
  - Lakes and Rivers
  - State Forest Land
- Treatments**
- Clearcut (w/Reserves, Patch/Strip)
  - Mowing
- Forest Stands**
- Level 3
- 412 - Oak Types
  - 413 - Aspen Types
  - 419 - Mixed Upland Deciduous
  - 421 - Planted Pines
  - 422 - Natural Pines
- Non-Forest Stands**
- Level 3
- 310 - Herbaceous Openland



# Stand Boundary Map

Compartment: 230  
 T25N R03W Sec. 03, 10, 15  
 County: Crawford  
 Unit: Grayling  
 YOE: 2016  
 Acres: 1,305 GIS Calculated  
 Examiner: Thomas Barnes  
 Map Revised: 08/26/2014  
 Map Phase: Pre-Review

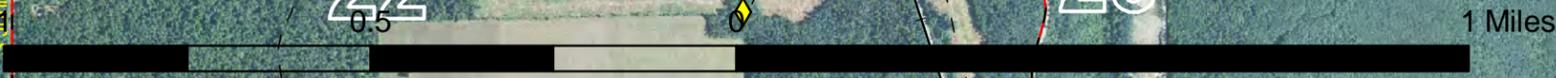
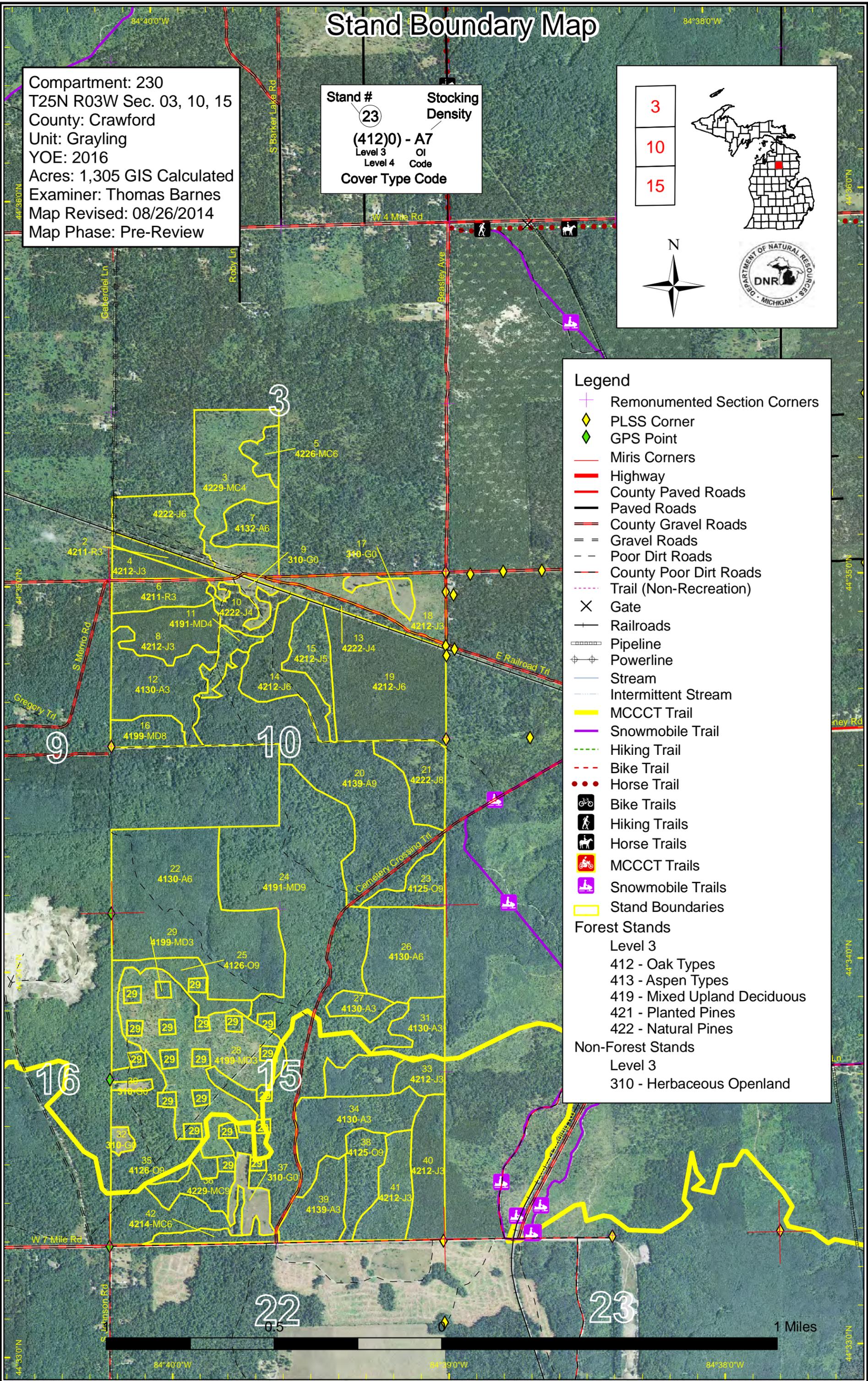
**Stand #**  
 23  
**Stocking Density**  
 (412)0 - A7  
 Level 3 OI  
 Level 4 Code  
**Cover Type Code**

3  
 10  
 15



## Legend

- Remonumented Section Corners
  - PLSS Corner
  - GPS Point
  - Miris Corners
  - Highway
  - County Paved Roads
  - Paved Roads
  - County Gravel Roads
  - Gravel Roads
  - Poor Dirt Roads
  - County Poor Dirt Roads
  - Trail (Non-Recreation)
  - Gate
  - Railroads
  - Pipeline
  - Powerline
  - Stream
  - Intermittent Stream
  - MCCCT Trail
  - Snowmobile Trail
  - Hiking Trail
  - Bike Trail
  - Horse Trail
  - Bike Trails
  - Hiking Trails
  - Horse Trails
  - MCCCT Trails
  - Snowmobile Trails
  - Stand Boundaries
- Forest Stands**
- Level 3
  - 412 - Oak Types
  - 413 - Aspen Types
  - 419 - Mixed Upland Deciduous
  - 421 - Planted Pines
  - 422 - Natural Pines
- Non-Forest Stands**
- Level 3
  - 310 - Herbaceous Openland



84°40'0"W      84°39'0"W      84°38'0"W  
 44°33'0"N      44°34'0"N      44°35'0"N

# Special Conservation Areas & Site Conditions Map

Compartment: 230  
 T25N R03W Sec. 03, 10, 15  
 County: Crawford  
 Unit: Grayling  
 YOE: 2016  
 Acres: 1,305 GIS Calculated  
 Examiner: Thomas Barnes  
 Map Revised: 08/26/2014  
 Map Phase: Pre-Review

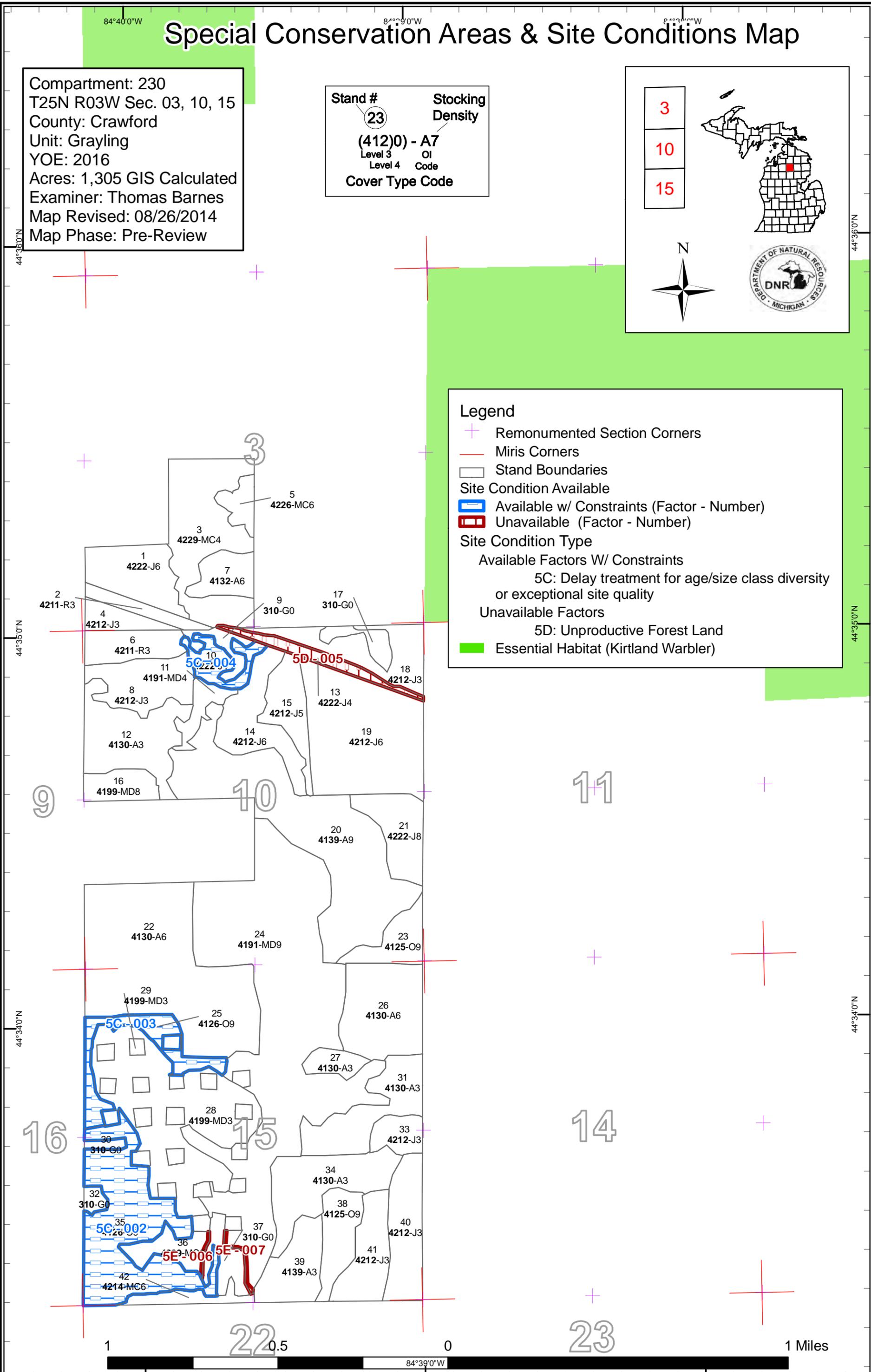
**Stand #**  
 23  
**Stocking Density**  
 (412)0 - A7  
 Level 3 OI  
 Level 4 Code  
**Cover Type Code**

3  
 10  
 15



## Legend

- Remonumented Section Corners
- Miris Corners
- Stand Boundaries
- Site Condition Available
  - Available w/ Constraints (Factor - Number)
  - Unavailable (Factor - Number)
- Site Condition Type
  - Available Factors W/ Constraints
    - 5C: Delay treatment for age/size class diversity or exceptional site quality
  - Unavailable Factors
    - 5D: Unproductive Forest Land
- Essential Habitat (Kirtland Warbler)



Report 1 – Total Acres by Cover Type and Age Class



	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	0	38	96	155	120	0	0	0	0	0	0	0	0	0	410
Herbaceous Openland	30	0	0	0	0	0	0	0	0	0	0	0	0	0	30
Jack Pine	26	32	61	120	27	0	44	0	0	0	0	0	0	0	311
Mixed Upland Deciduous	76	28	0	0	8	0	0	12	0	200	0	0	0	0	325
Natural Mixed Pines	0	0	8	53	0	0	0	0	0	12	0	0	0	0	74
Oak	0	0	0	0	0	0	0	18	0	105	0	0	0	0	123
Planted Mixed Pines	0	0	0	0	0	0	8	0	0	0	0	0	0	0	8
Red Pine	0	0	25	0	0	0	0	0	0	0	0	0	0	0	25
<b>Total</b>	<b>133</b>	<b>99</b>	<b>190</b>	<b>329</b>	<b>155</b>	<b>0</b>	<b>52</b>	<b>30</b>	<b>0</b>	<b>317</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1305</b>



## Report 2 – Proposed Treatment Summaries

**Grayling Mgt. Unit**  
**Year of Entry 2016**

**Compartment 230**  
**Total Compartment Acres: 1,305**

### Acres by Treatment Type

Commercial Harvest - 257    Tree Planting - 43    Other - 0  
 Habitat Cut - 0    Opening Maintenance - 23

### 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>Mixed Upland Deciduous</b>	200	0	0	0	0	0	<b>200</b>
<b>Natural Pines</b>	34	0	0	0	0	0	<b>34</b>
<b>Oak Types</b>	15	0	0	0	0	0	<b>15</b>
<b>Planted Pines</b>	8	0	0	0	0	0	<b>8</b>
<b>Total</b>	<b>257</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>257</b>



S t a n d	Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
21	72230021-Cut	22.0	42220 - Natural Jack Pine	Medium Density Log	67	81-110	Harvest	Clearcut	4211 - Planted Red Pine	Cmpt. Review Proposal
<u>Prescription</u> Final harvest the stand without retention due to size. Include snowmobile trail specs as Cemetary Crossing Trail might be needed for a haul										
<u>Specs:</u> route.										
<u>Other</u> Only access to this sale is Cemetary Crossing Trails, portions of this seasonal road is used as a snowmobile trail NE of this stand in										
<u>Comments:</u> Compartment 231.										
<u>Next</u> Site prep as needed including herbiciding, trench and plant to red pine. If planting fails replant to jack pine.										
<u>Steps:</u>										
<u>Proposed</u>										
<u>Start Date:</u> 10/01/2015										
23	72230023-Cut	14.9	4125 - Black, N. Pin Oak	High Density Log	93	81-110	Harvest	Clearcut	4199 - Other Mixed Upland Deciduous	Cmpt. Review Proposal
<u>Prescription</u> Final harvest all species with not retention to maximize regeneration. Include grouse drumming log spec as well as snowmobile trail spec as										
<u>Specs:</u> Cemetary Crossing Trail might be used as a haul route to the north.										
<u>Other</u> Only access to this sale is Cemetary Crossing Trails, portions of this seasonal road is used as a snowmobile trail NE of this stand in										
<u>Comments:</u> Compartment 231.										
<u>Next</u> Monitor the success of regeneration during the next treatment period. Will accept a moderate to well stocked stand of mixed aspen, maple and										
<u>Steps:</u> oak.										
<u>Proposed</u>										
<u>Start Date:</u> 10/01/2015										
24	72230024-Cut	200.0	4191 - Mixed Upland Deciduous with Conifer	High Density Log	94	81-110	Harvest	Clearcut with Reserves	4199 - Other Mixed Upland Deciduous	Cmpt. Review Proposal
<u>Prescription</u> Final harvest with retention, follow standard retention guidelines. Leave some islands of oaks scattered throughout for mast production, these										
<u>Specs:</u> islands will be part of the retention acres. Do not harvest red or white pine. Include drumming log spec, motorcycle trail spec and snowmobile spec. Also include shrub protection spec. Focus some of the retention along but not adjacent to the MCCCT Trail.										
<u>Other</u> Encourage logging operator to run over sub canopy aspen and maple, this should help the oak regen to compete better. MCCCT trails runs										
<u>Comments:</u> through this sale. Only access to this sale is Cemetary Crossing Trails, portions of this seasonal road is used as a snowmobile trail NE of this stand in Compartment 231.										
<u>Next</u> Monitor the success of regeneration during the next inventory period. Stand should regenerate to a moderate to well stocked stand of oak,										
<u>Steps:</u> aspen and maple. Will accept a stand that regenerates to moderate to well stocked stand of aspen, maple and oak.										
<u>Proposed</u>										
<u>Start Date:</u> 10/01/2015										
36	72230036-Cut	12.4	42290 - Natural Mixed Pine	High Density Log	97	141-170	Harvest	Clearcut	4211 - Planted Red Pine	Cmpt. Review Proposal
<u>Prescription</u> Final harvest all species without retention due to size of stand. Include low stump and chipping spec to help facilitate the planting operation.										
<u>Specs:</u> Include ORV/Bike trail spec if MCCCT is running thru the sale area.										
<u>Other</u> The MCCCT trail runs close to the stand boundary, may need to add this spec to the sale if trail is inside stand boundary.										
<u>Comments:</u>										
<u>Next</u> Site prep as needed, trench and plant to red pine.										
<u>Steps:</u>										
<u>Proposed</u>										
<u>Start Date:</u> 10/01/2015										



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Treatment Name	Acres	CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
42 72230042-Cut	8.1	42140 - Planted Mixed Pine	High Density Pole	67		Harvest	Clearcut	4211 - Planted Red Pine	Cmpt. Review Proposal

Prescription Final harvest all species without retention due to size and presence of scotch pine. Include low stump and chipping spec to help with the planting operation. Leave white pine to help buffer wildlife opening from Seven Mile Rd.

Other Sale borders 7 mile rd.

Comments:

Next Site prep as needed, trench and plant to red pine.

Steps:

Proposed  
Start Date: 10/01/2015

17 NF_72230017-NonFor	6.7	3102 - Grass				Non-Forest Management	Mowing	3102 - Grass	Cmpt. Review Proposal
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Prescription Periodic opening maintenance, as needed, that may include disking, fertilizing, food plot seeding, no-till prairie grass drill seeding, mowing, brushing, burning and herbicide application.

Other

Comments:

Next Monitor during next inventory cycle and continue to maintain wildlife opening by utilizing all available tools.

Steps:

Proposed  
Start Date: Unspecified

30 NF_72230030-NonFor	2.2	3102 - Grass				Non-Forest Management	Mowing	3102 - Grass	Cmpt. Review Proposal
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Prescription Periodic opening maintenance, as needed, that may include disking, fertilizing, food plot seeding, no-till prairie grass drill seeding, mowing, brushing, burning and herbicide application.

Other

Comments:

Next Monitor during next inventory cycle and maintain wildlife opening as needed.

Steps:

Proposed  
Start Date: Unspecified

32 NF_72230032-NonFor	3.0	3102 - Grass				Non-Forest Management	Mowing	3102 - Grass	Cmpt. Review Proposal
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Prescription Periodic opening maintenance, as needed, that may include disking, fertilizing, food plot seeding, no-till prairie grass drill seeding, mowing, brushing, burning and herbicide application.

Other

Comments:

Next Monitor during next inventory period and maintain opening as needed.

Steps:

Proposed  
Start Date: Unspecified

37 NF_72230037-NonFor	11.1	3102 - Grass				Non-Forest Management	Mowing	3102 - Grass	Cmpt. Review Proposal
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Prescription Periodic opening maintenance, as needed, that may include disking, fertilizing, food plot seeding, no-till prairie grass drill seeding, mowing, brushing, burning and herbicide application.

Other

Comments:

Next Monitor during next inventory cycle and maintain opening as needed.

Steps:

Proposed  
Start Date: Unspecified

Report 3 -- Treatments Prescribed  
with No 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
Total Treatment Acreage Proposed:		280.4							



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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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#Type! #Type!

Prescription  
Specs:

Other  
Comment:

Next  
Steps:

Proposed  
Start Date: #Type!

Limiting Factor

**Total Treatment  
Acreage Proposed: 0.0**

## Report 5 – Site Conditions

Grayling Mgt. Unit

Thomas Barnes : Examiner

Compartment 230

Year of Entry 2016

### Availability for Management

Total Acres	Acres		Dominant Site Conditions	No	5E	5D	5C
	Available	Not Available					
410	410		<b>Aspen</b>	410			
311	301	10	<b>Jack Pine</b>	289		10	12
325	324	1	<b>Mixed Upland Deciduous</b>	324	1		
73	73	1	<b>Natural Mixed Pines</b>	73	1		
123	123		<b>Oak</b>	33			90
8	8		<b>Planted Mixed Pines</b>	8			
25	25		<b>Red Pine</b>	25			
1,275	1,264	11	Total Forested Acres	1,162	1	10	102
	99%	1%	Relative Percent				

*\*Due to limitations in the current Site Conditions Analysis tool, all nonforested acres are considered available. Future development will enable analysis of nonforested types.*

Site No.	Dominant Site Cond Availability	Dominant Site Condition	Acres	Other Site Condition	Other Site Condition	Other Site Condition	Other Site Condition
002	Available	<b>5C: Delay treatment for age/size class diversity or exceptional site quality</b>	70				
<b>Comments:</b> Hold this stand for another 10 years to allow advanced oak regeneration time to become even more established.							
003	Available	<b>5C: Delay treatment for age/size class diversity or exceptional site quality</b>	20				
<b>Comments:</b> Hold off for another YOE cycle as large area adjacent to stand was recently treated.							
004	Available	<b>5C: Delay treatment for age/size class diversity or exceptional site quality</b>	12				
<b>Comments:</b> Hold for another 10 years then final harvest and replant.							

**Report 5 – Site Conditions**

**Grayling Mgt. Unit**

**Compartment 230**

**Thomas Barnes : Examiner**

**Year of Entry 2016**

005    **Not Available**    **5D: Unproductive Forest Land**    10

**Comments:**

Narrow strip of land between railroad and seasonal two track, leave as is and let nature take its course. Stand could have been easily included in the treatment that took place just to the north, it was not included for some reason.

006    **Not Available**    **5E: Long Term Retention**    1

**Comments:**

Buffering the wildlife opening, as per wildlife's request.

007    **Not Available**    **5E: Long Term Retention**    1

**Comments:**

Buffering wildlife opening, as per wildlife's request.



### Report 6 – 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.

<b>SCA Name</b>	<b>SCA Category</b>	<b>Detail Type</b>	<b>Recommendation</b>	<b>Acres</b>
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**Comments**

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**Report 7 – EXISTING SPECIAL CONSERVATION AREA DETAILS**

\* This is a list of SCA's for this compartment along with a 1/4 mile buffer surrounding the compartment. Refer to the Special Conservation Area Map for locations of the below listed Conservation Areas.

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.
HCVA	Designated Critical Habitat	Critical habitat areas are established via a consultative and cooperative process between the DNR and the U.S. Fish and Wildlife service for the recovery of threatened and endangered species, as governed by Part 365, Endangered Species Protection, of the Natural Resources and Environmental Protection Act, 1994 PA 451, and the Federal Endangered Species Act of 1973. This is an active program, with proposed species plans in various stages of review. As of now only two exist, Kirtland Warbler Habitat and Piping Plover Habitat.



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	42220 - Natural Jack Pine	High Density Pole	26.6	43		Jack pine stand with mixed species associated within the stand. Lower end of canopy closure. This stand has a good representation of diameters, dominate diameter is of the pole size category. Tree form not that great. This stand is PArVHa/PArVVb.
2	42110 - Planted Red Pine	High Density Sapling	8.4	22		Red pine plantation with oak and cherry scattered throughout stand. No ground cover was recorded due to snow. Clearcut in 1988 and planted in 1991 as per OI notes. This stand is PArVHa/PArVVb.
3	42290 - Natural Mixed Pine	Low Density Pole	53.5	38	1-50	9/5/07- TS-720160601 "5 and Tracks Jack" Scattered red pine and oak left Everything 6" and up was taken. Stand is being classified as pole because of residual left from harvest. Regen is heavy to cherry with some jp seeding in as well as some oak and aspen. Snow depth made it difficult to see how much jack pine was present. This stand is PArVHa/PArVVb. Regen survey was conducted in this stand for Old OI 2, MO jack pine survey failed, passes on other species, heavy to cherry.
4	42120 - Planted Jack Pine	High Density Sapling	9.3	22		Jack pine plantation with red pine, oak and cherry scattered throughout stand. No ground cover was recorded due to snow. Clearcut in 1988 and planted in 1991 as per OI notes. This stand is PArVHa/PArVVb.
5	42260 - Natural Pine, Mixed Deciduous	High Density Pole	7.7	28		Small stand with jack pine and aspen. Stand also has red pine and small amount of oak. Understory was primarily cherry with other associated species. No ground cover recorded because of snow. This stand is PArVHa/PArVVb.
6	42110 - Planted Red Pine	High Density Sapling	16.6	21		Stand harvested in 1988 and replanted in 1991. Stand is primarily Red Pine with a strip of planted Jack Pine of about 2 acres. Initial planting was in 1991, red pine was replanted in 1992 because of heavy mortality. Scattered associated species found throughout the stand. No ground cover was recorded due to snow conditions. This stand is PArVHa/PArVVb.
7	4132 - Aspen, Jack Pine	High Density Pole	13.8	42		Stand of pole sized aspen with jack pine and other associated species. Stand was not treated when surrounding stand was harvested. This stand is PArVHa/PArVVb.
8	42120 - Planted Jack Pine	High Density Sapling	25.5	22		Cut in 1988 and planted in 1991. Jack pine plantation with good density, some oak is scattered throughout the stand. No understory to report and ground vegetation was covered by snow. East half of stand is PArVHa/PArVVb and West half is PArVVb.
10	42220 - Natural Jack Pine	Low Density Pole	12.3	62		Open stand of pole sized jack pine surrounding an open area, form of jack pine is typical of open grown pine bushy short and of poor form. This stand is PVCd.
11	4191 - Mixed Upland Deciduous with Conifer	Low Density Pole	8.4	42		Open grown stand of mixed upland species dominated by jack pine with strong component of cherry and aspen. No ground cover due to snow depth.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
12	4130 - Aspen	High Density Sapling	38.3	25		Nice young aspen stand with scattered log/Xlog red pine. Stand was harvested in 1988. Stand is primarily PARVVb with a couple of areas that are PARVHa/PARVVb.
13	42220 - Natural Jack Pine	Low Density Pole	9.9	62		Narrow strip between railroad tracks and two track, previous OI listed stand as non-forested. There is enough tree cover to classify as forested, this could have been left as retention for Old Stand 18 harvested in 2007. Stand also has a history of burning. Stand is primarily PVCd with small areas of PARVHa/PARVVb.
14	42120 - Planted Jack Pine	High Density Pole	27.9	33		Jack pine plantation with an area of XLog Red Pine, stand is denser then the adjacent Jack Pine with smaller DBH. Stand was harvested 1975 and replanted in 1980. Northern tip is PVCd, middle portion is PARVHa/PARVVb and the bottom is PARVVb.
15	42121 - Planted Jack Pine, Mixed Deciduous	Medium Density Pole	18.3	32		Jack pine stand at lower end of canopy closure then the stands on either side, diameter is a little larger too. Stand also has areas of little to no jack pine as well as small pockets of quaking aspen. Stand cut in 1975 and plated in 1980, poor survival per old OI notes. Stand is primarily PARVHa/PARVVb.
16	4199 - Other Mixed Upland Deciduous	Medium Density Log	12.0	77	81-110	Mixed stand of log/pole sized hardwoods. Good number of standing and down dead oak, remaining oak is of poor quality. White pine regen in the east end with a few large red pine. Three BA swings were taken with a stand average of 94. Site index averaged 53. West half of stand is PARVHa/PARVVb and East half is PARVVb.
18	42120 - Planted Jack Pine	High Density Sapling	26.3	5		Good regeneration approximately 3-4 feet tall with oak, cherry and aspen scattered. There is a little portion of stand that runs along 5 Mile Rd that has pole sized trees, area less then a tenth of an acre. No ground cover recorded due to snow. Sale was harvested in 2006/07 under TS720160601 "5 and Tracks Jack". Planted Jack Pine May, 2008 per C72-567. Stand is primarily PVCd.
19	42120 - Planted Jack Pine	High Density Pole	74.0	33		Very dense jack pine plantation with no reportable sub canopy. Very little presence of other species within stand was well. No ground cover recorded due to snow. Harvested in 1975 and planted in 1980. North half of stand is PARVHa/PARVVb, Southern half is PARVVb.
20	4139 - Aspen, Mixed Deciduous	High Density Log	106.3	43	81-110	Aspen stand with good mixture of associated species. Ten BA swings were taken with an average BA of 90 and average Site index was 56. Northwest portion of stand is PARVVb the remaining portion is PARVHa/PARVVb.
21	42220 - Natural Jack Pine	Medium Density Log	22.0	67	81-110	Open grown stand of jack pine with clumps of aspen. Also areas of oak and cherry. Stand is not of good form. Three BA swings were done, average for stand was 85, jp 50, aspen 20, red pine 10 oak and cherry 5. This stand is PARVHa/PARVVb.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
22	4130 - Aspen	High Density Pole	114.5	36		Nice aspen stand just coming into the pole size class. Gentle to rolling terrain with a nice mixture of associated species. Good component of oak in this stand. Final Harvest in 1975. This stand is PARVHa/PArVVb.
23	4125 - Black, N. Pin Oak	High Density Log	14.9	93	81-110	Stand was thinned in 1996, stand has started to slow its growth or response from thinning. Very little oak in understory. Well established aspen and red maple regeneration, some of aspen regen is starting to die. Three BA swings were taken with stand average of 85 and average site index of 55. This stand is PARVHa/PArVVb.
24	4191 - Mixed Upland Deciduous with Conifer	High Density Log	200.0	94	81-110	Stand is a mixture of oak and associated species, In areas prior treatments have removed aspen, red maple and some oak, leaving stands of pure oak with a very heavy understory of aspen and maple with little to no oak. Other portions of stand have aspen and maple as a component of the overstory with mixed pine. Stand BA averaged 108 from the 10 BA swings, Oak is had the highest average at 75, maple was 15, aspen 10 and mixed conifer made up the rest. Oak was white oak and what looks like hybrid red and black oak. Rolling to somewhat steep terrain. Site index averaged 56. This stand is PARVHa/PArVVb.
25	4126 - White, Black, N. Pin Oak	High Density Log	19.9	95	81-110	Small sawlog sized stand roughly 10" dbh, understory very park like. Adjacent stand was recently clearcut with good oak sprouting I would think this stand would respond in the same way. This stand is PARVHa/PArVVb.
26	4130 - Aspen	High Density Pole	40.6	38		Nice pole sized aspen stand. Stand was cut in 1976. This stand is PARVHa/PArVVb.
27	4130 - Aspen	High Density Sapling	7.6	16		Nice young aspen stand. Harvested in 1997. This stand is PARVHa/PArVVb.
28	4199 - Other Mixed Upland Deciduous	High Density Sapling	76.4	5		Stand has small one acre 5 spot cuts mixed within this stand, these are listed as stand 27. Heavy browse on all regen especially oak regeneration. Northern portion of stand has a higher density of all species regen. No ground cover do to snow. FINAL HARVEST 2008: TS720170601 "Scooter Oak". This stand is PARVHa/PArVVb. Regen survey was conducted for Old OI 138 and this stand passes the regen survey for the MO of oak.
29	4199 - Other Mixed Upland Deciduous	High Density Sapling	28.1	17		Serious of patch cuts harvested in 1997. This stand is PARVHa/PArVVb.
31	4130 - Aspen	High Density Sapling	30.9	17		Young aspen stand which has density, signs of browse. Stand was harvested in 1996. This stand is PARVHa/PArVVb.
33	42120 - Planted Jack Pine	High Density Sapling	10.0	13		Jack pine was hand planted by contractor in 2000 under FTP72-0397. This stand is PARVHa/PArVVb.
34	4130 - Aspen	High Density Sapling	35.6	25		Young aspen stand regenerating nicely. Stand harvested in 1988. This stand is PARVHa/PArVVb.

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Grayling Mgt. Unit

## Report 8 – Forested Stands

Compartment: 230  
Year of Entry: 2016

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
35	4126 - White, Black, N. Pin Oak	High Density Log	70.0	94	81-110	Stand is not as dense as Stand 45, good advanced oak regeneration coming up in this stand. Areas of heavy Gypsy Moth egg masses. Southern portion of stand has the pine component and white oak has a good presence in this stand. There are pockets of regen from wind event that occurred in 93/94. Portion of Stand was last treated in 1995. This stand is PArVHa/PArVVb.
36	42290 - Natural Mixed Pine	High Density Log	12.4	97	141-170	Stand of mixed red and white pine, pockets of pure red and white pine with some hardwoods mixed in between them. Average BA was 141. Site indexed averaged 63. This stand is PArVHa/PArVVb.
38	4125 - Black, N. Pin Oak	High Density Log	18.2	71	51-80	Heavy to scotch pine in the southern portion of stand. All aspen was removed in 1996. Three BA swings were taken with a stand average of 75. Average site index was 54. This stand is PArVHa/PArVVb.
39	4139 - Aspen, Mixed Deciduous	High Density Sapling	22.1	25		Medium to heavy scotch pine along 7 mile rd. Stand harvested in 1988. This stand is PArVHa/PArVVb.
40	42120 - Planted Jack Pine	High Density Sapling	26.6	22		Stand was harvested in 1987 and planted in 1991. This stand is PArVHa/PArVVb.
41	42120 - Planted Jack Pine	High Density Sapling	22.3	13		Jack pine was hand planted by contract crew in 2000 under FTP 72-0397. This stand is PArVHa/PArVVb.
42	42140 - Planted Mixed Pine	High Density Pole	8.1	67		Mixed stand of jack and scotch pine. This stand is PArVHa/PArVVb.



Stand	Cover Type	Acres	Managed Site	Management Priority (Objective)	General Comments:
9	3102 - Grass	7.0	No	Unspecified	Open stand with some tree species present, predominately open grown jack pine. This stand is PVCd.
17	3102 - Grass	6.7	No	Medium	As per old OI notes building evidence either old homestead or railroad building. Too much snow to see any traces of building during field visit. Stand is primarily PVCd.
30	3102 - Grass	2.2	Yes	Medium	Wildlife opening. This stand is PARVHa/PArVVb.
32	3102 - Grass	3.0	Yes	Medium	Managed wildlife opening. This stand is PARVHa/PArVVb.
37	3102 - Grass	11.1	Yes	Medium	Could have been some kind of homestead as per old OI notes. Snow depth prohibited seeing any evidence of foundations. This stand is PARVHa/PArVVb.