



Compartment Review Presentation

Grayling Forest Management Unit

Compartment 72202

Entry Year 2022

Acreage: 1,306

County Crawford

Management Area: Camp Grayling

Revision Date: 2020-08-31

Stand Examiner: Joan Charlebois

Legal Description:

T26N R04W
Sections 22, 23, 24

Identified Planning Goals:

This compartment is comprised mainly of Hanson Reserve Lands, which contain the following deed restrictions: The lands are to 1) be used as a permanent encampment and maneuvering ground for the military, 2) serve as a game preserve for the breeding and protection of game, and 3) serve as a forest reserve. The management goal is to maintain forest health, productivity, sustainability, species diversification, and structural diversity throughout the compartment while meeting the deed restrictions. Outside of the Hanson Grant lands, three parcels within the compartment were deeded to the Military Board.

Soil and topography:

From the Lake Margrethe basin moving northeast, terrain is rolling and increasingly steep, topping out on Guyton Hill. Grayling and Graycalm-Grayling sands predominate on the uplands, along with minor amounts of Croswell, Rubicon, Kalkaska, and Croswell-AuGres sands. Stand 3 by Lake Margrethe is on Tawas-Lupton and Tawas-Leafriver mucks, and stands 29 & 30 below Guyton Hill are on Kinross-AuGres complex and Kinross muck soils.

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

The Michigan Army National Guard's Camp Grayling is located west of Military Road. The Military's Land Nav course is east of Military Road and extends into the south half of the compartment. The Hanson Hills Recreation Area, also east of Military Road, is leased to the Grayling Recreation Authority for non-motorized recreation. The compartment is within the Hanson Military Reserve. Hanson Reserve Lands were given to the National Guard, Department of Military Affairs (DMA) by Rasmus Hanson in 1913, with several deed restrictions as outlined under the management goals. The Department of Natural Resources manages the natural resources on these lands so as long as management activities do not conflict with military needs. Private residential subdivisions border the the west edge of the compartment. Hunt club lands border the east edge.

Unique Natural Features:

There is the potential for rare plants and animals to occur in the Lake Margrethe basin.

Archeological, Historical, and Cultural Features:

There is a deep history of Military and developed recreational use in the compartment.

Special Management Designations or Considerations:

This compartment is designated as a Military Special Conservation Area (SCA). It is also part of the Hanson Military Reserve, with goals and restrictions as noted above. Sections 23 & 24 are leased to the Grayling Recreation Authority for management of the Hanson Hills Recreation Area.

Watershed and Fisheries Considerations:

The compartment borders the southeast shore of Lake Margrethe, a cool water lake noted for its sport fishery and recreational boating opportunities. Four narrow streams drain from stand 3 into the lake.

Wildlife Habitat Considerations:

Opportunities for specific wildlife habitat management activities are limited due to military use, however, a variety of species would benefit by establishing new age classes oak and aspen, and by maintaining grassland and upland brush covertypes. Hunting is prohibited within the Hanson Refuge, so deer tend to congregate there and negatively impact forest regeneration.

Mineral Resource and Development Concerns and/or Restrictions

No known potential exists for commercial metallic mineral production in this part of the state. An active sand/gravel pit is just over one mile to the east, and sand & gravel potential within the compartment appears to be good. There has been no

history of oil & gas exploration or development in the compartment. The compartment consists of DMVA lands (Hanson Refuge), and the land is classified as non-leasable per an agreement with the DMVA.

Vehicle Access:

Military Road, M-93, and Lake Margrethe Boulevard cross through the west end of the compartment. Access within the Camp Grayling Cantonment Area is restricted. Roads within the Hanson Hills Recreation Area are limited to non-motorized public use. The snowmobile trail is the only open state forest road east of Military Road. Several driveways off Lake Margrethe Boulevard cross state land.

Survey Needs:

Section 22 corner code 6 is unclear; there are three private pins within the vicinity of the probable corner location. Within the same section, corner code 9 could not be located this YOY; the pin found the previous YOY may have been disturbed during the M-93 roundabout and checkpoint lane construction. The monument for the northeast corner of Section 23 is missing; the recorded witness trees, red-top cedar post with locator plaque, and carsonite marker are in place, along with a nail set 5 feet west of the calculated corner location.

Recreational Facilities and Opportunities:

Sections 23 & 24 contain most of the Hanson Hills Recreation Area's cross country ski and mountain bike trail mileage. Snowshoe trails and the disc golf course extend into the north end of the compartment. Snowmobile Trail #7 crosses through the compartment east of Military Road. The Camp Grayling RV Campground is associated with the fenced Cantonment and has Lake Margrethe beach access. Hunting is specifically prohibited per the Hanson deed restrictions.

Fire Protection:

The compartment is dominated by upland oak types. Access has been restricted through road closures around the Hanson Hills recreational trail system.

Additional Compartment Information:

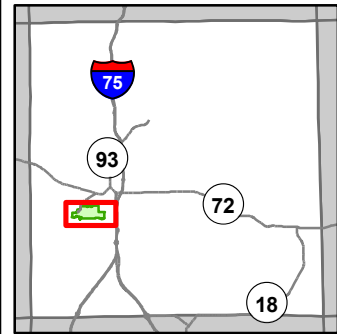
The following reports from the Inventory are attached:

- 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:

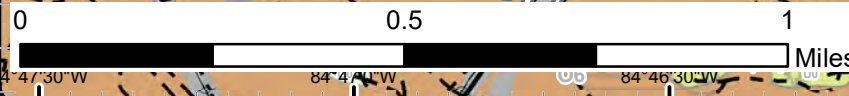
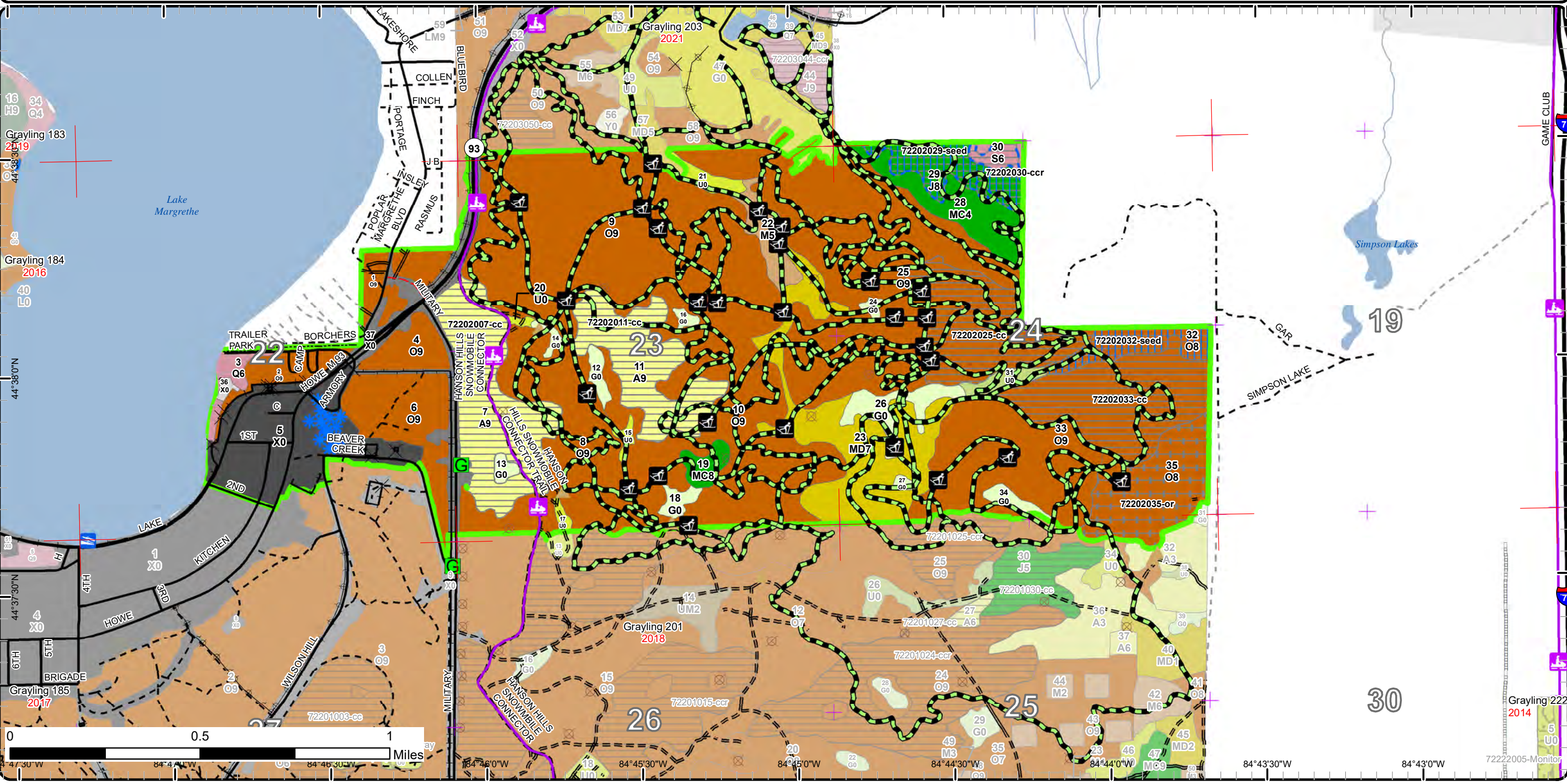
- Base feature information, stand boundaries, cover types, and numbers**
- Proposed treatments**
- Site condition boundaries**
- Details on the road access system**

Cover Type & Treatments Map



Compartment: 202
 T26N R04W 22-24
 County: Crawford
 Unit: Grayling
 Mgmt Area: Camp Grayling
 YOE: 2022
 Acres: 1306.5 GIS Calculated
 Examiner: Joan Charlebois
 Map Revised: 5/19/2021
 Map Phase: Post-Review

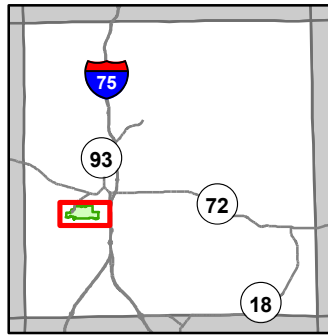
- Miris Corners
- Non-DNR Trails - User Created
- ☐ Clearcut (w/Reserves)
- ✚ Remonumented Section Corners
- ▲ Berms
- ☒ Harvest, Overstory Removal
- ☐ Counties
- Ⓜ Gate
- ☒ Seed Tree (w/Reserves)
- = DNR - Secondary Forest Road
- Ⓜ Boating Access Site
- ☒ 411 - Northern Hardwood
- = DNR - Forest Access Route
- Intermittent Stream
- ☒ 412 - Oak Types
- = Federal / State Highway
- Lake/Pond
- ☒ 413 - Aspen
- = Federal / State / County - Paved Road
- Perennial River
- ☒ 419 - Mixed Upland Deciduous
- - Federal / State - Dirt / Gravel Road
- ☒ Lakes and Rivers
- ☒ 422 - Natural Pines
- - County - Dirt Road (Seasonal)
- ☒ Pipeline
- ☒ 612 - Lowland Coniferous Forest
- - Private - Dirt / Gravel Road
- Ⓜ Powerline
- ☒ 110 - Low Intensity Urban
- ☒ Ski Trails
- ☒ Fence
- ☒ 122 - Roads/Parking Lot
- ☒ Snowmobile Trails
- ☒ Cities
- ☒ 123 - Other High Intensity Urban
- ☒ Designated Snowmobile Trails
- ☒ Compartment Boundary
- ☒ Treatments with Site Conditions
- ☒ 310 - Herbaceous Openland
- ☒ 320 - Upland Shrub
- ☒ 330 - Low Density Trees



44°38'0"N 44°37'30"N 44°37'0"N 84°44'30"W 84°44'0"W 84°43'30"W 84°43'0"W
 Grayling 183 2019, Grayling 184 2016, Grayling 185 2017, Grayling 201 2018, Grayling 202 2021, Grayling 203 2021, Grayling 222 2014

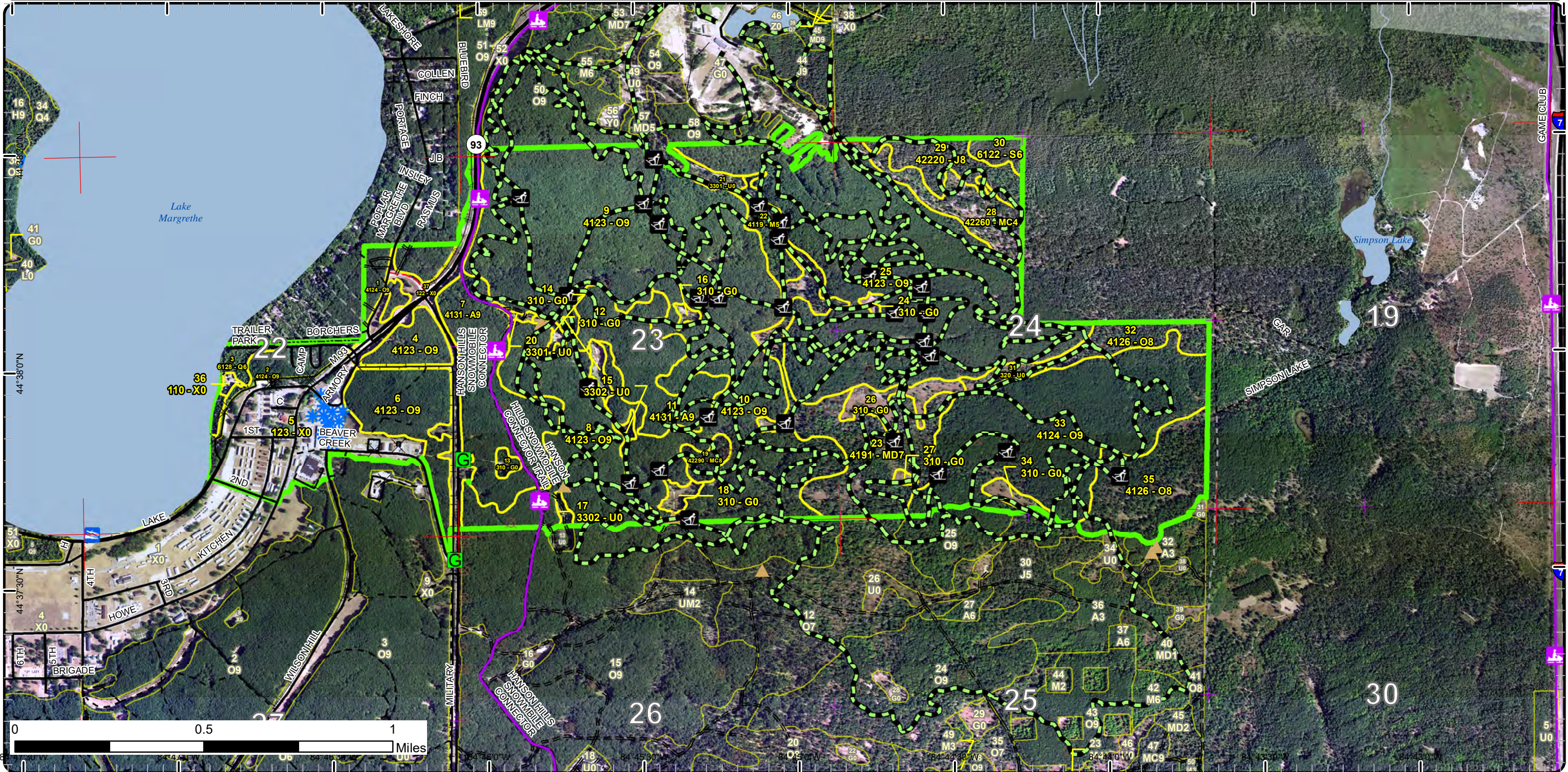
Stand Boundary Map

Compartment: 202
 T26N R04W 22-24
 County: Crawford
 Unit: Grayling
 Mgmt Area: Camp Grayling
 YOE: 2022
 Acres: 1306.5 GIS Calculated
 Examiner: Joan Charlebois
 Map Revised: 5/19/2021
 Map Phase: Post-Review



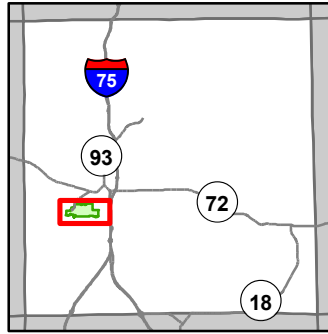
- Miris Corners
- Remonumented Section Corners
- Counties
- DNR - Secondary Forest Road
- DNR - Forest Access Route
- Federal / State Highway
- Federal / State / County - Paved Road
- Federal / State - Dirt / Gravel Road
- County - Dirt Road (Seasonal)
- Private - Dirt / Gravel Road
- Ski Trails
- Snowmobile Trails
- Designated Snowmobile Trails
- Non-DNR Trails - User Created
- Berms
- Gate
- Boating Access Site
- Intermittent Stream
- Lake/Pond
- Perennial River
- Lakes and Rivers
- Pipeline
- Powerline
- Fence
- Cities
- Compartment Boundary
- Stand Boundaries

- 411 - Northern Hardwood
- 412 - Oak Types
- 413 - Aspen
- 419 - Mixed Upland Deciduous
- 422 - Natural Pines
- 612 - Lowland Coniferous Forest
- 110 - Low Intensity Urban
- 122 - Roads/Parking Lot
- 123 - Other High Intensity Urban
- 310 - Herbaceous Openland
- 320 - Upland Shrub
- 330 - Low Density Trees
- Camp Grayling Monitoring Wells
- Camp Grayling Land Navigation Marker

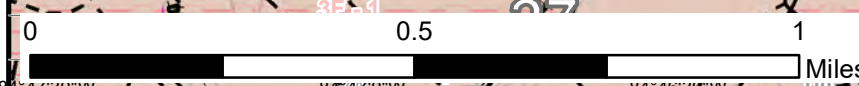
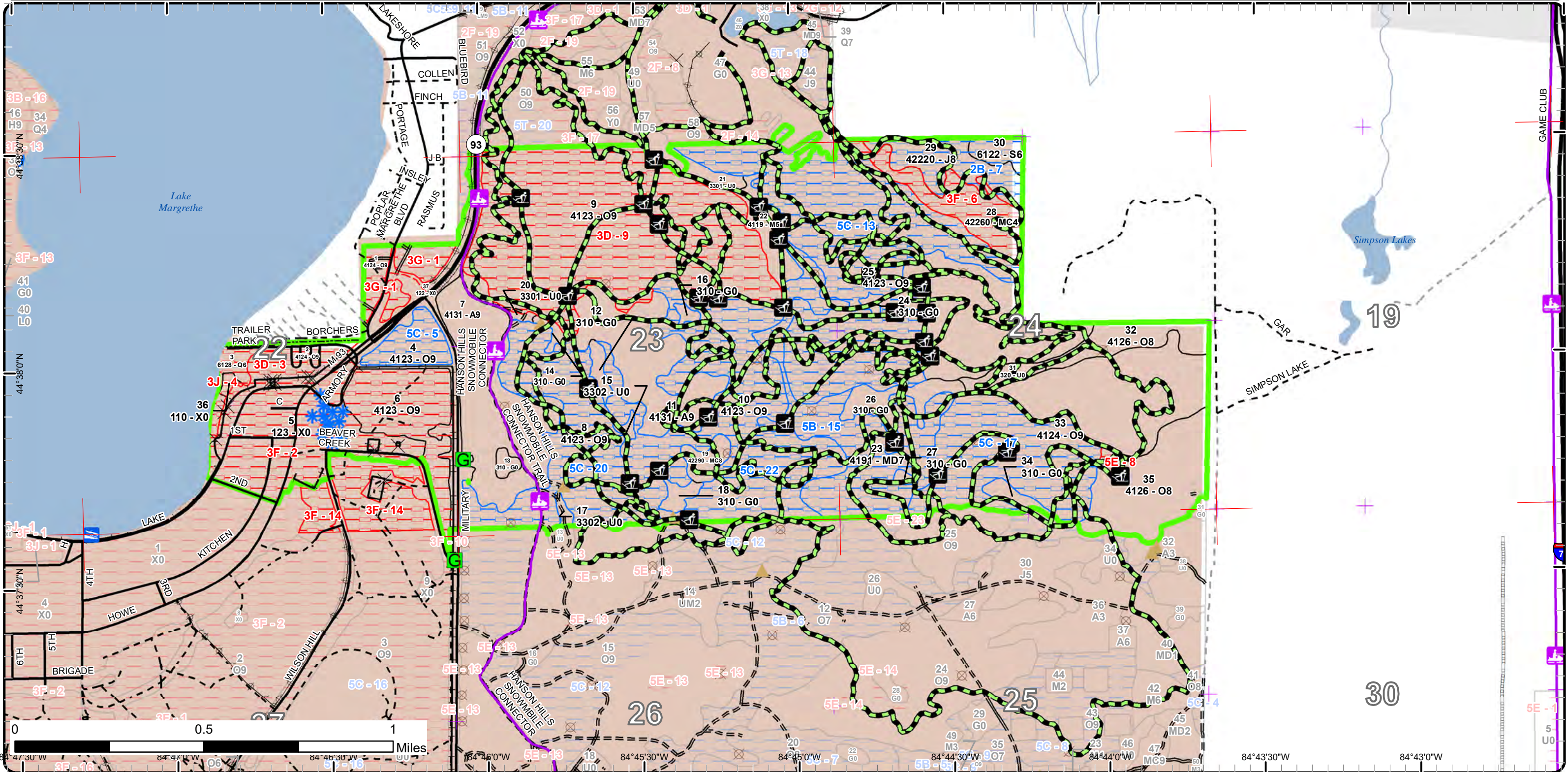


Special Conservation Areas

Compartment: 202
 T26N R04W 22-24
 County: Crawford
 Unit: Grayling
 Mgmt Area: Camp Grayling
 YOE: 2022
 Acres: 1306.5 GIS Calculated
 Examiner: Joan Charlebois
 Map Revised: 5/19/2021
 Map Phase: Post-Review



- Miris Corners
- + Remonumented Section Corners
- Counties
- DNR - Secondary Forest Road
- DNR - Forest Access Route
- Federal / State Highway
- Federal / State / County - Paved Road
- Federal / State - Dirt / Gravel Road
- County - Dirt Road (Seasonal)
- Private - Dirt / Gravel Road
- Ski Trails
- Snowmobile Trails
- Designated Snowmobile Trails
- Non-DNR Trails - User Created
- ▲ Berms
- G Gate
- Boating Access Site
- Intermittent Stream
- Lake/Pond
- Perennial River
- Lakes and Rivers
- Pipeline
- Powerline
- Fence
- Cities
- Compartment Boundary
- Available w/ Constraints
- Unavailable
- 5B: Maintain for regeneration purposes
- 5C: Delay treatment for age/size class diversity or exceptional site quality
- 3D: Recreational / Scenic values
- 3F: Military easement / lease
- 3G: Other Influence zones - See comments
- 3J: Water quality / BMPs (stream, river, or lake)
- 5E: Long-Term Retention
- Stand Boundaries
- Cold Water Streams
- Research, Development, and Military Lands
- ★ Camp Grayling Monitoring Wells
- ⊗ Camp Grayling Land Navigation Marker
- ✕ Camp Grayling Gates
- Camp Grayling Fence



84°47'30"W 84°46'30"W 84°45'30"W 84°44'30"W 84°43'30"W 84°43'0"W 84°43'0"W 84°43'0"W 84°43'0"W



Age Class

	Non-Forest	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+	Uneven-Aged	Total
Aspen	0	0	0	0	0	0	0	0	0	0	0	110	0	0	0	0	0	0	110
Herbaceous Openland	33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	33
Jack Pine	0	0	0	0	0	0	0	0	0	0	0	22	0	0	0	0	0	0	22
Low-Density Trees	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
Lowland Conifers	0	0	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	8
Lowland Spruce/Fir	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	6
Mixed Upland Deciduous	0	0	0	0	0	0	0	0	0	0	71	0	0	0	0	0	0	0	71
Natural Mixed Pines	0	0	0	0	0	26	6	0	0	0	0	0	0	0	0	0	0	0	32
Northern Hardwood	0	0	0	0	0	12	0	0	0	0	0	0	0	0	0	0	0	0	12
Oak	0	0	0	0	0	0	0	0	0	0	18	855	0	14	0	0	0	0	887
Upland Shrub	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
Urban	109	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	109
Total	158	0	0	0	0	38	6	0	0	0	89	993	0	8	14	0	0	0	1306



Report 2 – Treatment Summary

Grayling Mgt. Unit

Year of Entry: 2022

Acres of Harvest

Compartment 202

Total Compartment Acres: 1,306

Commercial Harvest - 292
 Harvests with Site Condition - 27
 Next Step Harvest - 0
 Habitat Cut - 0

Cover Type by Harvest Method

	Clearcut	Selection	Patch Clearcut	Seed Tree	Shelterwood	Thinning	Overstory Removal	Salvage	Other	Total Acres
Aspen	110	0	0	0	0	0	0	0	0	110
Jack Pine	0	0	0	22	0	0	0	0	0	22
Lowland Spruce/Fir	5	0	0	0	0	0	0	0	0	5
Oak	120	0	0	18	0	0	44	0	0	182
Total	235	0	0	40	0	0	44	0	0	319

Proposed and Next Step Treatments by Method

	Harvest	Site Prep	Planting	Seeding	Burning	Pesticide	Monitoring	Other	Non-Forest Mgt.	Total Acres
Current	319	0	0	0	0	0	0	0	0	319
Next Step	0	120	120	0	0	0	319	0	0	558
Total	319	120	120	0	0	0	319	0	0	877



Stand Name	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Habitat Cut
------------	----------------	-------	-----------------	--------------	-----------	----------	----------------	------------------	----------------------	---------------	-------------

Approved Treatments:

7	72202007-cc	64.5	4131 - Aspen, Oak	Sawtimber Well	100	111-140	Harvest	Clearcut	4131 - Aspen, Oak	Even-Aged	No
<p><u>Prescription</u> Final harvest with no reserves except leave the RP & WP. <u>Specs:</u> <u>Next Step</u> Monitoring, Natural Regen (Intermediate) <u>Treatments:</u> <u>Acceptable</u> Aspen with oak and RM. <u>Regen:</u> <u>Other</u> Apply snowmobile trail and ski trail protection specs. Protect Land Nav markers. Apply drumming log spec. Harvest operations within 100 feet of the ski trail will not occur during the active grooming season. <u>Comment:</u> <u>Site Condition</u> <u>Proposed Start Date:</u> 10/1 /2021</p>											
11	72202011-cc	45.7	4131 - Aspen, Oak	Sawtimber Well	100	141-170	Harvest	Clearcut	4131 - Aspen, Oak	Even-Aged	No
<p><u>Prescription</u> Final harvest with no reserves except leave the RP & WP. <u>Specs:</u> <u>Next Step</u> Monitoring, Natural Regen (Intermediate) <u>Treatments:</u> <u>Acceptable</u> Aspen with oak & RM. <u>Regen:</u> <u>Other</u> Apply snowmobile trail, ski trail and MtB trail protection specs. Apply drumming log spec. <u>Comment:</u> Harvest operations within 100 feet of the ski trail will not occur during the active grooming season. Apply drumming log spec. <u>Site Condition</u> <u>Proposed Start Date:</u> 10/1 /2021</p>											
25	72202025-cc	55.9	4123 - Red Oak	Sawtimber Well	106	81-110	Harvest	Clearcut	4199 - Other Mixed Upland Deciduous	Even-Aged	No
<p><u>Prescription</u> Final harvest except leave the traces of RP & WP. Also cut dead standing oak. <u>Specs:</u> <u>Next Step</u> Monitoring, Natural Regen (Intermediate); SitePrep, Trenching; Planting, Interplant <u>Treatments:</u> <u>Acceptable</u> Moderately stocked mix of RM, oak and aspen, with at least 20% oak at regen check. Oak component as a percentage of the canopy is expected to increase over time as the RM stagnates and is overtopped by the oak. If regen is inadequate, supplemental plant RP on the shallower terrain. <u>Regen:</u> <u>Other</u> Add ski trail, MtB trail and Land Nav protection specs. Protect Land Nav marker. Harvest operations within 100 feet of the ski trail will not occur during the active grooming season. <u>Comment:</u> <u>Site Condition</u> <u>Proposed Start Date:</u> 10/1 /2021</p>											



S
t
a
n
d

Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Habitat Cut
29 72202029-seed	22.3	42220 - Natural Jack Pine	Sawtimber Medium	105	51-80	Harvest	Seed Tree	429 - Mixed Upland Conifers	Two-Aged	No
<p><u>Prescription</u> Harvest merch stems except WP & RP. <u>Specs:</u> <u>Next Step</u> Monitoring, Natural Regen (Re-Inventory) <u>Treatments:</u> <u>Acceptable</u> Low to moderate stocking in mixed pine and spruce. Areas that were sparse pre-harvest are expected to remain in shrub-dominated cover. <u>Regen:</u> A longer timeframe to secure regeneration is accepted. <u>Other</u> Apply rec trail protection specs. Access is currently limited by terrain and adjacent private property. <u>Comment:</u> <u>Site Condition</u> Unknown Access <u>Proposed Start Date:</u> 10/1 /2021</p>										
30 72202030-ccr	4.9	6122 - Black Spruce Poletimber Well	100	81-110	Harvest	Clearcut with Retention	6125 - Lowland Black Spruce, Jack Pine	Two-Aged	No	
<p><u>Prescription</u> Harvest merch spruce and JP on the operable ground. Exclude the lowest ground. <u>Specs:</u> <u>Next Step</u> Monitoring, Natural Regen (Re-Inventory) <u>Treatments:</u> <u>Acceptable</u> Low to moderate stocking in spruce and JP. A longer timeframe to secure that regeneration is expected and acceptable. <u>Regen:</u> <u>Other</u> Apply rec trail protection specs. <u>Comment:</u> <u>Site Condition</u> Unknown Access <u>Proposed Start Date:</u> 10/1 /2021</p>										
32 72202032-seed	17.7	4126 - White, Black, N. Pin Oak	Sawtimber Medium	97	1-50	Harvest	Seed Tree	4310 - Pine, Oak Mix	Two-Aged	No
<p><u>Prescription</u> Harvest merch stems except leave the WP, RP, and open-grown WO. Also cut the standing dead oak. Operable paths will have to be cut through pockets of dense WP regeneration. <u>Specs:</u> <u>Next Step</u> Monitoring, Natural Regen (Intermediate) <u>Treatments:</u> <u>Acceptable</u> Low stocking in released WP and deciduous regen from the cut. <u>Regen:</u> <u>Other</u> Apply MtB trail and ski trail protection specs. Protect Land Nav markers. <u>Comment:</u> <u>Site Condition</u> <u>Proposed Start Date:</u> 10/1 /2021</p>										



S
t
a
n
d

Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Habitat Cut
33 72202033-cc	63.8	4124 - Red with White Oak	Sawtimber Well	104	111-140	Harvest	Clearcut	4199 - Other Mixed Upland Deciduous	Even-Aged	No
<p><u>Prescription</u> Final harvest except leave the traces of RP & WP. Also cut dead standing oak. <u>Specs:</u> <u>Next Step</u> Monitoring, Natural Regen (Intermediate); Planting, Interplant; SitePrep, Trenching <u>Treatments:</u> <u>Acceptable Regen:</u> Moderately stocked mix of RM, oak and aspen, with at least 20% oak at regen check. Oak component as a percentage of the canopy is expected to increase over time as the RM stagnates and is overtopped by the oak. If natural regen is inadequate, supplemental plant RP on the shallower terrain. <u>Other Comment:</u> Add ski trail, MtB trail, and Land Nav protection specs. Harvest operations within 100 feet of the ski trail will not occur during the active grooming season. <u>Site Condition</u> <u>Proposed Start Date:</u> 10/1 /2021</p>										
35 72202035-or	44.2	4126 - White, Black, N. Pin Oak	Sawtimber Medium	105	1-50	Harvest	Overstory Removal	4210 - Planted White Pine	Two-Aged	No
<p><u>Prescription</u> Remove the overstory in order to release the planted WP and secure additional deciduous sprout regen. Cut dead standing oak also. Leave the traces of canopy WP and RP. <u>Specs:</u> Exclude the portion within the ski trail loop. Seek chipping exception and short-wood the harvest in order to reduce damage to the planted WP. <u>Next Step</u> Monitoring, Natural Regen (Intermediate) <u>Treatments:</u> <u>Acceptable Regen:</u> Released planted WP and stump-origin RM & oak from the overstory removal. <u>Other Comment:</u> Apply ski trail and MtB trail protection specs. Harvest operations within 100 feet of the ski trail will not occur during the active grooming season. <u>Site Condition</u> <u>Proposed Start Date:</u> 10/1 /2021</p>										

Total Treatment 319
Acreage Proposed:

Report 4 – Site Conditions

Grayling Mgt. Unit
Joan Charlebois : Examiner

Compartment: 202
Year of Entry: 2022

Availability for Management

Total Acres	Acres Available	Acres Avail		Acres Not Available	Dominant Site Conditions										
		With Condition			2B	5B	5C	3D	3F	3G	3J	5E			
110	110	0		0	Aspen										
33	33	0		0	Herbaceous Openland										
22	0	22		0	Jack Pine	22				0					
10	10	0		0	Low-Density Trees										
8	0	0		8	Lowland Conifers								8		
6	0	6		0	Lowland Spruce/Fir	6									
71	0	71		0	Mixed Upland Deciduous		71								
32	6	0		26	Natural Mixed Pines	0				26					
12	12	0		0	Northern Hardwood										
887	186	450		250	Oak			450	194	37	17				2
6	6	0		0	Upland Shrub										
109	32	0		77	Urban			0		76			1		
1,306	394	550		362	Total Forested Acres	29	71	450	194	139	17		9		2
	30%	42%		28%	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
1	Unavailable	3G: Other Influence zones - See comments	17	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Multi-poly stand further fragmented by road, driveway and overhead utility corridors. Unlikely to achieve desirable regeneration at this time due to heavy deer use.							
2	Unavailable	3F: Military easement / lease	113	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Within Camp Grayling's Cantonment Fence.							

Report 4 – Site Conditions

Grayling Mgt. Unit
Joan Charlebois : Examiner

Compartment: 202
Year of Entry: 2022

3	Unavailable	3D: Recreational / Scenic values	14	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Camp Grayling RV park and cabins. Outside of the Cantonment fence but accessed though it.							
4	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	9	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Lowland stand bordering Lake Margrethe.							
5	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	14	Unspecified	Unspecified	Unspecified	Unspecified
Comments: At Camp Grayling main entry checkpoint. Draft proposal to treat the other side of Military Road for the 2022 YOE.							
6	Unavailable	3F: Military easement / lease	26	2B: Unknown if access through adjacent landowner(s) is possible	Unspecified	Unspecified	Unspecified
Comments: Within the Hanson Hills lease area. Snowshoe trail winds through the uplands. Access across State land is limited by terrain.							
7	Available	2B: Unknown if access through adjacent landowner(s) is possible	29	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Within the Hanson Hills lease area. Snowshoe trail winds through the uplands. Access across State land is limited by terrain.							
8	Unavailable	5E: Long-Term Retention	2	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Proposed retention for stand 35's harvest, bounded by XC Ski trail.							

Report 4 – Site Conditions

Grayling Mgt. Unit

Joan Charlebois : Examiner

Compartment: 202

Year of Entry: 2022

9	Unavailable	3D: Recreational / Scenic values	180	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Dense network of ski & MtB trails combined with the terrain makes management here challenging.							
13	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	161	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Proposal drafted for the 2022 YOE to regenerate the SE quarter of the stand lying outside of the main groomed ski pathway network.							
14	Unavailable	3F: Military easement / lease	31	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Within Camp Grayling's Cantonment Fence.							
15	Available	5B: Maintain for regeneration purposes	71	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Extensive mortality occurred in the NPO, to where portions of the stand don't meet the forested benchmark. Oak & RM regen are filling in below the sparse overstory.							
17	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	72	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Proposal drafted for the 2022 YOE to regenerate the NE half of the stand lying outside of the main groomed ski pathway network.							
20	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	79	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Proposal drafted for the 2022 YOE to regenerate the area of concentrated overmature aspen (split off as stand 7).							

Report 4 – Site Conditions

Grayling Mgt. Unit

Compartment: 202

Joan Charlebois : Examiner

Year of Entry: 2022

22	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	125	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Proposal drafted for the 2022 YOE to regenerate the area of concentrated overmature aspen (split off as stand 11).							

Mgt. Unit

Compartment: #Type!

Year of Entry:



Report 5 – 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.

SCA Name	SCA Category	Detail Type	Recommendation	Acres
----------	--------------	-------------	----------------	-------

Comments



Report 6 – 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	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	Research and Military Areas	These areas provide facilities and lands specifically dedicated for research, or other purposes. They include the 5,847 acre Forest Fire Experiment Station, the 12,000 acre Houghton Lake Wildlife Research Area, the Beaver Islands Archipelago Wildlife Research Area (that includes most of Garden Island, all of High and Hog Islands, all state owned land on Beaver, South Fox and North Fox Islands), the Cusino Wildlife Research Area, the 3,000 acre Hunt Creek Fisheries Research Station, the 125 acre Wyman Nursery, and over 144,000 acres of Military Lands.



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments																																																																				
1	4124 - Red with White Oak	Sawtimber Well	16.8	104	111-140	N/A	Multi-poly stand further dissected by roads, driveways, and overhead cables and electric lines. Canopy dominant oak tend to have open-grown form: xlog with wide crowns and low forks. BTA is very overmature interior, and younger along the cleared corridors. Diameters decrease to the NE, and the WO component increases. Heavy deer traffic.																																																																				
<table border="1"> <thead> <tr> <th>Canopy Species</th> <th>% Cover</th> <th>Size Class</th> <th>DBH</th> <th>Age</th> </tr> </thead> <tbody> <tr> <td>Red Oak</td> <td>60</td> <td>Log/XLog/Pole</td> <td>15</td> <td>104</td> </tr> <tr> <td>White Oak</td> <td>20</td> <td>Log/Pole/XLog</td> <td>12</td> <td></td> </tr> <tr> <td>Bigtooth Aspen</td> <td>4</td> <td>Log/Pole/XLog</td> <td>15</td> <td></td> </tr> <tr> <td>White Pine</td> <td>7</td> <td>Pole/Log/XLog</td> <td>8</td> <td></td> </tr> <tr> <td>Red Pine</td> <td>1</td> <td>Log/XLog/Pole</td> <td>16</td> <td></td> </tr> <tr> <td>Red Maple</td> <td>8</td> <td>Pole/Sap/Log</td> <td>6</td> <td></td> </tr> </tbody> </table>		Canopy Species	% Cover	Size Class	DBH	Age		Red Oak	60	Log/XLog/Pole	15	104	White Oak	20	Log/Pole/XLog	12		Bigtooth Aspen	4	Log/Pole/XLog	15		White Pine	7	Pole/Log/XLog	8		Red Pine	1	Log/XLog/Pole	16		Red Maple	8	Pole/Sap/Log	6		<table border="1"> <thead> <tr> <th>Sub-Canopy Species</th> <th>Density</th> <th>Avg. Height</th> <th>Size</th> </tr> </thead> <tbody> <tr> <td>White Pine</td> <td>Medium</td> <td>Variable</td> <td>Sapling</td> </tr> </tbody> </table>		Sub-Canopy Species	Density	Avg. Height	Size	White Pine	Medium	Variable	Sapling																												
Canopy Species	% Cover	Size Class	DBH	Age																																																																							
Red Oak	60	Log/XLog/Pole	15	104																																																																							
White Oak	20	Log/Pole/XLog	12																																																																								
Bigtooth Aspen	4	Log/Pole/XLog	15																																																																								
White Pine	7	Pole/Log/XLog	8																																																																								
Red Pine	1	Log/XLog/Pole	16																																																																								
Red Maple	8	Pole/Sap/Log	6																																																																								
Sub-Canopy Species	Density	Avg. Height	Size																																																																								
White Pine	Medium	Variable	Sapling																																																																								
2	4124 - Red with White Oak	Sawtimber Well	14.4	131	111-140	N/A	The Camp Grayling RV Campground occupies four acres of this stand which is outside of the Cantonment Fence but is accessed through it. The campground has open-grown RO & WO scattered between sites. West of the campground, there is a crescent of hemlock-dominated transition ground up to the swamp edge. The SW peninsula has oak, RM and traces of aspen on the sideslope down to the swamp. East of the campground is an undeveloped triangle of oak cover with a handful of supercanopy WP & RP.																																																																				
<table border="1"> <thead> <tr> <th>Canopy Species</th> <th>% Cover</th> <th>Size Class</th> <th>DBH</th> <th>Age</th> </tr> </thead> <tbody> <tr> <td>Red Maple</td> <td>7</td> <td>Log/Pole/Sap</td> <td>11</td> <td></td> </tr> <tr> <td>Red Oak</td> <td>50</td> <td>XLog/Log</td> <td>20</td> <td>131</td> </tr> <tr> <td>White Oak</td> <td>25</td> <td>Log/XLog/Pole</td> <td>16</td> <td></td> </tr> <tr> <td>Bigtooth Aspen</td> <td>1</td> <td>Log/Pole/Sap</td> <td>12</td> <td></td> </tr> <tr> <td>White Pine</td> <td>4</td> <td>Pole/Log/XLog</td> <td>8</td> <td></td> </tr> <tr> <td>Red Pine</td> <td>1</td> <td>XLog/Log</td> <td>18</td> <td></td> </tr> <tr> <td>Hemlock</td> <td>8</td> <td>XLog/Log/Pole</td> <td>20</td> <td>133</td> </tr> <tr> <td>Quaking Aspen</td> <td>1</td> <td>Log</td> <td>12</td> <td></td> </tr> <tr> <td>Balsam Fir</td> <td>2</td> <td>Pole</td> <td>7</td> <td></td> </tr> <tr> <td>Paper Birch</td> <td>1</td> <td>Log/Pole</td> <td>11</td> <td></td> </tr> </tbody> </table>		Canopy Species	% Cover	Size Class	DBH	Age		Red Maple	7	Log/Pole/Sap	11		Red Oak	50	XLog/Log	20	131	White Oak	25	Log/XLog/Pole	16		Bigtooth Aspen	1	Log/Pole/Sap	12		White Pine	4	Pole/Log/XLog	8		Red Pine	1	XLog/Log	18		Hemlock	8	XLog/Log/Pole	20	133	Quaking Aspen	1	Log	12		Balsam Fir	2	Pole	7		Paper Birch	1	Log/Pole	11		<table border="1"> <thead> <tr> <th>Sub-Canopy Species</th> <th>Density</th> <th>Avg. Height</th> <th>Size</th> </tr> </thead> <tbody> <tr> <td>White Pine</td> <td>Medium</td> <td>Variable</td> <td>Sapling</td> </tr> <tr> <td>Hemlock</td> <td>Low</td> <td>>20 feet</td> <td>Sapling</td> </tr> <tr> <td>Balsam Fir</td> <td>Low</td> <td>Variable</td> <td>Sapling</td> </tr> </tbody> </table>		Sub-Canopy Species	Density	Avg. Height	Size	White Pine	Medium	Variable	Sapling	Hemlock	Low	>20 feet	Sapling	Balsam Fir	Low	Variable	Sapling
Canopy Species	% Cover	Size Class	DBH	Age																																																																							
Red Maple	7	Log/Pole/Sap	11																																																																								
Red Oak	50	XLog/Log	20	131																																																																							
White Oak	25	Log/XLog/Pole	16																																																																								
Bigtooth Aspen	1	Log/Pole/Sap	12																																																																								
White Pine	4	Pole/Log/XLog	8																																																																								
Red Pine	1	XLog/Log	18																																																																								
Hemlock	8	XLog/Log/Pole	20	133																																																																							
Quaking Aspen	1	Log	12																																																																								
Balsam Fir	2	Pole	7																																																																								
Paper Birch	1	Log/Pole	11																																																																								
Sub-Canopy Species	Density	Avg. Height	Size																																																																								
White Pine	Medium	Variable	Sapling																																																																								
Hemlock	Low	>20 feet	Sapling																																																																								
Balsam Fir	Low	Variable	Sapling																																																																								
3	6128 - Lowland Coniferous, Mixed Deciduous	Poletimber Well	8.2	128	81-110	N/A	Variable lowland conifer stand on the lakeplain. Four small streams flow out of the stand. Cedar is healthiest on the old dune ridges by the lake; top mortality & windthrow are increasingly common on the core saturated interior. Balsam fir is progressively recruiting to the canopy as the cedar declines. Black ash noted in previous inventory has died out. There is mature hemlock in the NE, and a notable pocket of immature pole-sapling hemlock on the north edge of the north stream. In addition to the recorded canopy species, the stand has traces of BTA, WP, RO and willow. A built-up road connects the campground to the beach.																																																																				
<table border="1"> <thead> <tr> <th>Canopy Species</th> <th>% Cover</th> <th>Size Class</th> <th>DBH</th> <th>Age</th> </tr> </thead> <tbody> <tr> <td>Red Maple</td> <td>8</td> <td>Log/Pole</td> <td>10</td> <td></td> </tr> <tr> <td>Paper Birch</td> <td>10</td> <td>Pole/Sap/Log</td> <td>6</td> <td></td> </tr> <tr> <td>Quaking Aspen</td> <td>2</td> <td>Log/Pole</td> <td>11</td> <td></td> </tr> <tr> <td>Balsam Fir</td> <td>35</td> <td>Pole/Sapling</td> <td>5</td> <td>51</td> </tr> <tr> <td>Northern White Cedar</td> <td>35</td> <td>Pole/Log</td> <td>9</td> <td>128</td> </tr> </tbody> </table>		Canopy Species	% Cover	Size Class	DBH	Age		Red Maple	8	Log/Pole	10		Paper Birch	10	Pole/Sap/Log	6		Quaking Aspen	2	Log/Pole	11		Balsam Fir	35	Pole/Sapling	5	51	Northern White Cedar	35	Pole/Log	9	128																																											
Canopy Species	% Cover	Size Class	DBH	Age																																																																							
Red Maple	8	Log/Pole	10																																																																								
Paper Birch	10	Pole/Sap/Log	6																																																																								
Quaking Aspen	2	Log/Pole	11																																																																								
Balsam Fir	35	Pole/Sapling	5	51																																																																							
Northern White Cedar	35	Pole/Log	9	128																																																																							
4	4123 - Red Oak	Sawtimber Well	13.8	104	111-140	N/A	Relatively uniform small saw-large pole oak, with suppressed RM stump-origin clumps, and small patches of over-mature BTA. Traces of supercanopy RP. Occasional xlog oak on the stand edge by M-93. Suppressed oak poles (mostly WO) continue to drop out of the canopy. Well established WP understory is showing some branch flagging.																																																																				
<table border="1"> <thead> <tr> <th>Canopy Species</th> <th>% Cover</th> <th>Size Class</th> <th>DBH</th> <th>Age</th> </tr> </thead> <tbody> <tr> <td>Red Maple</td> <td>7</td> <td>Pole/Sapling</td> <td>5</td> <td></td> </tr> <tr> <td>Red Oak</td> <td>80</td> <td>Log/Pole</td> <td>11</td> <td>104</td> </tr> <tr> <td>White Oak</td> <td>10</td> <td>Pole/Log</td> <td>8</td> <td></td> </tr> <tr> <td>Bigtooth Aspen</td> <td>3</td> <td>Log/Pole</td> <td>11</td> <td></td> </tr> </tbody> </table>		Canopy Species	% Cover	Size Class	DBH	Age		Red Maple	7	Pole/Sapling	5		Red Oak	80	Log/Pole	11	104	White Oak	10	Pole/Log	8		Bigtooth Aspen	3	Log/Pole	11		<table border="1"> <thead> <tr> <th>Sub-Canopy Species</th> <th>Density</th> <th>Avg. Height</th> <th>Size</th> </tr> </thead> <tbody> <tr> <td>White Pine</td> <td>Trace</td> <td>>20 feet</td> <td>Pole</td> </tr> <tr> <td>White Pine</td> <td>Medium</td> <td>Variable</td> <td>Sapling</td> </tr> <tr> <td>Red Pine</td> <td>Trace</td> <td>Variable</td> <td>Sapling</td> </tr> </tbody> </table>		Sub-Canopy Species	Density	Avg. Height	Size	White Pine	Trace	>20 feet	Pole	White Pine	Medium	Variable	Sapling	Red Pine	Trace	Variable	Sapling																														
Canopy Species	% Cover	Size Class	DBH	Age																																																																							
Red Maple	7	Pole/Sapling	5																																																																								
Red Oak	80	Log/Pole	11	104																																																																							
White Oak	10	Pole/Log	8																																																																								
Bigtooth Aspen	3	Log/Pole	11																																																																								
Sub-Canopy Species	Density	Avg. Height	Size																																																																								
White Pine	Trace	>20 feet	Pole																																																																								
White Pine	Medium	Variable	Sapling																																																																								
Red Pine	Trace	Variable	Sapling																																																																								



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments					
5	123 - Other High Intensity Urban	Nonstocked	71.8		Unspecified	No	North end of Camp Grayling's developments: buildings, hard-surfaced roads, sidewalks, parking lots, and maintained lawns with scattered oak & pine.					
								Sub-Canopy Species	Density	Avg. Height	Size	
								Red Pine	Low		Log	
								Red Oak	Low		Log	
								White Pine	Low		Pole	
White Oak	Low		Log									
6	4123 - Red Oak	Sawtimber Well	37.2	102	141-170	N/A	Small saw-large pole oak with suppressed RM stump-origin clumps, and over-mature BTA. A few super-canopy RP established small patches of sapling-to-saw RP. Most of the aspen is in a few large clones in the center of the stand; the rest occurs as scattered individual stems. Occasional open-grown xlog oak. The suppressed oak poles (mostly WO) continue to drop out of the canopy. Field inventory date was 1-16-19, but could not select that far back on the MiFI calendar.					
								Canopy Species	% Cover	Size Class	DBH	Age
								Red Maple	5	Pole/Sap/Log	7	
								Red Oak	70	Log/Pole	13	102
								White Oak	9	Log/Pole	10	
								Bigtooth Aspen	15	Log/Pole	12	96
Red Pine	1	XLog/Log	18									
Sub-Canopy Species	Density	Avg. Height	Size									
Witch Hazel	Trace	5 - 10 feet	Tall Shrub									
Red Pine	Trace	Variable	Sapling									
White Pine	Low	Variable	Sapling									
7	4131 - Aspen, Oak	Sawtimber Well	64.5	100	111-140	N/A	RO with significant overmature BTA component. Minor WO & RM associates. Widely scattered super-canopy RP. Trace to low levels of WP & RP in the understory.					
								Canopy Species	% Cover	Size Class	DBH	Age
								Red Maple	5	Pole/Sapling	6	
								Red Oak	50	Log/Pole	11	103
								White Oak	4	Log/Pole	10	
Bigtooth Aspen	40	Log	12	100								
Red Pine	1	XLog/Log	18									
Sub-Canopy Species	Density	Avg. Height	Size									
Red Pine	Trace	Variable	Sapling									
Witch Hazel	Low	5 - 10 feet	Tall Shrub									
White Pine	Low	Variable	Sapling									
8	4123 - Red Oak	Sawtimber Well	78.9	102	111-140	N/A	Relatively uniform small saw-large pole RO, with WO & RM associates and scattered patches of overmature BTA. The suppressed-to-intermediate oak poles continue to drop out of the canopy Occasional super-canopy RP, and WP poles. Understory open except localized WP & RP regen. Sub-acre frost pocket depressions have sparse cover.					
								Canopy Species	% Cover	Size Class	DBH	Age
								Red Maple	7	Pole/Sapling	6	
								Red Oak	75	Log/Pole	12	102
								White Oak	10	Pole/Log	9	
Bigtooth Aspen	7	Log/Pole	11									
Red Pine	1	XLog/Log/Pole	18									
Sub-Canopy Species	Density	Avg. Height	Size									
Red Pine	Trace	Variable	Sapling									
Witch Hazel	Trace	10 - 20 feet	Tall Shrub									
White Pine	Trace	Variable	Sapling									
9	4123 - Red Oak	Sawtimber Well	179.8	104	111-140	N/A	Relatively uniform small saw-large pole RO, with WO & RM associates and pockets of overmature BTA. Traces of QA on the NE edge. Widely scattered super-canopy RP. Suppressed-to-intermediate oak poles continue to drop out of the canopy. Scattered co-dominant oak saw have also died; doesn't appear to be spreading epicenters. Occasional xlog RO & WO. WP understory varies from trace to medium.					
								Canopy Species	% Cover	Size Class	DBH	Age
								Red Maple	12	Pole/Sapling	6	
								Red Oak	65	Log/Pole	12	104
								White Oak	7	Log/Pole	10	
								Bigtooth Aspen	13	Log/Pole	12	99
Red Pine	2	XLog/Log/Pole	18									
White Pine	1	Log/Pole/XLog	14									
Sub-Canopy Species	Density	Avg. Height	Size									
Red Pine	Trace	Variable	Sapling									
Witch Hazel	Trace	5 - 10 feet	Tall Shrub									
White Pine	Low	Variable	Sapling									



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments																																																							
10	4123 - Red Oak	Sawtimber Well	125.4	103	111-140	N/A	Mature oak stand on shallow rolling terrain, dotted with sub-acre openings. Lower slopes drier, especially in the SE, with more WO. NPO that mixed in on the opening edges and near stand 27 has died out. Hybridized BRO hanging on there. Upper slopes have fairly uniform small saw-large pole oak. Patches of over-mature BTA are scattered across the stand; are declining faster in the SE. Suppressed to intermediate oak poles and even some small saw weeding out. XC ski & MtB trails cross through.																																																							
<table border="1"> <thead> <tr> <th>Canopy Species</th> <th>% Cover</th> <th>Size Class</th> <th>DBH</th> <th>Age</th> </tr> </thead> <tbody> <tr> <td>Red Maple</td> <td>7</td> <td>Pole/Sap/Log</td> <td>6</td> <td></td> </tr> <tr> <td>Red Oak</td> <td>70</td> <td>Log/Pole</td> <td>12</td> <td>103</td> </tr> <tr> <td>White Oak</td> <td>14</td> <td>Log/Pole/XLog</td> <td>11</td> <td></td> </tr> <tr> <td>Bigtooth Aspen</td> <td>6</td> <td>Log/Pole</td> <td>12</td> <td>98</td> </tr> <tr> <td>White Pine</td> <td>1</td> <td>Log/Pole</td> <td>10</td> <td></td> </tr> <tr> <td>Black/Red (Hybrid) Oak</td> <td>2</td> <td>Log/XLog</td> <td>16</td> <td></td> </tr> </tbody> </table>		Canopy Species	% Cover	Size Class	DBH	Age	Red Maple	7	Pole/Sap/Log	6		Red Oak	70	Log/Pole	12	103	White Oak	14	Log/Pole/XLog	11		Bigtooth Aspen	6	Log/Pole	12	98	White Pine	1	Log/Pole	10		Black/Red (Hybrid) Oak	2	Log/XLog	16		<table border="1"> <thead> <tr> <th>Sub-Canopy Species</th> <th>Density</th> <th>Avg. Height</th> <th>Size</th> </tr> </thead> <tbody> <tr> <td>Red Pine</td> <td>Trace</td> <td>Variable</td> <td>Sapling</td> </tr> <tr> <td>White Pine</td> <td>Low</td> <td>Variable</td> <td>Sapling</td> </tr> <tr> <td>White Pine</td> <td>Trace</td> <td>>20 feet</td> <td>Pole</td> </tr> <tr> <td>Red Maple</td> <td>Trace</td> <td>Variable</td> <td>Sapling</td> </tr> <tr> <td>White Oak</td> <td>Low</td> <td>< 5 feet</td> <td>Sapling</td> </tr> </tbody> </table>		Sub-Canopy Species	Density	Avg. Height	Size	Red Pine	Trace	Variable	Sapling	White Pine	Low	Variable	Sapling	White Pine	Trace	>20 feet	Pole	Red Maple	Trace	Variable	Sapling	White Oak	Low	< 5 feet	Sapling
Canopy Species	% Cover	Size Class	DBH	Age																																																										
Red Maple	7	Pole/Sap/Log	6																																																											
Red Oak	70	Log/Pole	12	103																																																										
White Oak	14	Log/Pole/XLog	11																																																											
Bigtooth Aspen	6	Log/Pole	12	98																																																										
White Pine	1	Log/Pole	10																																																											
Black/Red (Hybrid) Oak	2	Log/XLog	16																																																											
Sub-Canopy Species	Density	Avg. Height	Size																																																											
Red Pine	Trace	Variable	Sapling																																																											
White Pine	Low	Variable	Sapling																																																											
White Pine	Trace	>20 feet	Pole																																																											
Red Maple	Trace	Variable	Sapling																																																											
White Oak	Low	< 5 feet	Sapling																																																											
11	4131 - Aspen, Oak	Sawtimber Well	45.7	100	141-170	N/A	Overmature BTA with significant RO cohort. Minor RM & WO associates. Not a bright line between this stand and the surrounding oak-with-aspen stands; this stand encompasses the largest BTA clones intermixed with oak. XC ski & MtB trails cross through.																																																							
<table border="1"> <thead> <tr> <th>Canopy Species</th> <th>% Cover</th> <th>Size Class</th> <th>DBH</th> <th>Age</th> </tr> </thead> <tbody> <tr> <td>Red Maple</td> <td>5</td> <td>Pole/Log/Sap</td> <td>6</td> <td></td> </tr> <tr> <td>Red Oak</td> <td>40</td> <td>Log/Pole</td> <td>12</td> <td>104</td> </tr> <tr> <td>White Oak</td> <td>5</td> <td>Log/Pole</td> <td>10</td> <td></td> </tr> <tr> <td>Bigtooth Aspen</td> <td>50</td> <td>Log/Pole</td> <td>11</td> <td>100</td> </tr> </tbody> </table>		Canopy Species	% Cover	Size Class	DBH	Age	Red Maple	5	Pole/Log/Sap	6		Red Oak	40	Log/Pole	12	104	White Oak	5	Log/Pole	10		Bigtooth Aspen	50	Log/Pole	11	100	<table border="1"> <thead> <tr> <th>Sub-Canopy Species</th> <th>Density</th> <th>Avg. Height</th> <th>Size</th> </tr> </thead> <tbody> <tr> <td>White Pine</td> <td>Trace</td> <td>Variable</td> <td>Sapling</td> </tr> <tr> <td>White Pine</td> <td>Trace</td> <td>>20 feet</td> <td>Pole</td> </tr> <tr> <td>Red Maple</td> <td>Trace</td> <td>Variable</td> <td>Sapling</td> </tr> </tbody> </table>		Sub-Canopy Species	Density	Avg. Height	Size	White Pine	Trace	Variable	Sapling	White Pine	Trace	>20 feet	Pole	Red Maple	Trace	Variable	Sapling																		
Canopy Species	% Cover	Size Class	DBH	Age																																																										
Red Maple	5	Pole/Log/Sap	6																																																											
Red Oak	40	Log/Pole	12	104																																																										
White Oak	5	Log/Pole	10																																																											
Bigtooth Aspen	50	Log/Pole	11	100																																																										
Sub-Canopy Species	Density	Avg. Height	Size																																																											
White Pine	Trace	Variable	Sapling																																																											
White Pine	Trace	>20 feet	Pole																																																											
Red Maple	Trace	Variable	Sapling																																																											
12	310 - Herbaceous Openland	Nonstocked	3.4		Unspecified	No	Valley opening. Some little bluestem visible above the snow. Scattered WP, RP, BC, perimeter NPO snags. Colonizing NPO regen.																																																							
13	310 - Herbaceous Openland	Nonstocked	2.4	0	Unspecified	No	Fenced Military communications tower facility. Most of the 23-year old stump-origin RM & NRO, and BTA regen from the original site clearing has been brushed back, leaving a strip of that cover along the perimeter.																																																							
14	310 - Herbaceous Openland	Nonstocked	2.0	0	Unspecified	No	Shallow valley opening. Some sweetfern & little bluestem visible above the snow. Perimeter WP-RP, oak regen & BC.																																																							
15	3302 - Low Density Conifer Trees	Nonstocked	1.9		Unspecified	No	Valley opening with scattered RP, WP, WO, and perimeter oak regen.																																																							
16	310 - Herbaceous Openland	Nonstocked	1.6		Unspecified	No	From 2010 field inventory: Small frost pocket depression. Perimeter BC & oak. Patches of RM regen. Old RR grade cuts through.																																																							
17	3302 - Low Density Conifer Trees	Nonstocked	1.6	0	Unspecified	No	Shallow depression with scattered RP, oak regen, and BC. Most of the mature NPO is dead.																																																							
18	310 - Herbaceous Openland	Nonstocked	3.6	0	Unspecified	No	Frost pocket opening with scattered JP, WP, BC & perimeter NPO regen. Most of the mature NPO has died out. Some little bluestem visible above the snow.																																																							



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments																																																																	
19	42290 - Natural Mixed Pine	Sawtimber Medium	6.4	57	51-80	N/A	A handful of supercanopy RP and one WP seeded in the majority small saw-large pole pine cover. The mature NPO has largely died out. The WO is maintaining. RO and cull BTA mix in on the stand margins. The WP understory makes the canopy appear fuller. XC Ski & MtB trails cross through, also part of LandNav course.																																																																	
<table border="1"> <thead> <tr> <th>Canopy Species</th> <th>% Cover</th> <th>Size Class</th> <th>DBH</th> <th>Age</th> </tr> </thead> <tbody> <tr> <td>White Oak</td> <td>10</td> <td>Log/Pole</td> <td>12</td> <td>103</td> </tr> <tr> <td>Northern Pin Oak</td> <td>5</td> <td>Log/XLog</td> <td>14</td> <td></td> </tr> <tr> <td>White Pine</td> <td>20</td> <td>Log/Pole</td> <td>12</td> <td></td> </tr> <tr> <td>Red Pine</td> <td>55</td> <td>Log/Pole</td> <td>11</td> <td>57</td> </tr> <tr> <td>Red Oak</td> <td>5</td> <td>Log/XLog</td> <td>16</td> <td></td> </tr> <tr> <td>Bigtooth Aspen</td> <td>5</td> <td>Log</td> <td>12</td> <td></td> </tr> </tbody> </table>		Canopy Species	% Cover	Size Class	DBH	Age	White Oak	10	Log/Pole	12	103	Northern Pin Oak	5	Log/XLog	14		White Pine	20	Log/Pole	12		Red Pine	55	Log/Pole	11	57	Red Oak	5	Log/XLog	16		Bigtooth Aspen	5	Log	12		<table border="1"> <thead> <tr> <th>Sub-Canopy Species</th> <th>Density</th> <th>Avg. Height</th> <th>Size</th> </tr> </thead> <tbody> <tr> <td>White Pine</td> <td>Medium</td> <td>Variable</td> <td>Sapling</td> </tr> <tr> <td>Red Pine</td> <td>Low</td> <td>Variable</td> <td>Sapling</td> </tr> <tr> <td>Black Cherry</td> <td>Trace</td> <td>Variable</td> <td>Tall Shrub</td> </tr> <tr> <td>Red Maple</td> <td>Trace</td> <td>Variable</td> <td>Sapling</td> </tr> <tr> <td>Northern Pin Oak</td> <td>Low</td> <td>5 - 10 feet</td> <td>Sapling</td> </tr> </tbody> </table>		Sub-Canopy Species	Density	Avg. Height	Size	White Pine	Medium	Variable	Sapling	Red Pine	Low	Variable	Sapling	Black Cherry	Trace	Variable	Tall Shrub	Red Maple	Trace	Variable	Sapling	Northern Pin Oak	Low	5 - 10 feet	Sapling										
Canopy Species	% Cover	Size Class	DBH	Age																																																																				
White Oak	10	Log/Pole	12	103																																																																				
Northern Pin Oak	5	Log/XLog	14																																																																					
White Pine	20	Log/Pole	12																																																																					
Red Pine	55	Log/Pole	11	57																																																																				
Red Oak	5	Log/XLog	16																																																																					
Bigtooth Aspen	5	Log	12																																																																					
Sub-Canopy Species	Density	Avg. Height	Size																																																																					
White Pine	Medium	Variable	Sapling																																																																					
Red Pine	Low	Variable	Sapling																																																																					
Black Cherry	Trace	Variable	Tall Shrub																																																																					
Red Maple	Trace	Variable	Sapling																																																																					
Northern Pin Oak	Low	5 - 10 feet	Sapling																																																																					
20	3301 - Low Density Deciduous Trees	Nonstocked	1.2	0	Unspecified	No	Shallow valley with sapling-to-saw oak, and scattered RM, BC & RP-WP.																																																																	
21	3301 - Low Density Deciduous Trees	Nonstocked	4.9	0	Unspecified	No	Valley opening with cleared trail and grade corridors. BC brush with pockets of NPO & RM regen, scattered WP, overmature QA, and traces of surviving NPO. Snags common. Traces of non-native bush honeysuckle.																																																																	
22	4119 - Mixed Northern Hardwoods	Poletimber Medium	12.3	44	51-80	N/A	Valley stand with trail and old RR grade corridors. As the canopy NPO broke up, the RM understory became the main canopy, with remaining surviving NPO in a super-canopy layer above the RM. Occasional QA & BTA clumps. Scattered WP & WO. Snags and DWD common.																																																																	
<table border="1"> <thead> <tr> <th>Canopy Species</th> <th>% Cover</th> <th>Size Class</th> <th>DBH</th> <th>Age</th> </tr> </thead> <tbody> <tr> <td>Red Maple</td> <td>60</td> <td>Pole/Sapling</td> <td>5</td> <td>44</td> </tr> <tr> <td>White Oak</td> <td>5</td> <td>Log/Pole</td> <td>14</td> <td></td> </tr> <tr> <td>Northern Pin Oak</td> <td>20</td> <td>XLog</td> <td>20</td> <td>104</td> </tr> <tr> <td>White Pine</td> <td>4</td> <td>Log/Pole</td> <td>12</td> <td></td> </tr> <tr> <td>Bigtooth Aspen</td> <td>5</td> <td>Log/Pole</td> <td>12</td> <td></td> </tr> <tr> <td>Quaking Aspen</td> <td>5</td> <td>Log/Pole</td> <td>11</td> <td></td> </tr> <tr> <td>Red Pine</td> <td>1</td> <td>Log/Pole</td> <td>14</td> <td></td> </tr> </tbody> </table>		Canopy Species	% Cover	Size Class	DBH	Age	Red Maple	60	Pole/Sapling	5	44	White Oak	5	Log/Pole	14		Northern Pin Oak	20	XLog	20	104	White Pine	4	Log/Pole	12		Bigtooth Aspen	5	Log/Pole	12		Quaking Aspen	5	Log/Pole	11		Red Pine	1	Log/Pole	14		<table border="1"> <thead> <tr> <th>Sub-Canopy Species</th> <th>Density</th> <th>Avg. Height</th> <th>Size</th> </tr> </thead> <tbody> <tr> <td>Red Maple</td> <td>Low</td> <td>Variable</td> <td>Sapling</td> </tr> <tr> <td>White Pine</td> <td>Trace</td> <td>Variable</td> <td>Sapling</td> </tr> <tr> <td>Black Cherry</td> <td>Low</td> <td>Variable</td> <td>Tall Shrub</td> </tr> <tr> <td>Northern Pin Oak</td> <td>Low</td> <td>Variable</td> <td>Sapling</td> </tr> </tbody> </table>		Sub-Canopy Species	Density	Avg. Height	Size	Red Maple	Low	Variable	Sapling	White Pine	Trace	Variable	Sapling	Black Cherry	Low	Variable	Tall Shrub	Northern Pin Oak	Low	Variable	Sapling									
Canopy Species	% Cover	Size Class	DBH	Age																																																																				
Red Maple	60	Pole/Sapling	5	44																																																																				
White Oak	5	Log/Pole	14																																																																					
Northern Pin Oak	20	XLog	20	104																																																																				
White Pine	4	Log/Pole	12																																																																					
Bigtooth Aspen	5	Log/Pole	12																																																																					
Quaking Aspen	5	Log/Pole	11																																																																					
Red Pine	1	Log/Pole	14																																																																					
Sub-Canopy Species	Density	Avg. Height	Size																																																																					
Red Maple	Low	Variable	Sapling																																																																					
White Pine	Trace	Variable	Sapling																																																																					
Black Cherry	Low	Variable	Tall Shrub																																																																					
Northern Pin Oak	Low	Variable	Sapling																																																																					
23	4191 - Mixed Upland Deciduous with Conifer	Sawtimber Poor	71.2	92	1-50	N/A	Dry valley stand with a couple of knob hills. Mortality heavy in the NPO; snags and DWD common. WO is maintaining. WP increases in the NW. QA in a single clone; BTA stems widely scattered. Canopy closure drifts off either end of the 25-50% closure category. Cover is greatest on the knobs and by the adjacent O9 stands. Areas with the most extensive NPO mortality have dense regen filling in; mostly NPO, but also patches of RM. Stand is dotted with sub-acre frost pocket openings. NPO age is from the previous inventory.																																																																	
<table border="1"> <thead> <tr> <th>Canopy Species</th> <th>% Cover</th> <th>Size Class</th> <th>DBH</th> <th>Age</th> </tr> </thead> <tbody> <tr> <td>Red Maple</td> <td>15</td> <td>Pole/Log/Sap</td> <td>7</td> <td></td> </tr> <tr> <td>White Oak</td> <td>35</td> <td>Log/Pole</td> <td>11</td> <td>92</td> </tr> <tr> <td>Northern Pin Oak</td> <td>13</td> <td>Log/XLog</td> <td>16</td> <td>104</td> </tr> <tr> <td>White Pine</td> <td>20</td> <td>Log/Pole</td> <td>12</td> <td>49</td> </tr> <tr> <td>Bigtooth Aspen</td> <td>2</td> <td>Log</td> <td>14</td> <td></td> </tr> <tr> <td>Quaking Aspen</td> <td>3</td> <td>Pole/Sapling</td> <td>7</td> <td></td> </tr> <tr> <td>Jack Pine</td> <td>1</td> <td>Pole/Sap/Log</td> <td>7</td> <td></td> </tr> <tr> <td>Red Pine</td> <td>1</td> <td>Log/Pole</td> <td>12</td> <td></td> </tr> </tbody> </table>		Canopy Species	% Cover	Size Class	DBH	Age	Red Maple	15	Pole/Log/Sap	7		White Oak	35	Log/Pole	11	92	Northern Pin Oak	13	Log/XLog	16	104	White Pine	20	Log/Pole	12	49	Bigtooth Aspen	2	Log	14		Quaking Aspen	3	Pole/Sapling	7		Jack Pine	1	Pole/Sap/Log	7		Red Pine	1	Log/Pole	12		<table border="1"> <thead> <tr> <th>Sub-Canopy Species</th> <th>Density</th> <th>Avg. Height</th> <th>Size</th> </tr> </thead> <tbody> <tr> <td>Red Maple</td> <td>Medium</td> <td>Variable</td> <td>Sapling</td> </tr> <tr> <td>White Pine</td> <td>Trace</td> <td>Variable</td> <td>Sapling</td> </tr> <tr> <td>Black Cherry</td> <td>Medium</td> <td>Variable</td> <td>Tall Shrub</td> </tr> <tr> <td>White Oak</td> <td>Low</td> <td>Variable</td> <td>Sapling</td> </tr> <tr> <td>Northern Pin Oak</td> <td>Medium</td> <td>Variable</td> <td>Sapling</td> </tr> </tbody> </table>		Sub-Canopy Species	Density	Avg. Height	Size	Red Maple	Medium	Variable	Sapling	White Pine	Trace	Variable	Sapling	Black Cherry	Medium	Variable	Tall Shrub	White Oak	Low	Variable	Sapling	Northern Pin Oak	Medium	Variable	Sapling
Canopy Species	% Cover	Size Class	DBH	Age																																																																				
Red Maple	15	Pole/Log/Sap	7																																																																					
White Oak	35	Log/Pole	11	92																																																																				
Northern Pin Oak	13	Log/XLog	16	104																																																																				
White Pine	20	Log/Pole	12	49																																																																				
Bigtooth Aspen	2	Log	14																																																																					
Quaking Aspen	3	Pole/Sapling	7																																																																					
Jack Pine	1	Pole/Sap/Log	7																																																																					
Red Pine	1	Log/Pole	12																																																																					
Sub-Canopy Species	Density	Avg. Height	Size																																																																					
Red Maple	Medium	Variable	Sapling																																																																					
White Pine	Trace	Variable	Sapling																																																																					
Black Cherry	Medium	Variable	Tall Shrub																																																																					
White Oak	Low	Variable	Sapling																																																																					
Northern Pin Oak	Medium	Variable	Sapling																																																																					
24	310 - Herbaceous Openland	Nonstocked	1.5		Unspecified	No	Shallow frost pocket depression with perimeter WP, oak and BC.																																																																	



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments																																																
25	4123 - Red Oak	Sawtimber Well	219.2	106	81-110	N/A	Rolling to steep terrain; north end tops out above the old downhill ski runs. Small saw-large pole RO with intermediate WO and suppressed RM stump clumps. Patches of overmature BTA tend to occur on the perimeter lower slopes. Suppressed-intermediate oak poles continue to drop out of the canopy, along with lesser amounts of co-dominant oak saw. Oak has poorer form & growth on the south aspects and exposed hilltops vs. the north- and east-facing slopes. The drier aspects also have a greater proportion in WO. Open below except for traces of witch hazel and localized WP (SW edge by stand 10 and NE edge by stand 28). Occasional xlog oak and RP. Ski & Mtb pathways serpentine through the stand, also part of the Land Nav course.																																																
<table border="1"> <thead> <tr> <th>Canopy Species</th> <th>% Cover</th> <th>Size Class</th> <th>DBH</th> <th>Age</th> </tr> </thead> <tbody> <tr> <td>Red Maple</td> <td>6</td> <td>Pole/Sapling</td> <td>5</td> <td></td> </tr> <tr> <td>Red Oak</td> <td>75</td> <td>Log/Pole</td> <td>11</td> <td>106</td> </tr> <tr> <td>White Oak</td> <td>10</td> <td>Log/Pole</td> <td>10</td> <td></td> </tr> <tr> <td>Bigtooth Aspen</td> <td>7</td> <td>Log/Pole</td> <td>12</td> <td>97</td> </tr> <tr> <td>Northern Pin Oak</td> <td>1</td> <td>Log/XLog</td> <td>16</td> <td></td> </tr> <tr> <td>White Pine</td> <td>1</td> <td>Pole/Log</td> <td>9</td> <td></td> </tr> </tbody> </table>		Canopy Species	% Cover	Size Class	DBH	Age		Red Maple	6	Pole/Sapling	5		Red Oak	75	Log/Pole	11	106	White Oak	10	Log/Pole	10		Bigtooth Aspen	7	Log/Pole	12	97	Northern Pin Oak	1	Log/XLog	16		White Pine	1	Pole/Log	9		<table border="1"> <thead> <tr> <th>Sub-Canopy Species</th> <th>Density</th> <th>Avg. Height</th> <th>Size</th> </tr> </thead> <tbody> <tr> <td>White Pine</td> <td>Trace</td> <td>Variable</td> <td>Sapling</td> </tr> <tr> <td>Witch Hazel</td> <td>Trace</td> <td>5 - 10 feet</td> <td>Tall Shrub</td> </tr> <tr> <td>White Pine</td> <td>Trace</td> <td>>20 feet</td> <td>Pole</td> </tr> </tbody> </table>		Sub-Canopy Species	Density	Avg. Height	Size	White Pine	Trace	Variable	Sapling	Witch Hazel	Trace	5 - 10 feet	Tall Shrub	White Pine	Trace	>20 feet	Pole
Canopy Species	% Cover	Size Class	DBH	Age																																																			
Red Maple	6	Pole/Sapling	5																																																				
Red Oak	75	Log/Pole	11	106																																																			
White Oak	10	Log/Pole	10																																																				
Bigtooth Aspen	7	Log/Pole	12	97																																																			
Northern Pin Oak	1	Log/XLog	16																																																				
White Pine	1	Pole/Log	9																																																				
Sub-Canopy Species	Density	Avg. Height	Size																																																				
White Pine	Trace	Variable	Sapling																																																				
Witch Hazel	Trace	5 - 10 feet	Tall Shrub																																																				
White Pine	Trace	>20 feet	Pole																																																				
26	310 - Herbaceous Openland	Nonstocked	12.8	0	Unspecified	No	Shallow valley opening. Some little bluestem and sweetfern visible above the snow. NPO snags on perimeter. Scattered WP, surviving NPO, BC brush.																																																
27	310 - Herbaceous Openland	Nonstocked	1.2	0	Unspecified	No	Shallow frost pocket depression. Some little bluestem visible above the snow. Perimeter NPO regen and scattered JP, WP and BC brush.																																																
28	42260 - Natural Pine, Mixed Deciduous	Poletimber Poor	25.9	43	1-50	N/A	Brushy stand on the flats between the oak hills and the swamp. JP has been colonizing the opening as the mature NPO has been breaking up. Surviving NPO form a scattered super-canopy layer above the patchy pole-sapling JP canopy. Occasional WP, WO, RP. Traces of WS. Heavy deer use.																																																
<table border="1"> <thead> <tr> <th>Canopy Species</th> <th>% Cover</th> <th>Size Class</th> <th>DBH</th> <th>Age</th> </tr> </thead> <tbody> <tr> <td>White Oak</td> <td>5</td> <td>Log/Pole</td> <td>12</td> <td></td> </tr> <tr> <td>Northern Pin Oak</td> <td>20</td> <td>Log/XLog</td> <td>17</td> <td>103</td> </tr> <tr> <td>White Pine</td> <td>10</td> <td>Log/Pole</td> <td>12</td> <td></td> </tr> <tr> <td>Red Pine</td> <td>5</td> <td>Pole/Log/Sap</td> <td>7</td> <td></td> </tr> <tr> <td>Jack Pine</td> <td>55</td> <td>Pole/Sapling</td> <td>6</td> <td>43</td> </tr> <tr> <td>Red Maple</td> <td>5</td> <td>Pole/Sapling</td> <td>5</td> <td></td> </tr> </tbody> </table>		Canopy Species	% Cover	Size Class	DBH	Age		White Oak	5	Log/Pole	12		Northern Pin Oak	20	Log/XLog	17	103	White Pine	10	Log/Pole	12		Red Pine	5	Pole/Log/Sap	7		Jack Pine	55	Pole/Sapling	6	43	Red Maple	5	Pole/Sapling	5		<table border="1"> <thead> <tr> <th>Sub-Canopy Species</th> <th>Density</th> <th>Avg. Height</th> <th>Size</th> </tr> </thead> <tbody> <tr> <td>Jack Pine</td> <td>Low</td> <td>5 - 10 feet</td> <td>Sapling</td> </tr> <tr> <td>Black Cherry</td> <td>Medium</td> <td>Variable</td> <td>Tall Shrub</td> </tr> <tr> <td>Red Pine</td> <td>Trace</td> <td>Variable</td> <td>Sapling</td> </tr> </tbody> </table>		Sub-Canopy Species	Density	Avg. Height	Size	Jack Pine	Low	5 - 10 feet	Sapling	Black Cherry	Medium	Variable	Tall Shrub	Red Pine	Trace	Variable	Sapling
Canopy Species	% Cover	Size Class	DBH	Age																																																			
White Oak	5	Log/Pole	12																																																				
Northern Pin Oak	20	Log/XLog	17	103																																																			
White Pine	10	Log/Pole	12																																																				
Red Pine	5	Pole/Log/Sap	7																																																				
Jack Pine	55	Pole/Sapling	6	43																																																			
Red Maple	5	Pole/Sapling	5																																																				
Sub-Canopy Species	Density	Avg. Height	Size																																																				
Jack Pine	Low	5 - 10 feet	Sapling																																																				
Black Cherry	Medium	Variable	Tall Shrub																																																				
Red Pine	Trace	Variable	Sapling																																																				
29	42220 - Natural Jack Pine	Sawtimber Medium	22.3	105	51-80	N/A	Mature to overmature JP on transition ground between the uplands and the swamp. The overmature JP is 100+ years old. The younger mature JP is in its 60's. The JP's 2-aged condition cannot be reflected due to a current MiFI "rule". Featured the highest-risk JP for the dominant age; that component is top-dying and windthrowing. Spruce mixes in on the lowest ground, and WP & RP on the drier ground. Traces of RM & NPO. Heavy deer use; even some browse on spruce regen.																																																
<table border="1"> <thead> <tr> <th>Canopy Species</th> <th>% Cover</th> <th>Size Class</th> <th>DBH</th> <th>Age</th> </tr> </thead> <tbody> <tr> <td>White Pine</td> <td>10</td> <td>Pole/Log</td> <td>9</td> <td></td> </tr> <tr> <td>Red Pine</td> <td>5</td> <td>Log/XLog/Pole</td> <td>14</td> <td></td> </tr> <tr> <td>Jack Pine</td> <td>75</td> <td>Log/Pole</td> <td>10</td> <td>105</td> </tr> <tr> <td>Black Spruce</td> <td>10</td> <td>Pole/Log</td> <td>9</td> <td></td> </tr> </tbody> </table>		Canopy Species	% Cover	Size Class	DBH	Age		White Pine	10	Pole/Log	9		Red Pine	5	Log/XLog/Pole	14		Jack Pine	75	Log/Pole	10	105	Black Spruce	10	Pole/Log	9		<table border="1"> <thead> <tr> <th>Sub-Canopy Species</th> <th>Density</th> <th>Avg. Height</th> <th>Size</th> </tr> </thead> <tbody> <tr> <td>Black Spruce</td> <td>Trace</td> <td>Variable</td> <td>Sapling</td> </tr> <tr> <td>White Pine</td> <td>Low</td> <td>Variable</td> <td>Sapling</td> </tr> <tr> <td>Jack Pine</td> <td>Low</td> <td>5 - 10 feet</td> <td>Sapling</td> </tr> <tr> <td>Black Cherry</td> <td>Medium</td> <td>Variable</td> <td>Tall Shrub</td> </tr> </tbody> </table>		Sub-Canopy Species	Density	Avg. Height	Size	Black Spruce	Trace	Variable	Sapling	White Pine	Low	Variable	Sapling	Jack Pine	Low	5 - 10 feet	Sapling	Black Cherry	Medium	Variable	Tall Shrub						
Canopy Species	% Cover	Size Class	DBH	Age																																																			
White Pine	10	Pole/Log	9																																																				
Red Pine	5	Log/XLog/Pole	14																																																				
Jack Pine	75	Log/Pole	10	105																																																			
Black Spruce	10	Pole/Log	9																																																				
Sub-Canopy Species	Density	Avg. Height	Size																																																				
Black Spruce	Trace	Variable	Sapling																																																				
White Pine	Low	Variable	Sapling																																																				
Jack Pine	Low	5 - 10 feet	Sapling																																																				
Black Cherry	Medium	Variable	Tall Shrub																																																				
30	6122 - Black Spruce	Poletimber Well	6.4	100	81-110	N/A	Black spruce with overmature JP on low but not flooded ground. The JP has been dying out. Cover becomes sparser on the bog ground in the NW; more spruce in saplings than poles on the leatherleaf there.																																																
<table border="1"> <thead> <tr> <th>Canopy Species</th> <th>% Cover</th> <th>Size Class</th> <th>DBH</th> <th>Age</th> </tr> </thead> <tbody> <tr> <td>Black Spruce</td> <td>80</td> <td>Pole/Sap/Log</td> <td>8</td> <td>100</td> </tr> <tr> <td>Jack Pine</td> <td>20</td> <td>Pole/Log</td> <td>8</td> <td>85</td> </tr> </tbody> </table>		Canopy Species	% Cover	Size Class	DBH	Age		Black Spruce	80	Pole/Sap/Log	8	100	Jack Pine	20	Pole/Log	8	85	<table border="1"> <thead> <tr> <th>Sub-Canopy Species</th> <th>Density</th> <th>Avg. Height</th> <th>Size</th> </tr> </thead> <tbody> <tr> <td>Black Spruce</td> <td>Low</td> <td>Variable</td> <td>Sapling</td> </tr> </tbody> </table>		Sub-Canopy Species	Density	Avg. Height	Size	Black Spruce	Low	Variable	Sapling																												
Canopy Species	% Cover	Size Class	DBH	Age																																																			
Black Spruce	80	Pole/Sap/Log	8	100																																																			
Jack Pine	20	Pole/Log	8	85																																																			
Sub-Canopy Species	Density	Avg. Height	Size																																																				
Black Spruce	Low	Variable	Sapling																																																				
31	320 - Upland Shrub	Nonstocked	5.5	0	Unspecified	No	Valley stand with BC brush, NPO snags, and scattered WP, WO, JP, RM, RP & declining NPO.																																																



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	Managed Site	General Comments																																																																	
32	4126 - White, Black, N. Pin Oak	Sawtimber Medium	17.7	97	1-50	N/A	Dry valley stand. Most of the NPO has died out. WO maintaining. Younger age class in the WP & RP. Occasional cull BTA. Canopy closure drifts off either end of the 50-75% closure category. Snags and DWD increase to the west; stand becomes more sparse there. NPO age from previous inventory.																																																																	
<table border="1"> <thead> <tr> <th>Canopy Species</th> <th>% Cover</th> <th>Size Class</th> <th>DBH</th> <th>Age</th> </tr> </thead> <tbody> <tr><td>Red Maple</td><td>8</td><td>Pole/Sap/Log</td><td>7</td><td></td></tr> <tr><td>White Oak</td><td>40</td><td>Log/Pole</td><td>11</td><td>97</td></tr> <tr><td>Northern Pin Oak</td><td>20</td><td>Log/XLog</td><td>15</td><td>104</td></tr> <tr><td>White Pine</td><td>24</td><td>Pole/Log</td><td>9</td><td>56</td></tr> <tr><td>Jack Pine</td><td>1</td><td>Pole/Log</td><td>8</td><td></td></tr> <tr><td>Red Pine</td><td>4</td><td>Log/Pole</td><td>10</td><td></td></tr> <tr><td>Bigtooth Aspen</td><td>1</td><td>Log</td><td>14</td><td></td></tr> <tr><td>Red Oak</td><td>2</td><td>Log/Pole</td><td>12</td><td></td></tr> </tbody> </table>		Canopy Species	% Cover	Size Class	DBH	Age		Red Maple	8	Pole/Sap/Log	7		White Oak	40	Log/Pole	11	97	Northern Pin Oak	20	Log/XLog	15	104	White Pine	24	Pole/Log	9	56	Jack Pine	1	Pole/Log	8		Red Pine	4	Log/Pole	10		Bigtooth Aspen	1	Log	14		Red Oak	2	Log/Pole	12		<table border="1"> <thead> <tr> <th>Sub-Canopy Species</th> <th>Density</th> <th>Avg. Height</th> <th>Size</th> </tr> </thead> <tbody> <tr><td>Red Pine</td><td>Trace</td><td>Variable</td><td>Sapling</td></tr> <tr><td>White Pine</td><td>Low</td><td>Variable</td><td>Sapling</td></tr> <tr><td>Black Cherry</td><td>Low</td><td>Variable</td><td>Tall Shrub</td></tr> </tbody> </table>		Sub-Canopy Species	Density	Avg. Height	Size	Red Pine	Trace	Variable	Sapling	White Pine	Low	Variable	Sapling	Black Cherry	Low	Variable	Tall Shrub							
Canopy Species	% Cover	Size Class	DBH	Age																																																																				
Red Maple	8	Pole/Sap/Log	7																																																																					
White Oak	40	Log/Pole	11	97																																																																				
Northern Pin Oak	20	Log/XLog	15	104																																																																				
White Pine	24	Pole/Log	9	56																																																																				
Jack Pine	1	Pole/Log	8																																																																					
Red Pine	4	Log/Pole	10																																																																					
Bigtooth Aspen	1	Log	14																																																																					
Red Oak	2	Log/Pole	12																																																																					
Sub-Canopy Species	Density	Avg. Height	Size																																																																					
Red Pine	Trace	Variable	Sapling																																																																					
White Pine	Low	Variable	Sapling																																																																					
Black Cherry	Low	Variable	Tall Shrub																																																																					
33	4124 - Red with White Oak	Sawtimber Well	136.8	104	111-140	N/A	Mature oak stand on shallow rolling terrain. Site quality is best on the hilltops and north aspects, with relatively uniform RO cover. The proportion in WO increases on the drier lower slopes. NPO mixes in on the stand margins, much of it dead. Suppressed-intermediate oak poles and some co-dominant RO saw have been weeding out. Occasional small clump of overmature BTA. RM regen mainly along the stand margins, traces of WP interior. Ski, MtB trails wind through, also part of LandNav course.																																																																	
<table border="1"> <thead> <tr> <th>Canopy Species</th> <th>% Cover</th> <th>Size Class</th> <th>DBH</th> <th>Age</th> </tr> </thead> <tbody> <tr><td>Red Maple</td><td>6</td><td>Pole/Sapling</td><td>5</td><td></td></tr> <tr><td>Red Oak</td><td>70</td><td>Log/Pole</td><td>13</td><td>104</td></tr> <tr><td>White Oak</td><td>20</td><td>Log/Pole</td><td>11</td><td></td></tr> <tr><td>Bigtooth Aspen</td><td>2</td><td>Log</td><td>12</td><td></td></tr> <tr><td>Northern Pin Oak</td><td>2</td><td>Log/XLog</td><td>15</td><td></td></tr> </tbody> </table>		Canopy Species	% Cover	Size Class	DBH	Age		Red Maple	6	Pole/Sapling	5		Red Oak	70	Log/Pole	13	104	White Oak	20	Log/Pole	11		Bigtooth Aspen	2	Log	12		Northern Pin Oak	2	Log/XLog	15		<table border="1"> <thead> <tr> <th>Sub-Canopy Species</th> <th>Density</th> <th>Avg. Height</th> <th>Size</th> </tr> </thead> <tbody> <tr><td>Red Maple</td><td>Trace</td><td>Variable</td><td>Sapling</td></tr> <tr><td>White Pine</td><td>Trace</td><td>Variable</td><td>Sapling</td></tr> </tbody> </table>		Sub-Canopy Species	Density	Avg. Height	Size	Red Maple	Trace	Variable	Sapling	White Pine	Trace	Variable	Sapling																										
Canopy Species	% Cover	Size Class	DBH	Age																																																																				
Red Maple	6	Pole/Sapling	5																																																																					
Red Oak	70	Log/Pole	13	104																																																																				
White Oak	20	Log/Pole	11																																																																					
Bigtooth Aspen	2	Log	12																																																																					
Northern Pin Oak	2	Log/XLog	15																																																																					
Sub-Canopy Species	Density	Avg. Height	Size																																																																					
Red Maple	Trace	Variable	Sapling																																																																					
White Pine	Trace	Variable	Sapling																																																																					
34	310 - Herbaceous Openland	Nonstocked	4.2		Unspecified	No	Shallow frost pocket depression. Some little bluestem visible above the snow. Perimeter NPO regen. Scattered JP. Most of the mature NPO is dead.																																																																	
35	4126 - White, Black, N. Pin Oak	Sawtimber Medium	46.6	105	1-50	N/A	Most of the stand was within a prison crew firewood harvest in 2003-2004, cutting RM & dead/declining NPO. 20,000 white pine were interplanted (without trenching) in 2008 (C72-560), excluding the stand's south and east ends. The planted WP is above 5' tall except where the overstory is heavier. The understory RM is mostly stump-origin from the cut. Mature NPO continues to drop out of the canopy; most of the surviving NPO is in the stand's south end. Dominant cover has shifted to WO, with RO mixing in on the upper slopes. Canopy closure drifts off either end of 50-75%. BAs range 0-80, ave 45. NPO age is from the previous inventory.																																																																	
<table border="1"> <thead> <tr> <th>Canopy Species</th> <th>% Cover</th> <th>Size Class</th> <th>DBH</th> <th>Age</th> </tr> </thead> <tbody> <tr><td>Red Maple</td><td>5</td><td>Pole/Sap/Log</td><td>8</td><td></td></tr> <tr><td>White Oak</td><td>40</td><td>Log/Pole</td><td>12</td><td>105</td></tr> <tr><td>Northern Pin Oak</td><td>20</td><td>Log/XLog</td><td>16</td><td>103</td></tr> <tr><td>Red Oak</td><td>30</td><td>Log/XLog</td><td>14</td><td></td></tr> <tr><td>White Pine</td><td>1</td><td>Pole/Log</td><td>8</td><td></td></tr> <tr><td>Quaking Aspen</td><td>2</td><td>Pole</td><td>8</td><td></td></tr> <tr><td>Jack Pine</td><td>2</td><td>Pole/Log</td><td>8</td><td></td></tr> </tbody> </table>		Canopy Species	% Cover	Size Class	DBH	Age		Red Maple	5	Pole/Sap/Log	8		White Oak	40	Log/Pole	12	105	Northern Pin Oak	20	Log/XLog	16	103	Red Oak	30	Log/XLog	14		White Pine	1	Pole/Log	8		Quaking Aspen	2	Pole	8		Jack Pine	2	Pole/Log	8		<table border="1"> <thead> <tr> <th>Sub-Canopy Species</th> <th>Density</th> <th>Avg. Height</th> <th>Size</th> </tr> </thead> <tbody> <tr><td>Red Maple</td><td>Medium</td><td>10 - 20 feet</td><td>Sapling</td></tr> <tr><td>White Pine</td><td>Medium</td><td>5 - 10 feet</td><td>Sapling</td></tr> <tr><td>Northern Pin Oak</td><td>Low</td><td>< 5 feet</td><td>Seeding</td></tr> <tr><td>Northern Pin Oak</td><td>Low</td><td>Variable</td><td>Sapling</td></tr> <tr><td>Black Cherry</td><td>Low</td><td>Variable</td><td>Tall Shrub</td></tr> <tr><td>White Oak</td><td>Low</td><td>< 5 feet</td><td>Sapling</td></tr> </tbody> </table>		Sub-Canopy Species	Density	Avg. Height	Size	Red Maple	Medium	10 - 20 feet	Sapling	White Pine	Medium	5 - 10 feet	Sapling	Northern Pin Oak	Low	< 5 feet	Seeding	Northern Pin Oak	Low	Variable	Sapling	Black Cherry	Low	Variable	Tall Shrub	White Oak	Low	< 5 feet	Sapling
Canopy Species	% Cover	Size Class	DBH	Age																																																																				
Red Maple	5	Pole/Sap/Log	8																																																																					
White Oak	40	Log/Pole	12	105																																																																				
Northern Pin Oak	20	Log/XLog	16	103																																																																				
Red Oak	30	Log/XLog	14																																																																					
White Pine	1	Pole/Log	8																																																																					
Quaking Aspen	2	Pole	8																																																																					
Jack Pine	2	Pole/Log	8																																																																					
Sub-Canopy Species	Density	Avg. Height	Size																																																																					
Red Maple	Medium	10 - 20 feet	Sapling																																																																					
White Pine	Medium	5 - 10 feet	Sapling																																																																					
Northern Pin Oak	Low	< 5 feet	Seeding																																																																					
Northern Pin Oak	Low	Variable	Sapling																																																																					
Black Cherry	Low	Variable	Tall Shrub																																																																					
White Oak	Low	< 5 feet	Sapling																																																																					
36	110 - Low Intensity Urban	Nonstocked	1.2	0	Unspecified	No	Camp Grayling Cabins. Outside of the Cantonment fence but accessed through it.																																																																	
37	122 - Road/Parking Lot	Nonstocked	36.4		Unspecified	No	Road and fence corridors and associated roadside clearings.																																																																	