Compartment Review Presentation

Traverse City Forest Management Unit

Compartment 61231
Entry Year: 2027
Acreage: 1,911
County: Kalkaska

Management Area: Camp Grayling

Stand Examiner: Steve Crigier

Legal Description:

T25N R5W, Sections 1, 2 & 3

Identified Planning Goals:

Management goals within the Camp Grayling Management Area and this compartment must be meshed with the needs of the military. Summer troop training areas are most useful when dense forest canopy cover is in place, so the goal shall be to retain a high percentage of timber stands with this condition. Some forest canopy covers will be reduced by shelterwood and other partial cuttings. It is equally important, to have adequate understory and ground covers for military maneuver areas. In the end, a variety of stand conditions will be in place.

Soil and topography:

Excessively drained, poor sandy soils dominate the compartment. The main soil type is Roselawn sand. The terrain ranges from slightly rolling to hilly.

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

The entire land base in this compartment is state owned with the administrative authority being the Department of Military and Veterans Affairs. These lands are commonly referred to as Military Board Lands. FRD manages the timber upon these lands with guidance and direction from the staff of the Michigan National Guard at Camp Grayling. Military troop training is the primary activity in this area. No fenced ranges or live ammunition exercises occur in this area. A mortar range is located just east of this compartment in Crawford County. Some military bivouac areas are located in the compartment and these areas are used annually. In 2001, the military had a trail developed for tracked vehicles and a portion of that route is located near the south, east and west edges of this compartment. This trail, commonly referred to as the tank trail, is no longer in use because there are no tanks in the State of Michigan anymore. A cement refueling pad is located in the very southwest corner of Section 3 (stand 62). Military Board lands are open to the public for recreational use. Public use of the area includes snowmobiling, hunting and mushroom/berry picking. The adjacent lands around the perimeter of this compartment are all state owned.

Unique Natural Features:

No endangered or threatened species of plants or animals are known to exist in the compartment.

Archeological, Historical, and Cultural Features:

This area contains several old railroad grades from the turn of the century logging era. It is the intent of the Military to maintain the integrity of these old grades as they exist today. No known historical or archeological sites are listed for this area.

Special Management Designations or Considerations:

This compartment is entirely under the jurisdiction of the Department of Military and Veteran Affairs.

Watershed and Fisheries Considerations:

There is no water within the compartment.

Wildlife Habitat Considerations:

The north half of the compartment consists of an ice contact ridge (LTA 3111). Topography is generally steep and irregular. Soil types are excessively drained loamy sand. Oak is a major component within this compartment. Aspen stands are also present. The south half of the compartment consists of a broad, flat outwash plain (LTA 5111). Topography is generally level with excessively drained sands. Oak stands and aspen stands again dominate this portion of the compartment. There are also shrubland and one jack pine stand.

Acorns are an important food source for many different wildlife species. Wildlife considerations for oak stands may include leaving a scattering of mast-producing trees, use of harvest methods to perpetuate oak within the community, species diversification within each stand, and leaving of den/nest trees (by sale specification). This will insure biodiversity of wildlife species within these stands. Examples of wildlife found here include fox & gray squirrel, scarlet tanager, spotted

salamander, and garter snake. Aspen stands are an important habitat type for ruffed grouse and white-tailed deer. Ruffed grouse use different aged aspen throughout their life cycle. Younger stands provide cover while older stands provide catkins (food source) for the winter months. Clearcutting helps facilitate age class diversification of aspen by mimicking the necessary disturbances vital for regeneration. The creation of CWD trees for drumming logs and maintaining berry-producing shrubs is also desirable. This compartment is Military Board Land so the creation CWD will be subject to the Military's approval. Where applicable, the shrublands should be maintained by handfelling or by prescribed burning. Shrublands within this LTA type have a history of wildfire, and many species (for example, hill's thistle & little bluestem) respond positively to prescribed burning. The berry-producing shrubs provide an important food source. Examples of wildlife species found here include bluebird, badger, and green snake.

Mineral Resource and Development Concerns and/or Restrictions

Surface sediments consist of ice-contact and glacial outwash sand and gravel and postglacial alluvium. The glacial drift thickness varies between 200 and 600 feet. Beneath the glacial drift are the Mississippian Michigan Formation and Marshall Sandstone. The Michigan is quarried for gypsum and the Marshall has been used as a building stone in other areas of the state. No active gravel pits are located in the area, but there is potential on the uplands. This area is located just north of Garfield 8 and Beaver Creek fields, which both produce oil from multiple zones within the Devonian Detroit River Group and gas from the Ordovician PdC. There are active leases in the SW of Section 3 that are held by production by the Garfield 8 Field, but the majority of the compartment is classified as non-leasable.

Vehicle Access:

Numerous trails and roads are found in the compartment. The road system is extensive and will remain as is since the roads are needed for modern day military training. Roads developed during timber harvests will be closed once the harvest is complete unless the military determines that the road is one that they would like to keep open.

Survey Needs:

No additional corners are necessary.

Recreational Facilities and Opportunities:

There are no designated recreational facilities within this compartment. It is common to find deer camps in this compartment in the Fall. Snowmobilers use the pipeline corridor during the winter. Mushroom hunters and berry pickers use the compartment seasonally. Since the military uses the area for training during the summer, the recreational camping opportunities are limited. (T.M.N. 12/10/14)

Fire Protection:

This compartment is located in a relatively remote part of Kalkaska County that is primarily oak forest. The main forest fire difficulty will be the lengthy response time for initial attack units and the lack of a nearby water supply. It is 27 miles from the Kalkaska Office and 16 miles from the standby station at the Garfield Township Fire Hall. Roads are good for access to the southern part of the compartment. Fires occurring in the north half of the compartment will be much more difficult to access because the North/South roads are generally just two-track trails that often pass through some hilly terrain. Fire control crews will need to assess the topography and insert fire control lines accordingly. There are only small amounts of volatile pine fuels and those are located in the very northwest corner of the compartment so this reduces the chances of a catastrophic fire occurrence. Fires in open grass areas and fires burning up the hillsides may consume a fair amount of area before they can be controlled. Since slash is required to be removed from timber sales that are upon Military Board land, cut-over areas will not contain the usual fuel loads following harvests and may actually act as fuel breaks.

Additional Compartment Information:

Timber harvests upon Military Board lands must be done in such a manner that slash is removed from the sale area, stumps must be cut as low as possible and equipment/forest products must be removed from the sale area during the summer. Logging operations are generally limited during the period of May 1 - October 1. The Tank Trail, which is no longer used by the military, will no longer have restrictions on cutting along the trail. (There use to be restrictions on cutting along the trail to limit regeneration.)

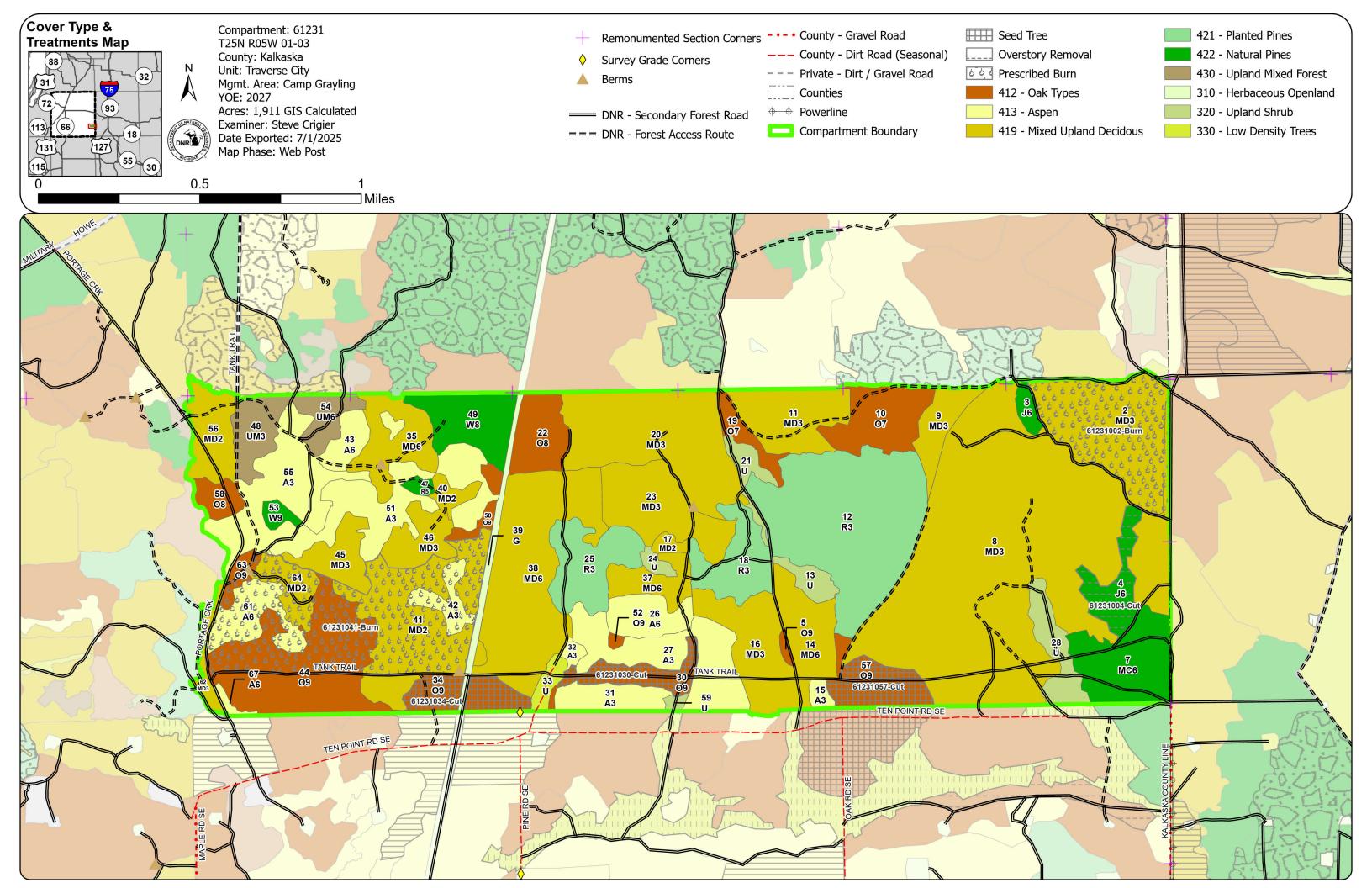
The following reports from the Inventory are attached:

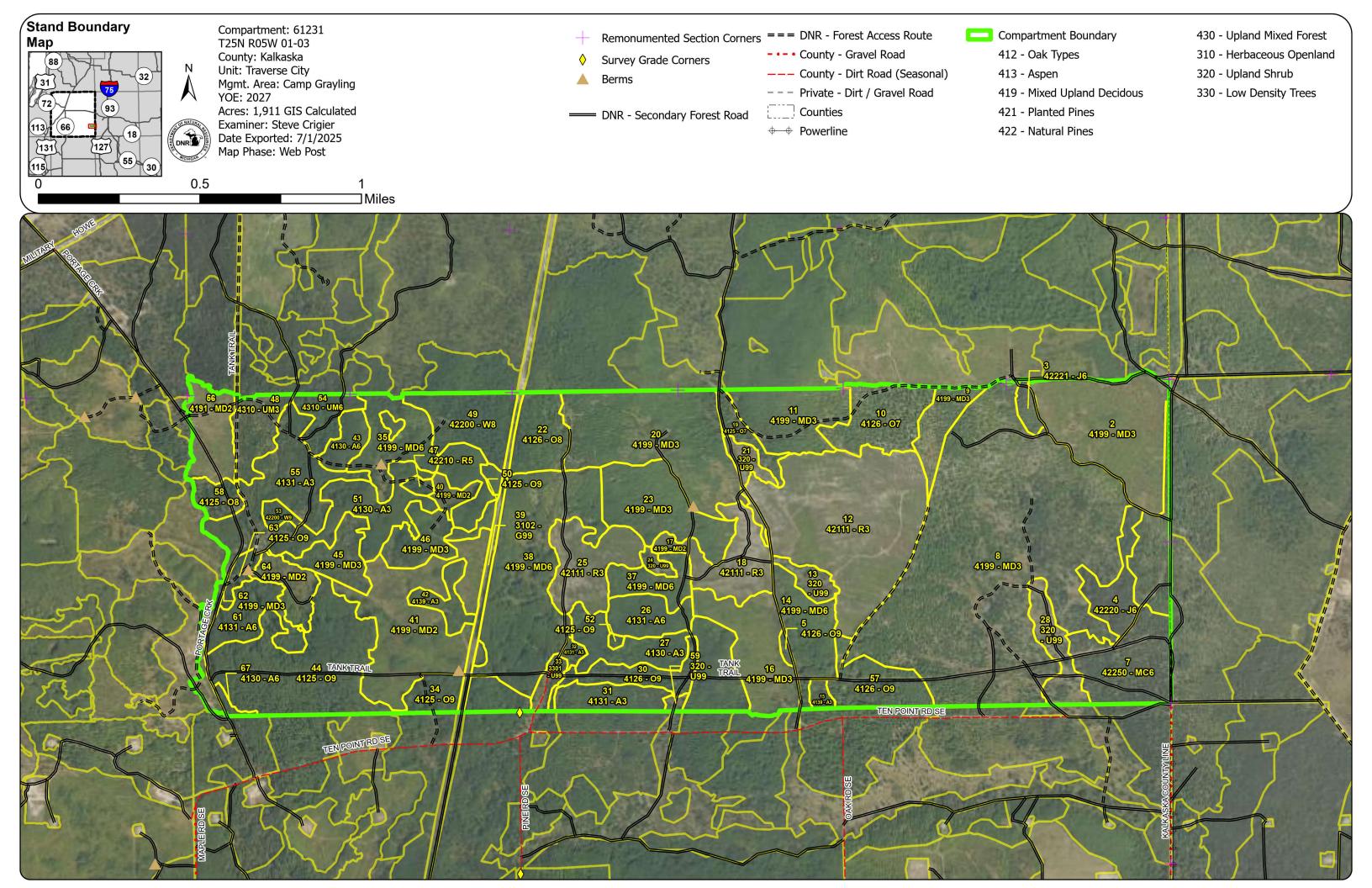
Total Acres by Cover Type and Age Class
Cover Type by Harvest Method
Proposed Treatments – No Limiting Factors
Proposed Treatments – With Limiting Factors
Stand Details (Forested and Nonforested)
Dedicated and Proposed Special Conservation Areas
Site Condition Details

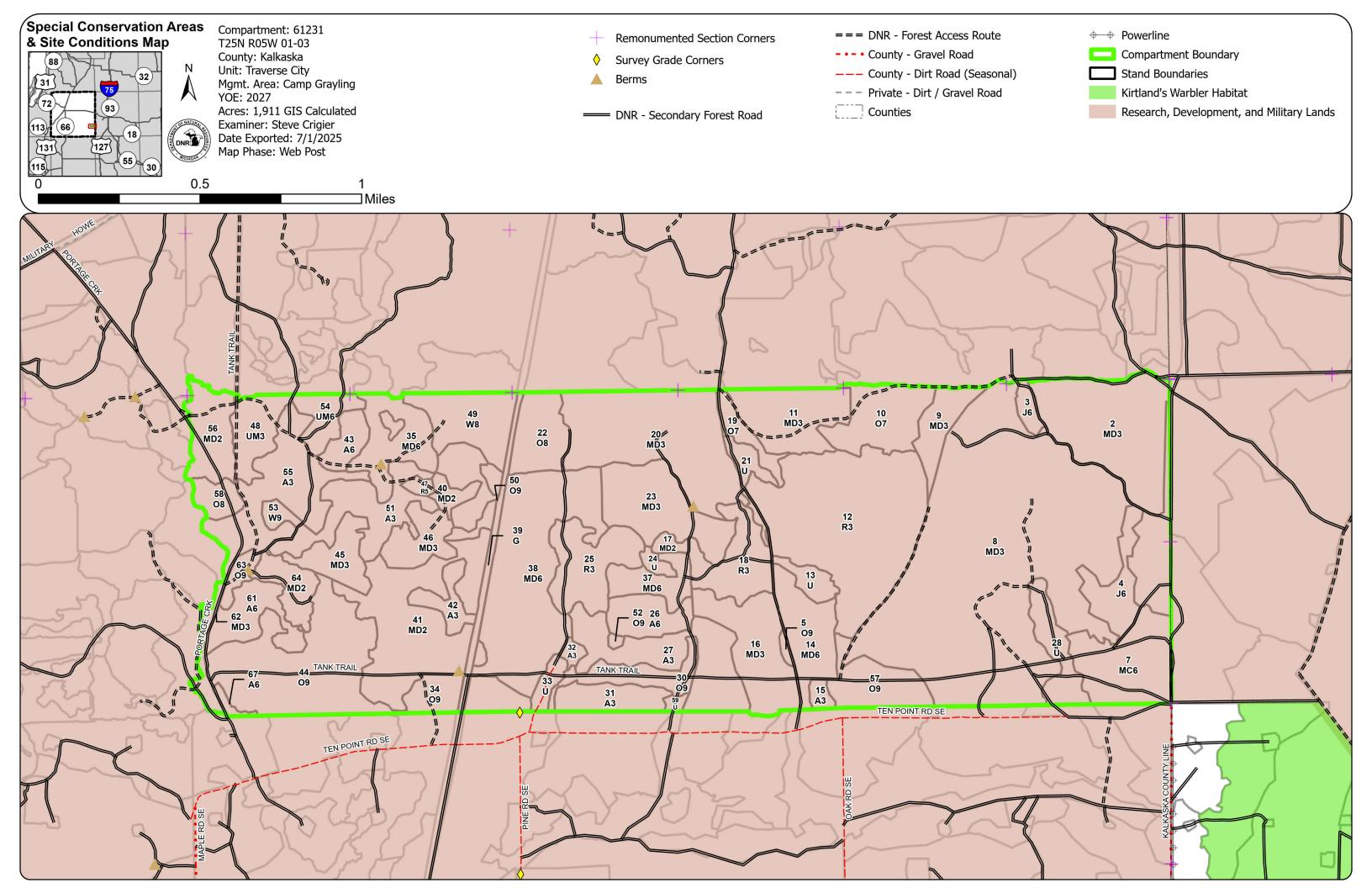
The following information is displayed, where pertinent, on the attached compartment maps:

Base feature information, stand boundaries, cover types, and numbers Proposed treatments Site condition boundaries

Details on the road access system







Traverse City Mgt. Unit
Steve Crigier: Examiner

Age Class

	No.	Ko Ko	3 / 2	\$ \ \$	S &	3 / 6	B R	3/8	3 / 6	\$ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	\$ &	3 2	Zaz,	\$ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	R &			By July	TO T	_
Aspen	0	0	88	54	54	33	26	0	0	0	0	0	0	0	0	0	0	0	254	
Herbaceous Openland	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	
Jack Pine	0	0	0	0	0	0	21	0	6	0	0	0	0	0	0	0	0	0	27	
Low-Density Trees	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	
Mixed Upland Deciduous	0	258	145	421	0	181	0	0	0	0	0	0	0	0	0	0	0	0	1005	
Natural Mixed Pines	0	0	0	0	0	45	0	0	0	0	0	0	0	0	0	0	0	0	45	
Oak	0	0	0	0	0	0	0	0	0	0	170	70	0	0	0	0	0	10	250	
Red Pine	0	194	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	197	
Upland Mixed Forest	0	0	20	0	0	15	0	0	0	0	0	0	0	0	0	0	0	0	35	
Upland Shrub	43	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	43	
White Pine	0	0	0	0	0	0	0	32	0	4	0	0	0	0	0	0	0	0	36	
Total	61	452	253	475	54	274	47	32	9	4	170	70	0	0	0	0	0	10	1910	

Report 2 – Treatment Summary

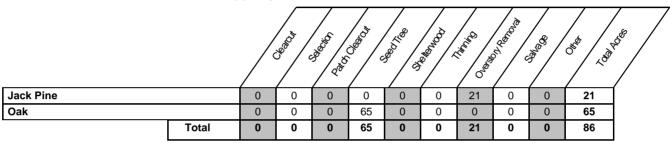
Traverse City Mgt. Unit Year of Entry: 2027

Acres of Harvest

Compartment 231
Total Compartment Acres: 1,911

Commercial Harvest - 151 Harvests with Site Condition - 0 Next Step Harvest - 0 Habitat Cut - 0

Cover Type by Harvest Method



Proposed and Next Step Treatments by Method



s t	Trav	erse City	Mgt. Unit		Repor	t 3 '	Treatments		Compartmen Year of Entry		
a n Treat	tment i	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Habit Cur
oosed Tre	atments	<u>s:</u>									
57 61231	057-Cut	24.2 41	26 - White, Black, N. Pin Oak	9	104	111- 140	Harvest	Seed Tree	4121 - Oak, Aspen	Planting Record	N
Prescription Specs:			mature oak trees/ac ed oak regeneration		rably whi	ite oak, fo	or seed and shel	ter. Also, leave any	red or white pine	e. Try to prote	ct any
Next Step Treatments		ıg, Natura	ıl Regen (Re-Invent	ory)							
Acceptable Regen:	oak, asp	en, maple	e, cherry.								
Other Comment:			y appropriate sale s for a sale (2026YO		nd will n	eed to be	chip harvested	and apply oak wilt r	restriction. Look t	o pair with sta	nd 53 ir
Site Conditi	on:										
Proposed S	tart Date:	10/01/20	25								
	31041- Burn		199 - Other Mixed Jpland Deciduous	2	8	Immatu re	Burn	Prescribed Burn	412 - Oak Types	Planting Record	N
Prescription Specs:	years aft	er the init						ulate the stunted oa lings, above 4' tall,			
Next Step Treatments	<u>:</u>										
Acceptable Regen:	-										
Other Comment:	DMVĂ/M	ilitary land ass severa	d and will need Can al timber types to br	np Graylir ing lines	ng appro out to ex	val and n	otification. Poss	ne on the east boun sible timing restriction on stand 44 the goal	on due to training	activities. Bu	
<u>Comment.</u>		ry before	the stand is harvest	ea in 203	<i>,</i> .						
Site Conditi	understo	ry before	the stand is harves	ea in 203							
	understo			.ea in 203							
Site Conditi	understo	10/01/20		9	102	141- 170	Harvest	Seed Tree	4121 - Oak, Aspen	Cutting Record	N
Site Conditi Proposed S 34 61231	understo ion: Start Date: 1034-Cut Mark to le	10/01/20 23.2 41 eave 3-5	26 I25 - Black, N. Pin Oak	9 er acre (p	102	170 white oa	ık where possible	Seed Tree e) to leave as a sou	Aspen	Record	N
Site Conditi Proposed S 34 61231 Prescription	understo ion: Start Date: 1034-Cut Mark to lipine. Try Monitorir	23.2 4° eave 3-5 v to protect	26 I25 - Black, N. Pin Oak mature oak trees pe	9 er acre (p lvanced c	102	170 white oa	ık where possible		Aspen	Record	N
Site Conditi Proposed S 34 61231 Prescription Specs: Next Step	understo ion: Start Date: 1034-Cut Mark to le pine. Try Monitorin	23.2 41 eave 3-5 v to protecting, Natura	26 I25 - Black, N. Pin Oak mature oak trees pe ct any pockets of ac	9 er acre (p lvanced c	102	170 white oa	ık where possible		Aspen	Record	N

Site Condition:

Proposed Start Date: 10/01/2025

Next Step

Treatments:

Acceptable

Regen:

DMVA/Military lands and will require Camp Grayling approval and notification. Might have to adjust operations depending on training **Other**

Comment: schedule.

Site Condition:

Proposed Start Date: 10/01/2026

Total Treatment 340.3 Acreage Proposed:

Report 4 - Site Conditions

Traverse City Mgt. Unit

Steve Crigier: Examiner





Availability for Management Total Acres Avail Acres Acres Available With Condition Not Available 5E

JL		140t / tvaliable		/ Wallable	710100
	Aspen	0	0	255	255
	Herbaceous Openland	0	0	12	12
	Jack Pine	0	0	26	26
	Low-Density Trees	0	0	6	6
	Mixed Upland Deciduous	0	0	1005	1005
	Natural Mixed Pines	0	0	45	45
12	Oak	12	0	214	227
	Red Pine	0	0	197	197
	Upland Mixed Forest	0	0	35	35
	Upland Shrub	0	0	43	43
	White Pine	0	0	37	36
12	Total Forested Acres	12		1,875	1,888
	Relative Percent	1%		99%	

^{*}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	5E: Long-Term Retention	7	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
2	Unavailable	5E: Long-Term Retention	2	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: Long term retention	for stand 16 harvest.					
3	Unavailable	5E: Long-Term Retention	1	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						

Report 4 – Site Conditions

Traverse City Mgt. Unit

Steve Crigier: Examiner

Compartment: 231 Year of Entry: 2027



5	Unavailable	5E: Long-Term Retention	3	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: For stand 57 harves	st.					
6	Unavailable	2F: Too steep	2	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
7	Unavailable	5E: Long-Term Retention	1	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: For stand 30 harves	st.					

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				

5

12

Sapling

42

Jack Pine

											Tour or Entry. 2027
Stan	d Level 4 C	over Type		Size De	ensity	Acres	Stand Age B	A Range	Managed S	Site	General Comments
2	4199 - Other Mixe	d Upland [Deciduous	Saplin	g Well	74.9	8 li	mmature	N/A	A	2024- Nice mix of species with decent oak recruitment. Heavy browse
	Canopy Species	% Cove	Size Class	DBI	H Age	Sub-Car	nopy Species	Density	Avg. Height	Size	n areas has made the stocking patchy or variable. 2020-A few aspen clones throughout stand, final harvested with 231 deadish oak.
Bla	ack/Red (Hybrid) Oak	20	Log	1	8	Oa	k (spp.)	Medium	< 5 feet	< 5 feet	some pockets of regen saved, alot of the oak that was cut was dead,
	White Oak	5	Log	1	8	Re	d Maple	Medium	5 - 10 feet	5 - 10 feet	expect to push hard to maple and aspen with some conifer and
	Red Maple	40	Log	1	8	Bigto	oth Aspen	Low	10 - 20 feet	10 - 20 feet	
	Quaking Aspen	25	Log	1	8						_
	Pin Cherry	10	Log	1	8						
3	42221 - Natural Dec	Jack Pine iduous	, Mixed P	oletimb	oer Well	5.7	79	51-80	N/A	A	2024- Jack pine overstory is deteriorating. Oak and maple are developing in the gaps in the canopy. Mix of oak in the canopy.2015-
	Canopy Species	% Cove	Size Class	DBI	H Age	Sub-Car	nopy Species	Density	Avg. Height	Size	Would treat this stand but concerned with bullets in trees.
Bla	nck/Red (Hybrid) Oak	15		10	79	Black/Red	d (Hybrid) Oak	Low	10 - 20 feet	10 - 20 feet	
	Jack Pine	70		8	79	Re	d Maple	Medium	>20 feet	>20 feet	
	White Oak	10	Seedling	7	79						-
	Red Maple	5	Seedling	8	79						
4	42220 - Nat	ural Jack F	Pine P	oletimb	oer Well	20.7	59	51-80	N/A	4	2025- Oak is filling in the understory with a trace of white pine. Some
	Canopy Species	% Cover	Size Class	DBI	H Age	Sub-Car	nopy Species	Density	Avg. Height	Size	individual stem mortality in the jack pine. Some scattered oak in the overstory. Some variability in the stocking 2015-Could treat except
	White Oak	4		10		Black/Red	d (Hybrid) Oak	High	Variable	Variable	for possible bullets in trees.
	Red Pine	3		12	59	Wh	ite Pine	Trace	Variable	Variable	
	White Pine	3		10	59	Ja	ck Pine	Medium	Variable	Variable	
	Jack Pine	90		8	59						_
5	4126 - White, E	Black, N. P	in Oak S	awtimb	er Well	1.8	105	51-80	N/A	A	Left as retention for stand 16 harvest.
	Canopy Species	% Cover	Size Class	DBI	H Age	Sub-Car	nopy Species	Density	Avg. Height	Size	
	Red Maple	15		10		Re	d Maple	Low	Variable	Variable	
	White Oak	20		14					1		
Bla	ack/Red (Hybrid) Oak	65		14	105						
7	42250 -	Pine, Oak	Р	oletimb	oer Well	44.6	42	51-80	N/A	A	2025- stand transitioning to pole size timber. Nice mix of oak.
	Canopy Species	% Cove	Size Class	DBI	H Age	Sub-Car	nopy Species	Density	Avg. Height	Size	Scattered mature red pine. 2015- Stand was cut in 1982.
Bla	ack/Red (Hybrid) Oak	30	Sapling	5	42	Black/Red	d (Hybrid) Oak	Low	10 - 20 feet	10 - 20 feet	
											†

Low

Variable

Variable

Jack Pine

Red Pine

65

5

Compartment: 231

Stand	d Level 4 Co	over Type		Size De	nsity	Acres Stand	Age BA	A Range	Managed Si	te	General Comments
8	4199 - Other Mixed	d Upland D	eciduous	Sapling	Well	337.7 23	lr	nmature	N/A		2024- Regen is filling well, with some open areas in the south and
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy S	pecies	Density	Avg. Height	Size	east part of the stand. Also, some scattered mature red and white pine.2015-Scattered white oak logs throughout stand. Also small
Bla	ck/Red (Hybrid) Oak	35	Log	2	23	Witch Haz	el	Low	5 - 10 feet	5 - 10 feet	clumps of mature jack pine within stand. Sale #023-00 - had to refund
	Jack Pine	5	Log	2	23						a lot of money on this sale because of bullets in trees.
	White Oak	12	Log	1	23						
	White Oak	5		12							
	Red Pine	3		12							
	Quaking Aspen	10	Log	2	23						
	Pin Cherry	5	Log	2	23						
	Red Maple	25	Log	2	23						
9	4199 - Other Mixed	d Upland D	eciduous	Sapling		17.5 15	i Ir	nmature	N/A		231 Lone Oak Sale #684-07. Oak has been hammered by deer browse.
	Canopy Species	% Cover	Size Class	DBH	Age						blowse.
Bla	ick/Red (Hybrid) Oak	40	Log	1	15						
	White Oak	10	Log	1	15						
	Red Maple	45	Log	1	15						
	Bigtooth Aspen	5	Log	2	15						
10	4126 - White, B			Sawtimbe		33.6 94		1-50	N/A		2024- Regen is filling in the understory. Over story looks healthy. Overstory stocking is variable.2015 - Stand was cut as part of the
	Canopy Species		Size Class		Age	Sub-Canopy S	•	Density	Avg. Height	Size	Salt Lick Sale #027-00. All oak <12" was cut along with all aspen and
-	White Oak	20					nan	Low	10 - 20 feet	10 - 20 feet	red maple. 3 dead oak/acre was also left.
Bla				12	94	Quaking Asp					Tournapion o acad cartació nac alco ion
	ck/Red (Hybrid) Oak	75		16	94	White Oal	k	Trace	5 - 10 feet	5 - 10 feet	100 110 100 100 100 100 100 100 100 100
	White Pine				_	White Oal	k id) Oak	Trace Medium	5 - 10 feet 10 - 20 feet	5 - 10 feet 10 - 20 feet	
	, , ,	75		16	_	White Oal Black/Red (Hybr	k id) Oak e	Trace Medium Trace	5 - 10 feet 10 - 20 feet < 5 feet	5 - 10 feet 10 - 20 feet < 5 feet	
	, , ,	75		16	_	White Oal	k id) Oak e	Trace Medium	5 - 10 feet 10 - 20 feet	5 - 10 feet 10 - 20 feet	
11	, , ,	75 5	eciduous	16 10 Sapling	94 Well	White Oal Black/Red (Hybr White Pine Red Maple	k id) Oak e e Ir	Trace Medium Trace	5 - 10 feet 10 - 20 feet < 5 feet 10 - 20 feet N/A	5 - 10 feet 10 - 20 feet < 5 feet 10 - 20 feet	2025- Well stocked stand. Nice clone of big tooth aspen in the west
11	White Pine	75 5	eciduous Size Class	16 10 Sapling	94 Well	White Oal Black/Red (Hybr White Pine Red Maple	k id) Oak e e Ir	Trace Medium Trace Medium	5 - 10 feet 10 - 20 feet < 5 feet 10 - 20 feet	5 - 10 feet 10 - 20 feet < 5 feet 10 - 20 feet	
	White Pine 4199 - Other Mixed Canopy Species ick/Red (Hybrid) Oak	75 5 d Upland D % Cover 35		Sapling DBH 3	Well Age 23	White Oal Black/Red (Hybr White Pine Red Maple	k id) Oak e e Ir	Trace Medium Trace Medium	5 - 10 feet 10 - 20 feet < 5 feet 10 - 20 feet N/A	5 - 10 feet 10 - 20 feet < 5 feet 10 - 20 feet	2025- Well stocked stand. Nice clone of big tooth aspen in the west part of the stand. In the future it might be worth soperating out the
	White Pine 4199 - Other Mixed Canopy Species	75 5 d Upland D % Cover	Size Class	16 10 Sapling	94 Well Age 23 23	White Oal Black/Red (Hybr White Pine Red Maple 37.8 23 Sub-Canopy S	k id) Oak e e Ir	Trace Medium Trace Medium mmature Density	5 - 10 feet 10 - 20 feet < 5 feet 10 - 20 feet N/A Avg. Height	5 - 10 feet 10 - 20 feet < 5 feet 10 - 20 feet	2025- Well stocked stand. Nice clone of big tooth aspen in the west part of the stand. In the future it might be worth soperating out the pockets of aspen. 2014-This stand was cut as part of the Salt Lick
	White Pine 4199 - Other Mixed Canopy Species ick/Red (Hybrid) Oak	75 5 d Upland D % Cover 35	Size Class Log	Sapling DBH 3	94 Well Age 23 23 23	White Oal Black/Red (Hybr White Pine Red Maple 37.8 23 Sub-Canopy S	k id) Oak e e Ir	Trace Medium Trace Medium mmature Density	5 - 10 feet 10 - 20 feet < 5 feet 10 - 20 feet N/A Avg. Height	5 - 10 feet 10 - 20 feet < 5 feet 10 - 20 feet	2025- Well stocked stand. Nice clone of big tooth aspen in the west part of the stand. In the future it might be worth soperating out the pockets of aspen. 2014-This stand was cut as part of the Salt Lick
	White Pine 4199 - Other Mixed Canopy Species ack/Red (Hybrid) Oak White Oak	75 5 Upland D % Cover 35 5	Size Class Log Log	16 10 Sapling DBH	94 Well Age 23 23	White Oal Black/Red (Hybr White Pine Red Maple 37.8 23 Sub-Canopy S	k id) Oak e e Ir	Trace Medium Trace Medium mmature Density	5 - 10 feet 10 - 20 feet < 5 feet 10 - 20 feet N/A Avg. Height	5 - 10 feet 10 - 20 feet < 5 feet 10 - 20 feet	2025- Well stocked stand. Nice clone of big tooth aspen in the west part of the stand. In the future it might be worth soperating out the pockets of aspen. 2014-This stand was cut as part of the Salt Lick
	White Pine 4199 - Other Mixed Canopy Species ack/Red (Hybrid) Oak White Oak Red Maple Bigtooth Aspen 42111 - Planted	75 5 4 Upland D % Cover 35 5 30 30 30	Size Class Log Log Log Log Log	16 10 Sapling DBH 3 1 3	94 Well Age 23 23 23 23	White Oal Black/Red (Hybr White Pine Red Maple 37.8 23 Sub-Canopy S	k id) Oak e e f Ir	Trace Medium Trace Medium mmature Density	5 - 10 feet 10 - 20 feet < 5 feet 10 - 20 feet N/A Avg. Height	5 - 10 feet 10 - 20 feet < 5 feet 10 - 20 feet	2025- Well stocked stand. Nice clone of big tooth aspen in the west part of the stand. In the future it might be worth soperating out the pockets of aspen. 2014-This stand was cut as part of the Salt Lick Sale #027-00 in 2001. 2024- Red pine on an oak / aspen site. Mild terrain. Red maple and cherry competition along the east side of the stand.2020-Stand had
Bla	White Pine 4199 - Other Mixed Canopy Species ack/Red (Hybrid) Oak White Oak Red Maple Bigtooth Aspen 42111 - Planted	75 5	Size Class Log Log Log Log Log	Sapling DBH 3 1 3 3 Sapling	94 Well Age 23 23 23 23	White Oal Black/Red (Hybr White Pine Red Maple 37.8 23 Sub-Canopy S Witch Haze	k id) Oak e e f Ir	Trace Medium Trace Medium mmature Density Low	5 - 10 feet 10 - 20 feet < 5 feet 10 - 20 feet N/A Avg. Height 5 - 10 feet	5 - 10 feet 10 - 20 feet < 5 feet 10 - 20 feet	2025- Well stocked stand. Nice clone of big tooth aspen in the west part of the stand. In the future it might be worth soperating out the pockets of aspen. 2014-This stand was cut as part of the Salt Lick Sale #027-00 in 2001. 2024- Red pine on an oak / aspen site. Mild terrain. Red maple and cherry competition along the east side of the stand.2020-Stand had a chapter 7 done to allow the salvage of the dead and dying oak and
Bla	White Pine 4199 - Other Mixed Canopy Species ck/Red (Hybrid) Oak White Oak Red Maple Bigtooth Aspen 42111 - Planted Deci	75 5	Size Class Log Log Log Log Mixed	Sapling DBH 3 1 3 3 Sapling	94 Well Age 23 23 23 Well	White Oal Black/Red (Hybr White Pine Red Maple 37.8 23 Sub-Canopy S Witch Haze	k id) Oak e e f Ir	Trace Medium Trace Medium mmature Density Low	5 - 10 feet 10 - 20 feet < 5 feet 10 - 20 feet N/A Avg. Height 5 - 10 feet	5 - 10 feet 10 - 20 feet < 5 feet 10 - 20 feet	2025- Well stocked stand. Nice clone of big tooth aspen in the west part of the stand. In the future it might be worth soperating out the pockets of aspen. 2014-This stand was cut as part of the Salt Lick Sale #027-00 in 2001. 2024- Red pine on an oak / aspen site. Mild terrain. Red maple and cherry competition along the east side of the stand.2020-Stand had a chapter 7 done to allow the salvage of the dead and dying oak and area to be planted to a fully stocker red pine stand. cut and trenched
Bla	White Pine 4199 - Other Mixed Canopy Species ack/Red (Hybrid) Oak White Oak Red Maple Bigtooth Aspen 42111 - Planted Deci Canopy Species	75 5	Size Class Log Log Log Log Size Class	Sapling DBH 3 1 3 3 Sapling	94 Well Age 23 23 23 Well Age	White Oal Black/Red (Hybr White Pine Red Maple 37.8 23 Sub-Canopy S Witch Haze	k id) Oak e e f Ir	Trace Medium Trace Medium mmature Density Low	5 - 10 feet 10 - 20 feet < 5 feet 10 - 20 feet N/A Avg. Height 5 - 10 feet	5 - 10 feet 10 - 20 feet < 5 feet 10 - 20 feet	2025- Well stocked stand. Nice clone of big tooth aspen in the west part of the stand. In the future it might be worth soperating out the pockets of aspen. 2014-This stand was cut as part of the Salt Lick Sale #027-00 in 2001. 2024- Red pine on an oak / aspen site. Mild terrain. Red maple and cherry competition along the east side of the stand.2020-Stand had a chapter 7 done to allow the salvage of the dead and dying oak and

Compartment: 231

Compartment: 231 Year of Entry: 2027

Stand	Level 4 Co	ver Type		Size De	nsity	Acres	Stand Age	BA Range	Managed Si	te	General Comments
13	320 - Upl	and Shrub		Unspe	cifed	8.4			No		2024-Scattered pin oak and choke cherry.
						Sub-Car	nopy Species	Density	Avg. Height	Size	
							ern Pin Oak	Low	Variable	Variable	
						Pir	Cherry	Medium	Variable	Variable	
14	4199 - Other Mixed	d Upland D	eciduous	Poletimb	er Well	30.8	44	51-80	N/A		2024- Stand is an oak and red maple mix with a few clones of aspen
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Car	nopy Species	Density	Avg. Height	Size	mostly in the south half of the stand. Stump Sprout originated. BA'S 90, 40, 70. 2015-Sale #9-80. Oak and red maple dominate the
	White Oak	20	Pole	4	44	Wh	nite Oak	Low	5 - 10 feet	5 - 10 feet	stand.
Blac	k/Red (Hybrid) Oak	35	Sapling	5	44	Re	d Maple	Low	5 - 10 feet	5 - 10 feet	
	Black Cherry	5	Pole	3					,		-
	Red Maple	30	Sapling	5	44						
	Bigtooth Aspen	10	Seedling	7	44						
15	4139 - Aspen, N	/lixed Deci	duous	Sawtimb	er Well	3.7	23	Immature	N/A		2025- Nice stem density and healthy stand. Pocket of cherry at the
	Canopy Species	% Cover	Size Class	DBH	Age						north end and is a little more scattered.
	Black Cherry	20	Log	2	23						
	Red Maple	35	Log	2	23						
	Bigtooth Aspen	45	Log	3	23						
16	4199 - Other Mixed	•		Sapling		43.1	8	Immature	N/A		2024- Stand is regenerating ok. Variable stocking and quite a bit of prowse. 2017-stand chapter 7'd to final harvest for a salvage of dead
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	adn dying oak trees, this portion of parent stand had more red maple
	Red Maple	40	Log	1	8	Wite	ch Hazel	Low	5 - 10 feet	5 - 10 feet	and aspen so this will be left to regenerate naturally area to north
	k/Red (Hybrid) Oak	20	Log	1	8						will be trenched and planted to red pine.
	Quaking Aspen	20	Log	1	8						
	Pin Cherry	20	Log	1	8						
17	4199 - Other Mixed	d Upland D	eciduous	Sapling I	/ledium	3.4	7	Immature	N/A		2024- This portion of the stand doesn't appear to have been planted
	Canopy Species	% Cover	Size Class	DBH	Age						low to moderate stocking. A few residual red pine stem. This was previously and O8 stand that experienced some decline. 2020-
Blac	k/Red (Hybrid) Oak	10	Log	1	7						Salvage cut summer of 2018 and trenched summer of 2018.
	Red Pine	5	Sapling	7							
	Red Maple	50	Log	1	7						
	Quaking Aspen	20	Log	1	7						
	Pin Cherry	15	Log	1	7						
18	42111 - Planted Deci	Red Pine, duous	Mixed	Sapling	Well	30.4	7	Immature	N/A		2024- Stand is doing well. Some areas with maple and aspen competition.2020-Salvage cut summer of 2018 and trenched
	Canopy Species	% Cover	Size Class	DBH	Age						summer of 2018. Planted spring 2019. 1 year regen check 10/7/19. Plots in south central part of stand. Looks pretty overgrown from the
	Red Pine	80	Log	1	7						edges but the central part is fairly open/sedgy and trees are FTG.
	Quaking Aspen	5	Log	1	7						Quant data suggests spraying is necessary. 84% survival, 64% FTG
	Red Maple	10	Log	1	7						Might need to re-evaluate seedling survival after spraying. Primary competition is oak, RM, cherry and witch hazel with aspen in wester
											Componition is bar, rxivi, onemy and within hazer with aspen in western
Blac	k/Red (Hybrid) Oak	5	Log	1	7						and southern ends. Western tail west of road was originally suppose

Stand											-				-	Size De	ensity	Acres	Stand Age B	A Kange	Managed S	oite	General Comments
19	4125 - Black	k, N. Pin C	Dak	Unspe	ecifed	10.3	96	201+	N/A	٨	Large scattered pin oak, with areas of pole timber and saplings.												
	Canopy Species	% Cove	Size Class	DBI	H Age	Sub-Can	opy Species	Density	Avg. Height	Size													
	Red Maple	20		8		Whi	te Oak	Low	10 - 20 feet	10 - 20 feet													
	Pin Cherry	10		6		Norther	n Pin Oak	High	Variable	Variable													
	Northern Pin Oak	70		10	96	Red	l Maple	Low	Variable	Variable													
20	4199 - Other Mixed	d Upland [Deciduous	Saplin	g Well	88.3	14 lı	mmature	N/A	٨	2024- Stand is regenerating well to a nice mix of species with a good												
	Canopy Species	% Cover	Size Class	DBI	H Age	Sub-Can	opy Species	Density	Avg. Height	Size	component of oak. Scattered mature oak left in the northeastern part of the stand. 2015-McLachlan Hill Oak Sale #614-07. Cut completed												
Bla	ck/Red (Hybrid) Oak	35	Log	2	14	Witc	h Hazel	Low	5 - 10 feet	5 - 10 feet	in 2010. Some mature oak was left in the north east part of stand, but												
	White Pine	5	Log	1	14			'		1	most have died.												
	White Oak	5	Log	1	14																		
	Red Maple	35	Log	2	14																		
	Bigtooth Aspen	20	Log	2	14																		
21	320 - Upla	and Shruk	`	Unspe	acifod	9.3			NI-														
Z I		aa o a.	,	Onope	Scileu	9.5			No		2024- Scattered pin cherry, might be a frost pocket.												
4 1	525 54		,	Chops	Scheu		opy Species	Density	Avg. Height	Size	2024- Scattered pin cherry, might be a frost pocket.												
4 1	323 34		,	Chiops	sciled	Sub-Can	opy Species Cherry	Density Low			2024- Scattered pin cherry, might be a frost pocket.												
22	4126 - White, B			awtimbe		Sub-Can Pin			Avg. Height	Size 5 - 10 feet	2024- Stand seem to be regenerating well with a nice mix of oak. Over												
	4126 - White, B	lack, N. P		wtimbe		Sub-Can Pin um 24.3	Cherry	Low	Avg. Height 5 - 10 feet	Size 5 - 10 feet	2024- Stand seem to be regenerating well with a nice mix of oak. Ove												
	4126 - White, B	lack, N. P	in Oak Sa	wtimbe	r Medi	Sub-Can Pin 24.3 Sub-Can	Cherry 99	Low 1-50	Avg. Height 5 - 10 feet	Size 5 - 10 feet	2024- Stand seem to be regenerating well with a nice mix of oak. Over												
22	4126 - White, B	lack, N. P	in Oak Sa	awtimbe	r Medi	Sub-Can Pin 24.3 Sub-Can Black/Red	Cherry 99 opy Species	Low 1-50 Density	Avg. Height 5 - 10 feet N/A Avg. Height	Size 5 - 10 feet Size	2024- Stand seem to be regenerating well with a nice mix of oak. Over story still looks healthy. stand i's on some moderate terrain. 2015-McLachlan Hill Oak Sale #614-07. All oak was left in stand that was												
22	4126 - White, B Canopy Species White Oak	lack, N. P % Cover	in Oak Sa	awtimbe DBI 12	r Medi	Sub-Can Pin 24.3 Sub-Can Black/Red Whi	99 opy Species (Hybrid) Oak	Low 1-50 Density Medium	Avg. Height 5 - 10 feet N/A Avg. Height 5 - 10 feet	Size 5 - 10 feet Size 5 - 10 feet	2024- Stand seem to be regenerating well with a nice mix of oak. Over story still looks healthy. stand i's on some moderate terrain. 2015-McLachlan Hill Oak Sale #614-07. All oak was left in stand that was												
22	4126 - White, B Canopy Species White Oak	lack, N. P % Cover	in Oak Sa	awtimbe DBI 12	r Medi	Sub-Can Pin 24.3 Sub-Can Black/Red Whi Quakir	99 opy Species (Hybrid) Oak ite Oak	1-50 Density Medium Low	Avg. Height 5 - 10 feet N/A Avg. Height 5 - 10 feet 5 - 10 feet	Size 5 - 10 feet Size 5 - 10 feet 5 - 10 feet 5 - 10 feet	2024- Stand seem to be regenerating well with a nice mix of oak. Over story still looks healthy. stand i's on some moderate terrain. 2015-McLachlan Hill Oak Sale #614-07. All oak was left in stand that was												
22	4126 - White, B Canopy Species White Oak	lack, N. P **Cover 20 80	in Oak Sa	awtimbe DBI 12	H Age 99 99	Sub-Can Pin 24.3 Sub-Can Black/Red Whi Quakir	Operation of the Color of the C	1-50 Density Medium Low Low	Avg. Height 5 - 10 feet N/A Avg. Height 5 - 10 feet 5 - 10 feet 10 - 20 feet	Size 5 - 10 feet Size 5 - 10 feet 5 - 10 feet 10 - 20 feet 10 - 20 feet	2024- Stand seem to be regenerating well with a nice mix of oak. Over story still looks healthy. stand i's on some moderate terrain. 2015-McLachlan Hill Oak Sale #614-07. All oak was left in stand that was greater than 12"DBH.												
22	4126 - White, B Canopy Species White Oak ck/Red (Hybrid) Oak	lack, N. P % Cover 20 80	in Oak Sa	DBI 12 14 Sapling	H Age 99 99	Sub-Can Pin 24.3 Sub-Can Black/Red Whi Quakir Red 45.7	Operation of the Color of the C	1-50 Density Medium Low Low Medium	Avg. Height 5 - 10 feet N/A Avg. Height 5 - 10 feet 5 - 10 feet 10 - 20 feet 10 - 20 feet	Size 5 - 10 feet Size 5 - 10 feet 5 - 10 feet 10 - 20 feet 10 - 20 feet	2024- Stand seem to be regenerating well with a nice mix of oak. Over story still looks healthy. stand i's on some moderate terrain. 2015-McLachlan Hill Oak Sale #614-07. All oak was left in stand that was greater than 12"DBH. 2024- stand is Well stocked with a good oak component. A few clone of big tooth aspen. stand is on rolling terrain. Mostly stump sprout												
22	4126 - White, B Canopy Species White Oak ck/Red (Hybrid) Oak 4199 - Other Mixed	lack, N. P % Cover 20 80	in Oak Sa Size Class	DBI 12 14 Sapling	H Age 99 99	Sub-Can Pin 24.3 Sub-Can Black/Red Whi Quakir Red 45.7 Sub-Can	Opy Species (Hybrid) Oak ite Oak ing Aspen I Maple	1-50 Density Medium Low Low Medium	Avg. Height 5 - 10 feet N/A Avg. Height 5 - 10 feet 5 - 10 feet 10 - 20 feet 10 - 20 feet	Size 5 - 10 feet Size 5 - 10 feet 5 - 10 feet 10 - 20 feet 10 - 20 feet	2024- Stand seem to be regenerating well with a nice mix of oak. Over story still looks healthy. stand i's on some moderate terrain. 2015-McLachlan Hill Oak Sale #614-07. All oak was left in stand that was greater than 12"DBH.												
22 Bla	4126 - White, B Canopy Species White Oak ck/Red (Hybrid) Oak 4199 - Other Mixed Canopy Species	lack, N. P Cover 20 80 Upland I	in Oak Sa Size Class Deciduous Size Class	DBI 12 14 Saplin	r Medil H Age 99 99	Sub-Can Pin 24.3 Sub-Can Black/Red Whi Quakir Red 45.7 Sub-Can	Opy Species (Hybrid) Oak ite Oak ing Aspen I Maple 22 In Opy Species	1-50 Density Medium Low Low Medium mmature Density	Avg. Height 5 - 10 feet N/A Avg. Height 5 - 10 feet 5 - 10 feet 10 - 20 feet 10 - 20 feet N/A Avg. Height	Size 5 - 10 feet Size 5 - 10 feet 5 - 10 feet 10 - 20 feet 10 - 20 feet Size	2024- Stand seem to be regenerating well with a nice mix of oak. Over story still looks healthy. stand i's on some moderate terrain. 2015-McLachlan Hill Oak Sale #614-07. All oak was left in stand that was greater than 12"DBH. 2024- stand is Well stocked with a good oak component. A few clone of big tooth aspen. stand is on rolling terrain. Mostly stump sprout												
22 Bla 23	4126 - White, B Canopy Species White Oak ck/Red (Hybrid) Oak 4199 - Other Mixed Canopy Species White Oak	lack, N. P Covel 20 80 Upland [% Covel 5	in Oak Sa Size Class Deciduous Size Class	BH Sapling DBH	r Medil H Age 99 99 99 99 G Well H Age	Sub-Can Pin 24.3 Sub-Can Black/Red Whi Quakir Red 45.7 Sub-Can	Opy Species (Hybrid) Oak ite Oak ing Aspen I Maple 22 In Opy Species	1-50 Density Medium Low Low Medium mmature Density	Avg. Height 5 - 10 feet N/A Avg. Height 5 - 10 feet 5 - 10 feet 10 - 20 feet 10 - 20 feet N/A Avg. Height	Size 5 - 10 feet Size 5 - 10 feet 5 - 10 feet 10 - 20 feet 10 - 20 feet Size	2024- Stand seem to be regenerating well with a nice mix of oak. Over story still looks healthy. stand i's on some moderate terrain. 2015-McLachlan Hill Oak Sale #614-07. All oak was left in stand that was greater than 12"DBH. 2024- stand is Well stocked with a good oak component. A few clone of big tooth aspen. stand is on rolling terrain. Mostly stump sprout												
22 Bla	4126 - White, B Canopy Species White Oak ck/Red (Hybrid) Oak 4199 - Other Mixed Canopy Species White Oak ck/Red (Hybrid) Oak	20 80 1 Upland [Deciduous Size Class Deciduous Log Pole	Sapline DBI Sapline 2 3	r Medil H Age 99 99 99 99 G Well H Age	Sub-Can Pin 24.3 Sub-Can Black/Red Whi Quakir Red 45.7 Sub-Can	Opy Species (Hybrid) Oak ite Oak ing Aspen I Maple 22 In Opy Species	1-50 Density Medium Low Low Medium mmature Density	Avg. Height 5 - 10 feet N/A Avg. Height 5 - 10 feet 5 - 10 feet 10 - 20 feet 10 - 20 feet N/A Avg. Height	Size 5 - 10 feet Size 5 - 10 feet 5 - 10 feet 10 - 20 feet 10 - 20 feet Size	2024- Stand seem to be regenerating well with a nice mix of oak. Over story still looks healthy. stand i's on some moderate terrain. 2015-McLachlan Hill Oak Sale #614-07. All oak was left in stand that was greater than 12"DBH. 2024- stand is Well stocked with a good oak component. A few clone of big tooth aspen. stand is on rolling terrain. Mostly stump sprout												
22 Bla 23	4126 - White, B Canopy Species White Oak ck/Red (Hybrid) Oak 4199 - Other Mixed Canopy Species White Oak ck/Red (Hybrid) Oak ck/Red (Hybrid) Oak	Cover 20 80 80 80 80 80 80 80	Deciduous Size Class Deciduous Log Pole Log	Sapling DBH Sapling 2 3 11	r Medil H Age 99 99 99 99 G Well H Age	Sub-Can Pin 24.3 Sub-Can Black/Red Whi Quakir Red 45.7 Sub-Can	Opy Species (Hybrid) Oak ite Oak ing Aspen I Maple 22 In Opy Species	1-50 Density Medium Low Low Medium mmature Density	Avg. Height 5 - 10 feet N/A Avg. Height 5 - 10 feet 5 - 10 feet 10 - 20 feet 10 - 20 feet N/A Avg. Height	Size 5 - 10 feet Size 5 - 10 feet 5 - 10 feet 10 - 20 feet 10 - 20 feet Size	2024- Stand seem to be regenerating well with a nice mix of oak. Over story still looks healthy. stand i's on some moderate terrain. 2015-McLachlan Hill Oak Sale #614-07. All oak was left in stand that was greater than 12"DBH. 2024- stand is Well stocked with a good oak component. A few clone of big tooth aspen. stand is on rolling terrain. Mostly stump sprout												
22 Bla 23	4126 - White, B Canopy Species White Oak ck/Red (Hybrid) Oak 4199 - Other Mixed Canopy Species White Oak ck/Red (Hybrid) Oak ck/Red (Hybrid) Oak Red Maple	S S S S S S S S S S	Deciduous Size Class Deciduous Size Class Log Pole Log Log	DBH	g Well H Age 99 99 22 22	Sub-Can Pin 24.3 Sub-Can Black/Red Whi Quakir Red 45.7 Sub-Can	Opy Species (Hybrid) Oak ite Oak ing Aspen I Maple 22 In Opy Species	1-50 Density Medium Low Low Medium mmature Density	Avg. Height 5 - 10 feet N/A Avg. Height 5 - 10 feet 5 - 10 feet 10 - 20 feet 10 - 20 feet N/A Avg. Height	Size 5 - 10 feet Size 5 - 10 feet 5 - 10 feet 10 - 20 feet 10 - 20 feet Size	2024- Stand seem to be regenerating well with a nice mix of oak. Over story still looks healthy. stand i's on some moderate terrain. 2015-McLachlan Hill Oak Sale #614-07. All oak was left in stand that was greater than 12"DBH. 2024- stand is Well stocked with a good oak component. A few clone of big tooth aspen. stand is on rolling terrain. Mostly stump sprout												

No

24

320 - Upland Shrub

Unspecifed

3.5

2015- Scattered choke cherry and oak present.

Compartment: 231

	Travers	se City Mg	jt. Unit				110	JOIL 7 — OL	ands		Year of Entry: 2027
Stand	Level 4 Co	over Type		Size De	nsity	Acres	Stand Age	BA Range	Managed S	ite	General Comments
25	42111 - Planted Deci	Red Pine, duous	Mixed	Sapling	g Well	35.7	7	Immature	N/A		2024- Site was an oak stand that was salvage cut in 2018. Plantation is doing well. Gentle rolling terrain. Red pine is 3-4 tall. Some red
	Canopy Species	% Cover	Size Class	DBH	I Age						maple, cherry and oak as well. 2019 -Planted spring 2019. 34,000 trees of 4-0 red pine. Regen survey 10/7/19. Put plots in the north
Blac	k/Red (Hybrid) Oak	5	Log	1	7						half. 56% live seedlings, 49% FTG. Recommend release next and
	Red Maple	10	Log	1	7						then replant. Competition is heaviest in the north half (mostly popple
	Pin Cherry	5	Log	1	7						with some oak, RM and cherry). See NAIP 2018 CIR imagery for distribution of competition. Plot data in screenshot in compartment file
	Red Pine	80	Log	1	7						on S drive. Aerial release spray 9/23/2020.
26	4131 - A	spen, Oak		Poletimb	er Well	19.0	41	111-140	N/A		2024- Nice quality aspen stand. Red maple and oak in the
	Canopy Species	% Cover	Size Class	DBH	I Age	Sub-Ca	nopy Species	s Density	Avg. Height	Size	understory. Northend has more of a red maple and oak component. BAs: 120, 120, 130. 2015-Sale #19-80.
Blac	k/Red (Hybrid) Oak	20	Sapling	6	41	Black/Re	d (Hybrid) Oal	k Low	>20 feet	>20 feet	
	White Oak	5	Pole	3	41	Re	d Maple	Medium	Variable	Variable	
	Red Maple	15	Sapling	6	41						
I	Bigtooth Aspen	40	Seedling	8	41						
(Quaking Aspen	20	Seedling	7	41						
27	4130	- Aspen		Sapling	g Well	50.4	23	Immature	N/A		2024- well stocked and healthy stand.2015- Sale #029-00. Stand cut n late June/early July of 2001.
	Canopy Species	% Cover	Size Class	DBH	I Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	in face June/early July of 2001.
Blac	k/Red (Hybrid) Oak	5	Log	3	23	Re	d Maple	Medium	>20 feet	>20 feet	
	Red Maple	20	Log	3	23						
	Bigtooth Aspen	42	Pole	4	23						
(Quaking Aspen	30	Pole	3	23						
	Pin Cherry	3	Log	3	23						
28	320 - Upl	and Shrub)	Sapling	g Well	20.1			No		2024- A grassy opening that is starting to filling in with hardwood sprouts. Some scattered mature oak. 2015 Sale #023-00
30	4126 - White, E	Black, N. P	in Oak	Sawtimb	er Well	18.8	108	81-110	N/A		2024- stand has several pockets of mortality. Prodominately a red
	Canopy Species	% Cover	Size Class	DBH	I Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	maple understory with a little oak. 2015-This stand is the result of 2 separate sales, 614-07 & 632-06, separated by the defunct "Tail Trail".
Blac	k/Red (Hybrid) Oak	80		14	108	Black/Re	d (Hybrid) Oal	k Low	Variable	Variable	When the Tank Trail was developed, the Military wanted cover left
	White Oak	20		12		WI	nite Oak	Trace	5 - 10 feet	5 - 10 feet	along the trail to prevent regeneration, mainly of aspen. The Tank Trail is no longer used, so this requirement will no longer be used.
						Re	d Maple	Medium	Variable	Variable	is no longer used, so this requirement will no longer be used.
31	4131 - A	spen, Oak		Sapling	g Well	18.1	17	Immature	N/A		2024- High stem density. Areas of decent oak regen. 2015- Sale
	Canopy Species	% Cover	Size Class	DBH	I Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	#632-06. Most of the timber sale occurred in compartment 139.
	White Oak	5	Log	1	17	Wit	ch Hazel	Low	5 - 10 feet	5 - 10 feet	
Blac	k/Red (Hybrid) Oak	15	Log	1	17						
	Red Maple	30	Log	2	17						

45

5

Log

Log

2

2 17

17

Bigtooth Aspen

Pin Cherry

Traverse City Mgt. Unit

Compartment: 231

Stand	Level 4 Co	over Type		Size D	ensity	Acres	Stand Age B	BA Range	Managed S	ite	General Comments
32	4131 - A	spen, Oak		Saplin	g Well	2.8	15	Immature	N/A	1	Sale #614-07. Cut in Fall of 2010.
	Canopy Species	% Cover	Size Class	DBI	H Age						
Blad	ck/Red (Hybrid) Oak	15	Log	2	15						
	White Oak	5	Log	1	15						
	Quaking Aspen	60	Log	2	15						
	Red Maple	20	Log	2	15						
33	3301 - Low Densi	ty Deciduc	ous Trees	Unspe	ecifed	6.4			No		2024- stand filling in. Some red maple developing under the cherry.
						Sub-Ca	nopy Species	Density	Avg. Height	Size	2015- Pin cherry and some oak.
						Pir	n Cherry	Low	>20 feet	>20 feet	2010 1 in onony and dome data
						Re	d Maple	Low	10 - 20 feet	10 - 20 feet	
34	4125 - Blac	k, N. Pin C)ak	Sawtimb	er Well	23.2	102	141-170	N/A		2024- stand has a small drainage or narrow depression in it. Some
	Canopy Species	% Cover	Size Class	DBI	H Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	component west of the pipeline.2015- Stand appears to have been
Blad	ck/Red (Hybrid) Oak	60		14	102	Black/Re	d (Hybrid) Oak	Low	5 - 10 feet	5 - 10 feet	cut sometime in the early 1970's, where aspen and red maple were
	White Oak	5		12		Re	d Maple	Medium	Variable	Variable	removed and the oak was left. Lots of regeneration in places - aspen, red maple and oak.
	Red Maple	20		12		Bigto	oth Aspen	Low	Variable	Variable	тей ттарте ани бак.
	Bigtooth Aspen	15		9	51						
35	4199 - Other Mixed	d Upland [Deciduous I	Poletim	er Well	30.9	45	51-80	N/A		2025- Stump sprout originated. Stocking is variable. Some clones of aspen and some scattered mixed pine.
	Canopy Species	% Cover	Size Class	DBI	d Age						aspen and some scattered mixed pine.
	White Oak	20	Sapling	5	45						
Blad	ck/Red (Hybrid) Oak	35	Sapling	5	45						
	White Pine	3	Sapling	6	45						
	Jack Pine	2	Sapling	6	45						
	Red Maple	28	Sapling	5	45						
	Bigtooth Aspen	10	Seedling	7	45						
	Red Pine	2		8							
37	4199 - Other Mixed	d Upland [Deciduous I	Poletim		17.3	41	81-110	N/A		2024- Stand was harvested the same time as stand 26. This slight ridge has regenerated more to oak and maple. 2015-Sale #19-80.
	Canopy Species		Size Class	DBI	l Age		nopy Species		Avg. Height	Size	naye has regenerated more to bak and maple. 2013-3ale #18-00.
Blad	ck/Red (Hybrid) Oak	40	Sapling	6	41	Black/Re	d (Hybrid) Oak	Low	>20 feet	>20 feet	
	White Oak	5	Pole	3	41	Re	d Maple	Medium	Variable	Variable	

Red Maple

Bigtooth Aspen

Quaking Aspen

Sapling

Seedling Seedling

25

20

10

6

7 41

6

41

41

Compartment: 231

Stand	d Level 4 Co	over Type		Size D	ensity	Acres	Stand Age BA Range		Managed Site		General Comments
38	4199 - Other Mixe	d Upland D	Jpland Deciduous		Poletimber Well		41	51-80	N/A		2024- stand has many areas dominated with red /black oak. South
	Canopy Species	% Cover	Size Class	DE	H Age	Sub-Car	nopy Species	Density	Avg. Height	Size	end of the stand is very well stocked and is more variable to the north Smaller and poorer quality timber in the north half as well. Stump
	White Oak	5	Pole	3	41	Re	d Maple	Medium	>20 feet	>20 feet	sprout originated. BA's: 90, 60, 802015-Density varies throughout
	Quaking Aspen	15	Sapling	6	41						stand.
	Red Maple	30	Sapling	5							
	Bigtooth Aspen	20	Sapling	6							
Bla	ck/Red (Hybrid) Oak	30	Sapling	6	41						
39	3102	- Grass		Unsp	ecifed	11.9			No		DTE Pipeline ROW
40	4199 - Other Mixe	lixed Upland Deciduous		Sapling Mediu		6.5	8	Immature	N/A	\	2024- Rolling terrain. Regeneration is still patchy. Heavy browse.
	Canopy Species	% Cover	Size Class	DE	H Age						Pockets of oak regen but is mostly red maple. Along the west boundary of the stand is some thick maple and aspen regen. Stand is
	Red Maple	55	Log	1	8						converting to a red maple /aspen stand. 2018- salvage sale cut
	Bigtooth Aspen	10	Log	1	8						summer 2018, 231 deadish oak. this area letting regenerate to mixed
	White Oak	5	Log	1	8						oak, deciduous and conifer. should fill in to a pretty good stocking. ok if some areas not as thick as this is a training area for military. Tank
Bla	ck/Red (Hybrid) Oak	25	Log	1	8						Trail Oak Sale #676-07
	White Pine	5	Sapling	7							
41	4199 - Other Mixe	•		3		80.8	8	Immature	N/A	1	2024- Rolling terrain. Regeneration is still patchy. Heavy browse. Pockets of oak regen but is mostly red maple. Along the west
	Canopy Species		Size Class		H Age						boundary of the stand is some thick maple and aspen regen. Stand is
DI-	White Oak	5	Log	1							converting to a red maple /aspen stand. This was previously an O9 stand that was in decline and also hit by spongy moth. 2018-
Bla	ick/Red (Hybrid) Oak	25	Log	1							salvage sale cut summer 2018, 231 deadish oak. this area letting
	White Pine	5	Sapling	7							regenerate to mixed oak, deciduous and conifer. should fill in to a
	Red Maple Bigtooth Aspen	55 10	Log	1							pretty good stocking. ok if some areas not as thick as this is a training area for military. Tank Trail Oak Sale #676-07
	Bigiootii Asperi	10	Log	'	0						- and to mindry. Turk than out one more of
42	2 4139 - Aspen, Mixed Deciduous Sapling				11.5	16	Immature	N/A	1	2024- Very well stocked. Some white oak establishing in the understory. 2015-Waldo Hill Oak #609-07.	
	Canopy Species		Size Class	DE	H Age		nopy Species	Density	Avg. Height	Size	understory. 2010 Waldo Filli Oak #000 01.
Bla	ick/Red (Hybrid) Oak	10	Log	1		Wh	nite Oak	Low	5 - 10 feet	5 - 10 feet	
	Red Maple	35	Log	2							
	Bigtooth Aspen	55	Log	2	16						
43	· ·			ber Well		13.5 45		N/A		2024- Nice quality aspen stand with a good mix of oak.	
	Canopy Species	% Cover			H Age		nopy Species		Avg. Height	Size	
DI-	White Oak	5	Pole	4			d (Hybrid) Oak		Variable	Variable	
Bia	ck/Red (Hybrid) Oak	10	Sapling	5			nite Pine	Low	Variable	Variable	
	Red Maple	20	Sapling	5		VVito	ch Hazel	Low	5 - 10 feet	5 - 10 feet	
	Bigtooth Aspen	65	Seedling	7	45						

Compartment: 231

Stand	Stand Level 4 Cover Type			Size Den	sity	Acres	Stand Age	BA Range	Managed S	ite	General Comments
44	4 4125 - Black, N. Pin Oak)ak	Sawtimbe	r Well	87.9	96	81-110	N/A		2024- Some rolling terrain, Steep in areas. Some individual mortality but overall a healthy overstory. Stand is pushing to red maple and
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Car	nopy Species	Density	Avg. Height	Size	aspen with its current understory stocking. BAs: 100, 110, 90,
	White Oak	10		11		Wh	ite Pine	Trace	Variable	Variable	110, 100. 2015- Sale #020-00. All aspen and red maple removed in
Blac	k/Red (Hybrid) Oak	72		13	96	Red	d Maple	High	Variable	Variable	stand. Heavy red maple and pockets of aspen regenerating. Nice red oak in most of stand. No need for treatment at this time.
	White Pine	2		14		Wito	ch Hazel	Low	5 - 10 feet	5 - 10 feet	oak in most of stand. No need for treatment at this time.
	Red Pine	2		14							
	Red Maple	10		9							
	Paper Birch	2		10							
(Quaking Aspen	2		12							
45	4199 - Other Mixed	d Upland D	Deciduous	Sapling Well		19.5 16		Immature	N/A		2024- Dense stocking. The north end of the stand has a higher
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Car	nopy Species	Density	Avg. Height	Size	component of oak2015- Waldo Hill Oak #609-07.
	White Oak	10	Log	2	16	Wito	ch Hazel	Medium	5 - 10 feet	5 - 10 feet	
Blac	k/Red (Hybrid) Oak	20	Log	2	16			'			_
	White Pine	5	Sapling	6							
	Red Maple	50	Log	2	16						
	Bigtooth Aspen	15	Log	2	16						
46	46 4199 - Other Mixed Սլ		•		pling Well 19.3 16			Immature	N/A		2024- High stocking. 2015-Waldo Hill Sale #609-07. Small 1/2 acre exclusion within stand.
	Canopy Species		Size Class	DBH			nopy Species		Avg. Height	Size	
	White Oak	5	Log	1	16	Wito	ch Hazel	Low	5 - 10 feet	5 - 10 feet	
	Red Maple	30	Log	2	16						
	Bigtooth Aspen	35	Log	2	16						
Blac	k/Red (Hybrid) Oak	20	Log	2	16						
	White Pine	8		12							
	Red Pine	2		12							
47	42210 - Natu	ural Red P	ine Po	oletimber I	Mediur	m 2.7	70	51-80	N/A	1	2024- Nice oak establishing under the pine. Several age and size
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Car	opy Species	Density	Avg. Height	Size	classes of the pine overstory.2015-Waldo Hill Sale # 60-07. Everything removed but the pine.
	Red Pine	75		8	70		d (Hybrid) Oal	k Medium	10 - 20 feet	10 - 20 feet	
	White Pine	25		8		Wh	ite Pine	Trace	Variable	Variable	
						Red	d Maple	Low	10 - 20 feet	10 - 20 feet	
48	4310 - Pin			Sapling \		20.4	15	Immature	N/A		2024- High stem density. Southern portion is an aspen/maple mix, north west portion of the stand has more of a jack pine and oak
	Canopy Species		Size Class	DBH							component. 2015-Sale #605-07.
	Red Maple	10	Log	1	15						
	Bigtooth Aspen	10	Log	2	15						
Blac	k/Red (Hybrid) Oak	30	Log	1	15						
	White Pine	5	Pole	4							
	Jack Pine White Oak	40	Log		15 15						

Compartment: 231

Stand	and Level 4 Cover Type		;	Size Density			Stand Age B	A Range	Managed S	ite	General Comments
49	42200 - Natural White Pine			Sawtimber Medium		n 32.1	60	51-80	N/A		2024- BAs: 70, 100, 30, 40, 10. Some legacy trees present. Over
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	story stocking is variable. Regen is thick in places with a good amount of oak. Regen is thriving under the current conditions2015-
	White Oak	2		12	96	Re	ed Maple	Medium	10 - 20 feet	10 - 20 feet	Waldo Hill Sale #609-07. All aspen and red maple removed and mos
Blac	ck/Red (Hybrid) Oak	10		14	96	Bigto	oth Aspen	Low	10 - 20 feet	10 - 20 feet	of the oak. No pine was cut in this stand.
	White Pine	60		11	60	WI	hite Oak	Low	5 - 10 feet	5 - 10 feet	
	Red Pine	28		12	60	Black/Re	d (Hybrid) Oak	Medium	10 - 20 feet	10 - 20 feet	
						Wh	nite Pine	Low	Variable	Variable	
50	4125 - Blac	k, N. Pin O	ak S	Sawtimb	er Well	6.9	94	111-140	N/A	\	2024- Stand might be long term retention from the St 41 harvest.
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	2015- Small stand of oak located on a rather steep north facing slope
	White Oak	5		12		Re	ed Maple	Medium	Variable	Variable	with Trans-Canada pipeline bordering to the East side of stand.
Blac	ck/Red (Hybrid) Oak	75		13	94			,			-
	Red Maple	18		8							
	Bigtooth Aspen	2		12							
51 4130 - Aspen Sapling Wel					y Well	54.4 34 Immature N/A					2024- very well stocked. Oak developing in the Understory in places
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	Some scattered mature oak present.2015-Sale #37-89.
Blac	ck/Red (Hybrid) Oak	3		13		Black/Re	d (Hybrid) Oak	Low	5 - 10 feet	5 - 10 feet	
	White Pine	2	Pole	4	34	Wit	ch Hazel	Low	5 - 10 feet	5 - 10 feet	
	Red Maple	10	Pole	3	34						
	Bigtooth Aspen	85	Pole	4	34						
52	4125 - Black, N. Pin Oak Poletim		oletimb	er Well	1.2	96	111-140	N/A	\	2024- Nice pocket of red oak. Retention pocket from adjacent	
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	harvest.
Blac	ck/Red (Hybrid) Oak	70		15	96	Re	ed Maple	Low	Variable	Variable	
	Red Maple	15	Sapling	6	41						
	Bigtooth Aspen	10		12							
	White Oak	5		12	96						
53	42200 - Natu	ral White Pine		Sawtimber Well		4.4 82 1		111-140	N/A		2024-BAs: 130, 140, 1202015-Small pocket of natural white pine
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	with some oak sawlogs mixed in. Oak quality is low to fair.
	White Oak	8		12		Black/Re	d (Hybrid) Oak	Low	< 5 feet	< 5 feet	
	Red Maple	2	Seedling	6		Wh	nite Pine	Low	Variable	Variable	

Black/Red (Hybrid) Oak

White Pine

10

80

14 12 82 Compartment: 231

Stand	tand Level 4 Cover Type			Size Density Acres Stand Age E					Managed S	Site	General Comments	
54	4310 - Pir	ne, Oak Mix	x	Poletimber Well		14.7	48	81-110	N/A	4	2024- Some scattered mature pine and oak. Stand appears to be	
	Canopy Species	% Cover	Size Class	DBH	DBH Age		nopy Species	Density	Avg. Height	Size	two-aged. Nice mix of species. White pine developing in the understory.BA: 110, 90, 80	
Blac	k/Red (Hybrid) Oak	15		8	48	Black/Re	d (Hybrid) Oak	Medium	Variable	Variable		
	White Pine	30		10	48	Wh	nite Pine	Medium	Variable	Variable		
	Jack Pine	20	Seedling	6	48						-	
	White Oak	5		10	96							
	Red Pine	5		16	96							
	Red Maple	15	Sapling	6	48							
	Bigtooth Aspen	10	Seedling	7	48							
55	4131 - A	spen, Oak		Sapling Well		55.6	15	Immature	N/A		2024- High stem density. Southern portion is an aspen/maple mix,	
	Canopy Species	% Cover	Size Class	DBH	Age						north west portion of the stand has more of a jack pine and oak component. 2015-Sale #605-07.	
Blac	k/Red (Hybrid) Oak	15	Log	1	15							
	White Pine	5	Pole	4								
	Jack Pine	5	Log	2	15							
	Red Maple	15	Log	1	15							
	Bigtooth Aspen	55	Log	2	15							
	White Oak	5	Log	1	15							
56	Co	and Deciduous with Sapling Monifer			25.2	25.2 6 I		N/A		2024- stand is regenerating well. Oak has Sprouted up first but quite bit of jack pine coming in. Oak isn't quite above the browse line.2019-Cut October 2019. 231 Forgotten, 61-619-17. Cut all trees		
	Canopy Species		Size Class		Age						>1" dbh with chipping. Original stand was 65% JP, 23% hybrid oak,	
	Choke Cherry	5 Log		1	6						10% white oak, 2% RM.	
	Jack Pine	35	Log	1	6							
IN	lorthern Pin Oak	50	Log	1	6							
57	4126 - White, E	Black, N. Pin Oak		Sawtimber Well		26.6	104	111-140	N/A	4	2024- BAs-130, 140, 160 . Some individual mortality but overall a	
	Canopy Species	% Cover	Size Class	s DBI	H Age	Sub-Car	nopy Species	Density	Avg. Height	Size	healthy overstory. South half of the stand had the red maple and aspen were removed about 20 years ago. and was paired with a sta	
Blac	k/Red (Hybrid) Oak	70		14	104	Wh	nite Oak	Trace	Variable	Variable	in C139 for the sale.	
	White Oak	20		10	104	Re	d Maple	Medium	10 - 20 feet	10 - 20 feet		
	Red Maple	8		10		Wit	ch Hazel	Trace	5 - 10 feet	5 - 10 feet		
	Bigtooth Aspen	2		12				, ,		,	_	
58	4125 - Blac	k, N. Pin O	k, N. Pin Oak Sawti		awtimber Medium		96	51-80	N/A		2024- Clumpy red maple regeneration is established in the	
	Canopy Species	% Cover	Size Class	SS DBH Age		Sub-Ca	Sub-Canopy Species		Avg. Height	Size	understory. Overstory looks healthy. 2015-The aspen and red maple and marked oak were removed from this stand in 08-09. Sale	
	White Oak	10				Wh	nite Pine	Trace	< 5 feet	< 5 feet	#605-07.	
Blac	k/Red (Hybrid) Oak	85		13	96	Re	d Maple	Medium	Variable	Variable		
	White Pine	3		14				1			_	
	Red Pine	2		12								
59	320 - Upl	land Shrub		Sapling	Well	1.9			No)	Old U type filling in.	

Compartment: 231 Year of Entry: 2027

Stand	Level 4 Co	Level 4 Cover Type		Size Density			Stand Age B	A Range	Managed Si	te	General Comments
61	1 4131 - Aspen, Oak		F	Poletimber Well			53	81-110	N/A		2024- Very well stocked stand. Red maple understory. Diameters
	Canopy Species	% Cover	Size Class	DBH	Age	je Sub-Ca	nopy Species	Density	Avg. Height	Size	haven't fully developed. Some pockets of oak, on the hill tops
Bla	ck/Red (Hybrid) Oak	15		13	96	Re	ed Maple	Medium	Variable	Variable	
	Quaking Aspen	25	Seedling	7	53						_
	White Oak	5		10	96						
	Red Maple	15	Sapling	6	53						
	Bigtooth Aspen	40	Seedling	8	53						
62	4199 - Other Mixed	d Upland D	eciduous	Sapling	y Well	8.2	7	Immature	N/A		2024- stand has regenerated well. Nice component of oak. 2015-
	Canopy Species	ies % Cover Size Class			ss DBH Age						Part of Stand 98 that was not planted (as far as I can tell from cultivation records). Cut as part of Quercus Maximus, 61-671-16-01,
Bla	ck/Red (Hybrid) Oak	30	Log	1	7						cut 3/2017. Cut all trees >2". Oak salvage or pre-salvage due to oak
	White Pine	5	Log	1	7						decline and heavy gypsy moth defoliation. Military Board Land.
	Black Cherry	15	Log	1	7						
	Red Maple	30	Log	1	7						
	Quaking Aspen	20	Log	1	7						
63	63 4125 - Black, N. Pin Oa		ak Sawtimber Well		6.2	96	81-110	N/A		2024- Fully developed white pine understory. Overstory oak is of	
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	moderate quality.
	White Oak	10		9	96	Black/Re	d (Hybrid) Oak	Trace	< 5 feet	< 5 feet	
Bla	ck/Red (Hybrid) Oak	63		12	96	WI	nite Pine	High	Variable	Variable	
	White Pine	25	Pole	4	35						_
	Red Maple	2	Seedling	8							
64	4199 - Other Mixed	d Upland D	eciduous S	Sapling I	/ledium	16.0	8 1	Immature	N/A		2024- some moderate terrain. Regen is a bit patchy and is
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	predominantly red maple with patches of oak and aspen. Scattered mature white pine. moderate to heavy deer browse. 2017- Unit 3 of
	Quaking Aspen	15	Log	1	8	Wit	ch Hazel	Medium	5 - 10 feet	5 - 10 feet	Quercus Maximus, 61-671-16-01, cut 3/2017. Cut all trees >2" except
	Red Maple	55	Log	1	8				-		red and white pine. Oak salvage or pre-salvage due to oak decline
Bla	ck/Red (Hybrid) Oak	20	Log	1	8						and heavy gypsy moth defoliation. Military Board Land.
	White Pine	5	Sapling	7							
	White Oak	5	Log	1	8						
67	4130 -	- Aspen	F	Poletimb	er Well	2.5	53	51-80	N/A		2024- Manage stand with compartment 139.
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	
Bla	ck/Red (Hybrid) Oak	5	Pole	3		Re	ed Maple	Medium	Variable	Variable	

Quaking Aspen

Red Maple

Seedling

Sapling

75

20

8

6

53

Compartment: 231