

Compartment Review Presentation

Newberry Forest Management Unit

Compartment 42023 Entry Year 2021 Acreage: 1,113 County Luce Management Area: Deer Park

Revision Date: 2019-08-30

Stand Examiner: Amy Douglass

Legal Description:

T49N R10W Sections 4-9.

Identified Planning Goals:

Timber, wildlife habitat and recreation are the main uses within this compartment. The overall goals are to maintain and enhance forest health, diversity and productivity of the area through sustainable, proper forest treatments. Treatments prescribed will help renew and utilize the forest resource and continue to enhance the quality of wildlife habitat.

Soil and topography:

Deer Park fine sand is the primary soil within the compartment on level to rolling ground. The area transitions to Rubicon sand along the southern boundary. A small portion of Crosswell-AuGres sands is located along the shores of Muskallonge Lake. There are steep sand banks located along the shore of Lake Superior.

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

A mix of state and private ownership extends across the compartment. Development is present on some of the private ownership, with a higher density along the northwest edge of the compartment. A corporate inholding of 160 acres lies within the compartment. Predominant land use in the area includes timber production and forest recreation.

Unique Natural Features:

The potential exists for several threatened and endangered flora and fauna, with piping plover habitat along the beach.

Archeological, Historical, and Cultural Features:

There are no known sites within the compartment, but may be nearby.

Special Management Designations or Considerations:

Piping plover habitat and Deer Park Non-dedicated natural area located along the Lake Superior shoreline.

Watershed and Fisheries Considerations:

Fisheries Values: None.

This compartment lies up against the Lake Superior shoreline. Fisheries has no concerns at this time.

Wildlife Habitat Considerations:

Compartment 23 lies along Lake Superior in north central Luce County in the Grand Marais Sandy End Moraine and Outwash ecological sub-subsection and lies within the Deer Park Management Area with American marten, Kirtland's warbler, and red crossbill as featured species. The compartment is dominated by pine types (red and jack) with a few oak stands along the northern portions of the compartment. Much of the jack pine is immature while much of the red pine is older. The compartment has high recreational use.

In a predominantly pine forested ecosystem, maintaining a variety of age and size classes and maintaining as much structural diversity as possible in managed stands will be important to achieving wildlife objectives. For example, retaining soft and hard mast producing species in harvested stands will help provide food sources, nest and den trees, and improve structural diversity. Leaving understory spruce and hemlock when it occurs will likewise increase structural diversity as will retaining non-pine species in pine stands. Diversity in red pine plantations will consist of hard mast retention and diversity in the red line trees. Wildlife species potentially using this compartment include white-tailed deer, black bear, coyote, and piping plover.

Mineral Resource and Development Concerns and/or Restrictions

No active sand/gravel pits exist within 6 miles, but there is likely some potential for sand within the compartment. There is no history of mineral leasing in the compartment. There is no known potential for metallic minerals in this area, and no known potential exists economic hydrocarbon production in the UP. The state does not own all mineral rights within the compartment. Because the mineral estate is the dominant estate, reasonable access to the surface must be provided to private owners if they choose to explore or develop their mineral rights.

Vehicle Access:

This compartment is located just east of Muskallonge Lake and County Road 407 (Deer Park Road). Lake Superior defines the north boundary of the compartment. The Rabbit Patch Road and County Road 410 East form the south boundary of the compartment. The Coast Guard Road runs east/west through the center of the compartment and is a poor sand road. Numerous two-track roads provide additional access to many areas of the compartment, including developments on private lands. Deep, loose sands and several unstable hills make many of the forest roads difficult to traverse with wheeled-vehicles.

Survey Needs:

The NE1/16 and the NW1/16 of Section 9 are needed. Corners may be present, but no corner records found.

Recreational Facilities and Opportunities:

The Two Hearted ORV Trail cuts through the southeast corner of this compartment. The North Country Trail runs through the northern portion of the entire compartment, connecting to Muskallonge State Park to the west. Several well-used dispersed camping sites are found along the North Country Trail and Lake Superior shoreline. The Lake Superior beach and adjacent stands provide exceptional vistas and non-motorized recreational opportunities. Opportunities for forest recreation include hunting, fishing, berry picking, hiking, dispersed camping, wildlife/nature viewing, snowmobiling, mountain biking, agate picking and ORV riding.

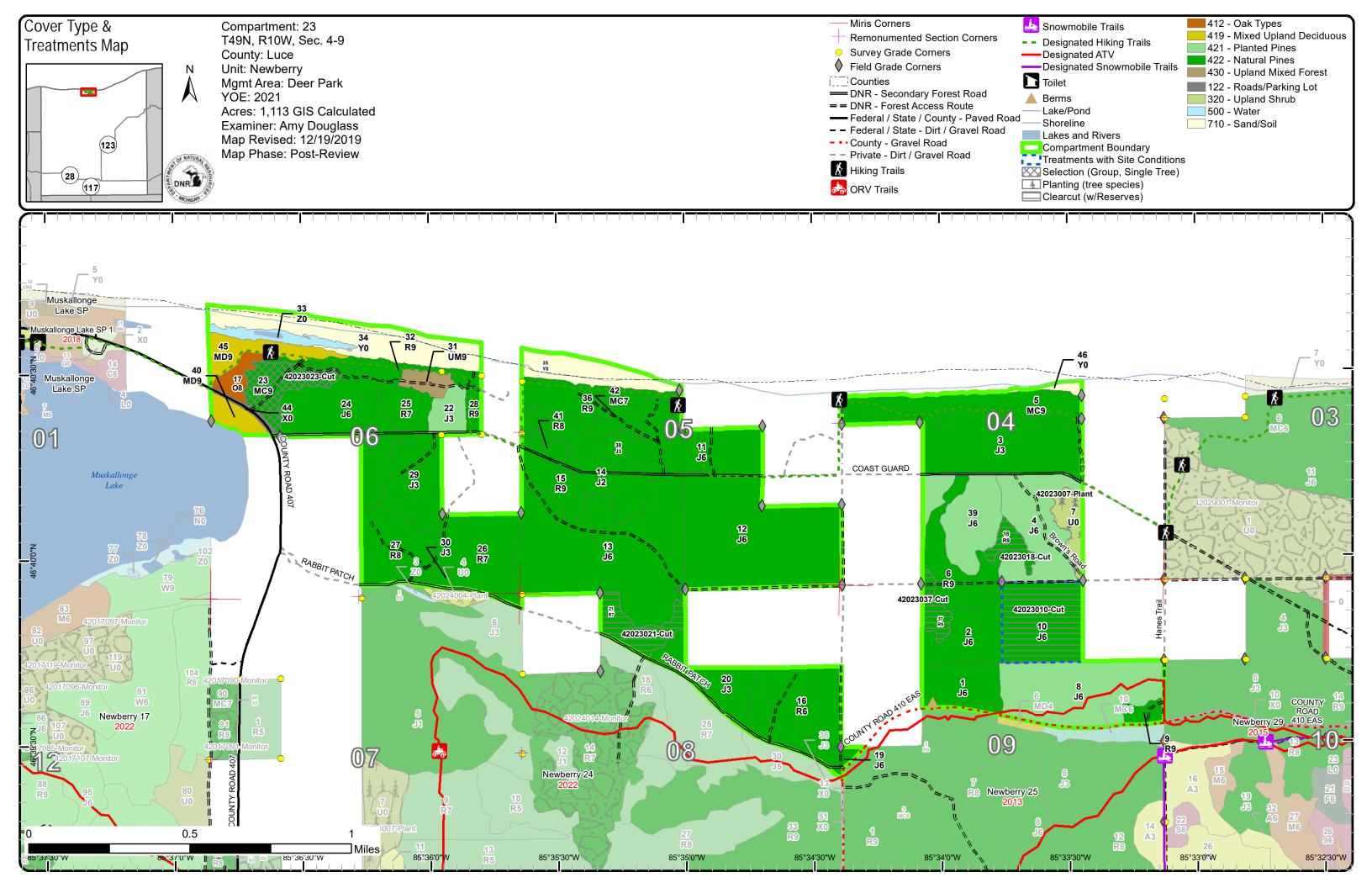
Fire Protection:

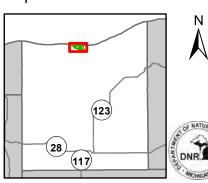
This compartment is part of the Two Hearted Zone Dispatch area. Large fire runs are possible with the hazard fuel component in this compartment and long response times, which makes the risk to private properties high. Access for heavy wheeled equipment is good because of dry sand ground and good two track network, except in areas of unstable hills and loose sand.

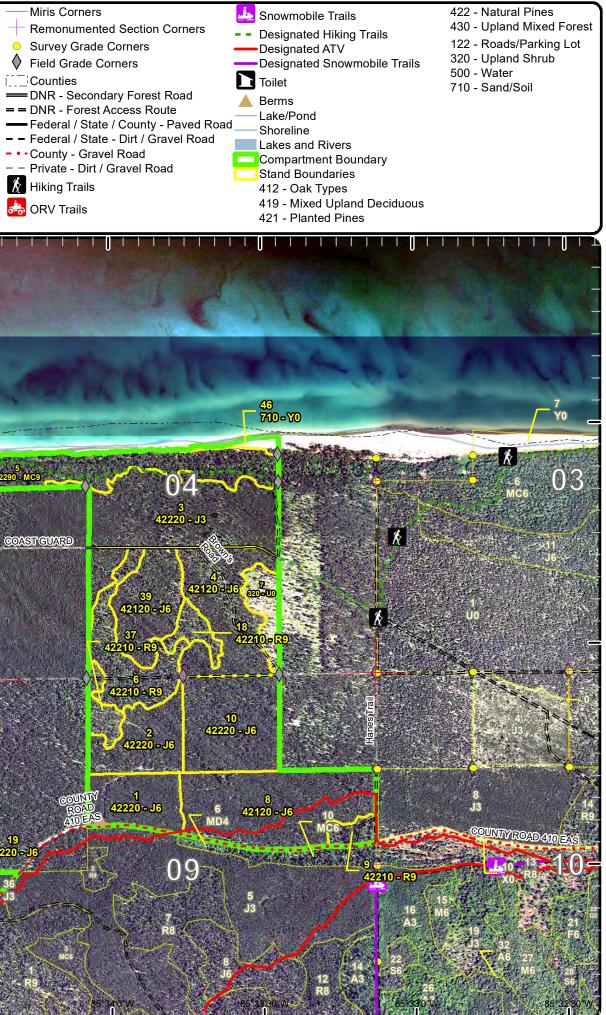
Additional Compartment Information:

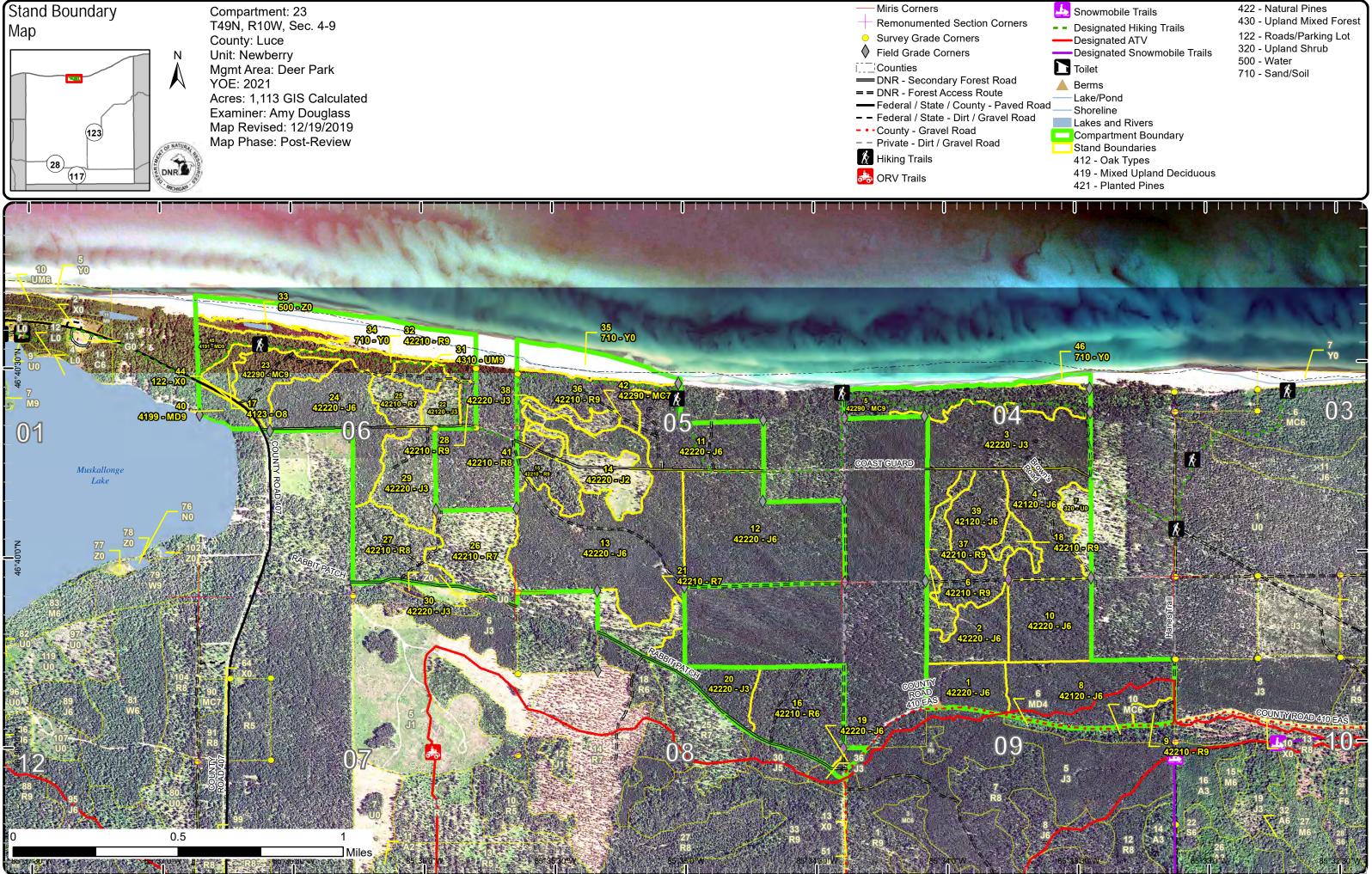
The following reports from the Inventory are attached: Total Acres by Cover Type and Age Class Cover Type by Harvest Method Proposed Treatments – No Limiting Factors Proposed Treatments – With Limiting Factors Stand Details (Forested and Nonforested) Dedicated and Proposed Special Conservation Areas Site Condition Details

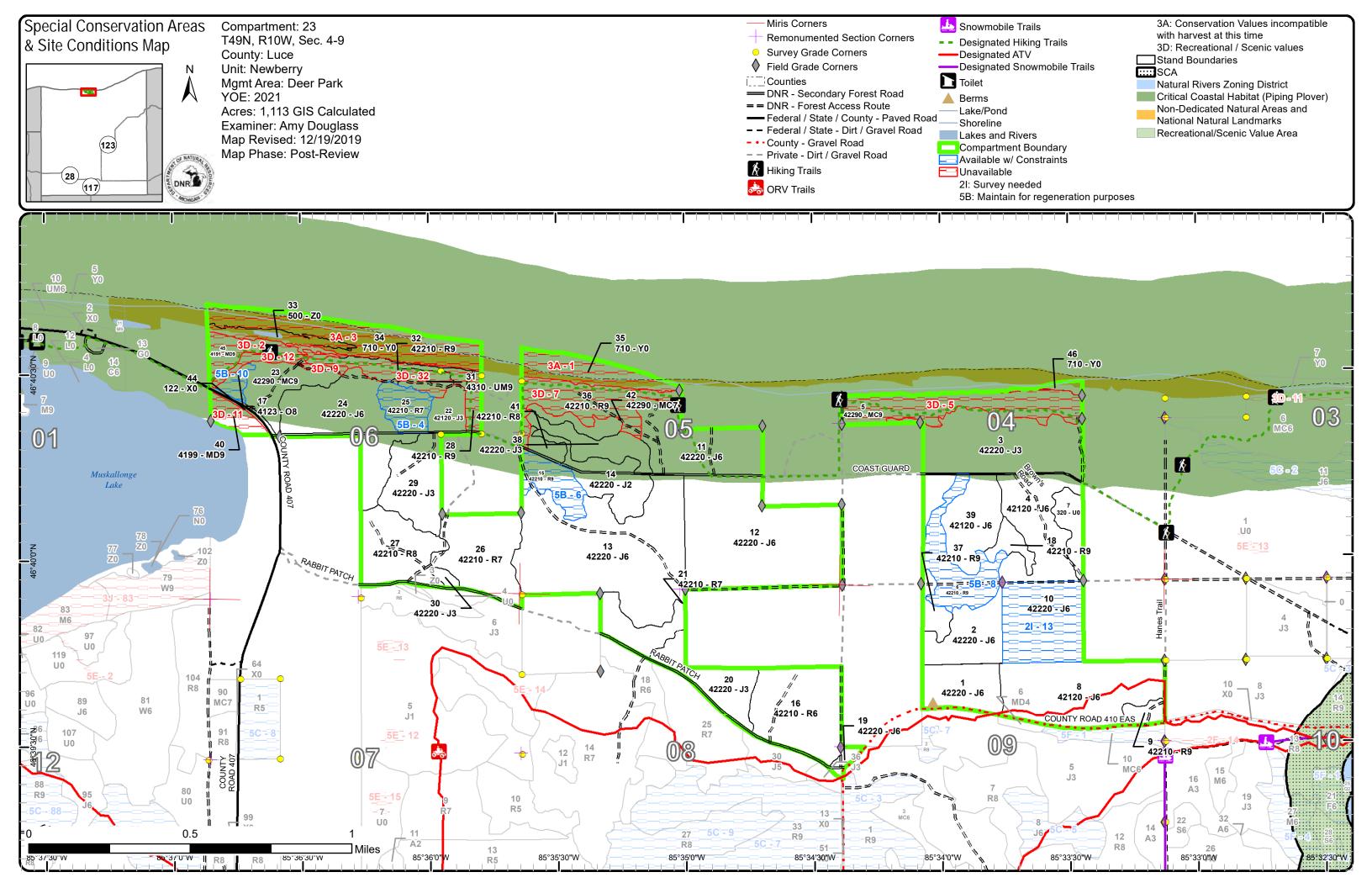
The following information is displayed, where pertinent, on the attached compartment maps: Base feature information, stand boundaries, cover types, and numbers Proposed treatments Site condition boundaries Details on the road access system











Report 1 – Total Acres by Cover Type and Age Class

Newberry Mgt. Unit



Age Class

	HOR	E CORRECT C	83 / ¥	82 - V	67 (73)	8	87 17 17	3 6		R B		8 Ju	1 ⁷ a ₇	Q. 42	87 - 53	193 Jul	100 10	JTE JEE	10 ²⁰	
Jack Pine	0	31	0	45	28	562	0	0	0	0	0	0	0	0	0	0	0	0	666	
Mixed Upland Deciduous	0	0	0	0	0	0	0	0	0	0	0	23	0	0	0	0	0	0	23	
Natural Mixed Pines	0	0	0	0	0	0	0	0	7	0	22	0	0	0	0	0	0	37	66	
Oak	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	7	
Red Pine	0	0	0	0	0	0	46	0	81	57	6	5	61	0	0	0	0	0	256	
Sand, Soil	68	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	68	
Upland Mixed Forest	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	7	
Upland Shrub	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	
Urban	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	
Water	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	
Total	89	31	0	45	28	562	46	0	88	57	28	42	61	0	0	0	0	37	1114	



y: 2021 Acres of Harvest Total Compartment Commercial Harvest - 49 Harvests with Site Condition - 40 Next Step Harvest - 0 Habitat Cut - 0

Cover Type by Harvest Method

			and the second s	Contraction of the second	to of	B B B B B B B B B B B B B B B B B B B	ico not i	Nini O	A COLORIDO	SS SS	Stop Log	and the second sec
Jack Pine		40	0	0	0	0	0	0	0	0	40	
Natural Mixed Pines		0	19	0	0	0	0	0	0	0	19	
Red Pine		30	0	0	0	0	0	0	0	0	30	
	Total	70	19	0	0	0	0	0	0	0	89	

Proposed and Next Step Treatments by Method

			Contraction of the second	and and a second	Contraction of the second	and a start of the second	in contraction	An College	in the second	300 - 30	~~ / ~~	A A A A A A A A A A A A A A A A A A A
Current		89	0	10	0	0	0	0	0	0	100	
Next Step		0	110	70	0	0	0	140	0	0	321	
	Total	89	110	81	0	0	0	140	0	0	420]

s		Newberry	Mgt. Unit		Repo	rt3	Treatments		Compartme Year of Entr		NOF NATURAL PRIBOU
t a										J. 2021	MICHIGAN
n d	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Habitat Cut

Approved Treatments:

noveu rreatments	<u>.</u>							
7 42023007- Plant	10.4 320 - Upland Shrub	Nonstocked 0	Unspec ified	Planting	Interplant	4212 - Planted Jack Pine	Even-Aged	No
Prescription Interplan Specs:	t without trenches where ne	eded to suppleme	ent natural jao	ck pine.				
<u>Next Step</u> Monitorir <u>Treatments:</u>	ng, Artificial Regen(1yr); Mo	onitoring, Artificial	Regen(3yr)					
<u>Acceptable</u> Jack pine <u>Regen:</u>	Э.							
<u>Other</u> Comment:								
Site Condition								
Proposed Start Date:	10/1 /2019							
10 42023010-Cut	40.2 42220 - Natural Jack Pine	Poletimber 49 Well	Unspec ified	Harvest	Clearcut with Retention	4222 - Natural Jack Pine	Even-Aged	No
Prescription Clearcut Specs:	leaving two retention pocke	ets, with maximum	i diversity. Le	ave oak, if pres	ent.			
<u>Next Step</u> SitePrep <u>Treatments:</u>	, Scarification; Monitoring,	Natural Regen (Ir	ntermediate);	SitePrep, Tre	nching; Planting	, Initial Plant		
<u>Acceptable</u> Jack pine <u>Regen:</u>	э.							
<u>Other</u> Attemptin <u>Comment:</u>	ng to start to break up jack	pine age classes i	n the area.					
Site Condition Surve	ey Needed							
Proposed Start Date:	10/1 /2020							
18 42023018-Cut	6.7 42210 - Natural Red Pine	Sawtimber 82 Well	81-110	Harvest	Clearcut	4211 - Planted Red Pine	Even-Aged	No
Prescription Clearcut Specs:	all species. No retention du	ue to small acreag	e. Leave oak	, if present. Lea	ive a variety of sp	ecies in the red lir	ne.	
<u>Next Step</u> SitePrep <u>Treatments:</u>	, Trenching; Planting, Initia	al Plant; Monitori	ng, Artificial F	Regen(1yr); M	onitoring, Artificial	Regen(3yr)		
<u>Acceptable</u> Red pine <u>Regen:</u>	3							
Other Follow ha	arvest with trenching and pl	anting to red pine.						
Site Condition								
Proposed Start Date:	10/1 /2020							

S t		Newberr	y Mgt. Unit		Repo	rt 3	Treatments		Compartmen Year of Entry	6	DNR DNR
a n d	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Habita Cut
21	42023021-Cut	16.3	42210 - Natural Red Pine	Sawtimbe Poor	r 84	1-50	Harvest	Clearcut with Retention	4212 - Planted Jack Pine	Even-Aged	No
Preso Spec		ut standing	g residual from last	cut. Leave	small p	ocket rete	ention. Leave oa	k if present.			
<u>Next</u> Treat	<u>Step</u> Plantir <u>ments:</u>	g, Initial P	lant; Monitoring, A	Artificial Reg	en(1yr)	; Monito	oring, Artificial Re	egen(3yr); SitePre	p, Trenching		
<u>Acce</u> <u>Rege</u>	<u>ptable</u> Jack p <u>n:</u>	ine with re	d pine.								
<u>Other</u> Comr	<u>r</u> ment:										
	<u>Condition</u>										
	osed Start Date	_									
23	42023023-Cut	19.0	42290 - Natural Mixed Pine	Sawtimbe Well	r 95	111- 140	Harvest	Group Selection	429 - Mixed Upland Conifers	Uneven- Aged	No
<u>Preso</u> Spec	s: cutting	approxima		and each tin	ne and	leaving u		melschlag method, on within the cut pat			
<u>Next</u> Treat	<u>Step</u> Monito <u>ments:</u>	ring, Natur	ral Regen (Intermed	diate)							
<u>Acce</u> <u>Rege</u>	<u>ptable</u> Mix of <u>n:</u>	current sp	ecies present.								
<u>Other</u> Comr	Use th <u>ment:</u>	e E/W port	tion of the road as t	the boundar	y and c	ontinue v	vesterly for the n	orth line of treatme	nt.		
<u>Site (</u>	<u>Condition</u>										
Propo	osed Start Date	<u>:</u> 10/1 /20)20								
37	42023037-Cut	7.0	42210 - Natural Red Pine	Sawtimbe Well	r 82	111- 140	Harvest	Clearcut	4211 - Planted Red Pine	Even-Aged	No
Preso Spec		ut all speci	ies. No retention du	ie to small a	creage	e. Leave c	oak, if present. L	eave a variety of sp	ecies in the red li	ne.	
	<u>Step</u> SitePro <u>ments:</u>	ep, Trench	ing; Planting, Initia	al Plant; M	onitorin	ıg, Artifici	al Regen(1yr);	Monitoring, Artificia	l Regen(3yr)		
<u>Acce</u> Rege	<u>ptable</u> Red pi <u>n:</u>	ne.									
<u>Othei</u> Comr		and plant	to red pine followir	ng harvest.							
Site (<u>Condition</u>										

Total Treatment 99.6 Acreage Proposed:

Amy Douglass : Examiner

Compartment: 23 Year of Entry: 2021



Availability for Management

Total	Acres	Acres Avail	Acres		Domina	nt Site	e Con	ditions
Acres	Available	With Condition	Not Available		21	5B	3A	3D
666	626	40	0	Jack Pine	40			0
23	0	0	23	Mixed Upland Deciduous				23
66	26	0	39	Natural Mixed Pines				39
7	0	4	3	Oak		4		3
255	155	54	46	Red Pine		54		46
68	3	0	65	Sand, Soil			64	1
7	0	0	7	Upland Mixed Forest				7
10	10	0	0	Upland Shrub				
3	3	0	0	Urban				
8	0	0	8	Water			8	0
1,113	823	99	192	Total Forested Acres	40	58	72	119
	74%	9%	17%	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	3A: Conservation Values incompatible with harvest at this time	21	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
	non dedicated natu	ral area					
2	Unavailable	3D: Recreational / Scenic values	14	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
	NCT and Lake Supe	erior shoreline					
/19/2	2019 11:16:07 AM - Pag	e 1 of 3					SWART

		vberry Mgt. Unit uglass : Examiner		Report 4 – Site Con	ditions	Compartment: 23 Year of Entry: 2021	DREAD OF MATURE
3	Unavailable	3A: Conservation Values incompatible with harvest at this time	51	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: Non-dedicated nate	ural area - Deer Park.					
4	Available	5B: Maintain for regeneration purposes	13	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
5	Unavailable	3D: Recreational / Scenic values	37	3A: Conservation Values incompatible with harvest at this time	Unspecified	Unspecified	Unspecified
	Comments: NCT and Lake Sup	perior shoreline. near non-dedic	ated n	atural area, and piping plove	r		
6	Available	5B: Maintain for regeneration purposes	15	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
7	Unavailable	3D: Recreational / Scenic values	30	3A: Conservation Values incompatible with harvest at this time	Unspecified	Unspecified	Unspecified
	Comments: NCT and Lake Sup	perior shoreline. Non-dedicated	natura	ıl area.			
8	Available	5B: Maintain for regeneration purposes	27	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						

		vberry Mgt. Unit uglass : Examiner		Report 4 – Site Cond	litions	Compartment: 23 Year of Entry: 2021	THE MAN DE LEVEL
9	Unavailable	3D: Recreational / Scenic values	3	5E: Long-Term Retention	Unspecified	Unspecified	Unspecified
	Comments:						
10	Available	5B: Maintain for regeneration purposes	4	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
11	Unavailable	3D: Recreational / Scenic values	8	3J: Water quality / BMPs (stream, river, or lake)	Unspecified	Unspecified	Unspecified
	Comments:						
12	Unavailable	3D: Recreational / Scenic values	3	5B: Maintain for regeneration purposes	Unspecified	Unspecified	Unspecified
	Comments: Along NCT						
13	Available	2I: Survey needed	40	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
32	Unavailable	3D: Recreational / Scenic values	26	3A: Conservation Values incompatible with harvest at this time	Unspecified	Unspecified	Unspecified
	Comments: NCT and Lake Sup	perior shoreline. Includes scatte	red car	npsites along the NCT.			



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.

Conservat Area	ion Type	Description	ERA = Ecological Reference Area HCVA = High Conservation Value Area SCA = Special Conservation Area
SCA	Non-Dedicated Natural Areas and National Natural Landmarks	This category is comprised of those Natural, Wilderness and Wi proposed for legal dedication, but for which legal dedication by le nomination process is defined by Part 351, Wilderness and Natu Environmental Protection Act, 1994 PA 451. The program is adn require the submittal of a Natural Areas Nomination Packet to th proposed sites in various stages of review. Final dedication of no Areas is accomplished through legislative action.	egislature has not occurred. The Iral Areas, of the Natural Resources and ninistered by the DNR. Nominations e DNR. This is an active program, with
HCVA	Designated Critical Habitat	Critical habitat areas are established via a consultative and coop U.S. Fish and Wildlife service for the recovery of threatened and 365, Endangered Species Protection, of the Natural Resources a PA 451, and the Federal Endangered Species Act of 1973. This species plans in various stages of review. As of now only two ex Plover Habitat.	endangered species, as governed by Part and Environmental Protection Act, 1994 is an active program, with proposed
HCVA	Legally dedicated Natural Areas, Wilderness or Wild Areas	The nomination process is defined by Part 351, Wilderness and and Environmental Protection Act, 1994 PA 451. The program is require the submittal of a Natural Areas Nomination Packet to th proposed sites in various stages of review. Final dedication of no Areas is accomplished through legislative action.	administered by the DNR. Nominations e DNR. This is an active program, with

Report 7 – Stands

Compartment: 23 Year of Entry: 2021

DRR MICHIGAN

Stand	Level 4 C	Level 4 Cover Type			Acres	Stand Age	BA Range	Managed S	Site	General Comments	
1	42220 - Natural Jack Pine		Poletimber Well	22.2	42	Unspecified	d N/A		Occasional white birch and oak. Just coming into pole size. 1-3 sticks (2 stick supran) ETD C 148 for accritication complete $\frac{7}{2}$ (40.77		
	Canopy Species	% Cover	Size Class	DBH Age						stick average).FTP C-148 for scarification complete 7/5/1977.	
	Jack Pine	90	Pole/Sapling	6 42							
	Red Pine	8	Log	12							
2	42220 - Nat	ural Jack P	ine F	Poletimber Well	24.3	42	Unspecified	N/A		Cut in 1973, sale #6-73A; scarified 1974 (C-105). Seeded in 1976.	
	Canopy Species	% Cover	Size Class	DBH Age							
	Jack Pine	95	Pole/Sapling	5 42							
3	42220 - Nat	ural Jack P	ine	Sapling Well	57.6	40	Unspecified	N/A		Thick regeneration with smaller dbh. 1 stick average. Stand scarified in	
	Canopy Species	% Cover	Size Class	DBH Age						1979. Residual red and white pine overstory trees present. Red maple and white pine saplings present. Cut in 1979 under permit #13-78A and	
	Jack Pine	85	Sapling/Pole	e 4 40						#27-79. Scarified in July 1979 (C-182).	
	Red Pine	10	Log	12							
4	42120 - Pla	nted Jack F	rine F	Poletimber Well	38.3	46	Unspecified	N/A		Red pine patches scattered along road thru middle of stand. Cut in 1969; scarified 1970 (No. 51). Planted in 1973. Mix of planted and natural. 1-3	
	Canopy Species	% Cover	Size Class	DBH Age						scanned 1970 (No. 51). Planted in 1975. Mix of planted and hatural. 1-5 stick average.	
	Jack Pine	75	Pole/Sapling	6 46						5	
	Red Pine	20	Pole/Log	8							
5	42290 - Nati	ural Mixed F	Pine S				A steep embankment divides this stand. This embankment runs parallel to the shoreline. The North Country Trail extends through this stand, also				
	Canopy Species	% Cover	Size Class	DBH Age	Sub-Ca	nopy Speci	es Density	Avg. Height	Size	running parallel to the shoreline. At least one dispersed camping site falls	
	White Pine	50	Log/XLog	16 110	W	hite Pine	High	Variable	Sapling	within stand. The trail does drop over the embankment comes very close	
	Red Pine	30	Log	14	Bla	ck Spruce	Low	Variable	Sapling	to the beachline in several places. Stand provides scenic vistas of the Lake. Oak and black spruce are overstory associates. Red maple, black	
	Paper Birch	20	Pole/Log	9						spruce and white pine saplings are present. Stand composition and	
										structure is varied, with patches of mature red pine and mixed pine above the escarpment, and maple and birch sub-stands below.	
6	42210 - Na	tural Red P	ine s	Sawtimber Well	26.6	82	81-110	N/A		Red pine over jack pine poles. Infrequent older jack pine. Patches of	
	Canopy Species	% Cover	Size Class	DBH Age	Sub-Ca	nopy Speci	es Density	Avg. Height	Size	J2/R5. Some areas with higher concentrations of larger red pine sawtimber. Understory jack pine needs additional time before any harvest	
	Red Pine	60	Log/Pole	12 82	W	hite Pine	Low	Variable	Sapling	to increase in size. White pine and red maple trees in overstory. Red	
	Jack Pine	35	Pole/Sapling	j 5 44	R	ed Pine	Low	Variable	Sapling	maple saplings present.Cut in 1973 on permit # 6-73A.	
7	320 - Up	land Shrub		Nonstocked	10.4	0	Unspecified	4222 - Natural	Jack Pine	Stand final harvested as sale #003-11-01, Coast Guard Patches Pine. Completed 04/30/12. Scarification completed summer 2012. Regen	
					Sub-Ca	nopy Speci	es Density	Avg. Height	Size	2016: 513 TPA of jack pine. Residual BA of 20 to 30. 2019: patchy JP	
					Já	ack Pine	Medium	< 5 feet	Sapling	regen ~3' tall.	
					R	ed Pine	Low	>20 feet	Log		
8	42120 - Pla	nted Jack F	Pine F	Poletimber Well	57.8	42	Unspecified	N/A		ORV trail passes through stand. Occasional WB and oak. Just coming	
	Canopy Species	% Cover	Size Class	DBH Age						into pole size. 1-3 sticks (2 stick average). Cut in 1974 under permit #5-74A. Scarified in 1975 (C-115). Planted in 1977.	
	Jack Pine	90	Pole/Sapling							14A. Stanileu III 1973 (C-113). Flailleu III 1977.	
	Red Pine	8	Log	12							

Report 7 – Stands

Compartment: 23 Year of Entry: 2021

Stand	Level 4 C	Level 4 Cover Type		Size Density		Acres	Stand Age BA Range		Managed Si	ite	General Comments		
9	42210 - Natural Red Pine			Sawtimb	er Well	5.5	5.5 94 81-110		N/A		Variable DBH. ORV trail follows forest road along east side of stand. Red		
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Specie	s Density	Avg. Height	Size	maple, white pine and red pine saplings present. F understory is black spruce. White birch, oak and jack pine poles found. Deer Park		
	Red Pine	60	Log/Pole	12	94	W	hite Pine	Low	Variable	Sapling	Sand.Was part of 1974 timber sale under permit #5-74A. Scarified in		
	White Pine	35	Log	12		Bla	ck Spruce	Low	Variable	Sapling	1975 (C-115).		
10	42220 - Nat	ural Jack P	ine	Poletimb	er Well	40.2	49	Unspecified	N/A		Not much difference between adjacent stands. 2-3 stick average. Cut in		
	Canopy Species	% Cover	Size Class	DBH	Age						1969; scarified in 1970 (No. 50). Wooden post and 4 BTs (Lewicki) at NW corner of stand, just north of abandoned forest road.		
	Jack Pine	90	Pole/Sapling	g 6	49						NW comer of stand, just north of abandoned forest road.		
	Red Pine	8	Log	14									
11	42220 - Nat	ural Jack P	ine	Poletimb	er Well	40.9	44	Unspecified	N/A		North Country Trail passes through stand. White pine and red pine in		
	Canopy Species	% Cover	Size Class	DBH	Age						overstory. White pine, red pine, oak, red maple, white birch and black spruce saplings present. Cut in 1974 on permit #9-73A. Scarified in		
	Jack Pine	90	Pole/Sapling	g 6	44						1975 (C-117). 2 stick average.		
	Red Pine	8	Log	14							(), J		
12	42220 - Nat			Poletimb		93.2	40	Unspecified	N/A		North Country Trail follows the Coast Guard Road along north edge of stand. White pine, white birch and red pine are overstory associates. Red		
	Canopy Species	% Cover	Size Class	DBH	Age						maple saplings present.		
	Jack Pine	90	Pole/Sapling	-	40						Cut in 1978 under permit #6-77A; scarified in 1979 (C-174). 1-2 stick (2		
	Red Pine	8	Log/Pole	10							stick average).		
13	42220 - Nat	ural Jack P	ine	Poletimb		107.0	42	Unspecified	N/A		Cut in 1976 under permit #13-75A; scarified in 1977 (C-137). 2 stick average.		
	Canopy Species	% Cover	Size Class	DBH	Age								
	Jack Pine	85	Pole/Sapling	g 6	42								
	Red Pine	15	Log/Pole	12									
14	42220 - Nat	ural Jack P	ine	Sapling I	Medium	22.4	7	Immature	N/A		Stand harvested via final harvest as sale #006-11-01, Ben's Last Stand		
	Canopy Species	% Cover	Size Class	DBH	l Age						Pine. Completed 04/30/2012. Scarification completed summer 2012. Regen 2016: Average TPA for all stands in Ben's Last Stand Pine Sale.		
	Jack Pine	95	Sapling	1	7						126 TPA of jack pine, 207 TPA of red oak, 108 TPA of white pine, and 351 TPA of red maple. Residual BA of 60.		
15	42210 - Nai	42210 - Natural Red Pine		Sawtimber Well		15.0	110	81-110	N/A		2019: JP ~ 3' - 4' tall. Full stocking. Red pine/white pine logs over jack pine poles (2 sticks).		
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Specie	s Density	Avg. Height	Size	Cut in 1976 under permit #13-75A; scarified in 1977 (Ć-137).		
	Red Pine	60	Log	14	110		hite Pine	High	Variable	Sapling			
	White Pine	17	Log/Pole	14		R	ed Pine	Low	Variable	Sapling			
	Jack Pine	20	Pole	6	42						1		
16	42210 - Nat	ural Red P	ine			45.7	53	81-110	N/A		Variable diameter patches within stand (48-75 years old). White birch and oak poles are overstory associates. Oak, white birch and red maple		
	Canopy Species	% Cover	Size Class	DBH	Age						saplings are present. Very heavy knots/whorls on red pine. Many		
	Red Pine	75	Pole/Log	8	53						submerchantable pine stems. Small patch of larger red pine at a higher		
	White Pine	8	Pole/Log	8							stocking level along Rabbit Patch Road.		
	winte i ine	<u> </u>	5								- •		

Report 7 – Stands

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stand	Level 4 C	over Type		Size Density	Acres	Stand Age	BA Range	Managed S	ite	General Comments
17	4123 -	Red Oak	Sa	awtimber Medium	7.1	100	81-110	N/A		Thick balsam (sapling to small pole) understory. Scattered overstory.
	Canopy Species	% Cover	Size Class	DBH Age	Sub-Can	opy Species	Density	Avg. Height	Size	
	Red Oak	73	Log/Pole	12 100	Bals	sam Fir	Full	Variable	Sapling	
	White Pine	15	XLog/Log	18					1	
18	42210 - Nat	tural Red P	ine	Sawtimber Well	6.7	82	81-110	N/A		White pine and jack pine are overstory associates. Red maple, red pir
	Canopy Species	% Cover	Size Class	DBH Age	Sub-Can	opy Species	Density	Avg. Height	Size	and white pine saplings present. Patches with J2 and W1 understory.
	Red Pine	80	Log/Pole	12 82	Whi	te Pine	Medium	Variable	Sapling	
	White Pine	20	Log/Pole	12					1	
19	42220 - Nat	ural Jack F	Pine I	Poletimber Well	3.0	36 L	Inspecified	N/A		Intersection of Rabbit Patch Road and County Road 410. The stand w
	Canopy Species	% Cover	Size Class	DBH Age						part of sale #23-79, scarified with FTP #42-38 in 1979. The eastern portion of the stand was planted in 1983 under FTP 42-138. Averages
	Jack Pine	100	Pole/Sapling							sticks tall.
20	42220 - Nat	ural Jack F	Pine	Sapling Well	22.5	35 L	Inspecified	N/A		On the verge of pole size. 0-1 stick average.Cut in 1983, permit #007
	Canopy Species	% Cover	Size Class	DBH Age						81; scarified in 1984, FTP 42-95.
	Jack Pine	85	Sapling/Pole	4 35						
	Red Pine	8	Log/Pole	12						
21	42210 - Natural Red Pine Sawtimber Poor				16.3	84	1-50	N/A		Scattered, patchy RP residual (1-50 BA; locally higher). Check for JP
	Canopy Species	% Cover	Size Class	DBH Age	Sub-Can	opy Species	Density	Avg. Height	Size	regen in snow-free conditions (some JP peaking up thru snow). Steep north facing slope located to north side of stand. 5/8/19: Very little JP
	Red Pine	100	Log/Pole	12 84	Red	l Maple	Low	10 - 20 feet	Sapling	regeneration (trace to low density).
		1		· · · · ·	Whi	te Pine	Low	5 - 10 feet	Sapling	Stand harvested via final harvest as sale #006-11-01, Ben's Last Star
					Jac	k Pine	Trace	< 5 feet	Sapling	Pine. Completed 04/30/2012. Scarification completed summer 2012 Regen 2016: Average TPA for all stands in Ben's Last Stand Pine Sa
										126 TPA of jack pine, 207 TPA of red oak, 108 TPA of white pine, and 351 TPA of red maple. Residual BA of 60.
22	42120 - Plar	nted Jack F	Pine	Sapling Well	9.4	9	Immature	N/A		JP 10-20' tall. Occasional birch and oak. Stand harvested as "Rabbit
	Canopy Species	% Cover	Size Class	DBH Age						Patch Jack Pine" timber sale (010-01-01). Cutting completed 11/200 (unit 1). FTP42-544 completed 7/2002 w/scarification. Remainder of
	Jack Pine	85	Sapling	2 9						sale was closed out, reoffered and sold as new sale #008-04. Kuhr a
	Red Pine	10	Log	12						Travis evaluated regeneration success July 2009 and found
										unsatisfactory results. Stand will be hand planted to jack pine in 2010 Stand was hand planted (roughly 8 acres) to jack pine in Spring 2010 trenching).
23	42290 - Natu	ural Mixed I	Pine	Sawtimber Well	21.6	95	111-140	N/A		2019: Variable stand - both in diameters and density. Occasional jack
	Canopy Species	% Cover	Size Class	DBH Age	Sub-Can	opy Species	Density	Avg. Height	Size	pine and white birch. Variable density understory. 2009: Red oak sawtimber-sized trees present. Understory is quite mi
	Red Pine	54	Log/Pole	14 95	Whi	te Pine	High	Variable	Sapling	and substantial = F2/O2/W1. Oak regen is primarily around 1 foot tall
	White Pine	25	Log/Pole	14	Black	Spruce	Medium	Variable	Sapling	some taller saplings. White pine saplings are 5' to 10' tall. Red maple
	Red Oak	18	Log/Pole	12	Bals	sam Fir	Low	Variable	Sapling	black spruce and white birch saplings found. Bigtooth aspen, jack pin white birch and black spruce poles are overstory associates. Forest re
					Re	d Oak	Medium	Variable	Sapling	passing through stand provides access to several dispersed camping
					D	Maple	Low	10 - 20 feet	Sapling	sites along Lake Superior.

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Stand	Level 4 Cover Type			Size Density		Acres	Stand Age	BA Range	Managed Site		General Comments		
24	42220 - Natural Jack Pine			letimbe	er Well	48.0	45	Unspecified	N/A		Pole size with some saps still present. 1-3 sticks (2 stick average).		
	Canopy Species	% Cover	Size Class	DBH	Age						Occasional oak. Cut in 1972-73; scarified in August 1973 (C-102).		
	Jack Pine	80	Pole/Sapling	6	45								
	Red Pine	18	Log/Pole	12									
25	42210 - Nat	tural Red P	'ine Sa	wtimbe	er Poor	12.6	74	1-50	N/A		More residual than stand to the east (stand 22) and regeneration is more		
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Car	nopy Specie	es Density	Avg. Height	Size	scattered. JP averages 2" dbh. Higher BA residual has little regen underneath. These stands were combined prior to cutting, but this side		
	Red Pine	75	Log/Pole	12	74	Jao	ck Pine	High	10 - 20 feet	Sapling	has higher residual and was not planted. Stand harvested as "Rabbit		
	White Pine	15	Log/Pole	12		Wh	ite Pine	Medium	Variable	Sapling	Patch Jack Pine" timber sale (010-01-01). Cutting completed 11/2001		
	Red Oak	8	Pole/Log	8							¹ (unit 1). FTP42-544 completed 7/2002 w/scarification. Remainder of sale was closed out, reoffered and sold as new sale #008-04.		
26	42210 - Nat	tural Red P	'ine Sa	wtimbe	er Poor	37.3	73	1-50	N/A		Variable residual BA (1 - 50 BA; locally higher). Nice JP regen (~10'		
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Car	nopy Specie	es Density	Avg. Height	Size	tall).Sale #008-04-01 "Rabbit Patch Jack Pine". Sale complete 05/17/05. Scarification (42-544) completed 11/3/2006. Long, narrow		
	Red Pine	80	Log	11	73	Jao	ck Pine	Full	10 - 20 feet	Sapling	inclusion of R6 along Rabbit Patch Road. White birch and white pine		
	White Pine	15	Log/Pole	10							poles present. Red maple and black spruce saplings found. Site has some topographic changes.		
27	42210 - Nat	tural Red P	ine Saw	timber	Medium	n 31.3	73	81-110	N/A		Stand harvested via thinning as sale #006-11-01, Ben's Last Stand Pine. Completed 04/30/2012. Occasional white birch and spruce. Lots of WP		
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Car	nopy Specie	es Density	Avg. Height	Size	small poles.		
	Red Pine	75	Log/Pole	12	73	Wh	ite Pine	Medium	Variable	Sapling			
	White Pine	23	Pole/Log	9		Red	d Maple	Medium	10 - 20 feet	Sapling			
28	42210 - Nat	tural Red P	'ine Sa	awtimbe	er Well	4.4	110	111-140	N/A		North Country Trail runs along west side of stand. Blue line is run on east		
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Car	opy Specie	es Density	Avg. Height	Size	side with T-posts along the line. Some jack pine is mixed in, but most have died. Variable density understory.		
	Red Pine	70	Log/XLog/Pole	16	110	Wh	ite Pine	High	Variable	Sapling			
	White Pine	20	Log/XLog/Pole	16		Red	d Maple	Low	>20 feet	Sapling			
						Blac	k Spruce	Low	Variable	Sapling			
						Bal	sam Fir	Low	>20 feet	Sapling			
29	42220 - Nat	ural Jack F	Pine S	Sapling	Well	28.8	24	Immature	N/A		Thick regeneration. 2-3" dbh; 20-30' tall. Red pine residual scattered		
	Canopy Species	% Cover	Size Class	DBH	Age						across site. Oak poles found. Cut in 1994 via final harvest, Coast Guard Road Jack Pine, #025-91.		
	Jack Pine	80	Sapling	3	24						TCR 11-10-94. FTP for scarification 42-362, but unable to find record of		
	Red Pine	19	Log/Pole	12							scarification.		
~~	42220 - Nat	ural Jack F	vine S	Sapling	Well	2.1	35	Unspecified	N/A		On the verge of pole size. Scattered residual red pine poles on site. Cut		
30													
30	Canopy Species	% Cover	Size Class	DBH	Age						in 1983, Block 1, #007-81. TCR 1-23-84. Scarified in 1984 under FTP 42- 95.		

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Stand	Level 4 Cover Type			Size Density	Acres	s Stand Age BA Range		Managed Site		General Comments		
31	4310 - Pine, Oak Mix			Sawtimber Well	6.8	101	81-110	N/A		Oak/pine mix. Patches with heavy oak regeneration. This layer is very		
	Canopy Species	% Cover	Size Class	DBH Age	Sub-Ca	anopy Specie	es Density	Avg. Height	Size	apparent in the fall with changing foliage colors.		
	Red Pine	20	Log/Pole	12	W	hite Pine	High	Variable	Sapling	-		
	White Pine	20	Log/Pole	12	Re	ed Maple	Low	>20 feet	Sapling			
	Red Oak	53	Log/Pole	13 101	R	led Pine	Low	>20 feet	Sapling			
32	42210 - Nat	tural Red Pi	ine S	Sawtimber Well	12.4	110	111-140	N/A		North Country Trail passes through stand and runs along bluff edge.		
	Canopy Species	% Cover	Size Class	DBH Age	Sub-Ca	anopy Specie	es Density	Avg. Height	Size	Steep, long, north-facing slope parallels the beach and forms north boundary of stand. Various trails branch off the NCT to provide beach		
	Red Pine	60	Log/XLog/Pol	e 16 110	R	led Pine	High	>20 feet	Sapling	access for hikers/campers. Several dispersed camping sites are situated		
	White Pine	25	Log/XLog/Pol	e 16	W	hite Pine	High	>20 feet	Sapling	close to the shoreline. White birch poles are present. Red maple and oak		
	Red Oak	8	Log/Pole	10	Re	ed Maple	Low	>20 feet	Sapling	saplings found. Area provides some exceptional views of Lake Superior and beach. There is a meander corner located on the east end of stand.		
					Bla	ck Spruce	Medium	>20 feet	Sapling			
					Ba	alsam Fir	Low	>20 feet	Sapling			
33	500 -	- Water		Nonstocked	8.2		Unspecified	No		Water between woods and beach. Some parts may dry out during the summer.		
34	710 - S	Sand, Soil		Nonstocked	44.0		Unspecified	No		Lake Superior Beach.		
35	710 - S	Sand, Soil		Nonstocked	21.2		Unspecified	No		Lake Superior Beach.		
36	42210 - Nat	tural Red Pi	ine s	Sawtimber Well	29.5	110	111-140	N/A		North Country trail extends through stand. Several dispersed camping		
	Canopy Species	% Cover	Size Class	DBH Age	Sub-Ca	anopy Specie	es Density	Avg. Height	Size	sites found throughout stand. Jack pine is overstory associate. Variable understory density. Black spruce, fir, white birch, red maple, red pine,		
	Red Pine	80	Log/Pole	14 110	R	led Pine	Medium	>20 feet	Sapling	oak and white pine saplings present. Small patches of J2/R1. Steep		
	White Pine	10	Log	14	W	hite Pine	High	>20 feet	Sapling	north-facing escarpment parallels shoreline.		
37	42210 - Nat	tural Red Pi	ine s	Sawtimber Well	7.0	82	111-140	N/A		Red oak and white birch are overstory associates. Black spruce, red		
	Canopy Species	% Cover	Size Class	DBH Age	Sub-Ca	anopy Specie	es Density	Avg. Height	Size	maple and red pine saplings present. 18" Dbh red pine witness tree on south side of two-track, west end of trail. Stand harvested via selection		
	Red Pine	85	Log/Pole	12 82	W	hite Pine	Low	Variable	Sapling	cut as sale #003-11-01, Coast Guard Patches Pine. Completed		
	White Pine	15	Log/Pole	10					1	04/30/12. Regen 2016: 587 TPA of white pine, 97 TPA of red pine. Residual BA of 90.		
38	42220 - Nat	ural Jack P	ine	Sapling Well	16.1	26	Immature	N/A		Cut completed on 5-10-93. Timber Sale #003-92-01, Pathway Jack Pine.		
	Canopy Species	% Cover	Size Class	DBH Age						Scarified in 1993 under FTP 42-305. Red pine and white birch overstory		
	Jack Pine	95	Sapling	3 26						trees remain. Red pine saplings present. Thick regeneration.		
_	42120 - Plar	nted Jack P	line F	Poletimber Well	32.4	42	Unspecified	N/A		Scotch pine saplings and small poles are mixed in with the jack pine to		
39										the north, along Coast Guard Road. Mix of planted and natural. 1-2 sticks tall.Cut in 1973, sale #6-73A; scarified 1974 (C-105). Planted in 1977.		
39	Canopy Species	% Cover	Size Class	DBH Age								
39	Canopy Species Jack Pine	% Cover 75	Size Class Pole/Sapling	_								
39				5 42								

Report 7 – Stands

Compartment: 23

	Year of Entry: 2021
General C	Comments



Stand	Level 4 Cover Type			Size Density	Acres	Stand Age B	A Range	e Managed Site		General Comments	
40	4199 - Other Mixed Upland Deciduous			Sawtimber Well	7.9	100	81-110	N/A		Muskallonge Lake forms western half of the southern boundary of stand	
	Canopy Species	% Cover	Size Class	DBH Age	Sub-Ca	anopy Species	Density	Avg. Height	Size	The eastern half of the southern boundary and the west boundary of the stand are adjacent to private parcels. The stand's northern and eastern	
	Red Oak	50	Log/Pole	12 100	Ba	alsam Fir	Full	Variable	Sapling	boundary is formed by Co Rd 407. Old road within stand that parallels the	
	Red Maple	20	Log/Pole	12				·		highway.	
	Paper Birch	15	Pole/Log	8							
	Balsam Fir	8	Pole	8							
41	42210 - Nat	tural Red Pi	ine S	awtimber Medium	n 4.6	100	51-80	N/A		Stand harvested via selection harvest as sale #006-11-01, Ben's Last	
	Canopy Species	% Cover	Size Class	DBH Age	Sub-Ca	anopy Species	Density	Avg. Height	Size	Stand Pine. Completed 04/30/2012.	
	Red Pine	80	Log	14 100	W	hite Pine	Medium	5 - 10 feet	Sapling		
	White Pine	20	Log	14	Re	ed Maple	Low	5 - 10 feet	Sapling		
42	42290 - Natural Mixed Pine			Sawtimber Poor	7.1	74	1-50	N/A		Stand harvested via final harvest as sale #006-11-01, Ben's Last Stand	
	Canopy Species	% Cover	Size Class	DBH Age	Sub-Ca	anopy Species	Density	Avg. Height	Size	Pine. Completed 04/30/2012. Scarification completed summer 2012 under FTP 42-783.	
	Red Pine	50	Log/Pole	12 74	W	hite Pine	Low	5 - 10 feet	Sapling	Regen 2016: Average TPA for all stands in Ben's Last Stand Pine Sale.	
	White Pine	25	Log	12	Re	ed Maple	Low	5 - 10 feet	Sapling	126 TPA of jack pine, 207 TPA of red oak, 108 TPA of white pine, and	
	Red Oak	23	Log/Pole	10	Ja	ack Pine	Medium	< 5 feet	Sapling	351 TPA of red maple. Residual BA of 60. 2019: JP 2-3' tall. Areas where residual is high have less regeneration. Decent regen on west end (lower BA residual).	
44	122 - Road/Parking Lot Nonstocked		2.7	U	Inspecified	No		County Road 407 right-of-way.			
45	4191 - Mixed Upland Deciduous with Conifer			Sawtimber Well	15.0	100	81-110	N/A		OPIC - FMD: North Country Trail passes through stand. Black spruce, beech, white spruce, balsam fir, bigtooth aspen, jack pine and red pine	
	Canopy Species	% Cover	Size Class	DBH Age	Sub-Ca	anopy Species	Density	Avg. Height	Size	are overstory associates. Oak reproduction common. North facing escarpment extends along north edge of stand. At least one dispersed	
	Balsam Fir	9	Pole	8	Ba	alsam Fir	Full	Variable	Sapling	campsite within stand. Scattered large (24" dbh) oak. Occasional birch,	
	White Pine	15	Log	16						but most have died out. East finger is mainly below the bluff.	
	Red Oak	20	Log	14							
46	710 - S	Sand, Soil		Nonstocked	3.0	U	Inspecified	No		Lake Superior Beach.	