

Compartment Review Presentation

Shingleton Forest Management Unit

Compartment 41038 Entry Year 2022 Acreage: 2,207

County Schoolcraft

Management Area: Seney Manistique Swamp

Revision Date: 2020-05-08

Stand Examiner: Adam Petrelius

Legal Description:

T43N R16W, Sections 6, 7, 8, 17, 18

Identified Planning Goals:

The main goal of this compartment is to conduct multiple resource management for current and future generations.

Soil and topography:

The topography within the compartment is mostly flat with a few rolling hills. Elevation values range between 669-705 feet. Most of the compartment is forested with only a few stands classified as grass or lowland brush. Aspen/jack pine is the dominant cover type. Other abundant cover types lowland aspen and natural pine/mixed deciduous. Numerous soil types are located in this compartment. A few of the most abundant soils are Deford, Rousseau-Neconish-Finch, and Markey Mucky Peat. Major habitat types within the compartment, in order of abundance, are Unclassified Lowland and PVE.

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

State land within this compartment was acquired between 1927 and 1970. Most of the land was acquired around 1940. The compartment boundary borders private, federal, and state land. The southern boundary and northern boundaries border state land. The western boundary borders USFS land. The eastern boundary borders private land, mostly Lyme Timeber Company Lands. One 40 acre private parcel is split into 3 ownerships within the compartment and is surrounded by state land entirely. The compartment is used mostly by hunters, ORV users, and snowmobile riders.

Unique Natural Features:

None

Archeological, Historical, and Cultural Features:

None

Special Management Designations or Considerations:

None

Watershed and Fisheries Considerations:

Poor-to-Good. The Big Ditch is classified as SQCW as soon as it combines into one stream, in the upper half of Section 6. Even so, we know very little about its natural trout production or angler success when fishing it. However, Smith Creek is classified SQWW. There is no need to protect Smith Creek from encroachment by beaver, but protection from increased sand bedload is still a high priority.

Wildlife Habitat Considerations:

Compartment 38 lies within central Schoolcraft county in the Seney Sand Lake Plain ecological sub-subsection and is part of the Seney-Manistique Swamp Management area with beaver, moose, sharp-tailed grouse, snowshoe hare, and white-tailed deer as featured species. The growing season averages approximately 110 days with an extreme minimum temperature of –46 degrees F. Average annual snowfall in this area is around 120 inches.

Pre-settlement forest in this area consisted primarily of red pine, jack pine, and aspen on the ridges. Lowlands were dominated by unforested marsh and black spruce/tag alder swamps. Currently a large portion of sections 6 and 7 are being drained by the Big Ditch. Non flooded areas are dominated by either low herbaceous vegetation or regenerating aspen. Wet areas are covered by willow.

Wildlife habitat management objectives for this compartment are primarily related to maintaining the open lands and encouraging early successional forest species. Other wildlife priorities include the creation of dense understory's with retention of woody debris in jack pine and lowland types and retaining soft and hard mast producing species in harvested stands. There are three bird species of concern known to exist either close to or within this compartment including Kirtland's warbler, prairie warbler and sharp-tailed grouse. There is at least one (potentially more) sharptailed-grouse lek(s) within this compartment. Other wildlife species of interest tree swallows, kestrels, blue birds, ruffed grouse, woodcock, mink, beaver, woodchuck, coyote and red fox.

Mineral Resource and Development Concerns and/or Restrictions

Surface sediments consist of lacustrine (lake) sand and gravel and peat and muck. There is insufficient data to determine the glacial drift thickness. The Ordovician Utica Shale and Stonington Formation subcrop below the glacial drift. These formations do not have an economic use. The nearest gravel pit is 3 miles to the east. There is limited gravel potential on State lands.

Vehicle Access:

Except for the areas containing low ground, the compartment has a decent system of forest roads that can be driven during the snow free months. State Highway M-94 travels east/west through the compartment. The Haywire Grade Snowmobile/ORV trail, Mint Farm Road, and Big Ditch Road, and Smith Creek Truck Trail also travel through the compartment.

Survey Needs:

A survey project was completed last year of entry, however areas bordering the Hiawatha National Forest to the west may require future survey work.

Recreational Facilities and Opportunities:

The Haywire Grade snowmobile trail and ORV trail travels through the middle of the compartment.

Fire Protection:

Response time to fires within this compartment from the Thompson field office will be slow. The compartment receives moderate use throughout fire season and human caused fires are a concern. Both spring and summer fires are likely to occur here. Organic soil conditions may cause problems for firefighters during dry summer months. Water sources are abundant and include the Big Ditch, Smith Creek, and additional unnamed tributaries.

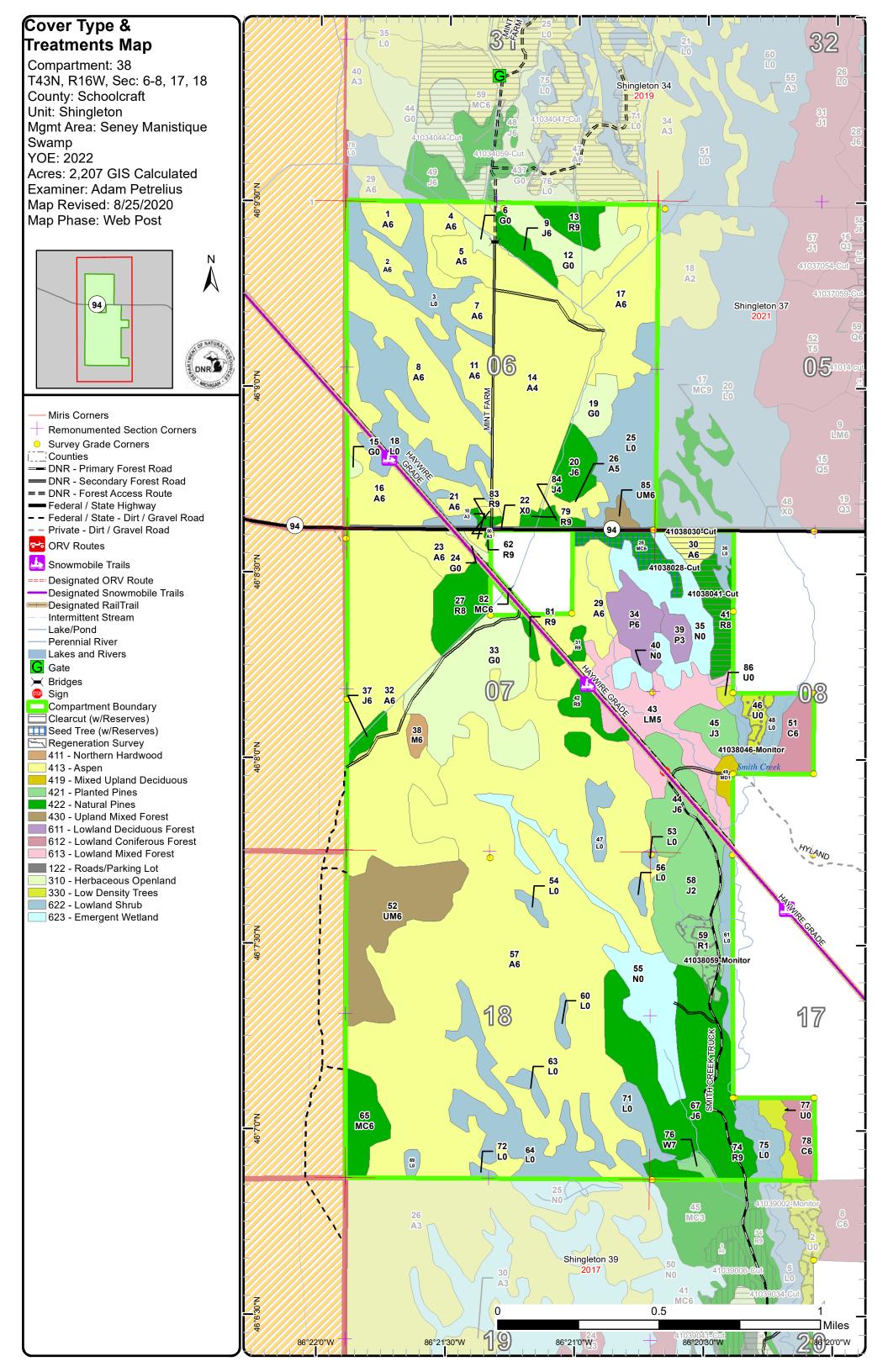
Additional Compartment Information:

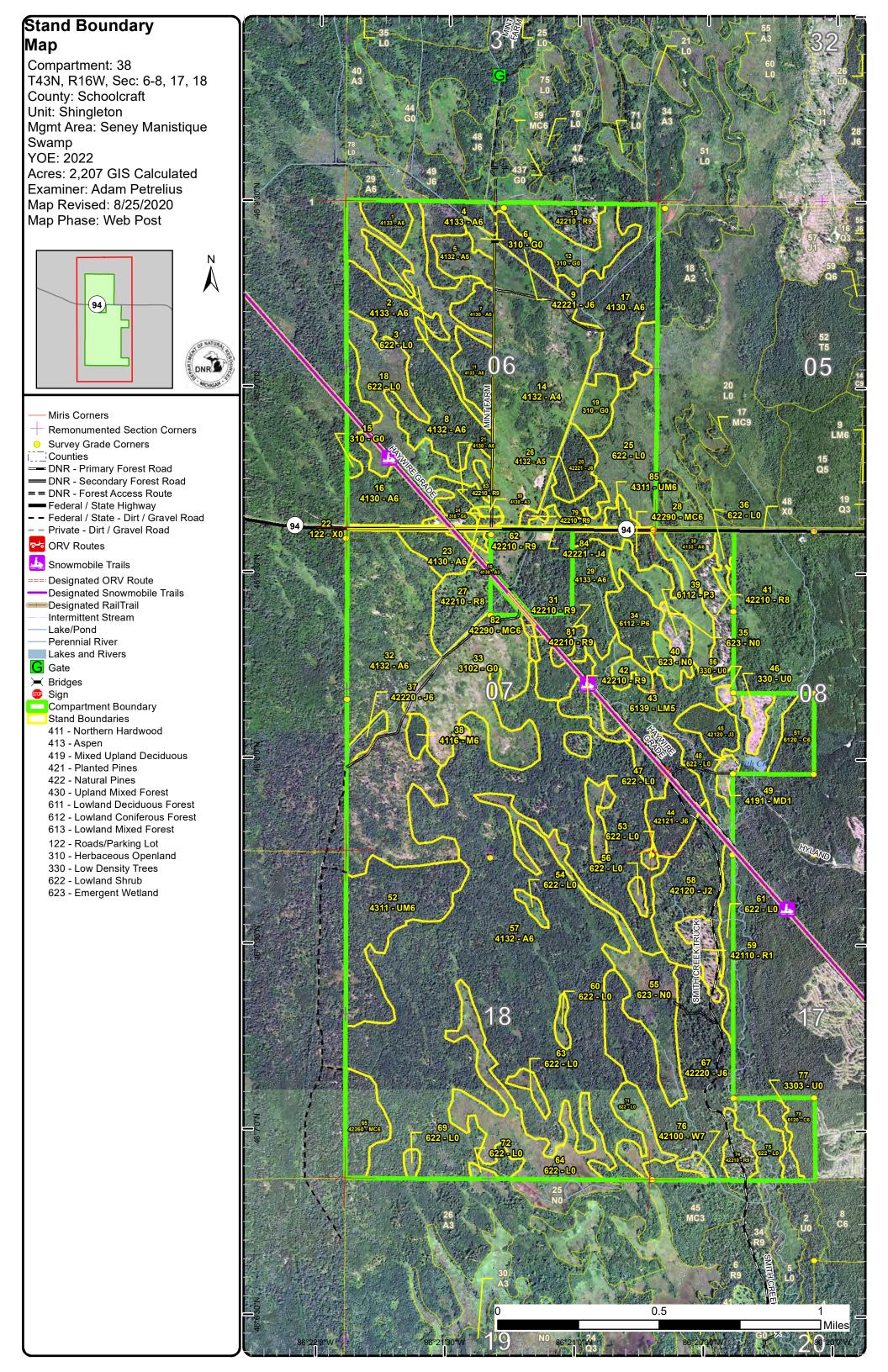
The following reports from the Inventory are attached:

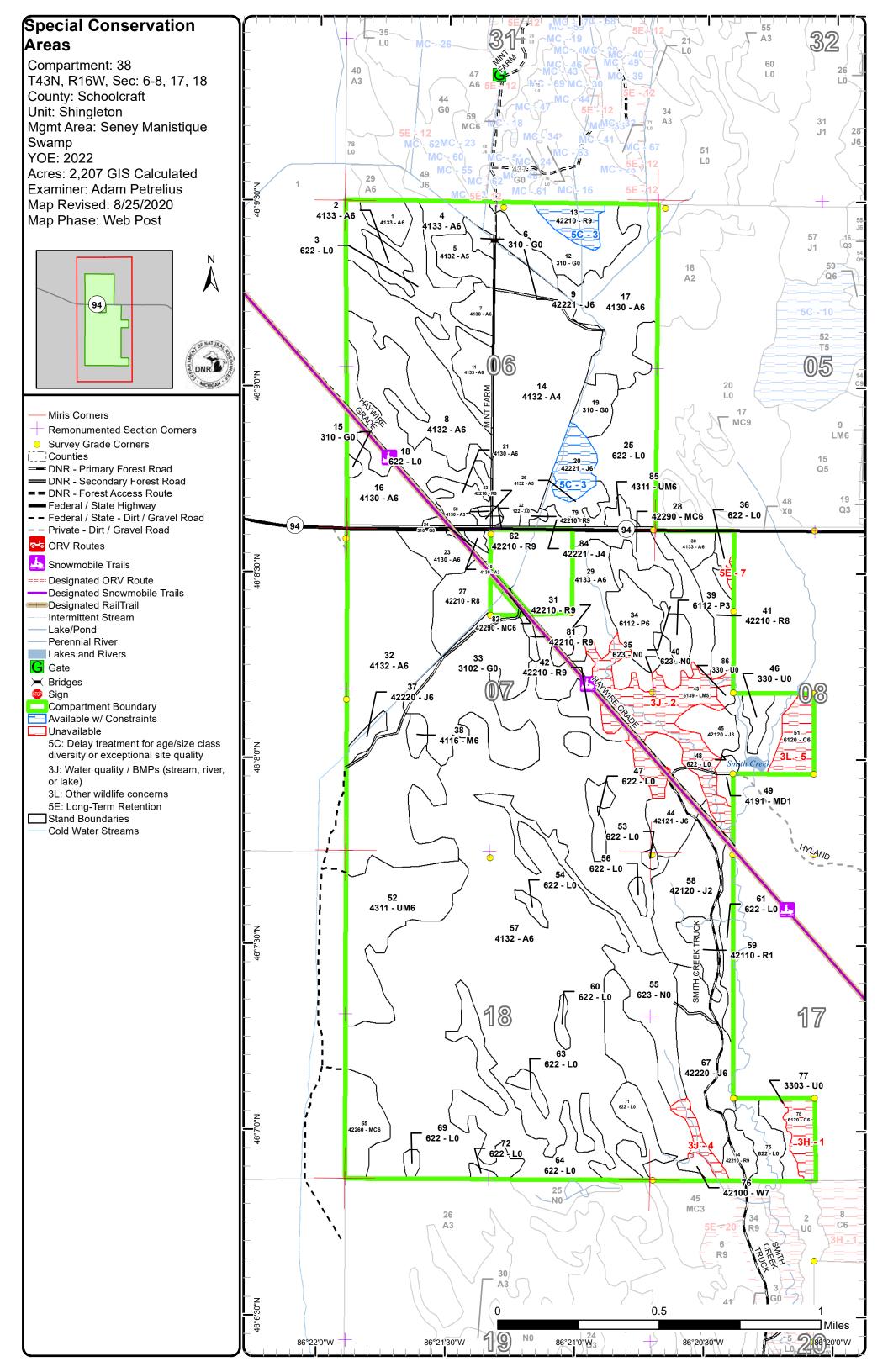
Total Acres by Cover Type and Age Class Cover Type by Harvest Method Proposed Treatments – No Limiting Factors Proposed Treatments – With Limiting Factors Stand Details (Forested and Nonforested) Dedicated and Proposed Special Conservation Areas Site Condition Details

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







Shingleton Mgt. Unit Adam Petrelius : Examiner



Age Class

	₹oc s		3/2	\$ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		3/6		3/8	\$ / _®	R. S	\$ \ &		70 12 A	\$\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\		\$5. \ B	84 / £	No. St. Oct.	N. S.
Aspen	0	3	0	213	909	0	8	0	0	0	0	0	0	0	0	0	0	0	1133
Cedar	0	0	0	0	0	0	0	0	0	0	0	29	0	0	0	0	0	0	29
Herbaceous Openland	122	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	122
Jack Pine	0	0	45	40	105	10	15	0	0	0	0	0	0	0	0	0	0	0	213
Low-Density Trees	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17
Lowland Aspen/Balsam Poplar	0	7	0	0	20	0	0	0	0	0	0	0	0	0	0	0	0	0	27
Lowland Mixed Forest	0	0	0	63	0	0	0	0	0	0	0	0	0	0	0	0	0	0	63
Lowland Shrub	294	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	294
Marsh	89	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	89
Mixed Upland Deciduous	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
Natural Mixed Pines	0	0	0	0	21	0	0	12	2	0	0	0	0	0	0	0	0	0	35
Northern Hardwood	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	4
Red Pine	0	11	0	0	0	0	0	5	52	30	0	0	0	0	0	0	0	0	96
Upland Mixed Forest	0	0	0	0	66	0	0	0	0	0	0	0	0	0	0	0	0	0	66
Urban	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
White Pine	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	3
Total	531	26	45	316	1126	10	23	17	57	30	0	29	0	0	0	0	0	0	2205



Report 2 – Treatment Summary

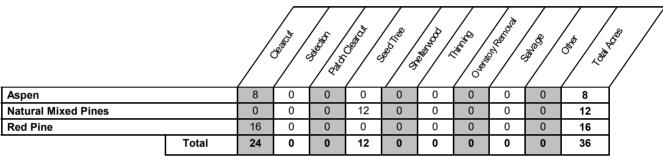
Shingleton Mgt. Unit Year of Entry: 2022

Acres of Harvest

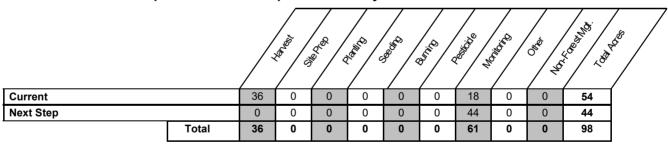
Compartment 38
Total Compartment Acres: 2,207

Commercial Harvest - 36 Harvests with Site Condition - 0 Next Step Harvest - 0 Habitat Cut - 0

Cover Type by Harvest Method



Proposed and Next Step Treatments by Method



CoverType

Habitat

Cut

Compartment: 38

Structure

Objective

Method

S t a

n

d

Year of Entry: 2022

Treatment Acres Stand Size Stand BA Treatment Treatment Cover Type Age

Range

Proposed Treatments:

Name

28 41038028-Cut 12.4 42290 - Natural Poletimber 66 81-110 Harvest Seed Tree with 4319 - Mixed Even-Aged No Mixed Pine Well Retention Upland Forest

Type

<u>Prescription</u> Cut all species except oak and hemlock. Leave a few scattered pine for seed trees. Retention can be placed on the edge.

Age

Density

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Any species currently onsite. Stand is predominantly pine, however it has a heavy aspen component. Due to the location, and stand size,

Regen: management will be for a mixed stand.

Other Comment:

Site Condition

Proposed Start Date: 10/1 /2021

30 41038030-Cut 8.0 4133 - Aspen, Poletimber 50 81-110 Harvest Clearcut 413 - Aspen Even-Aged No

Mixed Pine Well

Prescription Cut all trees except hemlock and oak if present. Less than 3% retention is acceptable due to small stand size.

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Mixed deciduous and conifers. Stand will likely regenerate to predominately aspen.

Regen:

Other Comment:

Site Condition

Proposed Start Date: 10/1 /2021

42210 - Natural 41038041-Cut 16.0 Sawtimber 84 51-80 Clearcut with 4199 - Other Harvest Even-Aged Nο Red Pine Medium Retention Mixed Upland Deciduous

<u>Prescription</u> Cut all trees except hemlock and oak if present. Leave some scattered seed trees to try and keep red pine as a component in stand.

Specs: Retention lies within stand 41 which was previously designated as retention last entry.

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Mixed deciduous and conifer trees. Stand was harvested last entry and has an understory of mostly aspen.

Regen:

Other Comment:

Site Condition

Proposed Start Date: 10/1 /2021

Approved Treatments:

46 41038046- 7.2 330 - Low-Density Nonstocked 0 Unspec Monitoring Artificial 42120 - Planted Even-Aged No Monitor Trees ified Regen(1yr) Jack Pine

Prescription check regeneration

Specs:

Next Step Monitoring, Artificial Regen(3yr)

Treatments:

Acceptable jack pine, red pine, black spruce, white pine

Regen:

Other Percent to Treat = 100%

Comment:

S t		Shingleton	Mgt. Unit		Repoi	rt 3 T	Treatments		Compartmen Year of Entry		DNR
a n d	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Habitat Cut
	Condition osed Start Date	te: 10/1 /20	20								
59	41038059- Monitor	10.6	42110 - Planted Red Pine	Sapling Poor	3	1-50	Monitoring	Artificial Regen(3yr)	42210 - Natural Red Pine	Two-Aged	No
Preso Spec	<u>cription</u> check s:	regeneratio	on								
Next Treat	<u>Step</u> ments:										
Acce Rege	<u>otable</u> red pi <u>n:</u>	ine									
Other Comr	•	ent to Treat =	= 100%								
Site C	Condition										

Total Treatment Acreage Proposed: 54.2

Proposed Start Date: 10/1 /2020

Shingleton Mgt. Unit

Adam Petrelius : Examiner

Availa	ability for	Managemer	nt						
Total	Acres	Acres Avail	Acres	D	omina	nt Sit	e Con	dition	s
Acres	Available	With Condition	Not Available		5C	3H	3J	3L	5E
1132	1132	0	0	Aspen					
29	0	0	29	Cedar		12		16	
123	123	0	0	Herbaceous Openland					
213	191	15	7	Jack Pine	15		7		
17	17	0	0	Low-Density Trees					
27	27	0	0	Lowland Aspen/Balsam Poplar					
63	0	0	63	Lowland Mixed Forest			63		
294	294	0	0	Lowland Shrub					
89	89	0	0	Marsh					
5	5	0	0	Mixed Upland Deciduous			0		
35	35	0	0	Natural Mixed Pines					
4	4	0	0	Northern Hardwood					
97	83	13	1	Red Pine	13				1
66	66	0	0	Upland Mixed Forest					
9	9	0	0	Urban					
3	3	0	0	White Pine					
2,207	2,080	28	99	Total Forested Acres	28	12	69	16	1
	94%	1%	4%	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 Condition	Acres	Other Site Condition	Other Site Condition	Other Site Condition	Other Site Condition
1	Unavailable	3H: Deer Wintering Area - habitat is incompatible with harvest at this time	12	Unspecified	Unspecified	Unspecified	Unspecified
C	Comments:						

Report 4 – Site Conditions

Shingleton Mgt. Unit
Adam Petrelius: Examiner

2	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	63	2G: Too wet (sensitive soils, does not include access issues)	Unspecified	Unspecified	Unspecified
	Comments:						
3	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	28	Unspecified	Unspecified	Unspecified	Unspecified
		s till next year of entry. Look into hat occurred 40 years ago.	o possik	oility of harvesting the easter	n 1/2 of Section 6 and in	clude former grass stands a	as well. Would be a
4	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	7	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
5	Unavailable	3L: Other wildlife concerns	16	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
7	Unavailable	5E: Long-Term Retention	1	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						

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				

Shingleton Mgt. Unit Compartment: 38
Year of Entry 2022



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.

Conservation Area	Type	Description	ERA = Ecological Reference Area HCVA = High Conservation Value Area SCA = Special Conservation Area
SCA	Cold Water Stream	stocked trout populations and those of other cold year to year. Coldwater streams in Michigan typic	s. Such streams are established by Director's action and

Shingleton Mgt. Unit

Compartment: 38
Year of Entry: 2022



Stand	d Level 4 Co	over Type	S	Size De	ensity	Acres	Stand Age B	A Range	Managed S	Site	General Comments	MICHIGAN .
1	4133 - Aspe	n, Mixed P	ine Po	oletimk	er Well	9.9	39	51-80	N/A			
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Can	opy Species	Density	Avg. Height	Size		
	Quaking Aspen	70	Pole/Sapling	6	39	Quaki	ng Aspen	Medium	10 - 20 feet	Sapling		
	Red Pine	10	Pole	9		Jac	k Pine	Low	5 - 10 feet	Sapling		
	Jack Pine	10	Pole/Sapling	6		Black	c Cherry	Low	5 - 10 feet	Sapling		
	Black Cherry	10	Sapling/Pole	4		Willo	ow spp.	Medium	5 - 10 feet	Tall Shrub		
2	4133 - Aspe	n, Mixed P	ine Po	oletimk	er Well	8.8	39	51-80	N/A			
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Can	opy Species	Density	Avg. Height	Size		
	Quaking Aspen	70	Pole/Sapling	6	39	Quaki	ng Aspen	Medium	10 - 20 feet	Sapling		
	Red Pine	10	Pole	9		Jac	k Pine	Low	5 - 10 feet	Sapling		
	Jack Pine	10	Pole/Sapling	6		Black	c Cherry	Low	5 - 10 feet	Sapling		
	Black Cherry	10	Sapling/Pole	4		Wille	ow spp.	Medium	5 - 10 feet	Tall Shrub		
3	622 - Low	land Shrub)	Nonst	ocked	42.3			No			
4	4133 - Aspe	n, Mixed P	'ine Po		er Well	18.0	39	51-80	N/A			
	Canopy Species	% Cover	Size Class	DBH	l Age		opy Species	Density	Avg. Height	Size		
	Quaking Aspen	70	Pole/Sapling	6	39		ng Aspen	Medium	10 - 20 feet	Sapling		
	Red Pine	10	Pole	9			k Pine	Low	5 - 10 feet	Sapling		
	Jack Pine	10	Pole/Sapling	6			k Cherry	Low	5 - 10 feet	Sapling		
	Black Cherry	10	Sapling/Pole	4		Wille	ow spp.	Medium	5 - 10 feet	Tall Shrub		
5	4132 - Aspe	en, Jack Pi	ne Pole	etimbe	r Mediun	n 12.9	25	1-50	N/A		flooded in past by beaver? big ditch fire?	
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Can	opy Species	Density	Avg. Height	Size		
	Quaking Aspen	70	Pole/Sapling	5	25	Wille	ow spp.	Medium	5 - 10 feet	Tall Shrub		
	Jack Pine	30	Pole/Sapling	5								
6	310 - Herbace	eous Open	land	Nonst	ocked	4.1			No		old beaver flooding	
7	4130 -	- Aspen	Po	oletimb	er Well	9.2	39	51-80	N/A			
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Can	opy Species	Density	Avg. Height	Size		
	Quaking Aspen	75	Pole/Sapling	5	39	Quaki	ng Aspen	Medium	10 - 20 feet	Sapling		
	Red Pine	5	Pole/Log/Sap	9		Jac	k Pine	Low	5 - 10 feet	Sapling		
	Jack Pine	10	Pole	6		Black	c Cherry	Medium	5 - 10 feet	Sapling		
	Black Cherry		Sapling/Pole				,		5 - 10 feet	Tall Shrub		

Report 7 - Stands



Stand	d Level 4 C	over Type	:	Size De	nsity	Acres	Stand Age E	A Range	Managed S	Site	General Comments
8		en, Jack Pi		Poletimb			39	51-80	N/A		-
	Canopy Species	% Cover			l Age		opy Species	Density	Avg. Height	Size	
	Quaking Aspen	65	Pole/Sapling	6	39		ng Aspen	Medium	10 - 20 feet	Sapling	
	Red Pine	5	Pole/Log/Sap				k Pine	Low	5 - 10 feet	Sapling	
	Jack Pine	20	Pole/Sapling			Blac	k Cherry	Low	5 - 10 feet	Sapling	
	Black Cherry	10	Sapling/Pole	4		Will	ow spp.	Medium	5 - 10 feet	Tall Shrub	
9	42221 - Natural Dec	Jack Pine, ciduous	Mixed P	Poletimb	er Well	9.9	49	81-110	N/A		
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Car	opy Species	Density	Avg. Height	Size	
	Quaking Aspen	20	Pole	8		Blac	k Cherry	Medium	10 - 20 feet	Sapling	
	Jack Pine	60	Pole	8	49	Serviceber	ry (Juneberry)) Medium	10 - 20 feet	Sapling	
	Black Cherry	20	Pole	8							-
10		- Aspen		Sapling		1.7	5	81-110	N/A		[12/12/2016 TI] Stand was cut as part of the Day Before Derby Sale #41- 032-12-01. TCR Date of 7/29/2016.
	Canopy Species	% Cover			l Age						002 12 011 1011 2010 01 1/20/20 101
	Quaking Aspen	100	Sapling	2	5						
11	4133 - Asp	en, Mixed P	ine P	Poletimb	er Well	15.8	39	51-80	N/A		
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Car	opy Species	Density	Avg. Height	Size	
	Quaking Aspen	70	Pole/Sapling	6	39	Quaki	ng Aspen	Medium	10 - 20 feet	Sapling	
	Red Pine	5	Pole	9		Jac	ck Pine	Low	5 - 10 feet	Sapling	
	Jack Pine	15	Pole/Sapling	6		Blac	k Cherry	Low	5 - 10 feet	Sapling	
	Black Cherry	10	Sapling/Pole	4		Will	ow spp.	Medium	5 - 10 feet	Tall Shrub	
12	310 - Herbad	ceous Open	land	Nonsto	ocked	29.4			Managed O	pening	
13	42210 - Na	tural Red P	ine S	Sawtimb	er Well	12.9	83	81-110	N/A		[12/12/2016 TI] Stand was cut as part of the Day Before Derby Sale #
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Car	opy Species	Density	Avg. Height	Size	041-32-12-01. TCR date 7/29/2016
	Red Pine	100	Log/Pole	13	83	Blac	k Cherry	Low	5 - 10 feet	Sapling	
					1	Serviceber	ry (Juneberry)) Low	10 - 20 feet	Sapling	
						Red	d Maple	High	< 5 feet	Sapling	
						Quaki	ng Aspen	Medium	5 - 10 feet	Sapling	
14	4132 - Asp	en, Jack Pi	ne P	oletimb		r 117.5	35	1-50	N/A		Commercial opening maintenance could be conducted with the adjacen stands in the future.
	Canopy Species	% Cover			l Age		opy Species		Avg. Height	Size	otando in tilo tuturo.
	Quaking Aspen	50	Pole/Sapling	6	35	Jac	k Pine	Medium	5 - 10 feet	Sapling	Ruffed Grouse Society Machine Fecon head cleared most of stand trees
	Jack Pine	40	Pole/Sapling	6		Blac	k Cherry	Medium	5 - 10 feet	Sapling	and brush. Red Oak and Crabapple saplings were planted along
	Black Cherry	10	Pole/Sapling	6		Quaki	ng Aspen	Medium	5 - 10 feet	Sapling	perimeter of stand.
15	310 - Herbad	ceous Open	land	Nonst	ocked	1.6			No		



Stan	d Level 4 Co	over Type	8	ize De	inoity	Acres	Stand Age B	, rrange	Managed S	Site	General Comments	MICHIGAN
16	4130	- Aspen	Po		er Well	37.3	31	51-80	N/A			
	Canopy Species	% Cover			l Age		nopy Species	Density	Avg. Height	Size		
	Quaking Aspen	80	Pole/Sapling	6	31		ing Aspen	Medium	10 - 20 feet	Sapling		
	White Pine	5	Log	12		Will	low spp.	Medium	5 - 10 feet	Tall Shrub		
	Jack Pine	5	Pole/Sapling	7								
	Black Cherry	5	Pole/Sapling	6								
	Paper Birch	5	Pole/Sapling	6								
17	4130	- Aspen	Po	oletimb	er Well	58.5	39	51-80	N/A			
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Car	nopy Species	Density	Avg. Height	Size		
	Quaking Aspen	70	Pole	7	39	Quak	ing Aspen	Medium	5 - 10 feet	Sapling		
	Red Pine	4	Log	14		Will	low spp.	Low	5 - 10 feet	Tall Shrub		
	Jack Pine	6	Pole/Sapling	6								
	Black Cherry	20	Pole	7								
18	622 - Low	land Shrub	o I	Nonst	ocked	57.6	0		No		sparse aspen clones on ridges, lowland shrub in low ground	
_												
19	310 - Herbac	eous Open	land I	Nonst	ocked	12.4	Uı	nspecified	No			
20	42221 - Natural	•			ocked er Well		59	nspecified 51-80	No N/A			
	42221 - Natural Deci Canopy Species	Jack Pine,		oletimb		14.8				Size		
	42221 - Natural Deci	Jack Pine,	Mixed Po	oletimb	er Well	14.8 Sub-Car	59	51-80	N/A	Size Sapling		
	42221 - Natural Deci Canopy Species	Jack Pine, iduous % Cover	Mixed Po	oletimb DBH	er Well	14.8 Sub-Car	59	51-80 Density	N/A Avg. Height			
	42221 - Natural Deci Canopy Species Quaking Aspen	Jack Pine, iduous Cover	Mixed Po	DBH 8	er Well	14.8 Sub-Car Quak Blace	59 nopy Species ing Aspen	51-80 Density Medium	N/A Avg. Height 5 - 10 feet	Sapling		
	42221 - Natural Deci Canopy Species Quaking Aspen Jack Pine	Jack Pine, iduous Cover	Mixed Positive Class Pole Pole	DBH 8 8	er Well	14.8 Sub-Car Quak Blac Will	59 nopy Species ing Aspen ck Cherry	51-80 Density Medium Medium	N/A Avg. Height 5 - 10 feet 5 - 10 feet	Sapling Sapling		
20	42221 - Natural Deci Canopy Species Quaking Aspen Jack Pine 4130 Canopy Species	Jack Pine, iduous **Cover* 40 60	Mixed Possible Pole	DBH 8 8	er Well	14.8 Sub-Car Quak Blac Will 10.6 Sub-Car	59 nopy Species ing Aspen ck Cherry low spp. 30 nopy Species	51-80 Density Medium Medium Medium	N/A Avg. Height 5 - 10 feet 5 - 10 feet 5 - 10 feet	Sapling Sapling		
20	42221 - Natural Deci Canopy Species Quaking Aspen Jack Pine	Jack Pine, iduous **Cover* 40 60 - Aspen	Mixed Possible Pole	DBH 8 8 B B B B B B B B B B B B B B B B B	er Well	14.8 Sub-Car Quak Blac Will 10.6 Sub-Car	59 nopy Species ing Aspen ck Cherry low spp. 30	51-80 Density Medium Medium Medium 51-80	N/A Avg. Height 5 - 10 feet 5 - 10 feet 5 - 10 feet N/A	Sapling Sapling Tall Shrub		
20	42221 - Natural Deci Canopy Species Quaking Aspen Jack Pine 4130 Canopy Species	Jack Pine, iduous Cover 40 60 - Aspen Cover	Mixed Possize Class Pole Pole Pole	DBH 8 8	er Well 59 er Well	14.8 Sub-Car Quak Blac Will 10.6 Sub-Car	59 nopy Species ing Aspen ck Cherry low spp. 30 nopy Species	51-80 Density Medium Medium Medium 51-80 Density	N/A Avg. Height 5 - 10 feet 5 - 10 feet 5 - 10 feet N/A Avg. Height	Sapling Sapling Tall Shrub		
20	42221 - Natural Deci Canopy Species Quaking Aspen Jack Pine 4130 Canopy Species Quaking Aspen	Jack Pine, iduous Cover 40 60 - Aspen Cover 90 10	Mixed Positive Class Pole Pole Pole Size Class Pole/Sapling Pole/Sapling	DBH 8 8 B B B B B B B B B B B B B B B B B	ser Well 59 er Well 1 Age 1 Age 1 Age 1 Age 30	14.8 Sub-Car Quak Blac Will 10.6 Sub-Car	59 nopy Species ing Aspen ck Cherry low spp. 30 nopy Species	51-80 Density Medium Medium Medium 51-80 Density	N/A Avg. Height 5 - 10 feet 5 - 10 feet 5 - 10 feet N/A Avg. Height	Sapling Sapling Tall Shrub		
21	42221 - Natural Deci Canopy Species Quaking Aspen Jack Pine 4130 Canopy Species Quaking Aspen Jack Pine 122 - Road	Jack Pine, iduous Cover 40 60 - Aspen Cover 90 10	Mixed Positive Class Pole Pole Pole Size Class Pole/Sapling Pole/Sapling ot I	DBH 8 8 8 B B B B B B B B B B B B B B B B	ber Well 59 ber Well Age 30 becked	14.8 Sub-Car Quak Blac Will 10.6 Sub-Car Will 8.7	59 nopy Species ing Aspen ck Cherry low spp. 30 nopy Species low spp.	51-80 Density Medium Medium Medium 51-80 Density	N/A Avg. Height 5 - 10 feet 5 - 10 feet 7 - 10 feet 7 - 10 feet N/A Avg. Height 7 - 10 feet No	Sapling Sapling Tall Shrub Size Tall Shrub		
21	42221 - Natural Deci Canopy Species Quaking Aspen Jack Pine 4130 Canopy Species Quaking Aspen Jack Pine 122 - Road 4130 Canopy Species	Jack Pine, iduous Cover 40 60 - Aspen Cover 90 10	Mixed Positive Class Pole Pole Pole Size Class Pole/Sapling Pole/Sapling ot I	DBH 8 8 8 B B B B B B B B B B B B B B B B	per Well 1 Age 59 Der Well 1 Age ocked oer Well 1 Age	14.8 Sub-Car Quak Blac Will 10.6 Sub-Car Will 8.7	59 nopy Species ing Aspen ck Cherry low spp. 30 nopy Species low spp.	51-80 Density Medium Medium Medium 51-80 Density High	N/A Avg. Height 5 - 10 feet 5 - 10 feet 7 - 10 feet N/A Avg. Height No N/A Avg. Height	Sapling Sapling Tall Shrub		
21	42221 - Natural Deci Canopy Species Quaking Aspen Jack Pine 4130 Canopy Species Quaking Aspen Jack Pine 122 - Road 4130 Canopy Species Quaking Aspen	Jack Pine, iduous Cover 40 60 - Aspen Cover 90 10 d/Parking L	Mixed Positive Class Pole Pole Pole Size Class Pole/Sapling Pole/Sapling ot I	DBH 8 8 8 B B B B B B B B B B B B B B B B	ber Well 59 ber Well Age 30 becked	14.8 Sub-Car Quak Blace Will 10.6 Sub-Car Will 8.7 13.1 Sub-Car	59 nopy Species ing Aspen ck Cherry low spp. 30 nopy Species low spp.	51-80 Density Medium Medium Medium 51-80 Density High	N/A Avg. Height 5 - 10 feet 5 - 10 feet 7 - 10 feet 7 - 10 feet N/A Avg. Height 7 - 10 feet No	Sapling Sapling Tall Shrub Size Tall Shrub		
21	42221 - Natural Deci Canopy Species Quaking Aspen Jack Pine 4130 Canopy Species Quaking Aspen Jack Pine 122 - Road 4130 Canopy Species	Jack Pine, iduous Cover 40 60 - Aspen Cover 90 10 J/Parking L - Aspen Cover	Mixed Positive Class Pole Pole Pole Size Class Pole/Sapling Pole/Sapling Pole/Sapling Pole/Sapling Pole/Sapling	DBH 8 8 8 Detimb DBH 6 7 Nonsto	ber Well 59 ber Well Age 30 becked ber Well Age	14.8 Sub-Car Quak Blac Will 10.6 Sub-Car Will 8.7 13.1 Sub-Car Quak	59 nopy Species ing Aspen ck Cherry low spp. 30 nopy Species low spp. 32 nopy Species	51-80 Density Medium Medium 51-80 Density High 51-80 Density	N/A Avg. Height 5 - 10 feet 5 - 10 feet 7 - 10 feet N/A Avg. Height No N/A Avg. Height	Sapling Sapling Tall Shrub Size Tall Shrub		
21	42221 - Natural Deci Canopy Species Quaking Aspen Jack Pine 4130 Canopy Species Quaking Aspen Jack Pine 122 - Road 4130 Canopy Species Quaking Aspen	Jack Pine, iduous Cover 40 60 - Aspen Cover 90 10 J/Parking L - Aspen Cover 85	Mixed Posize Class Pole Pole Pole Size Class Pole/Sapling Pote/Sapling Ot I Posize Class Pole/Sapling	DBH 6 7 Nonsto	ber Well 59 ber Well Age 30 becked ber Well Age	14.8 Sub-Car Quak Blac Will 10.6 Sub-Car Will 8.7 13.1 Sub-Car Quak	nopy Species ing Aspen ck Cherry low spp. 30 nopy Species low spp. 32 nopy Species ing Aspen	51-80 Density Medium Medium S1-80 Density High 51-80 Density Medium	N/A Avg. Height 5 - 10 feet 5 - 10 feet 5 - 10 feet N/A Avg. Height 5 - 10 feet No N/A Avg. Height 10 - 20 feet	Sapling Sapling Tall Shrub Size Tall Shrub		



Stand	Level 4 C	over Type	S	ize De	ensity	Acres	Stand Age E	A Range	Managed S	Site	General Comments
24	310 - Herbac	eous Open	land	Nonst	ocked	2.5			No		
25	622 - Lov	vland Shrut	0	Nonst	ocked	50.3			No		
26	4132 - Asp	en, Jack Pi	ine Pole	etimbe	r Mediun	n 8.4	35	51-80	N/A		
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Car	opy Species	Density	Avg. Height	Size	
	Quaking Aspen	80	Pole/Sapling	6	35	Quaki	ng Aspen	Low	5 - 10 feet	Sapling	
	Jack Pine	20	Pole/Sapling	6		Jac	ck Pine	Low	5 - 10 feet	Sapling	
27	42210 - Nat			vtimbe	r Mediun	n 23.1	72	81-110	N/A		[12/12/2016 TI] Stand was cut as part of the Day Before Derby Sale #41- 3032-12-01. TCR Date of 7/29/2016.
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Car	opy Species	Density	Avg. Height	Size	032-12-01. TON Date of 7/29/2010.
	White Pine	5	Log/Pole	10			ng Aspen	High	5 - 10 feet	Sapling	
	Red Pine	95	Log/Pole	10	72		ite Pine	Low	5 - 10 feet	Sapling	
						Re	d Pine	Low	5 - 10 feet	Sapling	
						Jac	ck Pine	Low	5 - 10 feet	Sapling	
28	42290 - Natu			oletimb	er Well	12.4	66	81-110	N/A		red pine occurs in patches and is not thick enough to thin. jp and aspen
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Car	opy Species	Density	Avg. Height	Size	13 Still Healthy
	Quaking Aspen	25	Pole	7			k Spruce	Low	5 - 10 feet	Sapling	
	Red Pine	55	Log/Pole	12	66		d Pine	Low	5 - 10 feet	Sapling	
	Jack Pine	15	Pole	8		Will	ow spp.	Low	5 - 10 feet	Tall Shrub	
	Black Spruce	5	Pole	6							
29	4133 - Aspe	en, Mixed P	Pine Po	oletimb	er Well	44.0	26	1-50	N/A		Stand was formerly jack pine prior to harvest in 1986.
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Car	opy Species	Density	Avg. Height	Size	
	Quaking Aspen	65	Pole/Sapling	5	26	Bal	sam Fir	Low	5 - 10 feet	Sapling	
	White Pine	5	Sapling/Pole	4		Wh	ite Pine	Medium	5 - 10 feet	Sapling	
	Red Pine	5	Sapling/Pole	4		Re	d Pine	Low	5 - 10 feet	Sapling	
	Jack Pine	15	Pole/Sapling	6		ŀ	Alder	Low	5 - 10 feet	Tall Shrub	
	Black Cherry	10	Pole/Sapling	5							
30	4133 - Aspe				er Well	8.0	50	81-110	N/A		1
<u></u>	Canopy Species		Size Class		l Age		nopy Species		Avg. Height	Size	
	Quaking Aspen	70	Pole Pole	8	50		k Spruce	Low	10 - 20 feet	Sapling	
	Black Spruce	5	Pole/Sapling	5			ite Pine	Low	< 5 feet	Sapling	
	Red Pine Jack Pine	15 10	Log/Pole Pole	12 7			Alder	Low	5 - 10 feet	Tall Shrub	
	Jack Pine	10	Pole	1							

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Stand	d Level 4 C	over Type	;	Size De	nsity	Acres	Stand Age B	A Range	Managed S	Site	General Comments
31	42210 - Na	tural Red P	ine S	Sawtimb	er Well	4.2	70	51-80	N/A		[12/12/2016 TI] Stand was cut as part of the Day Before Derby Sale #41-
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	032-12-01. TCR Date of 7/29/2016.
	White Pine	10	Log/Pole	12		WI	nite Pine	Medium	10 - 20 feet	Sapling	
	Red Pine	90	Log/Pole	12	70	R	ed Pine	Medium	10 - 20 feet	Sapling	
						Quak	ing Aspen	Medium	10 - 20 feet	Sapling	
32	4132 - Asp	en, Jack Pi	ne F	Poletimb	er Well	155.8	28	51-80	N/A		stand cut in 1975. opening maint. in 1991 (not 100 % sure). Washington
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	Hawthorn and Siberian Crab were planted here in 1975. Southwest corner.
	Quaking Aspen	60	Pole/Sapling	5	28	Ja	ck Pine	Low	5 - 10 feet	Sapling	- comer.
	Jack Pine	30	Sapling/Pole	4							_
	Black Cherry	10	Sapling/Pole	4							
33	3102	- Grass		Nonsto	cked	72.7			Managed O _l	pening	open maint. occurred in 2005. Red Oak and crabapple were planted along the perimeter of the stands.
34	6112 - Lo	wland Aspe	n F	Poletimb	er Well	19.9	32	51-80	N/A		
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	
	Quaking Aspen	70	Pole	6	32		lsam Fir	Medium	10 - 20 feet	Sapling	
	Balsam Fir	10	Pole/Sapling	6			Alder	Medium	10 - 20 feet	Tall Shrub	
	Black Spruce	10	Pole/Sapling	6							
	Jack Pine	10	Pole/Sapling	6							
35	623 - Emer	gent Wetla	nd	Nonsto	cked	35.6			No		
36	622 - Lov	vland Shrub)	Nonsto	cked	5.7			No		
37	42220 - Nat	ural Jack P	ine F	Poletimb	er Well	5.0	32	1-50	N/A		
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	
	Quaking Aspen	10	Pole/Sapling	5		R	ed Pine	Low	5 - 10 feet	Sapling	
	Red Pine	10	Log/Pole	10		Ja	ck Pine	Medium	10 - 20 feet	Sapling	
	Jack Pine	80	Pole/Sapling	6	32	Blad	ck Cherry	Medium	10 - 20 feet	Sapling	
38	4116 - Mixed N.	Hardwood	- Aspen F	Poletimb	er Well	4.5	38	51-80	N/A		Appears to be a pocket that was left from opening maintenance which
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	contains a lot of cherry
	ourropy openies				3						
	Quaking Aspen	40	Pole/Sapling				ing Aspen	Medium	10 - 20 feet	Sapling	



Stan	d Level 4 Co	over Type	;	Size De	ensity	Acres	Stand Age	BA Range	Managed S	Site	General Comments
39	6112 - Lov	vland Aspe	n	Saplin	g Well	7.3	4	1-50	N/A		
	Canopy Species	% Cover	Size Class	DBH	H Age						
	Quaking Aspen	65	Sapling	1	4						
	Red Pine	5	Log/Pole	10							
	Black Spruce	10	Sapling	1							
	Balsam Poplar	20	Sapling	1							
40	623 - Emer	gent Wetla	nd	Nonst	ocked	5.6			No		
41	42210 - Nat	ural Red Pi	ne Sa	wtimbe	r Mediur	n 17.0	84	51-80	N/A		[12/12/2016 TI] Stand was cut as part of the Day Before Derby Sale #41-
	Canopy Species	% Cover	Size Class	DBH	H Age	Sub-Ca	nopy Species	s Density	Avg. Height	Size	032-12-01. TCR Date of 7/29/2016.
	Red Pine	100	Log	14	84	Ва	alsam Fir	Low	5 - 10 feet	Sapling	
				-		Wh	ite Spruce	Low	5 - 10 feet	Sapling	
						W	hite Pine	Low	5 - 10 feet	Sapling	
						Qua	king Aspen	High	5 - 10 feet	Sapling	
42	42210 - Nat	ural Red Pi	ne S	awtimb	er Well	12.7	75	81-110	N/A		[12/12/2016 TI] Stand was cut as part of the Day Before Derby Sale #41- 032-12-01. TCR Date of 7/29/2016.
	Canopy Species	% Cover	Size Class	DBH	H Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	032-12-01. TON Date of 7/29/2010.
	Paper Birch	5	Pole	7		Re	ed Maple	Medium	10 - 20 feet	Sapling	
	White Pine	5	Log/Pole	12		W	hite Pine	Medium	5 - 10 feet	Sapling	
	Red Pine	90	Log/Pole	12	75	R	ted Pine	Low	5 - 10 feet	Sapling	
						Qua	king Aspen	Medium	>20 feet	Sapling	
43	6139 - Mixed				r Mediur		28	Immature	N/A		a lot of low pockets of alder. FTP C41-1426 is CLOSED. Work completed under ORV grant.
	Canopy Species		Size Class		l Age	Sub-Ca	nopy Species Alder		Avg. Height	Size Tall Shruk	
									5 - 10 feet	Lall Shrui	
	Red Maple	5	Pole/Sapling	5		10/		High		+	
	Paper Birch	5	Pole/Sapling	5		W	hite Pine	Medium	5 - 10 feet	Sapling	
	Paper Birch Quaking Aspen	5 40	Pole/Sapling Pole/Sapling	5	28	W				+	
	Paper Birch Quaking Aspen Red Pine	5 40 10	Pole/Sapling Pole/Sapling Pole	5 5 6	28	W				+	
	Paper Birch Quaking Aspen Red Pine Jack Pine	5 40 10 25	Pole/Sapling Pole/Sapling Pole Pole/Sapling	5 5 6 5	28	W				+	
	Paper Birch Quaking Aspen Red Pine Jack Pine Black Cherry	5 40 10 25 5	Pole/Sapling Pole/Sapling Pole Pole/Sapling Pole/Sapling	5 5 6 5 6	28	W				+	
	Paper Birch Quaking Aspen Red Pine Jack Pine	5 40 10 25	Pole/Sapling Pole/Sapling Pole Pole/Sapling	5 5 6 5	28	W				+	



Stand	Level 4 C	over Type		Size De	ensity	Acres	Stand Age	BA Range	Managed S	Site	General Comments	CHIGAN .
44	42121 - Planted Dec	Jack Pine, iduous	Mixed	Poletimb	er Well	27.2	24	1-50	N/A			
	Canopy Species	% Cover	Size Class	DBH	I Age	Sub-Ca	nopy Specie	es Density	Avg. Height	Size		
	Quaking Aspen	15	Pole/Sapling	g 5		Re	ed Maple	Medium	5 - 10 feet	Sapling		
	Jack Pine	65	Pole/Sapling	g 5	24	Já	ack Pine	Medium	10 - 20 feet	Sapling		
	Red Pine	5	Log/Pole	12							-	
	White Pine	5	Log/Pole	12								
	Red Maple	5	Pole/Sapling	g 5								
	Black Spruce	5	Pole/Sapling	g 5								
45	42120 - Plar	nted Jack F	ine	Sapling	g Well	12.4	24	1-50	N/A			
	Canopy Species	% Cover	Size Class	DBH	I Age							
	Quaking Aspen	10	Sapling	4								
	Jack Pine	90	Sapling	4	24							
46	330 - Low-I	Density Tre	es	Nonst	ocked	7.2	0	Unspecified	4222 - Natural	Jack Pine	Cut in winter 2016, Day Before Derby Sale.	
							nopy Specie ack Pine	Density High	Avg. Height < 5 feet	Size Sapling	Trenched in summer 2018. Planted in spring 2020, 770 tpa.	
47	622 - Lov	vland Shrub)	Nonsto	ocked	7.9			No			
48	622 - Lov	vland Shrub)	Nonsto	ocked	15.8			No			
49	4191 - Mixed Upla Co	and Decidu onifer	ous with	Sapling	Poor	4.8	6	1-50	N/A		Stand has passed regeneration check in summer 2018. It was scari by DNR staff 4 years ago. Mixed regeneration is present now which	was
	Canopy Species	% Cover	Size Class	DBH	l Age						acceptable. It is located in a flood plain at the intersection of some of	creeks
	Jack Pine	20	Sapling	1	6						and drainages. The regeneration that currently exists onsite will be accepted and site will not be trenched for this reason.	
	Red Maple	30	Sapling	1	6							
	Tamarack	10	Sapling	1								
	Black Spruce	10	Sapling	1								
	Black Cherry	10	Sapling	1								
50	4130	- Aspen		Saplin	g Well	1.3	5	1-50	N/A		[12/12/2016 TI] Stand was cut as part of the Day Before Derby Sale	#41-
	Canopy Species	% Cover	Size Class	DBH	I Age						032-12-01.	
	Quaking Aspen	85	Sapling	2	5							
	Red Pine	15	Log/Pole	12	66							



Stand	and Level 4 Cover Type		S	Size Density	Acres	Stand Age B	Managed S	Site	General Comments	
51	6120 - Lov	wland Ceda	r Po	oletimber We	16.3	100	111-140	N/A		ridges have big white pine, cedar, and hemlock. low ground is smaller cedar
	Canopy Species	% Cover	Size Class	DBH Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	Cedal
	Paper Birch	5	Pole	8	Ва	ılsam Fir	Medium	5 - 10 feet	Sapling	
	Black Spruce	5	Pole	9	Blad	ck Spruce	Medium	5 - 10 feet	Sapling	
No	rthern White Cedar	60	Pole	8 100	Northerr	n White Cedar	Medium	5 - 10 feet	Sapling	
	White Pine	15	XLog	20						
	Hemlock	15	Log/Pole	12						
52	4311 - Pin	e, Aspen M	ix Po	oletimber We	62.5	30 I	Immature	N/A		
	Canopy Species	% Cover	Size Class	DBH Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	
	Quaking Aspen	30	Pole/Sapling	6	WI	hite Pine	Low	10 - 20 feet	Sapling	
	White Pine	5	Pole/Log	8	R	ed Pine	Low	5 - 10 feet	Sapling	
	Red Pine	10	Pole/Log	8	Ja	nck Pine	Medium	10 - 20 feet	Sapling	
	Jack Pine	40	Pole/Sapling	6 30			'			
	Black Cherry	15	Pole/Sapling	7						
53	622 - Low	/land Shrub)	Nonstocked	1.7			No		
54	622 - Lowland Shrub Nonstocked			3.0			No			
55	623 - Emer	gent Wetla	nd	Nonstocked	48.1			No		
56	622 - Low	/land Shrub						No		
				Nonstocked	2.8					
57	4132 - Asp	en, Jack Pi		Nonstocked oletimber We		30 I	Immature	N/A		Stand was clearcut as part of a large sharptail block in early 1980's and
57	4132 - Aspo				l 539.2	30 I	Immature Density	N/A Avg. Height	Size	follow up opening maintenance occured in late 1980s. Previously had
	<u>_</u>		ne Po	oletimber We	539.2 Sub-Ca				Size Sapling	
	Canopy Species	% Cover	ne Po	oletimber We	Sub-Ca	nopy Species	Density	Avg. Height		follow up opening maintenance occured in late 1980s. Previously had
	Canopy Species Quaking Aspen	% Cover 70	ne Po Size Class Pole/Sapling	oletimber We DBH Age 6 30	Sub-Ca Quak	nopy Species king Aspen	Density Medium	Avg. Height 10 - 20 feet	Sapling	follow up opening maintenance occured in late 1980s. Previously had
	Canopy Species Quaking Aspen Red Pine	% Cover 70 5	ne Po Size Class Pole/Sapling Pole/Log	oletimber We DBH Age 6 30 9	Sub-Ca Qual Ja Blac	nopy Species king Aspen ack Pine	Density Medium Low	Avg. Height 10 - 20 feet 10 - 20 feet	Sapling Sapling	follow up opening maintenance occured in late 1980s. Previously had
	Canopy Species Quaking Aspen Red Pine Jack Pine	% Cover 70 5 20 5	ne Po Size Class Pole/Sapling Pole/Log Pole/Sapling Pole/Sapling	oletimber We DBH Age 6 30 9 5	Sub-Ca Qual Ja Blac	nopy Species king Aspen ack Pine ck Cherry	Density Medium Low Medium	Avg. Height 10 - 20 feet 10 - 20 feet 10 - 20 feet	Sapling Sapling Sapling	follow up opening maintenance occured in late 1980s. Previously had more red pine, white pine, jack pine.
	Canopy Species Quaking Aspen Red Pine Jack Pine Black Cherry	% Cover 70 5 20 5	ne Po Size Class Pole/Sapling Pole/Log Pole/Sapling Pole/Sapling	DBH Age 6 30 9 5 7	Sub-Ca Qual Ja Blae Wi	nopy Species king Aspen ack Pine ck Cherry Illow spp.	Density Medium Low Medium Medium	Avg. Height 10 - 20 feet 10 - 20 feet 10 - 20 feet 5 - 10 feet	Sapling Sapling Sapling	follow up opening maintenance occured in late 1980s. Previously had
	Canopy Species Quaking Aspen Red Pine Jack Pine Black Cherry 42120 - Plar	% Cover 70 5 20 5	ne Poisse Class Pole/Sapling Pole/Log Pole/Sapling Pole/Sapling Pole/Sapling	DBH Age 6 30 9 5 7 apling Mediur	Sub-Ca Qual Ja Blac Wi 44.5 Sub-Ca	nopy Species king Aspen ack Pine ck Cherry Illow spp.	Density Medium Low Medium Medium 1-50	Avg. Height 10 - 20 feet 10 - 20 feet 10 - 20 feet 5 - 10 feet N/A	Sapling Sapling Sapling Tall Shrub	follow up opening maintenance occured in late 1980s. Previously had more red pine, white pine, jack pine. Harvested in 1992 with Mad Hornet Sale
58	Canopy Species Quaking Aspen Red Pine Jack Pine Black Cherry 42120 - Plar Canopy Species	% Cover	ne Poisse Class Pole/Sapling Pole/Log Pole/Sapling Pole/Sapling ine Sa Size Class	DBH Age 6 30 9 5 7 apling Mediur DBH Age	Sub-Ca Qual Ja Blac Wi 44.5 Sub-Ca	nopy Species king Aspen ack Pine ack Cherry Illow spp. 18 nopy Species	Density Medium Low Medium Medium 1-50 Density	Avg. Height 10 - 20 feet 10 - 20 feet 10 - 20 feet 5 - 10 feet N/A Avg. Height	Sapling Sapling Sapling Tall Shrub	follow up opening maintenance occured in late 1980s. Previously had more red pine, white pine, jack pine. Harvested in 1992 with Mad Hornet Sale 1999 regen check showed 19% success rate. Ridges were machine planted in 2001. 2006 regen check - 174 jack pine, 46 red pine, 23 white
58	Canopy Species Quaking Aspen Red Pine Jack Pine Black Cherry 42120 - Plar Canopy Species Red Maple	% Cover 70 5 20 5 mted Jack P % Cover 5	ne Pole/Sapling Pole/Sapling Pole/Sapling Pole/Sapling Pole/Sapling Size Class Sapling Sapling	DBH Age 6 30 9 5 7 apling Mediur DBH Age	Sub-Ca Qual Blac Wi 1 44.5 Sub-Ca	nopy Species king Aspen ack Pine ack Cherry Illow spp. 18 nopy Species Alder	Density Medium Low Medium Medium 1-50 Density Low	Avg. Height 10 - 20 feet 10 - 20 feet 10 - 20 feet 5 - 10 feet N/A Avg. Height 5 - 10 feet	Sapling Sapling Sapling Tall Shrub Size Tall Shrub Sapling	follow up opening maintenance occured in late 1980s. Previously had more red pine, white pine, jack pine. Harvested in 1992 with Mad Hornet Sale 1999 regen check showed 19% success rate. Ridges were machine planted in 2001. 2006 regen check - 174 jack pine, 46 red pine, 23 white pine, 70 aspen, 46 black spruce. 2007 regen check 336 jack pine, 26
58	Canopy Species Quaking Aspen Red Pine Jack Pine Black Cherry 42120 - Plar Canopy Species Red Maple Quaking Aspen	% Cover	ne Pole/Sapling Pole/Sapling Pole/Sapling Pole/Sapling Pole/Sapling Size Class Sapling	DBH Age 6 30 9 5 7 apling Mediur DBH Age	Sub-Ca Qual Blac Wi 1 44.5 Sub-Ca	nopy Species king Aspen ack Pine ack Cherry Illow spp. 18 nopy Species Alder ad Maple	Density Medium Low Medium Medium 1-50 Density Low Medium	Avg. Height 10 - 20 feet 10 - 20 feet 10 - 20 feet 5 - 10 feet N/A Avg. Height 5 - 10 feet 5 - 10 feet	Sapling Sapling Sapling Tall Shrub	follow up opening maintenance occured in late 1980s. Previously had more red pine, white pine, jack pine. Harvested in 1992 with Mad Hornet Sale 1999 regen check showed 19% success rate. Ridges were machine planted in 2001. 2006 regen check - 174 jack pine, 46 red pine, 23 white



Stand	Level 4 C	4 Cover Type Size Density Acres Stand Age BA Range Managed Site		Site	General Comments										
59	42110 - Planted Red Pine			Sapling Poor		10.5	3	1-50	N/A		all speces except red pine removed 10 years ago, regen is decent				
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Cai	nopy Species	Density	Avg. Height	Size	stand was cut in July 2015. On FTP 1530 for red pine regeneration. Stand was trenched in June 2016. Planted in spring 2017 with red pin				
	Red Pine	70	Sapling	1	3	Re	d Maple	Low	5 - 10 feet	Sapling	1st year regen check - 780 RP, 80 volunteers				
	Jack Pine	10	Sapling	1		Blac	k Spruce	Low	5 - 10 feet	Sapling					
	White Pine	10	Sapling	1		Wh	ite Pine	Medium	5 - 10 feet	Sapling					
	Red Maple	10	Sapling	1		Re	ed Pine	Medium	5 - 10 feet	Sapling					
						Ja	ck Pine	Medium	5 - 10 feet	Sapling					
60	622 - Lov	wland Shrub)	Nonsto	ocked	3.3			No						
61	622 - Lov	wland Shrub)	Nonsto	ocked	12.4			No						
62		42210 - Natural Red Pine Sawtimber Well		0.7	66	81-110	N/A		[12/12/2016 TI] Stand was cut as part of the Day Before Derby Sale #41- 032-12-01. TCR Date of 7/29/2016.						
	Canopy Species		Size Class		l Age	Sub-Cai	nopy Species	Density	Avg. Height	Size	002 12 01. 1 01 But 01 1/25/2010.				
	Red Pine	90	Log/Pole	12	66	Re	ed Pine	Low	5 - 10 feet	Sapling					
	White Pine	10	Log	12		Wh	ite Pine	Low	5 - 10 feet	Sapling					
63	622 - Lov	wland Shrub)	Nonsto	ocked	4.4			No						
64	622 - Lov	wland Shrub)	Nonsto	ocked	52.2			No						
65	42260 - Natural Pi	ine, Mixed D	Deciduous	Poletimb	er Well	20.8	30 I	mmature	N/A						
	Canopy Species	% Cover	Size Class	DBH	I Age	Sub-Car	nopy Species	Density	Avg. Height	Size					
	Quaking Aspen	30	Pole/Sapling	g 7		Wh	ite Pine	Low	10 - 20 feet	Sapling					
	White Pine	5	Pole/Log	8		Re	ed Pine	Low	5 - 10 feet	Sapling					
	Red Pine	10	Pole/Log	9		Ja	ck Pine	Medium	10 - 20 feet	Sapling					
	Jack Pine	50	Pole/Sapling	g 6	30	Blac	k Cherry	Low	10 - 20 feet	Sapling					
	Black Cherry	5	Pole/Saplino	g 5											
67	42220 - Nat	tural Jack P	ine	Poletimb	er Well	95.5	33	1-50	N/A						
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Car	nopy Species	Density	Avg. Height	Size					
	Quaking Aspen	15	Pole/Saplino	g 5		Wh	ite Pine	Low	5 - 10 feet	Sapling					
	Black Spruce	5	Pole/Saplino	g 5		Re	ed Pine	Medium	5 - 10 feet	Sapling					
	Red Pine	10	Log/Pole	12		Ja	ck Pine	Medium	5 - 10 feet	Sapling					
	Jack Pine	70	Pole/Sapling	g 5	33	ı	Alder	Low	5 - 10 feet	Tall Shrub					
69	622 - Lov	wland Shrub)	Nonsto	ocked	2.4			No						



Stand	Level 4 Co	ver Type	Size Density	Acres	Stand Age B	BA Range	Managed S	ite	General Comments
71	622 - Lowl	and Shrub	Nonstocked	15.5			No		
72	622 - Lowl	and Shrub	Nonstocked	1.8			No		
74	42210 - Natu	ral Red Pine	Sawtimber Well	9.7	73	51-80	N/A		3 age classes-90,63,23 yrs
	Canopy Species	% Cover Size Cla	ss DBH Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	Stands was cut in July 2015. It is on FTP 1530 for red pine planting if needed, but there are no planting areas available. Regen was protected
	White Pine	5 Log/Pole/2	XLog 14	Re	ed Maple	Low	5 - 10 feet	Sapling	well and it will not need planting.
	Red Pine	95 Log/Pole/2	XLog 14 73	Quak	king Aspen	Low	10 - 20 feet	Sapling	
				Blad	ck Spruce	Low	5 - 10 feet	Sapling	
				WI	hite Pine	Low	5 - 10 feet	Sapling	
				R	ed Pine	Medium	5 - 10 feet	Sapling	
				Ja	ack Pine	Medium	10 - 20 feet	Sapling	
75	622 - Lowl	and Shrub	Nonstocked	14.9			No		
76	42100 - Plante	ed White Pine % Cover Size Cla	Sawtimber Poor		71	1-50 Density	N/A Avg. Height	Size	Stand cut in july 2015. On FTP 1530 for planting of red pine. Planted in spring 2017. site received extra trees since it was end of day.
	White Pine	100 Log/Pole/			ed Pine	Medium	< 5 feet	Sapling	Regeneration checked in fall 2019. Passed and will likely get combined
	William IIIC	100 Log/1 olc/	0ap 10 71		hite Pine	Medium	5 - 10 feet	Sapling	with adjacent stand in future YOE.
					ed Maple	Medium	< 5 feet	Sapling	,
77	3303 - Mixed Lo	w Density Trees	Nonstocked	7.7	0 U	Inspecified	429 - Mixed U	Jpland	Planted by Superior Forestry. Oversight by Forest Resource Services (Grossman Forestry Co.).
				Sub-Ca	nopy Species		Avg. Height	Size	Quality checks: 0.00% too deep, 0.00% bad stem angle, 0.00% too
				R	ed Pine	High	< 5 feet	Sapling	loose, 0.00% "J" rooted.
				Blad	ck Spruce	Medium	< 5 feet	Sapling	Weather: calm and clear, 80 degrees. Stocking = Stand 77; 682 trees/ac actual, 620 trees/ac plot data. Stand
									2; 706 trees/ac actual, 675 trees/ac plot data. Total cost = \$152.70/ac
									1 year regeneration check was done in fall 2018. About 70% survival of planted seedlings. Much natural regeneration is present also mostly composed of white pine, black spruce, red maple. All species are considered acceptable. Since red pine planting in this location was just to supplement the stand and maintain a component, no further regeneration work will be done. Also, access prevents future trenching.
78	6120 - Low	and Cedar	Poletimber Well	12.4	100	111-140	N/A		smaller trees in east
	Canopy Species	% Cover Size Cla	ss DBH Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	
	Black Spruce	5 Pole/Sap	oling 6	Ва	ılsam Fir	High	5 - 10 feet	Sapling	
	Diack Opinice		9						
Nor	rthern White Cedar	90 Pole	0		ck Spruce	Medium	5 - 10 feet	Sapling Sapling	



Stand	Level 4 Cover Type			Size Density		Acres Sta	cres Stand Age B		Managed S	Site	General Comments
79	42210 - Natural Red Pine			Sawtimber Well		2.0	66	81-110	N/A		[12/12/2016 TI] Stand was cut as part of the Day Before Derby Sale #41 032-12-01. TCR Date of 7/29/2016. Portion east of ditch was not
	Canopy Species	% Cover	r Size Class	DBH	I Age	Sub-Canopy	/ Species	Density	Avg. Height	Size	harvested.
	Quaking Aspen	10	Pole	8		Red Pi	ine	Low	5 - 10 feet	Sapling	
	Red Pine	80	Log/Pole	12	66						
	Jack Pine	10	Pole	7							
81	42210 - Na	itural Red F	Pine	Sawtimb	er Well	2.5	72	81-110	N/A		[12/12/2016 TI] Stand was cut as part of the Day Before Derby Sale #4*
	Canopy Species	% Cover	r Size Class	DBH	l Age	Sub-Canopy	/ Species	Density	Avg. Height	Size	032-12-01. TCR Date of 7/29/2016.
	White Pine	5	Log/XLog	16		Quaking A	Aspen	Low	5 - 10 feet	Sapling	
	Red Pine	95	Log/Pole	12	72	White F	Pine	Medium	5 - 10 feet	Sapling	
						Red Pi	ine	Low	5 - 10 feet	Sapling	
						Jack P	ine	Low	5 - 10 feet	Sapling	
82	42290 - Nat	ural Mixed	Pine I	Poletimb	er Well	2.1	72	81-110	N/A		
	Canopy Species	% Cover	r Size Class	DBH	I Age	Sub-Canopy	/ Species	Density	Avg. Height	Size	
	Quaking Aspen	25	Pole	8		Quaking A	Aspen	Low	5 - 10 feet	Sapling	
	White Pine	5	Log/XLog	18		White F		Low	5 - 10 feet	Sapling	
	Red Pine	50	Log/Pole	12	72	Red Pi		Medium	5 - 10 feet	Sapling	
	Jack Pine	20	Pole	8		Jack P		Low	5 - 10 feet	Sapling	
83	42210 - Na	itural Red F	Pine	Sawtimb	er Well	1.8	66	81-110	N/A		[12/12/2016 TI] Stand was cut as part of the Day Before Derby Sale #41
	Canopy Species	% Cover	r Size Class	DBH	l Age	Sub-Canopy	/ Species	Density	Avg. Height	Size	032-12-01. TCR Date of 7/29/2016.
	Red Pine	100	Log/Pole	12	66	Red Pi	ine	Low	5 - 10 feet	Sapling	
			-			White F	Pine	Low	5 - 10 feet	Sapling	
84	42221 - Natural Dec	I Jack Pine	, Mixed I	Poletimb	er Poor	3.5	35	1-50	N/A		
	Canopy Species	% Cover	r Size Class	DBH	l Age	Sub-Canopy	/ Species	Density	Avg. Height	Size	
	Jack Pine	60	Pole/Sapling	g 5	35	Alde	r	Medium	5 - 10 feet	Tall Shrub	
	Quaking Aspen	40	Pole/Sapling	g 5		Jack P	ine	Medium	5 - 10 feet	Sapling	
85	4311 - Pin	ne, Aspen M	Лix I	Poletimb	er Well	3.9	35	1-50	N/A		
	Canopy Species	% Cover	r Size Class	DBH	I Age	Sub-Canopy	/ Species	Density	Avg. Height	Size	
	Quaking Aspen	50	Pole/Sapling		35	Quaking A		Low	5 - 10 feet	Sapling	
	Jack Pine	35	Pole/Sapling			Jack P	ine	Low	5 - 10 feet	Sapling	
	Red Pine	15	Log/Pole	13						. 3	1
86	330 - Low-	Density Tre	ees	Nonst	ocked	1.9	0		4222 - Natural	Jack Pine	Cut in winter 2016, Day Before Derby Sale.
											Access for trenching and planting is not possible due to creeks.