

Compartment Review Presentation

Gaylord Forest Management Unit

Compartment 52005 Entry Year 2021 Acreage: 1,701

County Otsego

Management Area: Kirtland's Warbler

Revision Date: 2019-03-01

Stand Examiner: Trevor Kubitskey

Legal Description:

T29N R1W, Sections 20, 21, & 22.

Identified Planning Goals:

To provide for the protection, integrated management and responsible use of a healthy, productive and undiminished forest resource base for the social, recreational, environmental and economic benefit of the State of Michigan.

Soil and topography:

This compartment is very flat with very limited changes in topography. The dominant soil type (70%) is Rubicon-Grayling Sand with the remainder being Roselawn-Rubicon Sand.

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

This compartment is a designated Kirtland Warbler management unit that encompasses 1,661 acres of the total 1,920 acres that are within the confining sections. The remaining acres are made up of private ownership. The compartment provides many opportunities for public use with the two most common uses being hunting and snowmobiling. A large Consumers Right of Way splits the compartment along with sixteen gas wells and one facility that are found throughout.

Unique Natural Features:

The Michigan Natural Features Inventory Database indicated the identification and presence of the Hill's Thistle (Cirsium hillii), Blazing Start Borer (Papaipema beeriana), Dusted Skipper (Atrytonopsis hianna), and a Bald Eagle's (Haliaeetus leucocephalus) nest. Previously there has also been an identification of Grizzled Skipper (Pyrgus malvae) but has not been observed since 1965.

Archeological, Historical, and Cultural Features:

None known.

Special Management Designations or Considerations:

The majority of the compartment is being managed for Kirtland Warbler habitat, which is split into two management blocks; 14 and 18. The Kirtland Warbler habitat falls under a High Conservation Value Area. State Game lands are present west of Big Creek road.

Watershed and Fisheries Considerations:

This compartment lies within the Northern Lake Huron Management Unit.

The compartment also contains a small portion of Little Crapo Lake, a tributary to Crapo Creek and the West Branch Big Creek which is a tributary of the Au Sable River. The West Branch is a cold water stream that falls under a natural river zone and is also classified as a High Conservation Value Area. Natural River buffers should be applied.

Wildlife Habitat Considerations:

Most of the compartment is upland areas with wetlands intermixed. The two larger wetlands within the compartment are found in the NW corner of section 20, and the NE corner of section 22. Abundant wildlife is found within these areas; including ducks, geese, beavers, otters and various amphibians. The rest of the compartment is within the Kirtland Warbler management area which is the prime focus of the compartment. The ecosystem that supports the Warbler also provides habitat for game species such as deer, bear, grouse, American woodcock, wild turkey and a number of furbearers. This area receives a considerably amount of hunting pressure both from upland and waterfowl hunters.

Mineral Resource and Development Concerns and/or Restrictions

Surface sediments consist of glacial outwash sand and gravel and postglacial alluvium. The glacial drift thickness varies between 600 and 1,000 feet. The Mississippian Coldwater Shale subcrops below the glacial drift. The Coldwater Shale does not have an economic use. Active sand & gravel operations are not located in the area, but there is good potential within the compartment on the uplands. The compartment has been developed for Antrim Shale gas production and nearly all state-owned mineral rights in this area are currently under lease and in production. There is no known metallic mineral potential in this part of the state.

Vehicle Access:

Two main county roads cut through the compartment; Crapo Lake Rd and Big Creek Rd. From these roads, a series of state forest roads provide very good access to many areas of the compartment.

Survey Needs:

Most survey corners have been established. The south half of section 20 will need to be surveyed for future management.

Recreational Facilities and Opportunities:

The North Branch snowmobile trail traverses through the compartment within sections 20 and 21.

Fire Protection:

This compartment is composed of extremely high risk fuel types. Combining this with activities associated with intense Antrim gas development puts this compartment at a very high risk for wildfires. The Big Creek fire burned through portions of this compartment in 1981. The network of roads provides good access to areas of the compartment if a response to the area is needed.

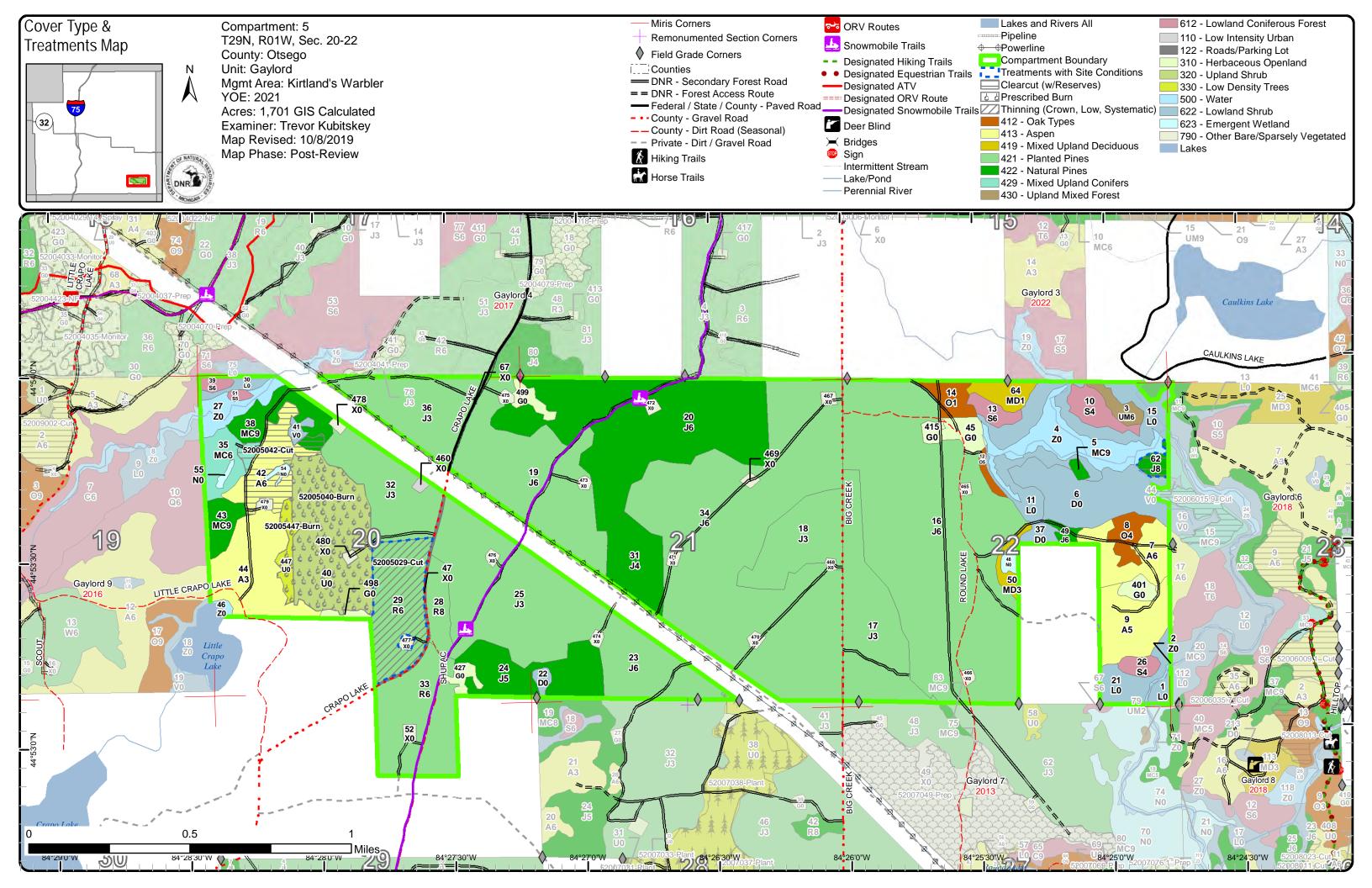
Additional Compartment Information:

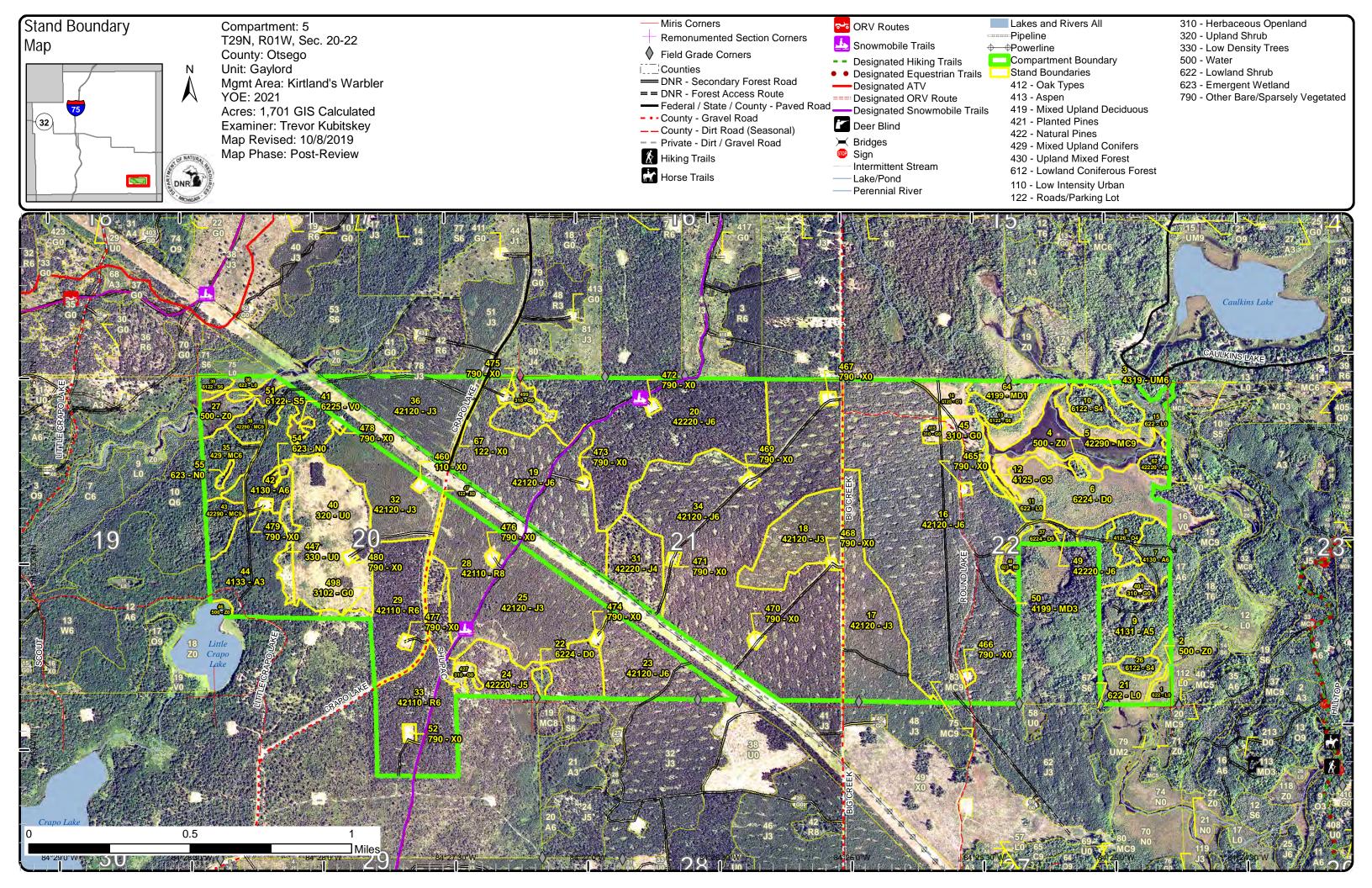
The following reports from the Inventory are attached:

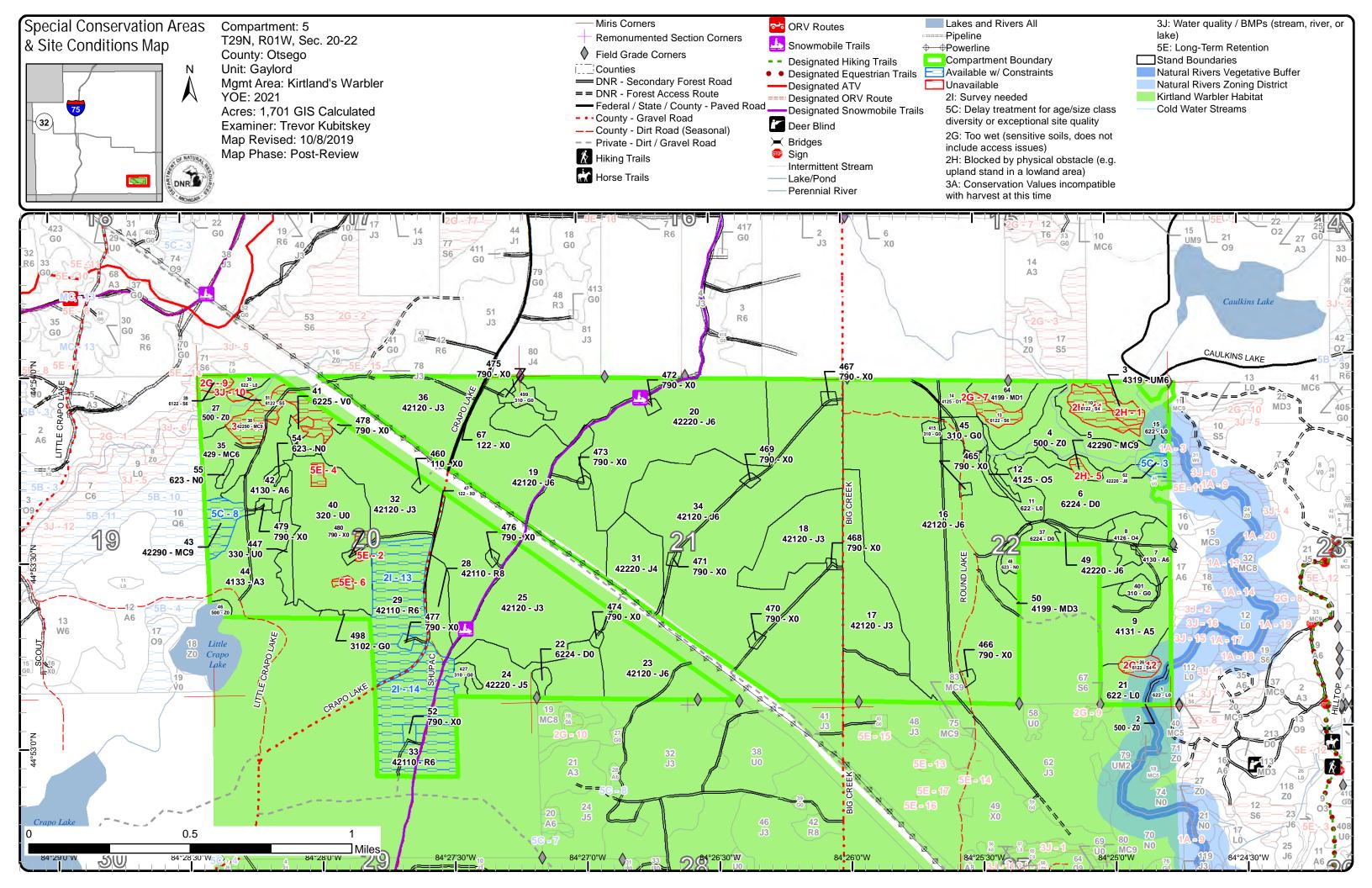
Total Acres by Cover Type and Age Class
Cover Type by Harvest Method
Proposed Treatments – No Limiting Factors
Proposed Treatments – With Limiting Factors
Stand Details (Forested and Nonforested)
Dedicated and Proposed Special Conservation Areas
Site Condition Details

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







Compartment 5

Year of Entry 2021

Gaylord Mgt. Unit
Trevor Kubitskey: Examiner



Age Class

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	No.	kores /				\$ \ \		, , , , ,									LES LES	S [*] Jue	No. No.
Aspen	0	0	0	44	0	48	21	0	0	0	0	0	0	0	0	0	0	0	113
Bare/Sparsely Vegetated	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18
Bog	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Herbaceous Openland	25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25
Jack Pine	0	0	43	244	604	26	165	0	0	4	0	0	0	0	0	0	0	0	1086
Low-Density Trees	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
Lowland Shrub	65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	65
Lowland Spruce/Fir	0	0	0	0	0	0	15	0	8	0	0	0	0	0	0	0	0	0	23
Marsh	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
Mixed Upland Deciduous	0	9	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13
Natural Mixed Pines	0	0	0	0	0	0	0	0	0	0	0	31	0	0	0	0	0	0	31
Oak	0	9	0	2	0	9	0	0	0	0	0	0	0	0	0	0	0	0	20
Red Pine	0	0	0	0	0	0	95	0	12	0	0	0	0	0	0	0	0	0	107
Treed Bog	48	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	48
Upland Conifers	0	0	0	0	0	0	15	0	0	0	0	0	0	0	0	0	0	0	15
Upland Mixed Forest	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	6
Upland Shrub	67	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	67
Urban	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
Water	44	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	44
Total	287	18	43	295	604	83	317	0	20	4	0	31	0	0	0	0	0	0	1701



Report 2 – Treatment Summary

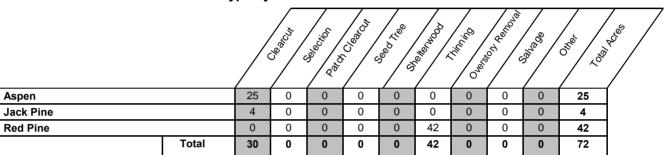
Gaylord Mgt. Unit Year of Entry: 2021

Acres of Harvest

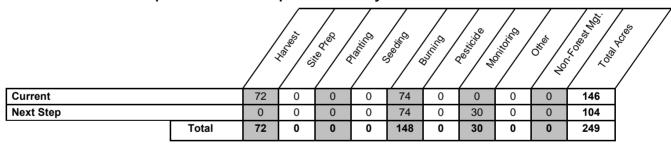
Compartment 5
Total Compartment Acres: 1,701

Commercial Harvest - 25 Harvests with Site Condition - 46 Next Step Harvest - 0 Habitat Cut - 0

Cover Type by Harvest Method



Proposed and Next Step Treatments by Method



Gaylord Mgt. Unit Report 3 -- Treatments Compartment: 5 Year of Entry: 2021 **Treatment** Stand Size Stand BA **Treatment Treatment Cover Type** Acres Age **Approval** Name CoverType Density Age Range Type Method Objective Structure **Status** 52005029-Cut 42110 - Planted Poletimber Systematic 4211 - Planted Draft Field 42.3 111-Harvest Even-Aged Red Pine 140 Thinning Red Pine Boundary **Habitat Cut: No** Site Condition: Survey Needed

Prescription Third row thin to increase residual volume. Rows present in north, but may need to be marked out in the south. Remove all Jack Pine. Specs:

Next Step Treatments:

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n

d 29

<u>Acceptable</u>

Regen:

Adjacent property corners will have to be established.

Comment:

Other

Proposed Start Date: 10/1 /2020

52005040-Unspec 310 -40 67.2 320 - Upland Shrub Nonstocked 0 Burn Opening Draft Field ified Herbaceous Boundary Burn Openland

Habitat Cut: No Site Condition:

Prescription Maintain barrens community with prescribe fire until it is planted through the KW planting rotation.

Specs:

Next Step Burn, Opening

Treatments:

Acceptable

Regen:

Other Comment:

Proposed Start Date: 10/1 /2020

52005042-Cut 25.3 52 81-110 Draft Field 4130 - Aspen Poletimber Harvest Clearcut with 413 - Aspen Even-Aged Well Retention Boundary

Habitat Cut: No Site Condition:

Prescription Final harvest. Cut all trees 2" DBH and up with 3-5% retention in islands. Retention should be placed around lowland pockets within stand and around pockets of Red Pine and White pine. Do NOT cut White or Red Oak. Add Drum Log and Oak wilt specifications into sale. Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Mainly aspen and red maple with a minor component of cherry, oak, and mixed conifers.

Regen: Other

If needed, mark to leave "bumper" trees around Oaks to minimize damage during harvest.

Comment:

Proposed Start Date: 10/1 /2020

52005062-Cut 4.2 42220 - Natural Sawtimber 81 51-80 Harvest Clearcut 4319 - Mixed Even-Aged Draft Field Jack Pine Medium **Upland Forest** Boundary

Habitat Cut: No Site Condition: Age-Class or Site Quality

Prescription Final harvest all trees 2 inches dbh and above. Protect pockets of advanced regeneration. Oak wilt specs will apply. Protect legacy trees.

Specs:

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Any mix of red maple, aspen, oak, jack, red or white pine that meets minimum stocking.

Regen:

Other Attempt to add to Syx Mix sale. Will have to be accessed through long term retention, minimize damage and rutting within this area.

Comment:

Proposed Start Date: 10/1 /2020

Gaylord Mgt. Unit Report 3 -- Treatments Compartment: 5 s Year of Entry: 2021 t а Treatment **Treatment Cover Type Treatment** Acres Stand Size Stand BA Age **Approval** n Method Objective Status Density Age Structure d Name CoverType Range Type 447 52005447-6.8 330 - Low-Density Nonstocked Burn Opening 310 -Draft Field Trees Herbaceous Boundary Burn Openland **Habitat Cut: No Site Condition:** Prescription Prescribe burn to maintain barrens community. Specs: Next Step Burn, Opening Treatments: <u>Acceptable</u> Regen: <u>Other</u> Comment:

Total Treatment Acreage Proposed:

Proposed Start Date:

145.8

10/1 /2020

Compartment: 5

Gaylord Mgt. Unit

Trevor Kubitskey : Examiner Year of Entry: 2021

Availa	ability for	Managemer	nt									
Total	Acres	Acres Avail	Acres	Ι	Domina	nt Site	e Cond	dition	s			
Acres	Available	With Condition	Not Available		21	5B	5C	2G	2H	ЗА	3J	5E
114	114	0	0	Aspen								
18	18	0	0	Bare/Sparsely Vegetated								0
2	2	0	0	Bog								
25	25	0	0	Herbaceous Openland								
1085	1081	4	0	Jack Pine			4					0
7	7	0	0	Low-Density Trees								
65	65	0	0	Lowland Shrub				0	0			
24	0	0	24	Lowland Spruce/Fir				13	10		1	
5	5	0	0	Marsh								
13	13	0	0	Mixed Upland Deciduous								
31	2	10	19	Natural Mixed Pines			10		2	17		
20	20	0	0	Oak								
107	12	95	0	Red Pine	95							0
48	48	0	0	Treed Bog					0			
15	15	0	0	Upland Conifers		0						
5	0	0	5	Upland Mixed Forest					5			
67	61	0	6	Upland Shrub								6
6	6	0	0	Urban								
44	44	0	0	Water		0		0			0	
1,701	1,538	109	54	Total Forested Acres	95	0	14	13	17	17	1	6
	90%	6%	3%	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.

1 Unavailable 2H: Blocked by physical 6 Unspecified Un
Comments:

Report 4 – Site Conditions

Gaylord Mgt. Unit

Trevor Kubitskey : Examiner

2	Unavailable	5E: Long-Term Retention	3	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
3	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	4	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: Stand is accessible	e; however wasn't incorporated i	nto sal	e in adjacent compartment.	Would have to access thr	ough river buffer and reten	tion.
4	Unavailable	5E: Long-Term Retention	2	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
5	Unavailable	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	2	3A: Conservation Values incompatible with harvest at this time	Unspecified	Unspecified	Unspecified
	Comments: Small knob of large	e natural pine timber					
3	Unavailable	5E: Long-Term Retention	1	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
7	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	5	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
	20040 0.44.40 DM - D						owan

Report 4 – Site Conditions

Gaylord Mgt. Unit

Trevor Kubitskey : Examiner

8	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	10	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: Mature pines provi	iding very good seed source for	this sta	and and surrounding stands	as well as containing signs	of high wildlife use.	
9	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	3	3J: Water quality / BMPs (stream, river, or lake)	Unspecified	Unspecified	Unspecified
	Comments:						
10	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	1	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	2G: Too wet (sensitive soils, does not include access issues)	Unspecified	Unspecified
	Comments:						
11	Unavailable	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	10	2G: Too wet (sensitive soils, does not include access issues)	Unspecified	Unspecified	Unspecified
	Comments:						
12	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	4	3J: Water quality / BMPs (stream, river, or lake)	Unspecified	Unspecified	Unspecified
	Comments:						
13	Available	2I: Survey needed	42	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: West property line	will need to be established. T po	osts we	ere found but no established	d corners.		

Report 4 - Site Conditions

Gaylord Mgt. Unit

Trevor Kubitskey: Examiner

14	Available	2I: Survey needed	53	Unspecified	Unspecified	Unspecified	Unspecified					
Comments: T posts and pipes were found but no RLS caps or recorded corners were identified.												
15	Unavailable	3A: Conservation Values incompatible with harvest at this time	17	5C: Delay treatment for age/size class diversity or exceptional site quality	Unspecified	Unspecified	Unspecified					
_	omments: ood site quality. [Delay treatment to encourage re	cruitme	· ·	Good seed source.							

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				

Gaylord Mgt. Unit Compartment: 5
Year of Entry 2021



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.

Conservatio Area	n Type	Description	ERA = Ecological Reference Area HCVA = High Conservation Value Area SCA = Special Conservation Area
SCA	Cold Water Stream	A coldwater stream has temperature and dissolved oxygen condistocked trout populations and those of other coldwater fish speci year to year. Coldwater streams in Michigan typically provide the contributions of groundwater to their stream flows. Such streams designated as trout resources by Fisheries Order 210.	es (e.g., slimy sculpin) to persist from se conditions due to substantial
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	Natural Rivers	There are two Natural Rivers datasets which are derived from sp approved distance from the river centerlines. The Natural Rivers most Natural Rivers. The Vegetative Buffer ranges from 25 to 10 and Vegetative Buffers for each Natural River see the table locat folder.	Zoning District is a 400 foot buffer for 00 feet. To view specific Zoning Districts



Stand	Level 4 Co	over Type	S	ize De	, <u>,</u>	Acres St	tand Age B	A Range	Managed S	Site	General Comments
1	622 - Low	vland Shrul	1 d	Nonsto	ocked	3.3 Canopy Tag A	56 Species Alder	Density High	No Avg. Height 5 - 10 feet	Size Tall Shrub	Very wet tag alder stand. Adjacent to natural river.
2	500 -	- Water	1	Nonst	ocked	0.8	56		No		West Branch Big Creek. Designated Natural River
3	4319 - Mixed	· .	orest Po		er We		56 Species	81-110	N/A	Sino	Stand growing on floodplain. Access is very difficult even from the north. Few large scattered white pines. Appears to have some beaver damage
	Canopy Species White Pine		Pole/Log/XLog	_	4 Age 56	Black S	Species	Density	Avg. Height	Size	near edges. Very wet around it. Age estimate came from similar sized
		30		8			•	Low	10 - 20 feet	Sapling	white pine core from stand 11 to the east.
	Quaking Aspen	20	Log/Pole	10	62	Paper		Low	10 - 20 feet	Sapling	
-	Red Maple	15	Pole/Log	8		Black/Red (H	Hybrid) Oak	Low	5 - 10 feet	Sapling	
Blac	ck/Red (Hybrid) Oak	7	Log/Pole	12							
	Jack Pine	12	Log/Pole	10							
	Balsam Fir	7	Pole/Log	8							
4	500 -	Water	1	Nonst	ocked	29.4			No		A flooding that is part of the West Branch of Big Creek. A natural river.
5	500 - 42290 - Natu				ocked oer We		106	141-170	No N/A		OPIC - FMD: 1999: It seems doubtful that the timber on this island has
		ıral Mixed		awtimb		I 1.6	106 Species	141-170 Density		Size	OPIC - FMD: 1999: It seems doubtful that the timber on this island has been cut since its virgin timber was cut 100 years ago. The predominant
	42290 - Natu	ıral Mixed	Pine Sa	nwtimb DBH	er We	I 1.6	Species		N/A	Size Sapling	OPIC - FMD: 1999: It seems doubtful that the timber on this island has
	42290 - Natu Canopy Species	ural Mixed	Pine Sa	DBH 20	er We	I 1.6	Species Pine	Density	N/A Avg. Height		OPIC - FMD: 1999: It seems doubtful that the timber on this island has been cut since its virgin timber was cut 100 years ago. The predominant overstory species are red pine logs with white pine logs a distant second,
	42290 - Natu Canopy Species Red Pine	ural Mixed % Cover 59	Pine Sa Size Class XLog/Log	DBH 20	er Wel	I 1.6 Canopy White	Species Pine	Density Medium Low	N/A Avg. Height Variable	Sapling	OPIC - FMD: 1999: It seems doubtful that the timber on this island has been cut since its virgin timber was cut 100 years ago. The predominant overstory species are red pine logs with white pine logs a distant second, both in a variety of sizes (red up to 30" and/pn/117 25/p 106
	42290 - Natu Canopy Species Red Pine	ural Mixed % Cover 59	Pine Sa Size Class XLog/Log	DBH 20	er Wel	I 1.6 Canopy White	Species Pine Pine Hybrid) Oak	Density Medium Low	N/A Avg. Height Variable >20 feet	Sapling Pole	OPIC - FMD: 1999: It seems doubtful that the timber on this island has been cut since its virgin timber was cut 100 years ago. The predominant overstory species are red pine logs with white pine logs a distant second, both in a variety of sizes (red up to 30" and/pn/117 25/p 106
	42290 - Natu Canopy Species Red Pine White Pine	ural Mixed % Cover 59	Pine Sa Size Class XLog/Log XLog/Log/Pole	DBH 20	ner Well Age 106 117	I 1.6 Canopy White Red I Black/Red (H	Species Pine Pine Hybrid) Oak	Density Medium Low Trace	N/A Avg. Height Variable >20 feet >20 feet >20 feet	Sapling Pole Pole	OPIC - FMD: 1999: It seems doubtful that the timber on this island has been cut since its virgin timber was cut 100 years ago. The predominant overstory species are red pine logs with white pine logs a distant second, both in a variety of sizes (red up to 30" and white 7 25 106 20 10 "
5	42290 - Natu Canopy Species Red Pine White Pine	wral Mixed % Cover 59 40	Pine Sa Size Class XLog/Log XLog/Log/Pole	DBH 20 20	ner Well Age 106 117	Canopy White Red I Black/Red (H Black S	Species Pine Pine Hybrid) Oak	Density Medium Low Trace	N/A Avg. Height Variable >20 feet >20 feet >20 feet	Sapling Pole Pole	OPIC - FMD: 1999: It seems doubtful that the timber on this island has been cut since its virgin timber was cut 100 years ago. The predominant overstory species are red pine logs with white pine logs a distant second, both in a variety of sizes (red up to 30" and white 7 25 106 20 10 " Similar composition to stand 37 to the south, however containing more Tamarack. Mounds of sedge and grasses. Very Wet.Transitions into
5	42290 - Natu Canopy Species Red Pine White Pine	wral Mixed % Cover 59 40	Pine Sa Size Class XLog/Log XLog/Log/Pole	DBH 20 20	ner Well Age 106 117	Canopy White Red I Black/Red (H Black S	Species Pine Pine Hybrid) Oak Spruce Species	Density Medium Low Trace Low	N/A Avg. Height Variable >20 feet >20 feet >20 feet	Sapling Pole Pole Pole	OPIC - FMD: 1999: It seems doubtful that the timber on this island has been cut since its virgin timber was cut 100 years ago. The predominant overstory species are red pine logs with white pine logs a distant second, both in a variety of sizes (red up to 30" and white 7 25 106 20 10 "
5	42290 - Natu Canopy Species Red Pine White Pine	wral Mixed % Cover 59 40	Pine Sa Size Class XLog/Log XLog/Log/Pole	DBH 20 20	ner Well Age 106 117	I 1.6 Canopy White Red I Black/Red (H Black S	Species Pine Pine Hybrid) Oak Spruce Species Spruce	Density Medium Low Trace Low Density	N/A Avg. Height Variable >20 feet >20 feet No Avg. Height	Sapling Pole Pole Pole Size	OPIC - FMD: 1999: It seems doubtful that the timber on this island has been cut since its virgin timber was cut 100 years ago. The predominant overstory species are red pine logs with white pine logs a distant second, both in a variety of sizes (red up to 30" and white 7 250 106 200 10 " Similar composition to stand 37 to the south, however containing more Tamarack. Mounds of sedge and grasses. Very Wet.Transitions into more sedge and grasses as you move east. Adjacent to natural river. Higher mortality in NW corner.
5	42290 - Natu Canopy Species Red Pine White Pine	wral Mixed % Cover 59 40	Pine Sa Size Class XLog/Log XLog/Log/Pole	DBH 20 20	ner Well Age 106 117	I 1.6 Canopy White Red I Black/Red (H Black S 41.5 Canopy Black S	Species Pine Pine Hybrid) Oak Spruce Species Spruce Alder	Density Medium Low Trace Low Density Medium	N/A Avg. Height Variable >20 feet >20 feet No Avg. Height Variable	Sapling Pole Pole Pole Pole Pole	OPIC - FMD: 1999: It seems doubtful that the timber on this island has been cut since its virgin timber was cut 100 years ago. The predominant overstory species are red pine logs with white pine logs a distant second, both in a variety of sizes (red up to 30" and white 7 250 106 200 10 " Similar composition to stand 37 to the south, however containing more Tamarack. Mounds of sedge and grasses. Very Wet.Transitions into more sedge and grasses as you move east. Adjacent to natural river. Higher mortality in NW corner.
5	42290 - Nature Canopy Species Red Pine White Pine	Freed Bog	Pine Sa Size Class XLog/Log XLog/Log/Pole	DBH 20 20 Nonsto	per Well 106 117 117 117 117 117 117 117 117 117 11	I 1.6 Canopy White Red I Black/Red (H Black S 41.5 Canopy Black S Tag A	Species Pine Pine Hybrid) Oak Spruce Species Spruce Alder	Density Medium Low Trace Low Density Medium Medium	N/A Avg. Height Variable >20 feet >20 feet >20 feet Variable Variable < 5 feet 10 - 20 feet	Sapling Pole Pole Pole Pole Tall Shrub	OPIC - FMD: 1999: It seems doubtful that the timber on this island has been cut since its virgin timber was cut 100 years ago. The predominant overstory species are red pine logs with white pine logs a distant second, both in a variety of sizes (red up to 30" and put 117 25 106 20 10" Similar composition to stand 37 to the south, however containing more Tamarack. Mounds of sedge and grasses. Very Wet.Transitions into more sedge and grasses as you move east. Adjacent to natural river. Higher mortality in NW corner.
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6	42290 - Natu Canopy Species Red Pine White Pine	Freed Bog	Pine Sa Size Class XLog/Log XLog/Log/Pole	DBH 20 20 Nonsto	per Well 106 117 117 117 117 117 117 117 117 117 11	I 1.6 Canopy White Red I Black/Red (H Black S 41.5 Canopy Black S Tag A Tama	Species Pine Pine Hybrid) Oak Spruce Species Spruce Alder arack 40 Species	Density Medium Low Trace Low Density Medium Medium Low 51-80	N/A Avg. Height Variable >20 feet >20 feet >20 feet Variable Variable < 5 feet 10 - 20 feet	Sapling Pole Pole Pole Pole Size Pole Tall Shrub Pole	OPIC - FMD: 1999: It seems doubtful that the timber on this island has been cut since its virgin timber was cut 100 years ago. The predominant overstory species are red pine logs with white pine logs a distant second, both in a variety of sizes (red up to 30" and white 7 25 106 20 10" Similar composition to stand 37 to the south, however containing more Tamarack. Mounds of sedge and grasses. Very Wet.Transitions into more sedge and grasses as you move east. Adjacent to natural river. Higher mortality in NW corner. West portion of stand contains smaller diameter stems with a higher stocking of oak. Better quality to the east. Mostly pole sized with some pockets of log sized trees. SE portion of stand contains a large crowned, super canopy Oak along with scattered Red Pine possibly left from old
6	42290 - Natu Canopy Species Red Pine White Pine 6224 - 1	"Gover 59 40 40 Freed Bog Cover % Cover % Cover	Pine Sa Size Class XLog/Log XLog/Log/Pole	DBH 20 20 Nonsta	per Well 106 117 117 117 117 117 117 117 117 117 11	I 1.6 Canopy White Red I Black/Red (H Black S 41.5 Canopy Black S Tag A Tama I 21.3 Canopy	Species Pine Pine Hybrid) Oak Spruce Species Spruce Alder arack 40 Species Im Fir	Density Medium Low Trace Low Density Medium Medium Low 51-80 Density	N/A Avg. Height Variable >20 feet >20 feet >20 feet Variable < 5 feet 10 - 20 feet N/A Avg. Height	Sapling Pole Pole Pole Pole Pole Size Pole Tall Shrub Pole	OPIC - FMD: 1999: It seems doubtful that the timber on this island has been cut since its virgin timber was cut 100 years ago. The predominant overstory species are red pine logs with white pine logs a distant second, both in a variety of sizes (red up to 30" and white 7 25 106 20 10" Similar composition to stand 37 to the south, however containing more Tamarack. Mounds of sedge and grasses. Very Wet.Transitions into more sedge and grasses as you move east. Adjacent to natural river. Higher mortality in NW corner. West portion of stand contains smaller diameter stems with a higher stocking of oak. Better quality to the east. Mostly pole sized with some pockets of log sized trees. SE portion of stand contains a large crowned,
6	42290 - Natural Canopy Species Red Pine White Pine 6224 - 1 4130 Canopy Species Bigtooth Aspen	Freed Bog - Aspen - Cover 60	Pine Sa Size Class XLog/Log/Pole XLog/Log/Pole	DBH 20 20 Nonsto	per Well 106 117 117 117 117 117 117 117 117 117 11	I 1.6 Canopy White Red I Black/Red (H Black S 41.5 Canopy Black S Tag A Tama I 21.3 Canopy Balsa	Species Pine Pine Hybrid) Oak Spruce Species Spruce Alder arack 40 Species Im Fir Oak	Density Medium Low Trace Low Density Medium Medium Low 51-80 Density Trace	N/A Avg. Height Variable >20 feet >20 feet >20 feet No Avg. Height Variable < 5 feet 10 - 20 feet N/A Avg. Height 5 - 10 feet	Sapling Pole Pole Pole Pole Size Pole Tall Shrub Pole Size Sapling	OPIC - FMD: 1999: It seems doubtful that the timber on this island has been cut since its virgin timber was cut 100 years ago. The predominant overstory species are red pine logs with white pine logs a distant second, both in a variety of sizes (red up to 30" and white 7 25 106 20 10" Similar composition to stand 37 to the south, however containing more Tamarack. Mounds of sedge and grasses. Very Wet.Transitions into more sedge and grasses as you move east. Adjacent to natural river. Higher mortality in NW corner. West portion of stand contains smaller diameter stems with a higher stocking of oak. Better quality to the east. Mostly pole sized with some pockets of log sized trees. SE portion of stand contains a large crowned, super canopy Oak along with scattered Red Pine possibly left from old
6	42290 - Natural Canopy Species Red Pine White Pine 6224 - 1 4130 Canopy Species Bigtooth Aspen Quaking Aspen	ral Mixed Cover 59 40 Freed Bog Aspen Cover 60 20	Pine Sa Size Class XLog/Log XLog/Log/Pole Pole Pole	Nonstandaria (Control of the Control	per Well 106 117 117 117 117 117 117 117 117 117 11	I 1.6 Canopy White Red I Black/Red (H Black S 41.5 Canopy Black S Tag A Tama I 21.3 Canopy Balsai Red	Species Pine Pine Hybrid) Oak Spruce Species Spruce Alder arack 40 Species Im Fir Oak Cherry	Density Medium Low Trace Low Density Medium Medium Low 51-80 Density Trace Medium	N/A Avg. Height Variable >20 feet >20 feet >20 feet Variable < 5 feet 10 - 20 feet N/A Avg. Height 5 - 10 feet 5 - 10 feet	Sapling Pole Pole Pole Size Pole Tall Shrub Pole Size Sapling Sapling	OPIC - FMD: 1999: It seems doubtful that the timber on this island has been cut since its virgin timber was cut 100 years ago. The predominant overstory species are red pine logs with white pine logs a distant second, both in a variety of sizes (red up to 30" and white 7 25 106 20 10" Similar composition to stand 37 to the south, however containing more Tamarack. Mounds of sedge and grasses. Very Wet.Transitions into more sedge and grasses as you move east. Adjacent to natural river. Higher mortality in NW corner. West portion of stand contains smaller diameter stems with a higher stocking of oak. Better quality to the east. Mostly pole sized with some pockets of log sized trees. SE portion of stand contains a large crowned, super canopy Oak along with scattered Red Pine possibly left from old

- Stands Compartment: 5
Year of Entry: 2021

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Stand	Level 4 Co	Level 4 Cover Type Size Density Acres Stand Age BA Range Man		Managed S	Site	General Comments					
8	4126 - White, B	lack, N. P	n Oak Po	oletimb	er Pooi	8.6	40	1-50	N/A		Records indicate that this was cut along with the adjacent stands in 1979.
	Canopy Species	% Cover	Size Class	DBH	l Age	Cano	py Species	Density	Avg. Height	Size	Aspen component is patchy and falling out compared to adjacent stands. BA variable throughout with averaging 47.5. Good regen of Oak in
	White Oak	25	Pole	6		Black/Re	ed (Hybrid) Oak	Medium	5 - 10 feet	Sapling	understory. Some larger crowned Oaks present throughout (~12 dbh).
	Jack Pine	15	Pole	6		W	hite Pine	Trace	5 - 10 feet	Sapling	
	Red Maple	10	Sapling/Pole	4		W	hite Oak	Low	5 - 10 feet	Sapling	OPIC - FMD: 1999: Has occasional clumps of A4. 2009: Patches of A4
Blac	k/Red (Hybrid) Oak	45	Pole	6	40	Já	ack Pine	Low	< 5 feet	Sapling	are more like small, occasional patches of A6 now.
9	4131 - A	spen, Oak	Pol	etimbe	Mediu	m 27.3	40	51-80	N/A		Pockets of healthy Aspen clones intermixed with Oak. Variable sized
	Canopy Species	% Cover	Size Class	DBH	l Age	Cano	py Species	Density	Avg. Height	Size	openings making canopy cover closer to 75. Within the openings are mostly open grown pines with scattered cherry brush. Moving south
	Bigtooth Aspen	50	Pole/Log	8	40	W	hite Pine	Trace	5 - 10 feet	Sapling	transitions into a Oak/Pine mix with some poor quality aspen intermixed.
Blac	k/Red (Hybrid) Oak	35	Pole/Sapling	6		Bla	ck Cherry	Low	< 5 feet	Sapling	
	Jack Pine	15	Sapling/Pole	4		Black/Re	ed (Hybrid) Oak	Medium	10 - 20 feet	Sapling	
					1	R	ed Pine	Low	10 - 20 feet	Sapling	
						Sw	veet Fern	High	< 5 feet	Tall Shrub	
10	6122 - Bla	ack Spruce	e Po	oletimb	er Pooi	9.8	56	1-50	N/A		Floodplain. Wet with pockets of dry spots where trees are present.
	Canopy Species	% Cover	Size Class	DBH	Age	Cano	py Species	Density	Avg. Height	Size	Scattered spruce and tamarack saplings. Beavers present.
	Black Spruce	85	Pole/Sapling	6	56	Ta	ag Alder	Medium	5 - 10 feet	Tall Shrub	
	Balsam Fir	7	Pole/Sapling	6		Bla	ck Spruce	Medium	5 - 10 feet	Sapling	
						Ta	amarack	Low	10 - 20 feet	Sapling	
11	622 - Low	land Shrul)	Nonsto	cked	14.2			No		Scattered black spruce containing a large amount of tag alder. Lowland
					Canopy Species			Density	Avg. Height	Size	brush, bog mix. Patches contain some spruce saplings.
						Ta	ag Alder	High	< 5 feet	Tall Shrub	
						Bla	ck Spruce	Low	Variable	Pole	
						Le	atherleaf	Medium	< 5 feet	Tall Shrub	
12	4125 - Blac	k, N. Pin C	ak Pol	etimbe	r Mediu	m 2.2	27 lı	mmature	N/A		Adjacent to natural river. Looks like it was cut with the adjacent jack pine
	Canopy Species	% Cover	Size Class	DBH	l Age	Cano	py Species	Density	Avg. Height	Size	stand but left to come back naturally. Many oaks are from stump sprout origin but some look to be from acorns. Some steeper slopes in areas
Blac	k/Red (Hybrid) Oak	80	Pole/Sapling	6	27	Black/Re	ed (Hybrid) Oak	Medium	5 - 10 feet	Sapling	transitioning into the L type to the east. Cherry brush prominent in
	Jack Pine	20	Pole	5			Beech	Trace	< 5 feet	Sapling	pockets.
						Bla	ck Cherry	Medium	< 5 feet	Sapling	
13	6122 - Bla	ack Spruce	e P	oletimb	er Well	5.4	78	51-80	N/A		Mortality is found in the larger log sized spruce and the remaining aspen.
	Canopy Species	% Cover	Size Class	DBH	l Age	Cano	py Species	Density	Avg. Height	Size	Aspen component is isolated in the drier portions on the stand. Density increases as you move west, very wet. Pockets of mortality put it closer
	Black Spruce	80	Pole/Log	9	78	Re	ed Maple	Low	5 - 10 feet	Sapling	to 75% canopy. Adjacent to natural river.
	Diack Spruce							_	-		1
	Tamarack	10	Sapling/Pole	4		Pa	per Birch	Trace	< 5 feet	Sapling	
	<u> </u>	10	Sapling/Pole	4			per Birch ck Spruce	Trace High	< 5 feet 5 - 10 feet	Sapling Sapling	



Stand	Level 4 C	over Type		Size Density	Acres	Stand Age	BA Range	Managed \$	Site	General Comments
14	4125 - Blac	k, N. Pin O	ak	Sapling Poor	r 8.8	4	Immature	N/A		Stand was cut along with stand 64 in January 2015 as a part of the Last
	Canopy Species	% Cover	Size Class	DBH Age	Can	opy Species	Density	Avg. Height	Size	Second Pine sale. Clumps of better regen is found in the north and north east portions containing oak, aspen and red maple. Most Oak saplings
Bla	ck/Red (Hybrid) Oak	68	Sapling	1 4	J	ack Pine	Low	< 5 feet	Seeding	are stump sprouts that are above browse height. Some scattered jack
	Red Maple	13	Sapling	1	Bla	ack Cherry	Low	< 5 feet	Seeding	pine throughout. Split away from stand 45 due to it failing regeneration
	Quaking Aspen	10	Sapling	1	F	Red Pine	Trace	< 5 feet	Seeding	check.
	Black Cherry	7	Sapling	1						-
15	622 - Lov	vland Shrub	ı	Nonstocked	30.3			No		Very wet with dominantly Tag Alder and intermixed Spruce and
					Can	opy Species	Density	Avg. Height	Size	Tamarack. Stand contains a large area around a drainage for Big Creek.
						ag Alder	Full	5 - 10 feet	Tall Shrub	
					Bla	ick Spruce	Medium	10 - 20 feet	Pole	
					Т	amarack	Low	10 - 20 feet	Pole	
16	42120 - Plar	nted Jack P	ine I	Poletimber We	ell 232.8	33	51-80	N/A		This stand is within the the Kirtland Warbler Management area and was
	Canopy Species	% Cover	Size Class	DBH Age	Can	opy Species	Density	Avg. Height	Size	planted in 1986 at 1,200 TPA. The majority of the stand is pole sized but still contains many stems just under 5". Scattered throughout are some
	Jack Pine	99	Pole/Sapling		+	thorn (spp.)	Low	< 5 feet	Tall Shrub	Oak stump sprouts that have established themselves in the canopy.
					Sa	nd Cherry	Trace	< 5 feet	Tall Shrub	Some pockets of mortality are found throughout. A portion of this stand
					Black/Re	ed (Hybrid) Oa	ak Low	5 - 10 feet	Sapling	was affected by the Big Creek Fire in 1981. A powerline runs through this stand.
										OPIC - FMD: Previous comment: KIRTLAND WARBLER HABITAT JACK PINE PLANTED 1200 PER ACRE IN OPPOSING WAVE PATTERN. 1999: J3 is approximately 10' high. The next time this is harvested, consider cutting Stand 14 with it. 2009: Approaching pole size.
17	42120 - Plar	nted Jack P	ine	Sapling Wel	60.8	23	Immature	N/A		Planted in 1996 with stand 18 to the west at 1,000 trees per acre. Part of
	Canopy Species	% Cover	Size Class	DBH Age	Can	opy Species	Density	Avg. Height	Size	management block 18. Intermixed oak and cherry saplings throughout.
	Jack Pine	99	Sapling	3 23	Black/Re	ed (Hybrid) Oa	ak Low	< 5 feet	Sapling	
					Sa	nd Cherry	Trace	< 5 feet	Tall Shrub	
					Bla	ack Cherry	Low	< 5 feet	Sapling	
18	42120 - Plar	nted Jack P	ine	Sapling Wel	37.2	23	Immature	N/A		Planted in 1996 at 1,000 trees per acre. Some scattered volunteer red
	Canopy Species	% Cover	Size Class	DBH Age	Can	opy Species	Density	Avg. Height	Size	pine.
	Jack Pine	99	Sapling	2 23	Black/Re	ed (Hybrid) Oa	ak Low	< 5 feet	Sapling	
					Sa	nd Cherry	Trace	< 5 feet	Tall Shrub	
					Bla	ack Cherry	Low	< 5 feet	Sapling	



Stand	d Level 4 Co	over Type	<u> </u>	Size De	nsity	Acres	Stand Age B	A Range	Managed S	Site	General Comments
19	42120 - Plar	nted Jack P	ine F	Poletimber Well		85.2	33	51-80	N/A		Planted in 1986 at 1,200 trees per acre. Just meets the criteria for pole
	Canopy Species	% Cover	Size Class	DBH	Age	Canor	y Species	Density	Avg. Height	Size	sized stand (30%) but still contains stems that are under 5". Pocket of larger pole jack pine in the SE corner of stand along power line ROW.
	Jack Pine	99	Pole/Sapling	5	33	Wh	ite Oak	Trace	< 5 feet	Sapling	North Branch Sled Trail runs through this stand.
				'		Blac	k Cherry	Medium	5 - 10 feet	Sapling	
						Black/Red	d (Hybrid) Oak	Medium	5 - 10 feet	Sapling	
						Hawth	orn (spp.)	Trace	< 5 feet	Tall Shrub	
						Swe	eet Fern	High	< 5 feet	Tall Shrub	
20	42220 - Nati	ural Jack Pi	ne F	oletimb	er Well	130.0	55	51-80	N/A		Overall the stand is on the verge of a log sized stand. Most areas are
	Canopy Species	% Cover	Size Class	DBH	Age	Canor	y Species	Density	Avg. Height	Size	larger pole sized jack pine with pockets of log sized jack pine with heavy oak regen coming up underneath. Looks to be of natural orgin with no
	Jack Pine	80	Pole/Log	8	55	Black/Red	d (Hybrid) Oak	High	5 - 10 feet	Sapling	history of planting. Scattered limby, scruby large crowned oaks
Bla	ck/Red (Hybrid) Oak	10	Log	14		Blac	k Cherry	Low	< 5 feet	Sapling	throughout with some showing signs of mortality. A few red pine found on
	Red Pine	8	Log/Pole	12	41	Wh	ite Oak	Low	5 - 10 feet	Sapling	the west side of the stand. Notes say stand orgin is 1944 but cores indicate a younger stand. North Branch Sled Trail runs through the stand.
				'		Servicebe	rry (Juneberry)	Low	5 - 10 feet	Tall Shrub	Has a small inclusion of planted red pine in northeast corner.
						Jac	ck Pine	Low	10 - 20 feet	Sapling	
						Wh	ite Pine	Trace	5 - 10 feet	Sapling	
						Re	d Pine	Trace	< 5 feet	Sapling	
						Hawth	orn (spp.)	Trace	< 5 feet	Tall Shrub	
21	622 - Low	land Shrub		Nonsto	cked	13.5	56		No		Very wet tag alder stand containing an outlet from Big Creek. Adjacent to
					ſ	Canor	y Species	Density	Avg. Height	Size	natural river. This stand however does contain a small Black Spruce, Tamarack, Red Maple and Balsam Fir pocket that doesn't meet mapping
					1						
							g Alder	High	< 5 feet	Tall Shrub	
					-	Та	g Alder marack	High Low	< 5 feet 10 - 20 feet		standards (.6 acres).
						Ta _l Taı				Tall Shrub	
					-	Ta Tai Blac	marack	Low	10 - 20 feet	Tall Shrub Pole	
						Ta Tai Blac Red	marack k Spruce	Low Medium	10 - 20 feet >20 feet	Tall Shrub Pole Pole	
22	6224 - 1	Freed Bog		Nonsto	cked	Ta Tai Blac Red	marack k Spruce d Maple	Low Medium Low	10 - 20 feet >20 feet 10 - 20 feet	Tall Shrub Pole Pole Pole	standards (.6 acres). Tamarack dominated with intermixed poor quality aspen. Tag alder found
22	6224 - 1	Freed Bog		Nonsto	cked	Tar Tar Black Rec Bal	marack k Spruce d Maple	Low Medium Low	10 - 20 feet >20 feet 10 - 20 feet 5 - 10 feet	Tall Shrub Pole Pole Pole	standards (.6 acres).
22	6224 - 1	Freed Bog		Nonsto	cked	Tai Tai Blac Rec Bal 2.3 Canor	marack k Spruce d Maple sam Fir	Low Medium Low Low	10 - 20 feet >20 feet 10 - 20 feet 5 - 10 feet No	Tall Shrub Pole Pole Pole Sapling	standards (.6 acres). Tamarack dominated with intermixed poor quality aspen. Tag alder found
22	6224 - 1	Гreed Bog		Nonsto	cked	Tar Tar Black Rec Bal 2.3 Canor	marack k Spruce d Maple sam Fir	Low Low Low Low	10 - 20 feet >20 feet 10 - 20 feet 5 - 10 feet No Avg. Height	Tall Shrub Pole Pole Pole Sapling	standards (.6 acres). Tamarack dominated with intermixed poor quality aspen. Tag alder found
22	6224 - 1	Freed Bog		Nonsto	cked	Tai Tai Blaci Rec Bal 2.3 Canop Quaki	marack k Spruce d Maple sam Fir by Species ing Aspen	Low Low Low Low Low Low	10 - 20 feet >20 feet 10 - 20 feet 5 - 10 feet No Avg. Height >20 feet	Pole Pole Pole Sapling Size Pole	standards (.6 acres). Tamarack dominated with intermixed poor quality aspen. Tag alder found throughout with mounds of sedge and grasses.
22	6224 - 1 42120 - Plar		ine F	Nonsto		Tag Tag Tag Black Rec Bal 2.3 Canop Quaki Tag	marack k Spruce d Maple sam Fir py Species ing Aspen marack	Low Low Low Low Low Low Medium Medium	10 - 20 feet	Pole Pole Sapling Size Pole Pole	Tamarack dominated with intermixed poor quality aspen. Tag alder found throughout with mounds of sedge and grasses. 1986 KW block planting that extends into comp 7. Few occasional oak
		nted Jack P	ine F Size Class	Poletimb		Tai Tai Blaci Rec Bal 2.3 Canop Quaki Tai Tai 38.9	marack k Spruce d Maple sam Fir py Species ing Aspen marack g Alder	Low Medium Low Low Low Density Low Medium High	10 - 20 feet	Pole Pole Sapling Size Pole Pole	Tamarack dominated with intermixed poor quality aspen. Tag alder found throughout with mounds of sedge and grasses. 1986 KW block planting that extends into comp 7. Few occasional oak stump sprouts with mortality in large crowned red pine left from harvest.
	42120 - Plar	nted Jack P		Poletimb	er Well	Tai Tai Blaci Rec Bal 2.3 Canop Quaki Tai Tai 38.9 Canop	marack k Spruce d Maple sam Fir by Species ng Aspen marack g Alder	Low Medium Low Low Low Density Low Medium High 51-80 Density	10 - 20 feet	Tall Shrub Pole Pole Pole Sapling Size Pole Pole Tall Shrub	Tamarack dominated with intermixed poor quality aspen. Tag alder found throughout with mounds of sedge and grasses. 1986 KW block planting that extends into comp 7. Few occasional oak



<u> </u>	d Level 4 C	over Type	5	Size De	ensity	Acres	Stand Age E	BA Range	Managed S	Site	General Comments
24	42220 - Nat	ural Jack Pi	ine Pol	etimbe	r Mediu	ım 35.3	50	81-110	N/A		Highly variable stand. East and west portions are fair quality jack pine
	Canopy Species	% Cover	Size Class	DBH	l Age	Cano	py Species	Density	Avg. Height	Size	dominated with a few scattered lowland pockets. Central portion of stand around lowland contains heavy mortality within larger red pines and
	Jack Pine	85	Pole/Log	8	50	Servicebe	erry (Juneberry) Medium	5 - 10 feet	Tall Shrub	overmature jack pine. Heavy oak regeneration in the sub-canopy in this
	Quaking Aspen	10	Pole	7		R	ed Pine	Low	< 5 feet	Seeding	portion. The aspen component that is present is of better quality in the
						Black/Re	d (Hybrid) Oak	Medium	10 - 20 feet	Sapling	narrow area just north of stand 22.
						R	ed Pine	Low	>20 feet	Pole	
						Bla	ck Cherry	Low	5 - 10 feet	Sapling	
						WI	nite Pine	Trace	5 - 10 feet	Sapling	
25	42120 - Plai	nted Jack P	ine	Sapling	g Well	99.5	25	Immature	N/A		Planted in 1996. Residual oak left from harvest are showing some signs
	Canopy Species	% Cover	Size Class	DBH	l Age	Cano	py Species	Density	Avg. Height	Size	of mortality with burnt out tops and some epicormic branching. There are pockets of pole sized jack pine but not enough for overall size. The North
	Jack Pine	97	Sapling/Pole	4	25	Bla	ck Cherry	Medium	5 - 10 feet	Sapling	Branch Snowmobile Trail traverses through stand. Blazing star borer was
						Black/Re	d (Hybrid) Oak	Low	< 5 feet	Sapling	last observed within this stand in 1997.
						Servicebe	erry (Juneberry) Low	5 - 10 feet	Sapling	
						Ja	ick Pine	Low	< 5 feet	Seeding	
						W	hite Oak	Trace	5 - 10 feet	Sapling	
						North	ern Pin Oak	High	5 - 10 feet	Sapling	
	6122 - Black Spruce Poletimber Poc										
26	6122 - Bl	lack Spruce	Po	oletimb	er Poo	r 4.4	54	1-50	N/A		Very wet. Mounds of sedge and grass with intermixed tag alder. Mortality
26	6122 - Bl		Size Class		er Poo		54 py Species	1-50 Density	N/A Avg. Height	Size	Very wet. Mounds of sedge and grass with intermixed tag alder. Mortality of aspen. Adjacent to natural river. Minimal volume.
26						Cano			<u> </u>	Size Tall Shrub	of aspen. Adjacent to natural river. Minimal volume.
26	Canopy Species	% Cover	Size Class	DBF	l Age	Cano Ta	py Species	Density	Avg. Height		of aspen. Adjacent to natural river. Minimal volume.
26	Canopy Species Black Spruce Tamarack	% Cover 85	Size Class Pole/Sapling	DB F	Age 54	Cano Ta	py Species ag Alder	Density High	Avg. Height < 5 feet	Tall Shrub	of aspen. Adjacent to natural river. Minimal volume. A beaver dammed pond that is a part of Crapo Creek. Lots of standing
	Canopy Species Black Spruce Tamarack	% Cover 85 10	Size Class Pole/Sapling	6 6	Age 54	Cano Ta Blac 11.4	py Species ag Alder	Density High	Avg. Height < 5 feet < 5 feet	Tall Shrub	A beaver dammed pond that is a part of Crapo Creek. Lots of standing dead trees within, with edges and high spots taken up by alder, grasses,
	Canopy Species Black Spruce Tamarack	% Cover 85 10	Size Class Pole/Sapling	6 6	Age 54	Cano Ta Blace 11.4 Cano	py Species ag Alder ck Spruce	Density High Medium	Avg. Height < 5 feet < 5 feet No	Tall Shrub Sapling	A beaver dammed pond that is a part of Crapo Creek. Lots of standing dead trees within, with edges and high spots taken up by alder, grasses, spruce and tamarack. Does contain a small lowland shrub area in the
	Canopy Species Black Spruce Tamarack	% Cover 85 10	Size Class Pole/Sapling	6 6	Age 54	Cano Ta Blac 11.4 Cano Ta	py Species ag Alder ck Spruce	Density High Medium Density	Avg. Height < 5 feet < 5 feet No Avg. Height	Tall Shrub Sapling Size	A beaver dammed pond that is a part of Crapo Creek. Lots of standing dead trees within, with edges and high spots taken up by alder, grasses, spruce and tamarack. Does contain a small lowland shrub area in the
	Canopy Species Black Spruce Tamarack	% Cover 85 10	Size Class Pole/Sapling	6 6	Age 54	Cano Ta Blac 11.4 Cano Ta Ta	py Species ag Alder ck Spruce py Species ag Alder	Density High Medium Density Low	Avg. Height < 5 feet < 5 feet No Avg. Height 5 - 10 feet	Tall Shrub Sapling Size Tall Shrub	A beaver dammed pond that is a part of Crapo Creek. Lots of standing dead trees within, with edges and high spots taken up by alder, grasses, spruce and tamarack. Does contain a small lowland shrub area in the
	Canopy Species Black Spruce Tamarack	% Cover 85 10 - Water	Size Class Pole/Sapling Pole/Sapling	DBH 6 6 Nonsto	54 Docked	Cano Ta Blac 11.4 Cano Ta Ta	py Species ag Alder ck Spruce py Species ag Alder amarack	Density High Medium Density Low Low	Avg. Height < 5 feet < 5 feet No Avg. Height 5 - 10 feet > 20 feet	Size Tall Shrub Sapling Size Tall Shrub Pole	A beaver dammed pond that is a part of Crapo Creek. Lots of standing dead trees within, with edges and high spots taken up by alder, grasses, spruce and tamarack. Does contain a small lowland shrub area in the southwest corner. Records indicate that this stand along with stand 29, and 33 were planted.
27	Canopy Species Black Spruce Tamarack 500	% Cover 85 10 - Water	Size Class Pole/Sapling Pole/Sapling	DBH 6 6 Nonsto	54 Docked	Canc Ta Blac Ta Canc Ta Blac Blac Canc Ta Blac Canc C	py Species ag Alder ck Spruce py Species ag Alder amarack ck Spruce	Density High Medium Density Low Low Low	Avg. Height < 5 feet < 5 feet No Avg. Height 5 - 10 feet > 20 feet > 20 feet	Size Tall Shrub Sapling Size Tall Shrub Pole	A beaver dammed pond that is a part of Crapo Creek. Lots of standing dead trees within, with edges and high spots taken up by alder, grasses, spruce and tamarack. Does contain a small lowland shrub area in the southwest corner. Records indicate that this stand along with stand 29, and 33 were planted in 1949. This stand however looks to have been thinned and managed.
27	Canopy Species Black Spruce Tamarack 500	% Cover 85 10 - Water	Size Class Pole/Sapling Pole/Sapling	DBH 6 6 Nonsto	54 54 ocked	Cano Ta Blace	py Species ag Alder ck Spruce py Species ag Alder amarack ck Spruce 70	Density High Medium Density Low Low Low Density Density	Avg. Height < 5 feet < 5 feet No Avg. Height 5 - 10 feet > 20 feet N/A	Size Tall Shrub Pole Pole	A beaver dammed pond that is a part of Crapo Creek. Lots of standing dead trees within, with edges and high spots taken up by alder, grasses, spruce and tamarack. Does contain a small lowland shrub area in the southwest corner. Records indicate that this stand along with stand 29, and 33 were planted.
27	Canopy Species Black Spruce Tamarack 500 42110 - Pla Canopy Species	% Cover 85 10 - Water nted Red Pi	Size Class Pole/Sapling Pole/Sapling ine Sav	DBH 6 6 6 Nonsto	54 54 ocked	Cano Ta Blac 11.4 Cano Ta Blac m 12.1 Cano Black/Re	py Species ag Alder ck Spruce py Species ag Alder amarack ck Spruce 70 py Species	Density High Medium Density Low Low Low Density Density	Avg. Height < 5 feet < 5 feet No Avg. Height 5 - 10 feet > 20 feet > 20 feet N/A Avg. Height	Size Tall Shrub Pole Pole Size	A beaver dammed pond that is a part of Crapo Creek. Lots of standing dead trees within, with edges and high spots taken up by alder, grasses, spruce and tamarack. Does contain a small lowland shrub area in the southwest corner. Records indicate that this stand along with stand 29, and 33 were planted in 1949. This stand however looks to have been thinned and managed. Healthier and better quality than surround stands. Jack pine that was within the canopy is beginning to fall out along with the hybrid oaks. Decent quality red pine logs throughout. BA averaged out to 96 sq. ft
27	Canopy Species Black Spruce Tamarack 500 42110 - Pla Canopy Species	% Cover 85 10 - Water nted Red Pi	Size Class Pole/Sapling Pole/Sapling ine Sav	DBH 6 6 6 Nonsto	54 54 ocked	Cano Ta Blac 11.4 Cano Ta Blac m 12.1 Cano Black/Re W	py Species ag Alder ck Spruce py Species ag Alder amarack ck Spruce 70 py Species d (Hybrid) Oak	Density High Medium Density Low Low Low Density Medium	Avg. Height < 5 feet No Avg. Height 5 - 10 feet >20 feet >20 feet N/A Avg. Height Variable	Size Tall Shrub Sapling Size Tall Shrub Pole Pole Size Sapling	A beaver dammed pond that is a part of Crapo Creek. Lots of standing dead trees within, with edges and high spots taken up by alder, grasses, spruce and tamarack. Does contain a small lowland shrub area in the southwest corner. Records indicate that this stand along with stand 29, and 33 were planted in 1949. This stand however looks to have been thinned and managed. Healthier and better quality than surround stands. Jack pine that was within the canopy is beginning to fall out along with the hybrid oaks.
27	Canopy Species Black Spruce Tamarack 500 42110 - Pla Canopy Species	% Cover 85 10 - Water nted Red Pi	Size Class Pole/Sapling Pole/Sapling ine Sav	DBH 6 6 6 Nonsto	54 54 ocked	Cano Ta Blace 11.4 Cano Ta Blace m 12.1 Cano Black/Re W R	py Species ag Alder ck Spruce py Species ag Alder amarack ck Spruce 70 py Species d (Hybrid) Oak hite Oak	Density High Medium Density Low Low Low Density Medium Trace	Avg. Height < 5 feet < 5 feet No Avg. Height 5 - 10 feet >20 feet >20 feet N/A Avg. Height Variable 5 - 10 feet	Size Tall Shruk Pole Pole Size Sapling Size Sapling	A beaver dammed pond that is a part of Crapo Creek. Lots of standing dead trees within, with edges and high spots taken up by alder, grasses, spruce and tamarack. Does contain a small lowland shrub area in the southwest corner. Records indicate that this stand along with stand 29, and 33 were planted in 1949. This stand however looks to have been thinned and managed. Healthier and better quality than surround stands. Jack pine that was within the canopy is beginning to fall out along with the hybrid oaks. Decent quality red pine logs throughout. BA averaged out to 96 sq. ft



Stand	d Level 4 C	over Type		Size De	nsity	Acres	Stand Age E	BA Range	Managed S	Site	General Comments
29	42110 - Pla	nted Red P	ine	Poletimb	er Well	42.3	57	111-140	N/A		Initially inter-planted jack and red pine in 1949 with a large replant of red pine in 1962. Since the majority of the red pine are from the 1962
	Canopy Species	% Cover	Size Class	DBH	l Age	Canop	y Species	Density	Avg. Height	Size	planting the dominant age is 57. ~121 ba. Many limby stems and doubles
	Red Pine	85	Pole/Log	8	57	Wh	ite Oak	Trace	5 - 10 feet	Sapling	present throughout. No record or signs of previous thinnings. The jack
	Jack Pine	13	Pole	6		Whi	ite Pine	Trace	10 - 20 feet	Sapling	pine component is slowly starting to fall out of the stand, along with a few
						Re	d Pine	High	10 - 20 feet	Pole	scattered oaks that are starting to show signs of mortality. South portion of stand contains the majority of the first planting of red pine.
						Black	k Cherry	Medium	5 - 10 feet	Tall Shrub	or starta contains the majority of the mot planting of rea pine.
						Black/Red	l (Hybrid) Oak	Low	5 - 10 feet	Sapling	
30	622 - Lov	wland Shrub)	Nonsto	cked	3.9			No		Tag alder dominated with many snags present throughout.
						Canop	y Species	Density	Avg. Height	Size	
						Та	g Alder	Full	5 - 10 feet	Tall Shrub	
						Michi	gan Holly	Low	5 - 10 feet	Tall Shrub	
31	42220 - Nat	tural Jack P	ine	Poletimb	er Pooi	25.8	44	1-50	N/A		Pole sized jack pine stand with larger crowned, limby red pine trees and oak scattered throughout. Similar composition to stand 20 to the north.
	Canopy Species	% Cover	Size Class	DBH	Age	Canop	y Species	Density	Avg. Height	Size	Old TCR report says that it was strip cut in 1976 as a part of the High
	Jack Pine	80	Pole	6	44	Jac	k Pine	Medium	5 - 10 feet	Sapling	Line sale Mortality starting to show within the oaks and red pine.
	Red Pine	15	Log/XLog	16	69	Black	k Cherry	Low	< 5 feet	Sapling	
						Re	d Pine	Low	5 - 10 feet	Sapling	
						Black/Red	l (Hybrid) Oak	Medium	5 - 10 feet	Sapling	
						Serviceber	ry (Juneberry	') Trace	5 - 10 feet	Tall Shrub	
32	42120 - Pla	42120 - Planted Jack Pine			Sapling Well		42.8 16 I		N/A		This stand was planted in 2003 at 1,341 tpa. Occasional stump sprouts of oak are found throughout with a pocket of aspen that is over topping
	Canopy Species	% Cover	Size Class	DBH	l Age	Canop	y Species	Density	Avg. Height	Size	the jack pine in the northeast corner. Scattered super canopy red pine
	Jack Pine	97	Sapling	3	16	Black/Red	l (Hybrid) Oak	Low	< 5 feet	Seeding	are found throughout, and some are showing signs of mortality. ROW
						Re	d Pine	Low	< 5 feet	Seeding	along stand boundary was adjusted. Portion of stand near gas facility
						Black	k Cherry	Low	5 - 10 feet	Tall Shrub	appears to be planted but survival was very low.
33	42110 - Pla	nted Red P	ine	Poletimb	er Well	52.5	57	111-140	N/A		Records indicate that this was first planted in 1949 with a replant of just 1 red pine in 1962. The majority that are there are from the 1962 planting
	Canopy Species	% Cover	Size Class	DBH	l Age	Canop	y Species	Density	Avg. Height	Size	so that age will be recorded as dominant. Records also indicate that
	Jack Pine	35	Pole	8		Re	d Pine	Low	10 - 20 feet	Pole	there was health issues with weevil damage. Much of the trees are of
	Red Pine	60	Pole/Log	8	57	Black/Red	l (Hybrid) Oak	Low	5 - 10 feet	Sapling	poor form. Red pine is beginning to overtop the existing jack pine. Very
						Wh	ite Oak	Trace	< 5 feet	Sapling	limby, poor quality red pine. The north branch snowmobile trail runs through this stand. Average BA 132
											through this stand. Average BA 102.
						Jac	k Pine	Low	10 - 20 feet	Sapling	
34	42120 - Pla	nted Jack P	ine	Poletimb	er Well		33	51-80	10 - 20 feet N/A	Sapling	Planted in 1986 at 1,200 trees per acre. Mostly pole sized with some
34	42120 - Pla		ine Size Class	DBH	l Age	244.3				Sapling	pockets of sapling sized trees. Scattered limby red pine found throughout
34				DBH	l Age	244.3 Cano p	33	51-80 Density	N/A		
34	Canopy Species	% Cover	Size Class	DBH	l Age	244.3 Canop Black/Red	33 by Species	51-80 Density	N/A Avg. Height	Size	pockets of sapling sized trees. Scattered limby red pine found throughout

Gaylord Mgt. Unit



Stand	Level 4 Co	over Type	;	Size De	ensity	Acres Stand Age E	BA Range	Managed S	Site	General Comments
35	429 - Mixed U	Jpland Coni	fers P	oletimb	er Well	15.3 52	51-80	N/A		Patchy in spots. Scattered large crowned oak throughout with mostly fir and spruce coming up underneath. Aspen, oak and red maple
	anopy Species	% Cover	Size Class	DBI	l Age	Canopy Species	Density	Avg. Height	Size	component mostly present in the east/northeast. Mortality starting to
	Balsam Fir	30	Pole/Log	9	52	White Pine	Low	5 - 10 feet	Sapling	appear within overmature fir and some Oak.
E	Black Spruce	20	Pole	7		Paper Birch	Low	10 - 20 feet	Sapling	
Black/	Red (Hybrid) Oak	10	XLog/Log	18		Black Spruce	Medium	10 - 20 feet	Pole	
	White Pine	18	Log/Pole	10		Balsam Fir	Medium	10 - 20 feet	Sapling	
Q	uaking Aspen	10	Pole/Log	9		Nannyberry	Low	5 - 10 feet	Tall Shrub	
						Serviceberry (Juneberry) Low	5 - 10 feet	Sapling	
						Black/Red (Hybrid) Oak	Low	5 - 10 feet	Sapling	
36	42120 - Plan	ited Jack P	ine	Saplin	g Well	46.0 23	Immature	N/A		Cut in 1992, planted in 1996. Advanced red pine regeneration compared to the jack pine. Scattered oak stump sprouts with a pocket of aspen in
С	anopy Species	% Cover	Size Class	DBI	l Age	Canopy Species	Density	Avg. Height	Size	the far west corner. 15-20ft tall. This planting does extend into the
	Jack Pine	97	Sapling/Pole	4	23	Black Cherry	Low	< 5 feet	Sapling	adjacent compartment to the north.
						Black/Red (Hybrid) Oak	Low	< 5 feet	Sapling	
37	6224 - T	reed Bog		Nonst	ocked	4.1		No		Stand contains what seems to be an old railroad grade that connects the 3 SE quarter of section 22 to the rest of the compartment. The road
						Canopy Species	Density	Avg. Height	Size	following this grade will be used to access a sale in compartment 6. (Syx
						Black Spruce	Medium	Variable	Pole	Mix). Mounds of sedges and grass intermixed with tag alder and spruce.
						Black Spruce Tag Alder	Medium High	Variable < 5 feet	Pole Tall Shrub	Mix). Mounds of sedges and grass intermixed with tag alder and spruce.
38	42290 - Natu				er Well	Tag Alder		< 5 feet		Mix). Mounds of sedges and grass intermixed with tag alder and spruce. Initial selection harvest in 1988, followed by a red pine and red maple log
	42290 - Natu anopy Species		Pine S	DBI	H Age	Tag Alder 19.1 103 Canopy Species	High	< 5 feet		Mix). Mounds of sedges and grass intermixed with tag alder and spruce.
С	Red Pine	% Cover	Size Class Log/XLog	DBI	103	Tag Alder 19.1 103 Canopy Species White Pine	High 171-200 Density Medium	< 5 feet N/A Avg. Height Variable	Size Sapling	Mix). Mounds of sedges and grass intermixed with tag alder and spruce. Initial selection harvest in 1988, followed by a red pine and red maple log selection harvest completed in 2015. Stand grades into a Mixed conifer type as you move to the west/southwest with a lower density but remains to have same red pine/white pine composition. Most of the red maple and
С	Red Pine White Pine	% Cover	Size Class Log/XLog Log/XLog/Pole	DBI 16 15	103	Tag Alder 19.1 103 Canopy Species	High 171-200 Density Medium	< 5 feet N/A Avg. Height	Tall Shrub	Mix). Mounds of sedges and grass intermixed with tag alder and spruce. Initial selection harvest in 1988, followed by a red pine and red maple log selection harvest completed in 2015. Stand grades into a Mixed conifer type as you move to the west/southwest with a lower density but remains to have same red pine/white pine composition. Most of the red maple and white pine saplings are found in the northern portion near the ROW
C Black/	Red Pine White Pine (Red (Hybrid) Oak	% Cover 52 13 8	Size Class Log/XLog Log/XLog/Pole XLog/Log	16 15 19	103	Tag Alder 19.1 103 Canopy Species White Pine Black/Red (Hybrid) Oak Balsam Fir	High 171-200 Density Medium Medium Low	< 5 feet N/A Avg. Height Variable 5 - 10 feet 5 - 10 feet	Size Sapling Sapling Sapling	Mix). Mounds of sedges and grass intermixed with tag alder and spruce. Initial selection harvest in 1988, followed by a red pine and red maple log selection harvest completed in 2015. Stand grades into a Mixed conifer type as you move to the west/southwest with a lower density but remains to have same red pine/white pine composition. Most of the red maple and
C Black/	Red Pine White Pine	% Cover 52 13	Size Class Log/XLog Log/XLog/Pole	DBI 16 15	103	Tag Alder 19.1 103 Canopy Species White Pine Black/Red (Hybrid) Oak Balsam Fir Red Maple	High 171-200 Density Medium Medium Low Medium	< 5 feet N/A Avg. Height Variable 5 - 10 feet 5 - 10 feet 5 - 10 feet	Size Sapling Sapling	Mix). Mounds of sedges and grass intermixed with tag alder and spruce. Initial selection harvest in 1988, followed by a red pine and red maple log selection harvest completed in 2015. Stand grades into a Mixed conifer type as you move to the west/southwest with a lower density but remains to have same red pine/white pine composition. Most of the red maple and white pine saplings are found in the northern portion near the ROW boundary. There is damage present on some of the residual trees from
C Black/	Red Pine White Pine (Red (Hybrid) Oak	% Cover 52 13 8	Size Class Log/XLog Log/XLog/Pole XLog/Log	16 15 19	103	Tag Alder 19.1 103 Canopy Species White Pine Black/Red (Hybrid) Oak Balsam Fir Red Maple Serviceberry (Juneberry	High 171-200 Density Medium Medium Low Medium	< 5 feet N/A Avg. Height Variable 5 - 10 feet	Size Sapling Sapling Sapling Sapling Sapling Sapling Sapling	Mix). Mounds of sedges and grass intermixed with tag alder and spruce. Initial selection harvest in 1988, followed by a red pine and red maple log selection harvest completed in 2015. Stand grades into a Mixed conifer type as you move to the west/southwest with a lower density but remains to have same red pine/white pine composition. Most of the red maple and white pine saplings are found in the northern portion near the ROW boundary. There is damage present on some of the residual trees from past harvests. The east/southeast portion has a larger aspen component
C Black/	Red Pine White Pine (Red (Hybrid) Oak	% Cover 52 13 8	Size Class Log/XLog Log/XLog/Pole XLog/Log	16 15 19	103	Tag Alder 19.1 103 Canopy Species White Pine Black/Red (Hybrid) Oak Balsam Fir Red Maple Serviceberry (Juneberry Quaking Aspen	High 171-200 Density Medium Medium Low Medium	< 5 feet N/A Avg. Height Variable 5 - 10 feet 5 - 10 feet 5 - 10 feet	Size Sapling Sapling Sapling Sapling	Mix). Mounds of sedges and grass intermixed with tag alder and spruce. Initial selection harvest in 1988, followed by a red pine and red maple log selection harvest completed in 2015. Stand grades into a Mixed conifer type as you move to the west/southwest with a lower density but remains to have same red pine/white pine composition. Most of the red maple and white pine saplings are found in the northern portion near the ROW boundary. There is damage present on some of the residual trees from past harvests. The east/southeast portion has a larger aspen component
C Black/	Red Pine White Pine (Red (Hybrid) Oak	% Cover 52 13 8	Size Class Log/XLog Log/XLog/Pole XLog/Log	16 15 19	103	Tag Alder 19.1 103 Canopy Species White Pine Black/Red (Hybrid) Oak Balsam Fir Red Maple Serviceberry (Juneberry	High 171-200 Density Medium Low Medium Medium Trace	< 5 feet N/A Avg. Height Variable 5 - 10 feet	Size Sapling Sapling Sapling Sapling Sapling Sapling Sapling	Mix). Mounds of sedges and grass intermixed with tag alder and spruce. Initial selection harvest in 1988, followed by a red pine and red maple log selection harvest completed in 2015. Stand grades into a Mixed conifer type as you move to the west/southwest with a lower density but remains to have same red pine/white pine composition. Most of the red maple and white pine saplings are found in the northern portion near the ROW boundary. There is damage present on some of the residual trees from past harvests. The east/southeast portion has a larger aspen component
C Black/	Red Pine White Pine (Red (Hybrid) Oak uaking Aspen	% Cover 52 13 8	Size Class Log/XLog Log/XLog/Pole XLog/Log Log/Pole	DBH 16 15 19 9	103 81 Der Well	Tag Alder 19.1 103 Canopy Species White Pine Black/Red (Hybrid) Oak Balsam Fir Red Maple Serviceberry (Juneberry Quaking Aspen Red Pine	High 171-200 Density Medium Low Medium Medium Trace Low	< 5 feet N/A Avg. Height Variable 5 - 10 feet 5 - 10 feet 5 - 10 feet 10 - 20 feet	Size Sapling Sapling Sapling Sapling Sapling Sapling Sapling Sapling	Mix). Mounds of sedges and grass intermixed with tag alder and spruce. Initial selection harvest in 1988, followed by a red pine and red maple log selection harvest completed in 2015. Stand grades into a Mixed conifer type as you move to the west/southwest with a lower density but remains to have same red pine/white pine composition. Most of the red maple and white pine saplings are found in the northern portion near the ROW boundary. There is damage present on some of the residual trees from past harvests. The east/southeast portion has a larger aspen component than the rest of the stand. Good quality logs throughout. Overall BA 174. Wet pockets throughout. Contains smaller diameter trees compared to
Black/Q	Red Pine White Pine (Red (Hybrid) Oak uaking Aspen	% Cover 52 13 8 10	Size Class Log/XLog Log/XLog/Pole XLog/Log Log/Pole	DBH 16 15 19 9	103 81	Tag Alder 19.1 103 Canopy Species White Pine Black/Red (Hybrid) Oak Balsam Fir Red Maple Serviceberry (Juneberry Quaking Aspen Red Pine	High 171-200 Density Medium Low Medium Low Medium Low Medium Low Low Low Low	< 5 feet N/A Avg. Height Variable 5 - 10 feet 5 - 10 feet 5 - 10 feet 10 - 20 feet < 5 feet	Size Sapling Sapling Sapling Sapling Sapling Sapling Sapling Sapling	Mix). Mounds of sedges and grass intermixed with tag alder and spruce. Initial selection harvest in 1988, followed by a red pine and red maple log selection harvest completed in 2015. Stand grades into a Mixed conifer type as you move to the west/southwest with a lower density but remains to have same red pine/white pine composition. Most of the red maple and white pine saplings are found in the northern portion near the ROW boundary. There is damage present on some of the residual trees from past harvests. The east/southeast portion has a larger aspen component than the rest of the stand. Good quality logs throughout. Overall BA 174. Wet pockets throughout. Contains smaller diameter trees compared to stand 71 to north. Mortality present in cedar with heavy porcupine
Black/Q	Red Pine White Pine //Red (Hybrid) Oak uaking Aspen	% Cover 52 13 8 10	Size Class Log/XLog Log/XLog/Pole XLog/Log Log/Pole	DBH 16 15 19 9	103 81 Der Well	Tag Alder 19.1 103 Canopy Species White Pine Black/Red (Hybrid) Oak Balsam Fir Red Maple Serviceberry (Juneberry Quaking Aspen Red Pine 3.0 72	High 171-200 Density Medium Low Medium Low Medium Low Medium Medium 1 Trace Low Low Low 81-110	< 5 feet N/A Avg. Height Variable 5 - 10 feet 5 - 10 feet 5 - 10 feet 10 - 20 feet < 5 feet N/A	Size Sapling Sapling Sapling Sapling Sapling Sapling Sapling Sapling Sapling	Mix). Mounds of sedges and grass intermixed with tag alder and spruce. Initial selection harvest in 1988, followed by a red pine and red maple log selection harvest completed in 2015. Stand grades into a Mixed conifer type as you move to the west/southwest with a lower density but remains to have same red pine/white pine composition. Most of the red maple and white pine saplings are found in the northern portion near the ROW boundary. There is damage present on some of the residual trees from past harvests. The east/southeast portion has a larger aspen component than the rest of the stand. Good quality logs throughout. Overall BA 174. Wet pockets throughout. Contains smaller diameter trees compared to stand 71 to north. Mortality present in cedar with heavy porcupine damage. The red maple and aspen that are present are very poor quality and starting to show signs of mortality also. Does contain small grade
Black/Q	Red Pine White Pine Whate Pine Wed (Hybrid) Oak uaking Aspen 6122 - Bla	% Cover 52 13 8 10	Size Class Log/XLog Log/XLog/Pole XLog/Log Log/Pole P Size Class	DBH 16 15 19 9	1 Age 103 81 Der Well	Tag Alder 19.1 103 Canopy Species White Pine Black/Red (Hybrid) Oak Balsam Fir Red Maple Serviceberry (Juneberry Quaking Aspen Red Pine 3.0 72 Canopy Species	High 171-200 Density Medium Low Medium Low Medium Low Medium Output B1-110 Density	N/A Avg. Height Variable 5 - 10 feet 7 - 10 feet 8 - 10 feet 9 - 10 feet 10 - 20 feet 10 - 20 feet N/A Avg. Height	Size Sapling Sapling Sapling Sapling Sapling Sapling Sapling Sapling Sapling	Mix). Mounds of sedges and grass intermixed with tag alder and spruce. Initial selection harvest in 1988, followed by a red pine and red maple log selection harvest completed in 2015. Stand grades into a Mixed conifer type as you move to the west/southwest with a lower density but remains to have same red pine/white pine composition. Most of the red maple and white pine saplings are found in the northern portion near the ROW boundary. There is damage present on some of the residual trees from past harvests. The east/southeast portion has a larger aspen component than the rest of the stand. Good quality logs throughout. Overall BA 174. Wet pockets throughout. Contains smaller diameter trees compared to stand 71 to north. Mortality present in cedar with heavy porcupine damage. The red maple and aspen that are present are very poor quality and starting to show signs of mortality also. Does contain small grade between this stand and stand 30 with a single red pine and large crowned
Black/Qi	Red Pine White Pine White Pine Red (Hybrid) Oak uaking Aspen 6122 - Bla Canopy Species Black Spruce	% Cover 52 13 8 10	Size Class Log/XLog Log/XLog/Pole XLog/Pole Log/Pole P Size Class Pole/Log/Sap	DBH	1 Age 103 81 Der Well	Tag Alder 19.1 103 Canopy Species White Pine Black/Red (Hybrid) Oak Balsam Fir Red Maple Serviceberry (Juneberry Quaking Aspen Red Pine 3.0 72 Canopy Species Balsam Fir	High 171-200 Density Medium Low Medium Trace Low Low 81-110 Density Medium	N/A Avg. Height Variable 5 - 10 feet 5 - 10 feet 5 - 10 feet 5 - 10 feet 10 - 20 feet < 5 feet N/A Avg. Height 10 - 20 feet	Size Sapling	Mix). Mounds of sedges and grass intermixed with tag alder and spruce. Initial selection harvest in 1988, followed by a red pine and red maple log selection harvest completed in 2015. Stand grades into a Mixed conifer type as you move to the west/southwest with a lower density but remains to have same red pine/white pine composition. Most of the red maple and white pine saplings are found in the northern portion near the ROW boundary. There is damage present on some of the residual trees from past harvests. The east/southeast portion has a larger aspen component than the rest of the stand. Good quality logs throughout. Overall BA 174. Wet pockets throughout. Contains smaller diameter trees compared to stand 71 to north. Mortality present in cedar with heavy porcupine damage. The red maple and aspen that are present are very poor quality and starting to show signs of mortality also. Does contain small grade between this stand and stand 30 with a single red pine and large crowned hybrid oak. Thick understory in spots. Sedge/grass mats present
Black/Qi	Red Pine White Pine White Pine Washing Aspen 6122 - Black Canopy Species Black Spruce Red Maple	% Cover 52 13 8 10	Size Class Log/XLog Log/XLog/Pole XLog/Pole Log/Pole Pole/Log/Sap Pole/Log	DBH	1 Age 103 81 Der Well	Tag Alder 19.1 103 Canopy Species White Pine Black/Red (Hybrid) Oak Balsam Fir Red Maple Serviceberry (Juneberry Quaking Aspen Red Pine 3.0 72 Canopy Species Balsam Fir Black Spruce	High 171-200 Density Medium Low Medium Output Medium Low Medium Medium Low Medium Medium Medium Medium Medium Medium Medium Medium Medium Medium	< 5 feet N/A Avg. Height Variable 5 - 10 feet 5 - 10 feet 5 - 10 feet 5 - 10 feet 10 - 20 feet < 5 feet N/A Avg. Height 10 - 20 feet 10 - 20 feet 10 - 20 feet 10 - 20 feet	Size Sapling	Mix). Mounds of sedges and grass intermixed with tag alder and spruce. Initial selection harvest in 1988, followed by a red pine and red maple log selection harvest completed in 2015. Stand grades into a Mixed conifer type as you move to the west/southwest with a lower density but remains to have same red pine/white pine composition. Most of the red maple and white pine saplings are found in the northern portion near the ROW boundary. There is damage present on some of the residual trees from past harvests. The east/southeast portion has a larger aspen component than the rest of the stand. Good quality logs throughout. Overall BA 174. Wet pockets throughout. Contains smaller diameter trees compared to stand 71 to north. Mortality present in cedar with heavy porcupine damage. The red maple and aspen that are present are very poor quality and starting to show signs of mortality also. Does contain small grade between this stand and stand 30 with a single red pine and large crowned
Black/Qi	Red Pine White Pine White Pine Washing Aspen 6122 - Black Canopy Species Black Spruce Red Maple	% Cover 52 13 8 10	Size Class Log/XLog Log/XLog/Pole XLog/Pole Log/Pole Pole/Log/Sap Pole/Log	DBH	1 Age 103 81 Der Well	Tag Alder 19.1 103 Canopy Species White Pine Black/Red (Hybrid) Oak Balsam Fir Red Maple Serviceberry (Juneberry Quaking Aspen Red Pine 3.0 72 Canopy Species Balsam Fir Black Spruce Paper Birch	High 171-200 Density Medium Low Medium Low Medium Low Medium Medium Low Medium Trace Medium Medium Medium Trace	N/A Avg. Height Variable 5 - 10 feet 10 - 20 feet N/A Avg. Height 10 - 20 feet 10 - 20 feet 10 - 20 feet 10 - 20 feet	Size Sapling	Mix). Mounds of sedges and grass intermixed with tag alder and spruce. Initial selection harvest in 1988, followed by a red pine and red maple log selection harvest completed in 2015. Stand grades into a Mixed conifer type as you move to the west/southwest with a lower density but remains to have same red pine/white pine composition. Most of the red maple and white pine saplings are found in the northern portion near the ROW boundary. There is damage present on some of the residual trees from past harvests. The east/southeast portion has a larger aspen component than the rest of the stand. Good quality logs throughout. Overall BA 174. Wet pockets throughout. Contains smaller diameter trees compared to stand 71 to north. Mortality present in cedar with heavy porcupine damage. The red maple and aspen that are present are very poor quality and starting to show signs of mortality also. Does contain small grade between this stand and stand 30 with a single red pine and large crowned hybrid oak. Thick understory in spots. Sedge/grass mats present



Stand	d Level 4 Co	over Typ	e S	ize De	ensity	Acres	Stand Age	BA Range	Managed 9	Site	General Comments
40	320 - Upl	land Shru	ıb	Nonsto	ocked	67.2	0	Unspecified	Managed O	pening	Harvested in 2016, very nice oak regeneration throughout the central portion of the stand, with pockets of aspen coming up in the east. Very
						Cano	py Species	Density	Avg. Height	Size	close to having over 25% canopy cover with stems over 3'. Many snags
						Ja	ck Pine	Medium	10 - 20 feet	Pole	are present in the northern portion of the stand as well. Some scattered
						R	ed Pine	Medium	>20 feet	Log	red pine left with the majority of red pine in retention pockets.
						Ja	ck Pine	Low	< 5 feet	Seeding	
						Black/Re	d (Hybrid) Oa	ık High	5 - 10 feet	Sapling	
						Qual	king Aspen	Low	5 - 10 feet	Sapling	
						Bla	ck Cherry	Medium	5 - 10 feet	Sapling	
41	6225	5 - Bog	l	Nonsto	ocked	2.4			No		OPIC - FMD: OI Stand Year Origin was therleaf bog with occasional pole sized wp and bs rp.
42	4130	- Aspen	Po	letimb	er Wel	21.1	52	81-110	N/A		Harvested in 1967. Few Oak, white and red pine logs scattered
	Canopy Species	% Cove	er Size Class	DBH	l Age	Cano	py Species	Density	Avg. Height	Size	throughout. Overall the aspen is fair quality, with some pockets of decline. Larger conifer component in canopy to the north with a denser
	Quaking Aspen	42	Pole/Log	8	52	Bla	ck Cherry	Low	Variable	Sapling	oak subcanopy in that area. A few small lowland holes are found within.
	Red Maple	15	Pole	6		Re	d Maple	Medium	10 - 20 feet	Sapling	
	White Pine	11	Pole/Log/XLog	8		WI	nite Pine	Medium	5 - 10 feet	Sapling	
	Bigtooth Aspen	20	Pole/Log	8		Black/Re	d (Hybrid) Oa	k Low	5 - 10 feet	Sapling	
						Servicebe	erry (Juneberr	y) Low	5 - 10 feet	Tall Shrul	
						Ва	lsam Fir	Low	< 5 feet	Sapling	
						R	ed Pine	Trace	< 5 feet	Sapling	
						W	hite Oak	Trace	< 5 feet	Sapling	
43	42290 - Natu	ıral Mixed	l Pine Sa	wtimb	er Wel	10.0	104	111-140	N/A		A pine log selection cut was completed in 1988. It appears that there was
	Canopy Species	% Cove	er Size Class	DBH	l Age	Cano	py Species	Density	Avg. Height	Size	a lot of advanced regen of White Pine, Black Spruce, Red Maple and Balsam Fir. Mostly overtopping white pines of good quality with a pole
	White Pine	58	Log/XLog/Pole	14	104		nite Pine	Medium	5 - 10 feet	Sapling	sized class underneath. Dense White pine seedling establishment in
	Balsam Fir	15	Pole	6		R	ed Oak	Trace	5 - 10 feet	Sapling	pockets throughout. Separated from stand 35 due to age and
	Red Pine	7	Log	14		Blad	ck Spruce	Low	5 - 10 feet	Sapling	composition. Strips of lowland areas are found within southern portion of stand.
	Black Spruce	10	Pole	6		Ва	Isam Fir	Low	< 5 feet	Sapling	Stariu.
			l .			Re	d Maple	Low	5 - 10 feet	Sapling	
						Na	nnyberry	Trace	5 - 10 feet	Tall Shrul	
44	4133 - Aspe			Sapling		44.0	27	Immature	N/A		Multi-Polygon stand. Harvested in 1993, leaving all Red Oak and Red Pine along with a few White Pine. Multiple size classes present within.
	Canopy Species	% Cove			l Age		py Species	Density	Avg. Height	Size	BA for residual: Oak: ~10, Red Pine:~18, White Pine:~11. Many legacy
-	Quaking Aspen	30	Sapling/Pole	4	27		d Maple	Low	5 - 10 feet	Sapling	trees found throughout. A few areas have over mature aspen giving way to a good regeneration of oak and white pine (NE and SE). Larger oaks
Bla	ck/Red (Hybrid) Oak	10	Log/XLog	16			d (Hybrid) Oa		5 - 10 feet	Sapling	found west of two track. Fairly diverse
	Red Maple	8	Sapling/Pole	4	0.5		erry (Juneberr	• •	5 - 10 feet	Tall Shrul	o , , , , , , , , , , , , , , , , , , ,
	White Pine	16	XLog/Log/Pole				nite Pine	High	5 - 10 feet	Sapling	
	Red Pine	11	Log/Pole/XLog	10	88		ed Pine	Low	< 5 feet	Sapling	
	Bigtooth Aspen	20	Sapling/Pole	4		Pa	per Birch	Low	5 - 10 feet	Sapling	



Stand	Level 4 C	over Type	S	ize Der	sity	Acres	Stand Age	BA Range	Managed S	Site	General Comments
45	310 - Herbac	eous Open	land	Nonsto	cked	7.3	0	Unspecified	No		Originally merged with stand 14 to the north, but was split out due to a failed regeneration check. This stand was harvested in 2015. Will be left
						Cano	py Species	Density	Avg. Height	Size	out as an opening, and will be treated with surrounding jack pine when
						Ja	ck Pine	Low	< 5 feet	Sapling	rotation for the management block is met. A pocket of Red Pine was left
						Blac	k Cherry	Low	< 5 feet	Sapling	in the southeastern part of the stand. Heavy presence of sedge and
						Re	ed Pine	Low	>20 feet	Log	grasses.
46	500	- Water	,	Nonsto	cked	2.0			No		North tip of Little Crapo Lake.
47	122 - Roa	d/Parking Lo	ot	Nonsto	cked	3.3	0		No		Crapo Lake Rd.
48	623 - Emei	rgent Wetla	nd	Nonsto	cked	2.5	0		No		Lowland wetland/bog containing mostly leatherleaf and some grasses.
						Cano	py Species	Density	Avg. Height	Size	Wet.
						Blac	k Spruce	Low	10 - 20 feet	Pole	
						Quak	ing Aspen	Low	10 - 20 feet	Pole	
						Lea	therleaf	High	< 5 feet	Tall Shrub	
						Та	g Alder	Low	5 - 10 feet	Tall Shrub	
49	42220 - Nat	tural Jack P	ine Po	oletimbe	r Wel	2.7	38	51-80	N/A		Separated from stand 7 due to composition. Jack pine open grown with
	Canopy Species	% Cover	Size Class	DBH	Age	Cano	py Species	Density	Avg. Height	Size	portions of higher density smaller stems towards the west.
	Jack Pine	96	Pole/Sap/Log	5	38		k Cherry	Low	5 - 10 feet	Sapling	
						Black/Red	d (Hybrid) Oa	ak Medium	5 - 10 feet	Sapling	
						Wh	ite Pine	Trace	10 - 20 feet	Pole	
								Tross	5 - 10 feet	0 !:	
						Wh	nite Oak	Trace	3 - 10 leet	Sapling	
50	4199 - Other Mixe	ed Upland D	eciduous S	Sapling	Well	4.5	27	51-80	N/A	1 0	Separated from stand 16 due to composition and topo. This stand slopes
50	4199 - Other Mixe		Deciduous Size Class	Sapling DBH		4.5				1 0	in areas from stand 16 down into 48. Seems to be of similar age to the
						4.5 Cano	27	51-80	N/A	1 0	
	Canopy Species	% Cover	Size Class	DBH		4.5 Cano	27 py Species	51-80 Density Low	N/A Avg. Height	Size	in areas from stand 16 down into 48. Seems to be of similar age to the adjacent jack pine, looks as if it was cut with the surrounding jack pine
	Canopy Species Quaking Aspen	% Cover	Size Class Pole/Sapling	DBH	Age	4.5 Cano Black/Rec	27 py Species k Cherry	51-80 Density Low	N/A Avg. Height < 5 feet	Size Sapling	in areas from stand 16 down into 48. Seems to be of similar age to the adjacent jack pine, looks as if it was cut with the surrounding jack pine
	Canopy Species Quaking Aspen ck/Red (Hybrid) Oak	% Cover 30 50	Size Class Pole/Sapling Sapling/Pole	DBH 6 4	Age	4.5 Cano Black/Rec	27 py Species k Cherry d (Hybrid) O	51-80 Density Low ak Medium	N/A Avg. Height < 5 feet < 5 feet	Size Sapling Sapling	in areas from stand 16 down into 48. Seems to be of similar age to the adjacent jack pine, looks as if it was cut with the surrounding jack pine
	Canopy Species Quaking Aspen ck/Red (Hybrid) Oak Jack Pine Red Maple	% Cover 30 50 9	Size Class Pole/Sapling Sapling/Pole Pole Sapling	DBH 6 4 6	Age 27	4.5 Cano Black/Red Wh	27 py Species k Cherry d (Hybrid) O	51-80 Density Low ak Medium	N/A Avg. Height < 5 feet < 5 feet	Size Sapling Sapling Sapling	in areas from stand 16 down into 48. Seems to be of similar age to the adjacent jack pine, looks as if it was cut with the surrounding jack pine but unable to plant due to the slope. Stand seems to look as if it is transitioning into a lowland shrub. Signs of
Blac	Canopy Species Quaking Aspen ck/Red (Hybrid) Oak Jack Pine Red Maple 6122 - Bi	% Cover	Size Class Pole/Sapling Sapling/Pole Pole Sapling	DBH 6 4 6 4 6 4	27 Mediu	4.5 Cano Black/Rec Wh	27 py Species ck Cherry d (Hybrid) Ochite Oak	51-80 Density Low ak Medium Low 1-50	N/A Avg. Height < 5 feet < 5 feet < 5 feet	Size Sapling Sapling Sapling	in areas from stand 16 down into 48. Seems to be of similar age to the adjacent jack pine, looks as if it was cut with the surrounding jack pine but unable to plant due to the slope. Stand seems to look as if it is transitioning into a lowland shrub. Signs of a rising water table with heavy influences in tag alder, holly, and more
Blac	Canopy Species Quaking Aspen ck/Red (Hybrid) Oak Jack Pine Red Maple	% Cover	Size Class Pole/Sapling Sapling/Pole Pole Sapling	DBH 6 4 6 4	27 Mediu	4.5 Cano Black/Ree Wh m 1.4 Cano	27 py Species k Cherry d (Hybrid) Oa nite Oak	51-80 Density Low ak Medium Low 1-50	N/A Avg. Height < 5 feet < 5 feet < 5 feet N/A	Size Sapling Sapling Sapling	in areas from stand 16 down into 48. Seems to be of similar age to the adjacent jack pine, looks as if it was cut with the surrounding jack pine but unable to plant due to the slope. Stand seems to look as if it is transitioning into a lowland shrub. Signs of a rising water table with heavy influences in tag alder, holly, and more sedge and grass mats. Most of the trees that are present are on higher
Blac	Canopy Species Quaking Aspen ck/Red (Hybrid) Oak Jack Pine Red Maple 6122 - B	% Cover	Size Class Pole/Sapling Sapling/Pole Pole Sapling Pole Size Class	DBH 6 4 6 4 Cetimber DBH	27 Mediu	4.5 Cano Black/Red Wh m 1.4 Cano	27 py Species k Cherry d (Hybrid) Oa nite Oak 56 py Species	51-80 Density Low Medium Low 1-50 Density	N/A Avg. Height < 5 feet < 5 feet < 5 feet N/A Avg. Height	Size Sapling Sapling Sapling Sapling	in areas from stand 16 down into 48. Seems to be of similar age to the adjacent jack pine, looks as if it was cut with the surrounding jack pine but unable to plant due to the slope. Stand seems to look as if it is transitioning into a lowland shrub. Signs of a rising water table with heavy influences in tag alder, holly, and more sedge and grass mats. Most of the trees that are present are on higher mounds. Mortality is creating gaps where mostly cedar was present, and now tag alder is filling in. There seems to be an old grade running on the
Blac	Canopy Species Quaking Aspen ck/Red (Hybrid) Oak Jack Pine Red Maple 6122 - B	% Cover	Size Class Pole/Sapling Sapling/Pole Pole Sapling Pole Size Class	DBH 6 4 6 4 Cetimber DBH	27 Mediu	4.5 Cano Black/Red Wh m 1.4 Cano Ta Mich	27 py Species ck Cherry d (Hybrid) Ochite Oak 56 py Species g Alder	51-80 Density Low ak Medium Low 1-50 Density Medium	N/A Avg. Height < 5 feet < 5 feet < 5 feet N/A Avg. Height 5 - 10 feet	Size Sapling Sapling Sapling Sapling Tall Shrub	stand seems to look as if it is transitioning into a lowland shrub. Signs of a rising water table with heavy influences in tag alder, holly, and more sedge and grass mats. Most of the trees that are present are on higher mounds. Mortality is creating gaps where mostly cedar was present, and now tag alder is filling in. There seems to be an old grade running on the north side of the stand where the maple, pine, and aspen are mostly
Blac	Canopy Species Quaking Aspen ck/Red (Hybrid) Oak Jack Pine Red Maple 6122 - B	% Cover	Size Class Pole/Sapling Sapling/Pole Pole Sapling Pole Size Class	DBH 6 4 6 4 Cetimber DBH	27 Mediu	4.5 Cano Black/Rec Wh m 1.4 Cano Ta Mich Black	27 py Species ck Cherry d (Hybrid) Ochite Oak 56 py Species g Alder igan Holly	51-80 Density Low Ak Medium Low 1-50 Density Medium Low	N/A Avg. Height < 5 feet < 5 feet < 5 feet N/A Avg. Height 5 - 10 feet 5 - 10 feet	Size Sapling Sapling Sapling Size Tall Shrub	in areas from stand 16 down into 48. Seems to be of similar age to the adjacent jack pine, looks as if it was cut with the surrounding jack pine but unable to plant due to the slope. Stand seems to look as if it is transitioning into a lowland shrub. Signs of a rising water table with heavy influences in tag alder, holly, and more sedge and grass mats. Most of the trees that are present are on higher mounds. Mortality is creating gaps where mostly cedar was present, and now tag alder is filling in. There seems to be an old grade running on the



Stand	Level 4 Co	over Type		Size Density	Acres	Stand Age	BA Range	Managed	Site	General Comments
52	790 - Other Bare/	Sparsely V	egetated	Nonstocked	1.4	0	Unspecified	No		Active gas well site. Originally part of compartment 7, merged into compartment 5 with surrounding red pine stand per compartment review (3/6/2019).
54	623 - Emer	gent Wetla	nd	Nonstocked	1.4			No		Small wetland pocket. Contains mostly grassy/sedge mats with
					Cano	py Species	Density	Avg. Height	Size	occasional shrubs on the perimeter.
					T	ag Alder	Low	5 - 10 feet	Tall Shrub	
					Na	annyberry	Trace	5 - 10 feet	Tall Shrub	
					W	hite Pine	Low	10 - 20 feet	Pole	
55	5 623 - Emergent Wetland			Nonstocked	1.1			No		Small wetland pocket. Contains grass/sedge mats with leatherleaf
					Cano	py Species	Density	Avg. Height	Size	throughout. High deer traffic area.
					T	ag Alder	High	5 - 10 feet	Tall Shrub	
					Na	annyberry	Low	5 - 10 feet	Tall Shrub	
					Le	atherleaf	High	< 5 feet	Tall Shrub	
62	42220 - Natu	ural Jack F	Pine S	awtimber Medi	um 4.2 81		51-80	N/A		Larger diameter jack pine starting to fall out along with a few scattered
	Canopy Species	% Cover	Size Class	DBH Age	Cano	py Species	Density	Avg. Height	Size	oaks. The jack pine and oak that are left are of good quality and healthy. There is a pocket in the middle of the stand that was aspen but has since
	Jack Pine	65	Log/Pole	11 81	Re	ed Maple	Medium	10 - 20 feet	Sapling	been removed by beavers. A few aspen are still standing, but many are
Blac	k/Red (Hybrid) Oak	15	Log	14	Bla	ck Cherry	Low	5 - 10 feet	Sapling	down. Good oak understory developing along with a few dense pockets
	Red Pine	10	Log/XLog	16	W	hite Oak	Low	5 - 10 feet	Sapling	of red maple saplings. BA: 70, 110, 80, 60, 40. White pine component diminishes as you move to the west.
	White Pine	9	Log	13	Black/Re	ed (Hybrid) O	ak High	5 - 10 feet	Sapling	
					W	hite Pine	Low	>20 feet	Pole	
					R	Red Pine	Low	>20 feet	Pole	
					Ва	alsam Fir	Trace	10 - 20 feet	Pole	
64	4199 - Other Mixed	d Upland D	eciduous	Sapling Poor	8.7	4	Immature	N/A		Stand was harvested in January 2015 as a part of the Last Second Pine
	Canopy Species	% Cover	Size Class	DBH Age	Cano	py Species	Density	Avg. Height	Size	sale. Higher composition of Oak, Aspen and Red Maple than adjacent cut (stand 14). Most saplings are over browse height however heavy
	Red Maple	35	Sapling	1 4	Blueberry/E	Bilberry/Cran	berry Medium	< 5 feet	Tall Shrub	browsing is present. Most Oak stump sprouts are above browse height,
	Quaking Aspen	35	Sapling	1 4	Sv	veet Fern	High	< 5 feet	Tall Shrub	along with some small single stem advanced Oak regen that was left from previous sale. Does contain transition zone into stand 13.
	Black Cherry	10	Sapling	1	Wi	ntergreen	High	< 5 feet	Tall Shrub	non previous sale. Does contain transition zone into stand 13.
Blac	k/Red (Hybrid) Oak	10	Sapling	1	Ja	ack Pine	Low	< 5 feet	Sapling	
					W	hite Pine	Trace	< 5 feet	Sapling	
67	122 - Road	I/Parking L	ot	Nonstocked	1.4	0		No		Crapo Lake Rd.
401	310 - Herbace	eous Open	land	Nonstocked	4.3			No		Herbaceous openland with scattered oak and jack pine. Not much history
					Cano	py Species	Density	Avg. Height	Size	on stand. Could have been used as a landing when the adjacent stands were harvested in 1979.
					Ja	ack Pine	Medium	5 - 10 feet	Sapling	
					Black/Re	ed (Hybrid) O	ak Low	10 - 20 feet	Pole	



Stand	Level 4 Cover Type	Size Density	Acres Stand	d Age BA Range	Managed \$	Site	General Comments
415	310 - Herbaceous Openland	Nonstocked	2.6		No		Herbaceous openland composed of scattered volunteer jack pine and
			Canopy Sp	ecies Density	Avg. Height	Size	oak.
			Jack Pin	e Low	5 - 10 feet	Sapling	
			Black/Red (Hyb	orid) Oak Trace	5 - 10 feet	Sapling	
427	310 - Herbaceous Openland	Nonstocked	3.9	Immature	No		Contains a small lowland pocket too small for mapping standards along
			Canopy Sp	ecies Density	Avg. Height	Size	with a pocket of poor quality aspen and red maple with open grown jack pine scattered throughout. Property corner in SW of stand isn't
			Jack Pin	e Medium	>20 feet	Pole	established, no corner was found.
			Quaking As	spen Medium	>20 feet	Pole	
			Black/Red (Hyb	orid) Oak Low	5 - 10 feet	Sapling	
			Red Map	le Low	10 - 20 feet	Sapling	
447	330 - Low-Density Trees	Nonstocked	6.8		Managed O	pening	Old notes indicated plantings for wildlife in 1999. Needs maintenance.
			Canopy Sp	ecies Density	Avg. Height	Size	Lots of oak, pine and cherry brush establishment. some aspen clones present. A single large diameter oak, white and red pine in southern
			Red Pine	e Low	10 - 20 feet	Pole	portion. Signs of an old railroad grade.
			Black/Red (Hyb	orid) Oak Medium	Variable	Pole	
			Bigtooth As	spen Low	>20 feet	Log	
			Black Che	erry Medium	5 - 10 feet	Sapling	
			White Pir	ne Low	10 - 20 feet	Pole	
460	110 - Low Intensity Urban	Nonstocked	1.1		No		Muskegon Development Co Gas facility with two well heads. Permits #42255 & #43367
465	790 - Other Bare/Sparsely Vegetated	Nonstocked	0.9	Unspecified	No		Muskegon Development Gas Well. Permit # 46517
466	790 - Other Bare/Sparsely Vegetated	Nonstocked	1.1	Unspecified	No		Muskegon Development Gas Well. Permit #46520
467	790 - Other Bare/Sparsely Vegetated	Nonstocked	1.3	Unspecified	No		Muskegon Development Gas Well. Permit 42921
468	790 - Other Bare/Sparsely Vegetated	Nonstocked	0.7	Unspecified	No		Muskegon Development Gas Well. Permit 42923
469	790 - Other Bare/Sparsely Vegetated	Nonstocked	1.0	Unspecified	No		Muskegon Development Gas Well. Permit 42922
470	790 - Other Bare/Sparsely Vegetated	Nonstocked	1.2	Unspecified	No		Muskegon Development Gas Well. Permit 42924
471	790 - Other Bare/Sparsely Vegetated	Nonstocked	1.0	Unspecified	No		Muskegon Development Gas Well. Permit 42262
472	790 - Other Bare/Sparsely Vegetated	Nonstocked	1.1	Unspecified	No		Muskegon Development Gas Well. Permit 42258



Stand	Level 4 Cover Type	Size Density	Acres Stand Age	BA Range	Managed S	Site	General Comments
473	790 - Other Bare/Sparsely Vegetated	Nonstocked	0.9	Unspecified	No		Muskegon Development Gas Well. Permit 42263
474	790 - Other Bare/Sparsely Vegetated	Nonstocked	1.1	Unspecified	No		Muskegon Development co gas well. permit #42925
475	790 - Other Bare/Sparsely Vegetated	Nonstocked	1.1	Unspecified	No		Muskegon Development Gas Well. Permit 42260
476	790 - Other Bare/Sparsely Vegetated	Nonstocked	1.0	Immature	No		Muskegon Development Co gas well. permit #42257
477	790 - Other Bare/Sparsely Vegetated	Nonstocked	1.2	Unspecified	No		Muskegon Development Co gas well. Permit #42259
478	790 - Other Bare/Sparsely Vegetated	Nonstocked	1.0	Unspecified	No		Muskegon Development Co gas well . Permit #42572
479	790 - Other Bare/Sparsely Vegetated	Nonstocked	1.1	Unspecified	No		Muskegon Development co gas well . Permit #42274
480	790 - Other Bare/Sparsely Vegetated	Nonstocked	0.9	Unspecified	No		Muskegon Development Co gas well. permit #42256
498	3102 - Grass	Nonstocked	2.4	Unspecified	Managed Op	pening	Managed opening with patchy oak, pine and aspen pockets. Old notes
			Canopy Species	Density	Avg. Height	Size	mentions part of burn complex with stand 40 & 447. Recommend a survey to establish property line.
			Jack Pine	Medium	>20 feet	Pole	Survey to establish property line.
			Red Pine	Medium	>20 feet	Log	
			Black/Red (Hybrid) Oa	k Low	>20 feet	Log	
			Quaking Aspen	Low	10 - 20 feet	Pole	
499	310 - Herbaceous Openland	Nonstocked	4.4		No		Herbaceous opening containing volunteer jack pine, oak and cherry. Possible seed source from stand 20 to the east.
			Canopy Species	Density	Avg. Height	Size	1 Sound Sourd Holli Stand 20 to the Guot.
			Jack Pine	Medium	10 - 20 feet	Pole	
			Black/Red (Hybrid) Oa	k Low	5 - 10 feet	Sapling	
			Black Cherry	Low	5 - 10 feet	Sapling	