

Compartment Review Presentation

Traverse City Forest Management Unit

Compartment 61121 Entry Year 2025 Acreage: 1,599

County Kalkaska

Management Area: Kalkaska Sandy Moraines

Stand Examiner: Paul Roell

Legal Description:

T27N R5W, Sections 34, 35 and W half of 36

Identified Planning Goals:

Management in the Kalkaska Sandy Moraines area will emphasize continuing to balance the age class of aspen on suitable sites and thinning the northern hardwoods, balancing age classes of red pine and jack pine and regenerating the aging oak resource. Management will strive to sustainably produce various forest products; enhance game and non-game wildlife habitat; protect areas of unique character, and provide for forest-based recreational uses. Expected trends within this 10-year planning period are increased recreational pressure, managing oil and gas development, introduced pests and diseases and the difficulty in regenerating oak.

Soil and topography:

Most of the compartment lies on sandy soils of one type or another including Lindquist, Rubicon, Graycalm, Au Gres, Grayling, and Croswell. There is a limited extent of Roscommon mucky sand in the wetter areas of Section 35. The hardwood stand sits Island Lake-Blue Lake complex.

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

The compartment is surrounded by a mixture of state and private ownership. There is State land along the north boundary. The Black Creek Conservation Association owns land to the west. There is State and private ownership to the south. There are numerous small private parcels, most with year-round dwellings, to the east.

Unique Natural Features:

This compartment has no known element occurrences but there is potential for Hill's thistle and eastern Massasauga rattlesnake across some of the compartment.

Archeological, Historical, and Cultural Features:

There is the possibility of an archeological within this compartment.

Special Management Designations or Considerations:

Aesthetics should be considered when managing stands adjacent to M-72.

Watershed and Fisheries Considerations:

There are no flowing streams or rivers in this compartment.

Wildlife Habitat Considerations:

The bulk of this compartment lies on a large ice contact ridge. This land type is typically characterized by broken topography. Presettlement vegetation over this LTA consisted of nearly 75% beech/maple forests with the rest consisting of beech/hemlock or mixed conifer stands. Today, northern hardwoods remain dominant on about 70% of the LTA. However, the coniferous component from many of these stands has been largely eliminated. Natural openings within this LTA are normally the result of frost pockets and occasional fires, and typically need little maintenance. One of these openings have been scheduled for maintenance activities in order to promote their forage and edge components. Oak treatments should be designed to leave a component of white pine, mature mast producing oak, and standing dead timber for structural diversity within the stands. Aspen harvests have been scheduled this inventory cycle in order to increase age class diversity. The incorporation of snags, leave trees, and downed logs in these cuts will help to replicate a wildfire-altered forest and increase wildlife use by species like grouse, woodcock, golden-winged warbler, turkey, and deer. Harvest operations should be utilized to create some (approximately 1-2 trees per acre) coarse woody debris (CWD), preferably via timber sale specs.

A broad flat outwash plain occurs in the southeast corner of this compartment. This LTA is a fire driven ecosystem which historically supported a variety of forest types. The dominant cover types were fire dependant conifers like jack pine. This area should be managed for a variety of forest age classes, successional stages, and patch sizes. Species benefiting from this habitat type include Kirtland's warbler, ruffed grouse, upland sandpiper, white-tailed deer, and hog-nosed snakes.

Mineral Resource and Development Concerns and/or Restrictions

There is no known metallic mineral potential in this part of the state. No active sand/gravel pits are known to exist in the area. There may be potential for sand & gravel within the compartment. Some oil & gas test drilling has occurred in the area, but there has been no significant production for miles. Some testing and minor production from the Collingwood Formation occurred a few miles west, but the Collingwood has not been proven to be economical to produce. Nevertheless, all State-owned mineral rights in and around the compartment were recently nominated for oil & gas leasing by Lambda Energy. Lambda's intentions in the area are unknown.

Vehicle Access:

The numerous roads in this compartment are sufficient for timber sale and recreational access.

Survey Needs:

There are no survey needs at this time.

Recreational Facilities and Opportunities:

Approximately 1-1/2 miles of the Kalkaska ORV trail bisects the compartment in a north/south fashion. Proposed timber management activities should include trail protection specifications to reduce impacts, as well as serve as an example of how timber harvesting practices can co-exist and often improve recreation and hunting experiences for future generations.

Fire Protection:

Proximity to M-72 and numerous woods roads through this compartment afford good access in the event of a wildfire. Primary fire protection would come from the DNR's Kalkaska Field Office with additional help from the Grayling Field Office and the Bear Lake Township fire station which are relatively close. Risk of catastrophic wildfire is relatively low due to open nature of many oak or hardwood stands and relative lack of pine stands.

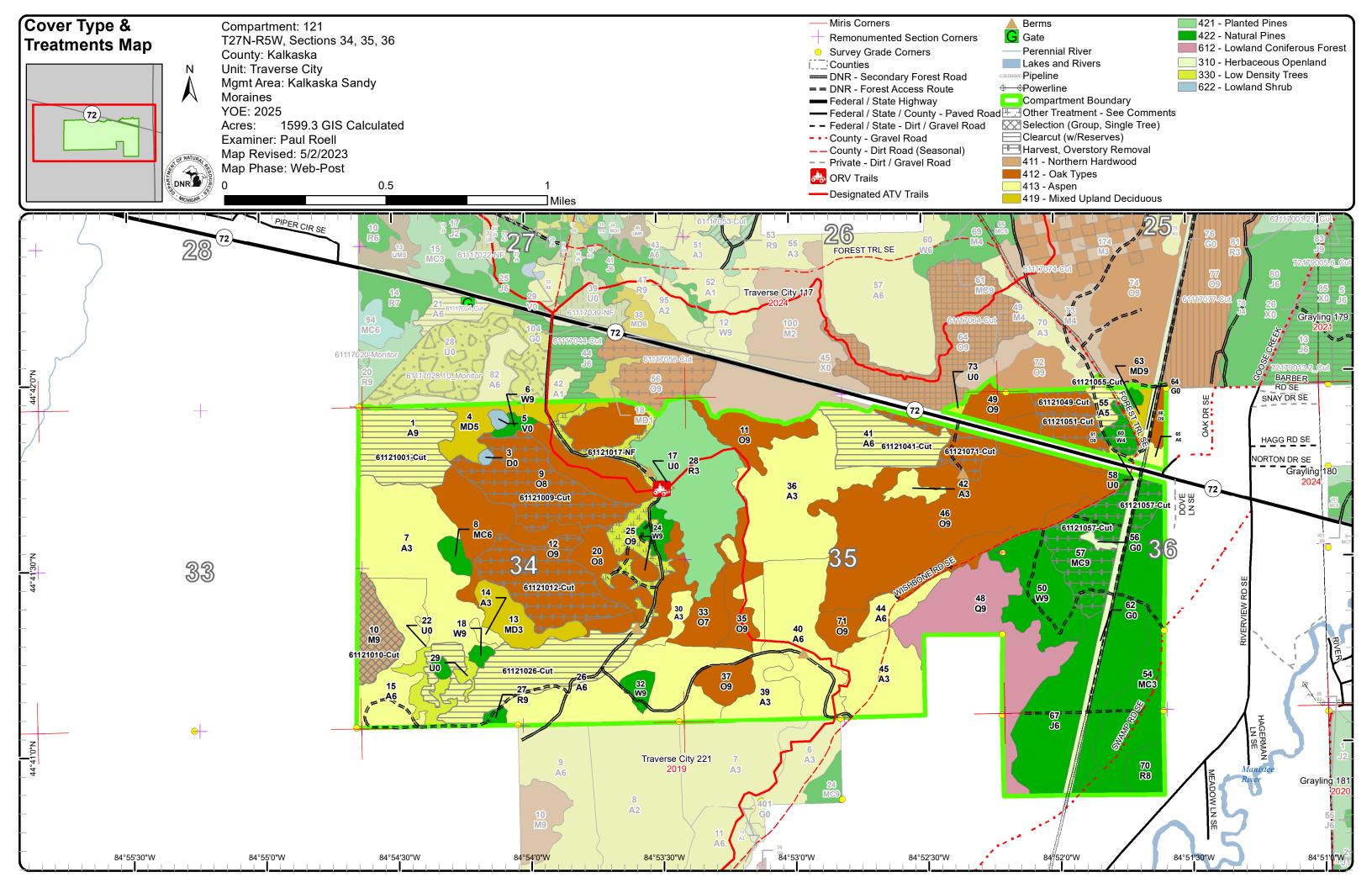
Additional Compartment Information:

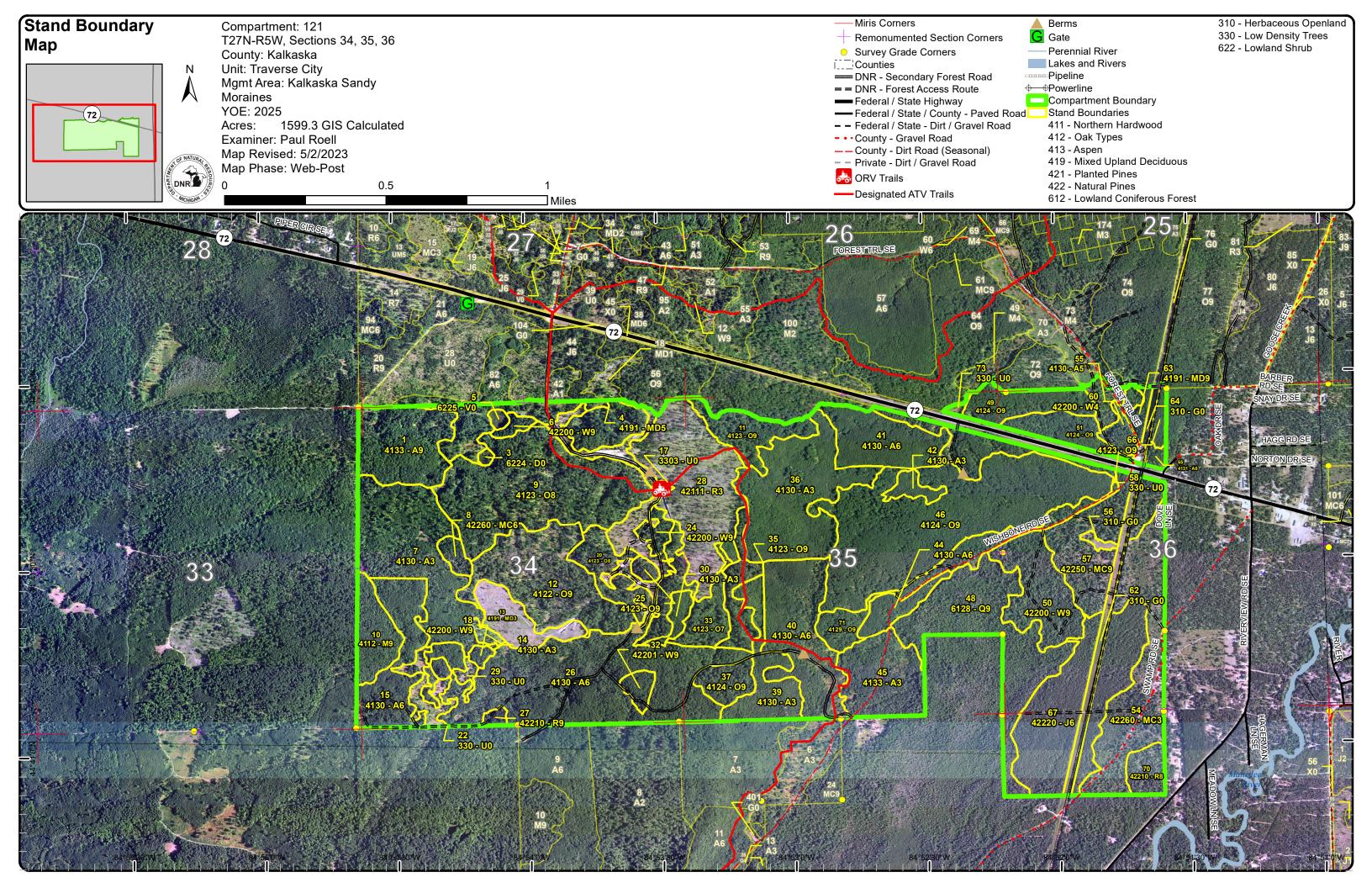
The following reports from the Inventory are attached:

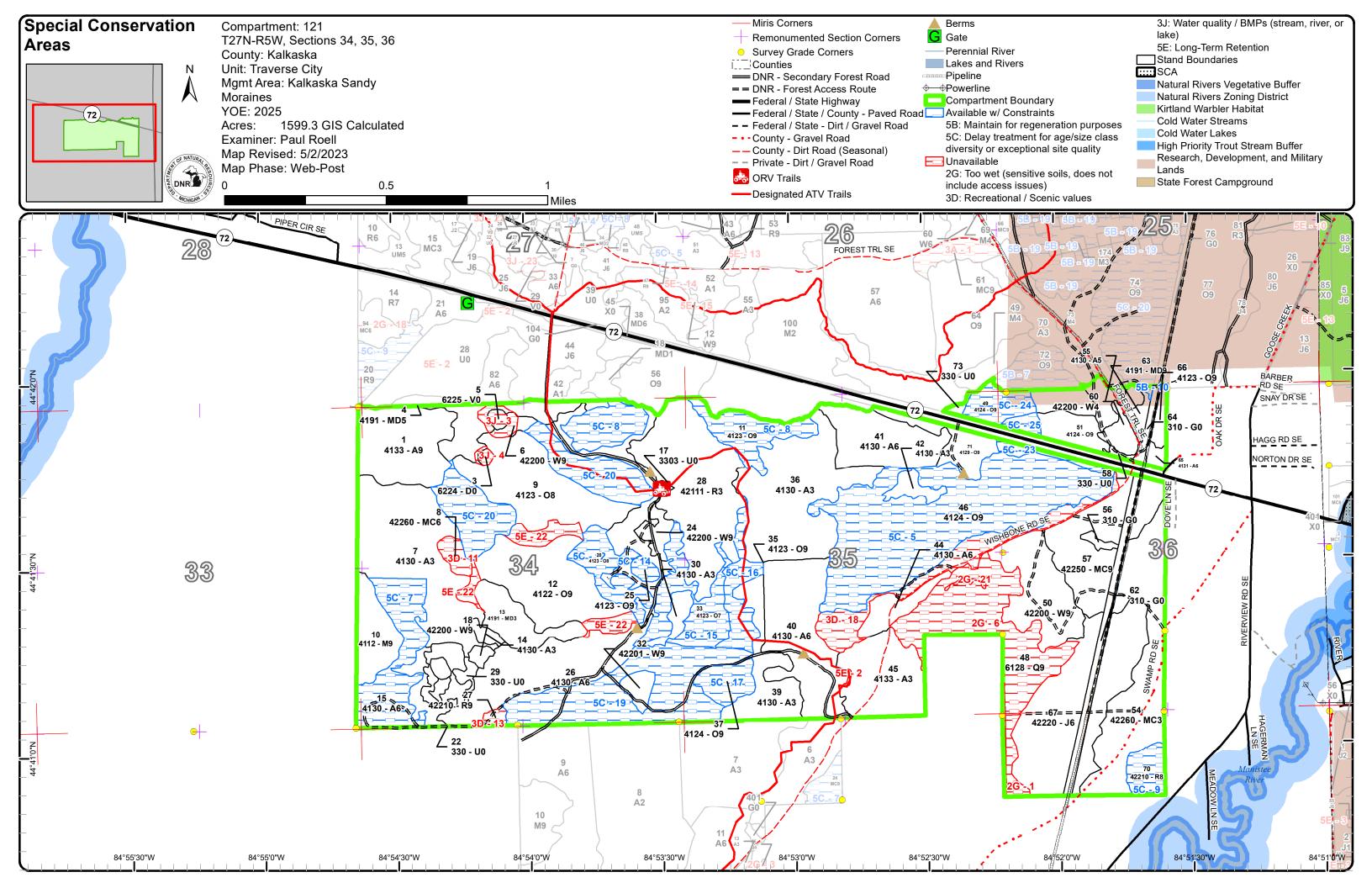
Total Acres by Cover Type and Age Class
Cover Type by Harvest Method
Proposed Treatments – No Limiting Factors
Proposed Treatments – With Limiting Factors
Stand Details (Forested and Nonforested)
Dedicated and Proposed Special Conservation Areas
Site Condition Details

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







Traverse City Mgt. Unit

Paul Roell: Examiner

Age Class

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		ζ ^δ / ς	§ / s		\$ \ \g	3 /8		3 /		8				§ /	\$ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	& /	1 ¹⁸ / 2	* / 6	Exp. You
	\ * 86	Soft C	, / &	, \ &	/ &	1 16	/ 8	/ &	\$ / K	s / &	· / &	1,3	Za	\ \L	' / Æ	, \ '\'	\$ / *	5 / Jr. 6	TO TO
Aspen	0	41	0	184	11	54	247	3	0	0	0	0	0	0	0	0	0	0	539
Bog	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Herbaceous Openland	21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20
Jack Pine	0	0	0	0	0	77	0	0	0	0	0	0	0	0	0	0	0	0	77
Low-Density Trees	44	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	44
Lowland Conifers	0	0	0	0	0	0	0	0	0	72	0	0	0	0	0	0	0	0	72
Mixed Upland Deciduous	0	20	0	0	0	22	0	0	0	4	0	0	0	0	0	0	0	0	46
Natural Mixed Pines	0	0	0	66	0	0	5	0	0	45	0	0	0	0	0	0	0	0	116
Northern Hardwood	0	0	0	0	0	0	0	0	0	0	20	0	0	0	0	0	0	0	20
Oak	0	0	0	0	0	0	0	0	0	269	241	0	0	0	0	0	0	0	510
Red Pine	0	71	0	0	0	0	0	0	0	11	2	0	0	0	0	0	0	0	84
Treed Bog	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
White Pine	0	0	0	0	0	0	0	0	15	11	41	0	0	0	0	0	0	0	67
Total	68	132	0	250	11	153	252	3	15	412	304	0	0	0	0	0	0	0	1598



Report 2 – Treatment Summary

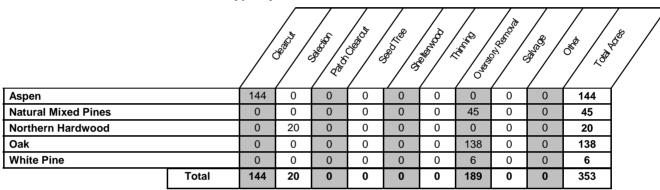
Traverse City Mgt. Unit Year of Entry: 2025

Acres of Harvest

Compartment 121
Total Compartment Acres: 1,599

Commercial Harvest - 353 Harvests with Site Condition - 0 Next Step Harvest - 0 Habitat Cut - 0

Cover Type by Harvest Method



Proposed and Next Step Treatments by Method

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Current		353	0	0	0	0	0	0	0	29	382	
Next Step		0	0	0	0	0	0	164	0	0	164	
	Total	353	0	0	0	0	0	164	0	29	546]

Acres

Report 3 -- Treatments

BA

Range

Compartment: 121

Structure

Cut

S t а n

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Year of Entry: 2025 **Cover Type** Age Habitat

Objective

Proposed Treatments:

Treatment

Name

61121001-Cut 41.8 4133 - Aspen, Sawtimber 56 81-110 Harvest Clearcut with 413 - Aspen Even-Aged No Mixed Pine Well Retention

Treatment

Type

Treatment

Method

Prescription Harvest all trees two inches and larger in diameter. Look at leave tree marking some scattered white oaks and pine while cruising the stand.

Specs: Minimal area retention.

Include grouse spec and oak wilt in timber sale specs.

Acceptable aspen, mixed oak, pine and hardwood which meet minimum stocking requirements.

Stand

CoverType

Size

Density

Stand

Age

Next Step Treatments:

Monitoring, Natural Regen (Re-Inventory)

Regen:

Other Comment:

Site Condition

Proposed Start Date: 10/1 /2024

61121009-Cut 52.7 4123 - Red Oak Sawtimber 95 51-80 Harvest Overstory 4131 - Aspen, Even-Aged No Removal Oak Medium

Prescription Harvest all trees four inches and larger in diameter. Remove the existing overstory and release the regeneration present along with producing more regeneration. Look at leave tree marking some scattered white oaks and pine while cruising the stand. A site condition for Specs: area retention has been placed in MIFI.

Next Step **Treatments:**

Acceptable aspen, oak, mixed pine and hardwood

Regen: Other

Comment:

Site Condition

Proposed Start Date: 10/1 /2024

61121010-Cut 20.2 4112 - Maple, Sawtimber 98 111-Single Tree 411 - Northern Harvest Even-Aged No Beech, Cherry Well 140 Selection Hardwood

Association

Prescription Follow the departments guide to mark the stand to a residual BA of 70-80 sqft per acre/establish 4 or 5 larger 1-2 acre regen gaps. Scarify

Specs: the gaps during the harvest if possible.

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable Sugar maple, Red maple, Red oak and Basswood

Regen:

Other Comment:

Site Condition

Report 3 -- Treatments

Compartment: 121 Year of Entry: 2025

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

12 61121012-Cut 49.0 4122 - Oak, Pine Sawtimber 81-110 Harvest Overstory 4122 - Oak, Pine Even-Aged Well Removal

Prescription Harvest all trees four inches and larger in diameter. Remove the existing overstory and release the regeneration present along with producing more regeneration. Look at leave tree marking some scattered white oaks and pine while cruising the stand. A site condition for Specs:

area retention has been placed in MIFI.

Next Step Treatments:

Acceptable oak, pine, aspen and some hardwood

Regen: Other Comment:

Site Condition

Proposed Start Date: 10/1 /2024

28.8 3303 - Mixed Low Nonstocked NonForestMqt Fruit Tree/Shrub 3205 - Mixed No 61121017-NF 17 **Density Trees** Planting **Upland Shrub**

Prescription Selectively hand fell woody encroachment to maintain upland brush/grassland community. Leave scattered mast producing trees and shrubs and/or conifers for wildlife food and cover. Plant site appropriate native shrubs and/or mast producing trees for wildlife food and Specs:

cover. May need to fertilize plantings and protect with wire cages or tubex.

Next Step Treatments:

<u>Acceptable</u> Regen:

Could augment herbaceous vegetation with low maintenance native spp via overseeding. Other 4 2 2

Comment: This could be a good area for Non Profit or wildlife club to plant shrubs.

Site Condition

Proposed Start Date: 10/1 /2024

61121026-Cut 61.2 4130 - Aspen Poletimber Clearcut with 53 Harvest 413 - Aspen Even-Aged Nο Well Retention

Prescription Harvest all trees two inches and larger in diameter. Look at leave tree marking some scattered white oaks and pine while cruising the stand. Minimal area retention. Specs:

Include grouse spec and orv trail protection spec in timber sale

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable aspen with a minor component of oaks, pine and hardwoods which meet minimum stocking level

Regen: <u>Other</u>

Comment:

Site Condition

Report 3 -- Treatments

Compartment: 121 Year of Entry: 2025

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а **Treatment** Stand Size Stand BA **Treatment Treatment Cover Type** Acres Age Habitat n Method Objective Structure Name CoverType Density Age Range Type Cut d 41 61121041-Cut 33.5 4130 - Aspen Poletimber Harvest Clearcut with 413 - Aspen Even-Aged Nο Well Retention Harvest all trees two inches and larger in diameter. Look at leave tree marking some scattered white oaks and pine while cruising the stand. Prescription Specs: Minimal area retention. Include Grouse spec in timber sale oak wilt spec too. Next Step Monitoring, Natural Regen (Re-Inventory) Treatments: Acceptable aspen with a minor component of red maple, pines and oaks which meet minimum stocking requirements Regen: Other Comment: Site Condition Proposed Start Date: 10/1 /2024 61121049-Cut 8.7 4124 - Red with Sawtimber 83 81-110 Harvest Overstory 4190 - Mixed Even-Aged No White Oak Well Upland Removal Deciduous with Cedar Prescription Harvest all trees four inches and larger in diameter. Remove the existing overstory and release the regeneration present along with producing more regeneration. Look at leave tree marking some scattered white oaks and pine while cruising the stand. Specs: No retention regen concerns and small stand size include oak wilt specs Next Step Treatments: Acceptable oaks and aspen mixed pine and red maple Regen: Other Comment: Site Condition Proposed Start Date: 10/1 /2024 61121051-Cut 11.8 4124 - Red with Sawtimber 83 81-110 Harvest Overstory 4199 - Other Even-Aged No Mixed Upland White Oak Well Removal Deciduous Prescription Harvest all trees four inches and larger in diameter. Remove the existing overstory and release the regeneration present along with producing more regeneration. Look at leave tree marking some scattered white oaks and pine while cruising the stand. Specs: No retention because of small stand size and regen concerns include oak wilt specs Next Step **Treatments:** Acceptable oak, aspen, mixed pine and red maple Regen: **Other** Comment: Site Condition

Report 3 -- Treatments

Compartment: 121 Year of Entry: 2025

DNR M/CHIGAN

а **Treatment** Stand Size Stand BA **Treatment Treatment Cover Type** Age Habitat n Method Range Objective Structure Name CoverType Density Age Type Cut d 55 61121055-Cut 7.2 4130 - Aspen Poletimber 51-80 Harvest Clearcut 413 - Aspen Even-Aged Nο

<u>Prescription</u> Harvest all trees two inches and larger in diameter. Look at leave tree marking some scattered white oaks and pine while cruising the stand. <u>Specs:</u> No retention because of small stand size and regeneration concerns.

Protect the gas line during the harvest include grouse and oak wilt specs.

Next Step Monitoring, Natural Regen (Re-Inventory)

Treatments:

Acceptable aspen with a minor component of oaks, pines and hardwoods which meet minimal stocking levels.

Medium

Regen:

S

t

Other Comment:

Site Condition

Proposed Start Date: 10/1 /2024

57 61121057-Cut 44.9 42250 - Pine, Oak Sawtimber 83 51-80 Harvest Overstory 4122 - Oak, Pine Even-Aged No Well Removal

<u>Prescription</u> Harvest all trees four inches and larger in diameter. Remove the existing overstory and release the regeneration present along with <u>Specs:</u> producing more regeneration. Look at leave tree marking some scattered white oaks and pine while cruising the stand. Minimal area

retention.

Next Step Treatments:

Acceptable oak, mixed pine, aspen and red maple.

Regen:

Other Comment:

Site Condition

Proposed Start Date: 10/1 /2024

60 61121060-Cut 6.3 42200 - Natural Poletimber 77 1-50 Harvest Overstory 4131 - Aspen, Even-Aged No White Pine Poor Removal Oak

<u>Prescription</u> Harvest all trees four inches and larger in diameter. Remove the existing overstory and release the regeneration present along with <u>Specs:</u> producing more regeneration. Look at leave tree marking some scattered white oaks and pine while cruising the stand. Protect the gas line.

No retention needed include oak wilt spec

Next Step Treatments:

Acceptable Oak, pine and red maple.

Regen:

Other Comment:

Site Condition

Traverse City Mgt. Unit Report 3 -- Treatments Compartment: 121 s Year of Entry: 2025 t а **Cover Type Treatment** Acres Stand Size Stand BA **Treatment Treatment** Age Habitat n CoverType Density Method Objective Structure Name Age Range Type Cut d 71 61121071-Cut 15.5 4129 - Mixed Oak Sawtimber 81-110 Harvest Overstory 4121 - Oak, Even-Aged Removal Well Aspen Prescription Harvest all trees four inches and larger in diameter. Remove the existing overstory and release the regeneration present along with producing more regeneration. Look at leave tree marking some scattered white oaks and pine while cruising the stand. Minimal area Specs: Next Step Treatments: Acceptable oaks, pine, aspen and red maple Regen: <u>Other</u> Comment:

Total Treatment Acreage Proposed: 381.6

Proposed Start Date: 10/1 /2024

Site Condition

Paul Roell: Examiner

Compartment: 121
Year of Entry: 2025

Availa	ability for	Managemer	nt							
Total	Acres	Acres Avail	Acres	ι	Domina	nt Site	e Con	dition	s	
Acres	Available	With Condition	Not Available		5B	5C	2G	3D	3J	5E
539	435	103	1	Aspen		103				1
2	0	0	2	Bog					2	
20	20	0	0	Herbaceous Openland	0					
77	77	0	0	Jack Pine						
44	44	0	0	Low-Density Trees		0				
71	0	0	71	Lowland Conifers			71			
46	43	1	3	Mixed Upland Deciduous	1				3	
117	111	0	5	Natural Mixed Pines				5		
20	20	0	0	Northern Hardwood						
510	142	326	42	Oak		326		27	0	14
84	71	11	2	Red Pine		11		2		
1	0	0	1	Treed Bog					1	
66	64	0	2	White Pine					2	
1,599	1,030	441	129	Total Forested Acres	1	440	71	35	8	15
	64%	28%	8%	Relative Percent						

*Due to limitations in the current Site Conditions Analysis tool, all nonforested acres are considered available. Future development will enable analysis of nonforested types.

Site No.	e Dominant Site b. Cond Availability Dominant Site Condition		Acres Other Site Cond		Other Site Condition	Other Site Condition	Other Site Condition
1	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	6 Unspecified		Unspecified	Unspecified	Unspecified
C	Comments:						
2	Unavailable	5E: Long-Term Retention	1	Unspecified	Unspecified	Unspecified	Unspecified
C	Comments:						

Traverse City Mgt. Unit

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3	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	6	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: buffer for wet kettle	e hole with steep slopes					
4	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	2	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: buffer for wet kettle	e hole with steep slopes					
5	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	138	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
6	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	65	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
7	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	37	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
8	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	39	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						

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9	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	11	Unspecified	Unspecified	Unspecified	Unspecified
(Comments:						
10	Available	5B: Maintain for regeneration purposes	1	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: This part was treat	ed recently with Compartment 1	17.				
11	Unavailable	3D: Recreational / Scenic values	5	Unspecified	Unspecified	Unspecified	Unspecified
(Comments:						
12	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	19	Unspecified	Unspecified	Unspecified	Unspecified
(Comments:						
13	Unavailable	3D: Recreational / Scenic values	2	Unspecified	Unspecified	Unspecified	Unspecified
(Comments:						
14	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	3	Unspecified	Unspecified	Unspecified	Unspecified
(Comments:						

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15	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	29	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
16	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	17	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
17	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	12	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: Allow this oak stan	d to develop naturally for a while	longer	since we are planning to t	reat so many other oak acr	es in this compartment.	
18	Unavailable	3D: Recreational / Scenic values	27	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
19	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	66	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
20	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	48	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						

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21	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	1	5B: Maintain for regeneration purposes	Unspecified	Unspecified	Unspecified
	comments: mall pocket of the	bigger stand that was harvested	d				
22	Unavailable	5E: Long-Term Retention	14	Unspecified	Unspecified	Unspecified	Unspecified
C	comments:						
23	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	5	Unspecified	Unspecified	Unspecified	Unspecified
C	comments:						
24	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	13	Unspecified	Unspecified	Unspecified	Unspecified
C	comments:						
25	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	4	Unspecified	Unspecified	Unspecified	Unspecified
С	comments:						

Mgt. Unit

Compartment: #Type! Year of Entry:



Report 5 - PROPOSED SPECIAL CONSERVATION AREA* (SCA) DETAILS

* This is a partial list of SCAs for this compartment. Not included are those areas identified under other Department initiatives (Natural Rivers, Deer Wintering Areas, etc.). Those will be identified in separate, future map and report products.

SCA Name	SCA Category	Detail Type	Recommendation	Acres
Comments				

Traverse City Mgt. Unit Compartment: 121





Report 6 – EXISTING SPECIAL CONSERVATION AREA DETAILS

* This is a list of SCA's for this compartment along with a 1/4 mile buffer surrounding the compartment. Refer to the Special Conservation Area Map for locations of the below listed Conservation Areas.

Conservation Area	on Type	Description	ERA = Ecological Reference Area HCVA = High Conservation Value Area SCA = Special Conservation Area
SCA	Cold Water Lake	A coldwater lake has temperature and dissolved oxygen condition stocked trout populations and those of other coldwater fish specific conditions for coldwater fishes may occur in Michigan lakes if the groundwater inflows, or are located in colder (northern) areas of Director's action and designated as trout resources by Fisheries	es to persist from year to year. Suitable ey are relatively deep, have substantial the state. Such lakes are established by
SCA	Cold Water Stream	A coldwater stream has temperature and dissolved oxygen cond stocked 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
SCA	Research and Military Areas	These areas provide facilities and lands specifically dedicated fo include the 5,847 acre Forest Fire Experiment Station, the 12,00 Area, the Beaver Islands Archipelago Wildlife Research Area (the High and Hog Islands, all state owned land on Beaver, South Fow Wildlife Research Area, the 3,000 acre Hunt Creek Fisheries Renursery, and over 144,000 acres of Military Lands.	0 acre Houghton Lake Wildlife Research at includes most of Garden Island, all of x and North Fox Islands), the Cusino
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	Zoning District is a 400 foot buffer for

Report 7 - Stands



Stan	d Level 4 C	Level 4 Cover Type Size Density Acres Stand Age BA Range Managed Site		ite	General Comments						
1	4133 - Aspe	en, Mixed P	ine S	awtimb	er Well	41.8	56	81-110	N/A		
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	
	Red Maple	10	Pole/Log	8		0	ak (spp.)	Low	5 - 10 feet	Sapling	
	White Pine	15	Log/Pole	10	56	W	hite Pine	Medium	10 - 20 feet	Sapling	
	Red Pine	5	Log/Pole	12		Re	ed Maple	Low	>20 feet	Sapling	
	Bigtooth Aspen	50	Log/Pole	10	56						
	Red Oak	20	Log/XLog	14							
3	6224 - '	Treed Bog		Nonsto	ocked	1.2		Immature	No		Small kettle hole with standing water. Contains a clump of small black spruce and a few white pine.
4	4191 - Mixed Upl Co	and Decidu	ous with Po	etimbe	r Mediur	m 21.9	43	51-80	N/A		Very open, variable stand. Parts were typed as opening in last inventory but they are filling in. Some pockets of much younger regeneration.
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	
	Red Maple	10	Pole	6		W	hite Pine	Low	5 - 10 feet	Sapling	
	Red Oak	5	Pole/Log	9		0	ak (spp.)	Low	5 - 10 feet	Sapling	
	White Pine	25	Pole	8		Ja	ack Pine	Low	5 - 10 feet	Sapling	
	Black Cherry	20	Sapling	2							
	Quaking Aspen	35	Pole/Sapling	6	43						
	Jack Pine	5	Pole/Log	8							
5	622	5 - Bog		Nonsto	ocked	1.9			No		Small kettle hole with standing water. No vegetation visible above snow.
6	42200 - Nati	ural White F	Pine S	awtimb	er Well	3.4	95	111-140	N/A		Most of stand sits on steep slope at edge of kettle hole.
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	
	Red Oak	10	Log/XLog	14		W	hite Pine	Low	Variable	Sapling	
	Red Maple	5	Pole	6				-	1	1	
	Red Pine	15	Pole/Log	8							
	White Pine	60	Log/Pole	10	95						
	Quaking Aspen	10	Pole	8							
7	4130	- Aspen		Sapling	g Well	71.3	21	Immature	N/A		Stand was cut as part of M-72 Aspen, 61-045-99-01, finished May 2002.
	Canopy Species	% Cover	Size Class	DBH	l Age						Cut all trees greater than" DBH except oak and pine. Good regeneration: mostly aspen but some areas are more red maple. Oak is starting to
	Red Maple	10	Sapling	2							reach pole size. Scattered pockets of white and red pine. Rolling hills.
	Red Oak	15	Log/Pole/Sap								, , ,
	Quaking Aspen	20	Sapling	3							
	Bigtooth Aspen	50	Sapling	4	21						
	White Pine	3	Sapling/Pole	4							
1											



Stand	d Level 4 C	over Type		Size Density	Acres	Stand Age B	A Range	Managed S	ite	General Comments		
8	42260 - Natural P	ine, Mixed [Deciduous	Poletimber Well	5.2	53	171-200	N/A		Dense white pine with variable diameters. Trace of oak in the understory.		
	Canopy Species	% Cover	Size Class	DBH Age	Sub-Ca	anopy Species	Density	Avg. Height	Size	Moderate slopes.		
	Bigtooth Aspen	5	Pole	8	W	hite Pine	High	Variable	Sapling			
	Red Oak	20	Pole/Log	8	0	ak (spp.)	Medium	5 - 10 feet	Sapling			
	Red Maple	5	Pole	6								
	White Pine	50	Pole/Log	8 53								
	Red Pine	20	Pole/Log	8								
9	4123 -	Red Oak	S	Sawtimber Mediu	m 100.7	95	51-80	N/A		Good quality oak. Most of stand was cut as part of 121 Oak sale, 61-053-		
	Canopy Species	% Cover	Size Class	DBH Age	Sub-Ca	anopy Species	Density	Avg. Height	Size	05-01, completed January 2008 (106 acres). Cut all aspen, paper birch and red maple and thin oak to shelterwood BA. Pockets of dense aspen,		
	Red Oak	80	Log/XLog	14 95	R	ed Maple	Low	5 - 10 feet	Sapling	red maple and oak regeneration. Moderate browse levels. Trace of beech		
	White Pine	10	Log/Pole	12	Bigt	ooth Aspen	High	10 - 20 feet	Sapling	in understory. Rolling hills with scattered dry kettle hole depressions and		
	White Oak	10	Log	10	0	ak (spp.)	Low	5 - 10 feet	Sapling	scattered small openings.		
		'			W	hite Pine	Low	Variable	Sapling			
10	4112 - Maple, Beed	ch, Cherry A	Association	Sawtimber Well	20.2	98	111-140	N/A		Stand was cut as part of M-72 Hardwoods, 61-046-99-01, finished		
	Canopy Species	% Cover	Size Class	DBH Age	Sub-Ca	anopy Species	Density	Avg. Height	Size	September 2000. Marked hardwood thinning, including aspen and oak.		
	Red Maple	25	Pole/Log	8		Beech	High	< 5 feet	Sapling			
	Beech	5	Pole/Log	8	li .	onwood	Medium	5 - 10 feet	Sapling			
	Red Oak	10	Log	14						•		
	Basswood	5	Log/Pole	10								
	Red Maple	55	Log/Pole	12 98								
11	4123 -	Red Oak		Sawtimber Well	38.6	93	81-110	N/A		121 Aspen Sale, 61-055-99-01. Aspen removed. Good oak size diversity. Fair to good quality oak. Dense red maple in patches of understory. Knoll		
	Canopy Species	% Cover	Size Class	DBH Age	Sub-Ca	anopy Species	Density	Avg. Height	Size	surrounded by opening.		
	White Pine	5	Log/Pole	10	R	ed Maple	High	Variable	Sapling	, , ,		
	Red Oak	90	Log/Pole	12 93	W	hite Pine	Low	>20 feet	Sapling			
	Red Pine	5	Log	10	0	ak (spp.)	Low	Variable	Sapling			
12	4122 -	Oak, Pine		Sawtimber Well	63.4	95	81-110	N/A		Stand was cut as part of Hops Oak Salvage, 61-065-94-01, finished May		
	Canopy Species	% Cover	Size Class	DBH Age	Sub-Ca	anopy Species	Density	Avg. Height	Size	1996. Marked oak and aspen was cut. Notes say oak was killed by insects. Now it is a two-aged stand with scattered log-sized canopy		
	Red Pine	10	Pole/Log	8	Bigte	ooth Aspen	Medium	10 - 20 feet	Sapling	pling and good advanced oak regeneration and pockets of dense aspen.		
	Red Pine	10	Log	10	Bla	ck Cherry	Medium	5 - 10 feet	Sapling			
	White Pine	20	Log	12	0	ak (spp.)	High	Variable	Sapling			
	Red Oak	50	Log	14 95	W	hite Pine	Medium	5 - 10 feet	Sapling			
	White Oak	10	Log	10						-		



Stand	d Level 4 Co	over Type	;	Size De	nsity	Acres	Stand Age	BA Range	Managed S	Site	General Comments
13	4191 - Mixed Upla Co	and Decidu onifer	ous with	Sapling	ı Well	19.7	6	Immature	N/A		Left less than 1 oak/acre. Trenched in fall 2016. Planted May 2017. 3-0 RP, 902 TPAWas supposed to be release-sprayed in 2019 and then
	Canopy Species	% Cover	Size Class	DBH	Age						2020 but it wasn't done and competition got too tall to spray with skidder and this is too small for helicopter so we will have to accept mixed stand.
	White Oak	10	Sapling	1							and this is too small for helicopter so we will have to accept mixed stand.
	Red Pine	30	Sapling	1	6						
	Bigtooth Aspen	30	Sapling	1							
	Red Maple	15	Sapling	1							
14	4130	- Aspen		Sapling	Well	2.8	6	Immature	N/A		Cut spring 2016. Should come back to mix of aspen, white pine and oak.
	Canopy Species	% Cover	Size Class	DBH	Age						Had a decent amount of advanced oak regeneration before cutting. Left scattered pine and oak.
	Bigtooth Aspen	70	Sapling	2	6						scattered pine and tak.
	Red Oak	5	Pole/Log/Sap	8							
	White Pine	5	Pole/Sap/Log	8							
	Red Maple	20	Sapling	2							
15	4130	- Aspen	P	oletimb	er Well	37.1	50	81-110	N/A		
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Specie	s Density	Avg. Height	Size	
	Red Oak	5	Pole	8		Oa	ak (spp.)	Medium	10 - 20 feet	Sapling	
	Red Maple	10	Pole	8		Re	ed Maple	Low	5 - 10 feet	Sapling	
	Bigtooth Aspen	85	Pole/Log	9	50	W	hite Pine	Low	Variable	Pole	
17	3303 - Mixed Lo	ow Density	['] Trees	Nonsto	cked	28.8			No		Winding, open valley between oak hills. Scattered trees including open- grown white pine, cherry and oaks. Poor dirt road and ORV trail run through or cross opening so there are some hill climb areas. Widest part is a bowl-shaped depression which is dry.
18	42200 - Natu	ural White I	Pine S	Sawtimb	er Well	4.4	86	141-170	N/A		
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Specie	s Density	Avg. Height	Size	
	Bigtooth Aspen	5	Pole/Log	8		Bigto	ooth Aspen	Low	10 - 20 feet	Sapling	
	White Pine	95	Log/Pole/XLog	12	86	W	hite Pine	Low	Variable	Sapling	
						Oa	ak (spp.)	Low	< 5 feet	Sapling	
20	4123 -	Red Oak	Sa	wtimbei	Mediu	m 18.8	95	51-80	N/A		Scattered canopy gaps. Low BA log stand with pockets of younger regeneration. Small patch of decent red pine in north part. Heavy browse
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Specie	s Density	Avg. Height	Size	regeneration. Small patch of decent red pine in north part. Heavy browse.
	Red Oak	65	Log	12	95	Oa	ak (spp.)	Medium	10 - 20 feet	Sapling	
	White Oak	10	Log	12		Re	ed Maple	Low	10 - 20 feet	Sapling	
	Red Pine	25	Pole/Log	8		Qual	king Aspen	Medium	10 - 20 feet	Sapling	
22	330 - Low-I	Density Tre	ees	Nonsto	cked	10.5			No		Meandering opening with various levels of tree cover. Some aspen, cherry, and white pine, all sapling/pole size.

Report 7 - Stands



Stand	Level 4 Co	over Type		Size De	nsity	Acres	Stand Age B	A Range	Managed S	Site	General Comments
24	42200 - Natu	ıral White F	Pine S	awtimb	er Well	6.6	88	81-110	N/A		
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Can	opy Species	Density	Avg. Height	Size	
	White Pine	70	Pole/Log/Sap	8	88	Whi	te Pine	Medium	Variable	Sapling	
	Red Oak	15	Log	14		Oak	(spp.)	Low	Variable	Sapling	
	Red Pine	15	Log/Pole	10				·			
25	4123 -	Red Oak	S	awtimb	er Well	3.2	94	81-110	N/A		Small knoll of oak mostly surrounded by openings or stands with sparse
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Can	opy Species	Density	Avg. Height	Size	canopies. Fair quality oak with patches of good advanced regeneration. Red maple in understory is reaching pole size. ORV use/hill climbs.
	Bigtooth Aspen	5	Pole/Log	8		Red	l Maple	Low	>20 feet	Sapling	Treat maple in understory to readining pole 3/20. Otto abottill diffuso.
	Red Pine	15	Pole/Log	8		Oak	(spp.)	Low	5 - 10 feet	Sapling	
	Red Oak	80	Log/Pole	10	94	Whi	te Pine	Medium	Variable	Pole	
26	4130	- Aspen	Р	oletimb	er Well	127.6	53		N/A		Scattered small openings and shallow, dry bowl-shaped depressions. A
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Can	opy Species	Density	Avg. Height	Size	few pockets of white pine and good advanced oak regeneration in pockets. Gradual transition into adjacent stands.
	Bigtooth Aspen	55	Pole/Log	8	53	Whi	te Pine	Low	Variable	Sapling	pooreto. Oradual transition into adjacent stands.
	White Pine	5	Pole/Log	8		Oak	(spp.)	Medium	Variable	Sapling	
	Red Pine	10	Pole/Log	8							ı
	Red Oak	10	Pole/Log	8							
	Quaking Aspen	20	Pole	8	53						
27	42210 - Nat	ural Red P	ine S	awtimb	er Well	2.3	92	111-140	N/A		Small pocket of red pine with aspen filling in underneath and in canopy
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Can	opy Species	Density	Avg. Height	Size	gaps. Some large, fire-scarred red pine. Pine is relatively short.
	Quaking Aspen	10	Pole	6		Quakii	ng Aspen	Medium	Variable	Pole	
	Red Pine	85	Log/Pole	12	92	Re	d Pine	Low	5 - 10 feet	Sapling	
	White Pine	5	Pole/Log	8				'		1	•
28	42111 - Planted Deci	Red Pine, duous	Mixed	Sapling	ı Well	71.1	7	1-50	N/A		Much of stand was cut as part of 121 Aspen, 61-055-99-01, finished October 2002. Cut all trees greater than 2" DBH except oak and pine. C
	Canopy Species	% Cover	Size Class	DBH	Age						as Spring Break Oak, 61-118-15-01, in spring 2016. Residual oak BA ~(50 sf/ac. Rolling hills. ORV trail bisects stand. Trenched in 2016.
	Red Pine	60	Sapling/Pole	1	7						Underplanted May 2017, 3-0 RP, 834 TPA
	Red Oak	5	Sapling	1							
	Red Maple	15	Sapling	1							
	White Pine	10	Log/Pole	10							
29	330 - Low-D	Density Tre	es	Nonsto	cked	2.7			No		Meandering opening with various levels of tree cover. Some aspen, cherry, and white pine, all sapling/pole size.
	4130	- Aspen		Sapling	ı Well	7.5	21	Immature	N/A		Stand was cut as part of 121 Aspen, 61-055-99-01, finished October
30											2002. Cut all trees greater than 2" DBH except oak and pine. Good
30	Canopy Species	% Cover	Size Class	DBH	Age						
30	Canopy Species Red Maple	% Cover	Size Class Sapling	DB H	Age						regeneration. A few larger white pine, red pine and red maple trees.

Report 7 – Stands

Compartment: 121

Year of Entry: 2025

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Stand	Level 4 C	over Type		Size De	nsity	Acres	Stand Age E	BA Range	Managed S	Site	General Comments
32	42201 - Natural Dec	White Pine	, Mixed S	Sawtimb	er Well	5.5	78	141-170	N/A		Dense, relatively limby white pine.
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	
	White Pine	70	Log/Pole	10	78	Oa	ık (spp.)	Low	10 - 20 feet	Sapling	
	Red Oak	10	Log/Pole	12		Wh	nite Pine	Medium	Variable	Sapling	
	Bigtooth Aspen	20	Pole	6							
33	4123 -	Red Oak	5	Sawtimb	er Poor	28.9	88	1-50	N/A		Stand was cut as part of 121 Aspen, 61-055-99-01, finished October
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	2002. Cut all trees greater than" DBH except oak and pine. Stand is now two-aged with a sparse log-sized canopy and patchy regeneration
	Red Maple	10	Pole/Sapling				d Maple	High	>20 feet	Sapling	underneath. Rolling hills.
	Red Oak	60	Log/Pole	10	88		ing Aspen	High	>20 feet	Sapling	,
	White Oak	15	Log/Pole	10			nite Pine	Medium	Variable	Sapling	
	White Pine	15	Pole/Log	8			ak (spp.)	Low	>20 feet	Sapling	
35	4123 -	Red Oak	S	Sawtimb	er Well	17.0	88	81-110	N/A		Much of stand was cut as part of 121 Aspen, 61-055-99-01, finished
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	October 2002. Cut all trees greater than 2 inches except oak and pine. Decent quality oak with thick red maple underneath. Small canopy gaps
	Red Oak	90	Log/Pole	10	88	Re	d Maple	High	10 - 20 feet	Sapling	at south end. Rolling hills. ORV trail runs through stand.
	White Oak	10	Log/Pole	10		Wit	ch Hazel	Medium	5 - 10 feet	Tall Shrub	
36	4130	- Aspen		Sapling	Well	71.3	21	Immature	N/A		Stand was cut as part of 121 Aspen, 61-055-99-01, finished October
	Canopy Species	% Cover	Size Class	DBH	Age						2002. Cut all trees greater 2" DBH except oak and pine. Oak within aspen pockets was also removed. Most of this stand is sapling sized
	Bigtooth Aspen	80	Sapling/Pole		21						except for a few 1-2 acre patches of older, log-sized oak totalling about 4
	Red Oak	5	Sapling/Pole	3							acres. ORV trail runs along west side of stand.
	Red Maple	15	Sapling	2							
37	4124 - Red	with White	Oak S	Sawtimb	er Well	11.9	93	81-110	N/A		Variable stand. Canopy is mostly log-sized oak but there are patches of
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	good oak and red maple regen.
	Red Oak	50	Log/Pole	12	93	Oa	ık (spp.)	Low	Variable	Sapling	
	White Oak	25	Log/Pole	12		Wit	ch Hazel	Low	5 - 10 feet	Tall Shrub	
	Red Pine	5	Log	14		Re	d Maple	Low	>20 feet	Sapling	
	Quaking Aspen	10	Pole	6		Wh	nite Pine	Low	5 - 10 feet	Sapling	
	Red Maple	10	Pole	8							•
39	4130	- Aspen		Sapling		27.4	21	Immature	N/A		Stand was cut as part of 121 Aspen, 61-055-99-01, finished October 2002. Cut all trees greater than 2" DBH except oak and pine. Oak within
	Canopy Species	% Cover	Size Class	DBH	Age						aspen pockets was also removed. ORV trail runs on edge of or through
	White Pine	5	Sapling	2							stand. Somewhat steep hills at south end of stand.
	Red Maple	20	Sapling	2							
		10	Sapling Sapling	3							
	Red Maple				21						
	Red Maple Quaking Aspen	10	Sapling	3	21						



Stand	d Level 4 C	over Type	S	Size De	ensity	Acres	Stand Age B	BA Range	Managed S	Site	General Comments
40	4130	- Aspen	P	oletimb	er Well	54.1	46	81-110	N/A		Variable stand with some areas of mediocre aspen and some areas of U- type opening. Rolling hills. Clearcut, sale 61-021-77. ORV trail runs
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	through stand.
	White Pine	5	Pole/Sapling	6		Bla	ck Cherry	Medium	5 - 10 feet	Sapling	
	Quaking Aspen	30	Pole/Sapling	5	46	Oa	ak (spp.)	Low	Variable	Sapling	
	Bigtooth Aspen	55	Pole	6	46						
	Black Cherry	10	Pole	6							
41	4130	- Aspen	P	oletimb	er Well	33.5	58		N/A		
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	
	Bigtooth Aspen	80	Pole/Log	9	58	Oa	ak (spp.)	Low	Variable	Sapling	
	White Pine	3	Pole/Log	8		WI	nite Pine	Low	10 - 20 feet	Sapling	
	Red Oak	2	Log	12							•
	White Oak	5	Log	12							
	Red Maple	10	Pole	8							
42	4130	- Aspen		Saplin	g Well	6.1	21	51-80	N/A		Cut as part of 121 Aspen, 61-055-99-01, finished October 2002. Cut all
	Canopy Species	% Cover	Size Class	DBH	l Age						trees except pine and oak. Good regeneration.
	Red Oak	10	Sapling	2							
	Red Maple	25	Sapling	3							
	Bigtooth Aspen	65	Sapling/Pole	4	21						
44	4130	- Aspen	P	oletimb	er Well	11.3	33	81-110	N/A		Stand was cut as part of Hunt Club Sale, 61-002-99-01, clearcut finished
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	July 1990. Good regeneration.
	Red Oak	10	Sapling/Pole	3		WI	nite Pine	Low	5 - 10 feet	Sapling	
	White Pine	5	Sapling/Pole	4		Oa	ak (spp.)	Low	5 - 10 feet	Sapling	
	Quaking Aspen	10	Pole/Sapling	5							
	Black Cherry	5	Sapling	2							
	Red Maple	20	Sapling/Pole	3							
	Bigtooth Aspen	50	Pole/Sapling	5	33						
45	4133 - Aspe	en, Mixed P	ine	Saplin	g Well	37.7	7	Immature	N/A		Cut as part of Wishbone Woods, 61-124-15-01. Previous stand had good
	Canopy Species	% Cover	Size Class	DBH	l Age						oak and white pine in understory. Mostly excluded short section of ORV trail on west side of stand.
	White Pine	15	Pole/Log	8							
	Red Maple	15	Sapling	1							
	White Oak	5	Pole/Sapling	5							
	Red Pine	5	Pole/Log	8							
	Quaking Aspen	10	Sapling	1							
	Red Oak	5	Pole/Log	8							
	Bigtooth Aspen	45	Sapling	1	7						



Stand	Level 4 C	over Type		Size De	nsity	Acres	Stand Age B	A Range	Managed S	Site	General Comments
46	4124 - Red v			awtimb		138.2	88	51-80	N/A		Sale 61-055-99-01, completed October 2002. Remove aspen and thin oak. Not a lot of oak in understory. Some pole/sapling red maple. Heavy
	Canopy Species		Size Class		Age		nopy Species	Density	Avg. Height	Size	browse. Moderately hilly. Adjacent to M-72. Cut more oak as part of Duc
	Red Oak	55	Log/Pole	12	88		ite Pine	Low	>20 feet	Sapling	and Cover Oak, 61-103-15-01. Residual BA 30-80 sf/acre. Probably
	White Oak	45	Pole/Log	8		Oa	k (spp.)	Low	Variable	Sapling	should have clearcut, in hindsight.
						Re	d Maple	Low	>20 feet	Pole	
48	6128 - Lowland Dec	Coniferous iduous	, Mixed S	awtimb	er Well	71.5	88	81-110	N/A		Variable stand. Pockets of cedar and mixed conifer surrounded by more typical E-type of sapling/pole size. Patchy canopy. Red maple in canopy
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Car	nopy Species	Density	Avg. Height	Size	is log-sized in places. Wet, hummocky stand but drier to north.
	Balsam Fir	5	Pole	6		Blac	k Spruce	Medium	Variable	Sapling	
No	rthern White Cedar	20	Log	12		Re	d Maple	Medium	Variable	Sapling	
	White Pine	20	Log/XLog	16	88	Wh	ite Pine	Low	5 - 10 feet	Sapling	
	Black Spruce	18	Log/Pole	10		Bla	ack Ash	Medium	>20 feet	Sapling	
	Red Maple	15	Pole/Log/Sap	6		Bal	lsam Fir	Low	>20 feet	Sapling	
	Black Ash	20	Pole/Sapling	4							
	Paper Birch	2	Pole/Log	8							
49	4124 - Red v	with White	Oak S	awtimb	er Well	21.3	83	81-110	N/A		Good quality oak with minimal mortality. Stand is two-aged in places. Re
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Car	nopy Species	Density	Avg. Height	Size	maple in understory ranges from 1/2 - 2" DBH or has thick stump sprout in a few places. White pine in understory is patchy but thick in a few
	Red Pine	2	Log	10		Wh	nite Pine	Low	10 - 20 feet	Sapling	places. Topography is rolling hills with generally south aspect. Heavy
	Bigtooth Aspen	8	Pole/Log	8		Re	d Maple	High	>20 feet	Sapling	browse on seedlings.
	White Oak	35	Log/Pole	12		Oa	k (spp.)	Low	Variable	Sapling	All aspen and maple and some oak were removed from this stand in 1994, M72 Oak Salvage, 61-059-93. (Sale in comp 117.)
	White Pine	2	Log	10							If this stand is treated in 2025 YOE, consider including 61117072 to the
	Red Oak	53	Log/Pole	12	83						north. Canopy data from 3/15/2013.
50	42200 - Natu	ural White F	Pine S	awtimb	er Well	37.3	93	81-110	N/A		Carropy data from 0/10/2010.
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Car	nopy Species	Density	Avg. Height	Size	Thispand Wighbons Woods CA 404 45
	Red Pine	30	Log	12			nite Pine	Medium	Variable	Sapling	Thinned, Wishbone Woods, 61-124-15.
	Black Spruce	5	Pole	6			k Spruce	Low	< 5 feet	Sapling	
	Red Maple	5	Log/Pole	10			d Maple	High	Variable	Pole	
	White Pine	60	Log/XLog/Pole		93		aap.o	9	7 4114410	. 0.0	
51	4124 - Red v	with White	Oak S	awtimb	er Well	15.5	83	81-110	N/A		Good quality oak stand. Similar to stand to north except white pine is
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Car	nopy Species	Density	Avg. Height	Size	more uniformly present in the understory of this stand. This stand also has slightly more red maple in the canopy and oak diameters might be
	Red Maple	10	Pole	6		Re	d Maple	Medium	Variable	Sapling	slightly smaller. More aspen and less oak at eastern end. Rolling hills
	Red Pine	10	Log	10		Wh	ite Pine	Medium	Variable	Sapling	with generally northern or eastern aspect. Heavy browse on seedlings.
	White Oak	25	Pole/Log	8							
				_							
	Bigtooth Aspen	5	Pole/Log	8							
	Bigtooth Aspen Red Oak	5 45	Pole/Log Log/Pole	10	83						



tanc											
54	42260 - Natural Pi	ine, Mixed D	Deciduous S	Sapling	Well	66.4	22	51-80	N/A		Stand was cut as part of M-72 Jack Pine, 61-061-99-01, finished Augus 2001. Cut all trees greater than 2" DBH except oak, red pine and white
	Canopy Species		Size Class	DBH	_						pine. Sale was chipped. Scattered canopy gaps. Good oak seedlings in
	Jack Pine	40	Sapling	4	22						places.
	Red Oak	15	Sapling/Pole	3							
	White Pine	15	Sapling/Pole	4							
	Red Pine	10	Pole/Log	8							
	Black Cherry	5	Sapling	3							
	Quaking Aspen	5	Sapling	3							
	Red Maple	10	Sapling/Pole	4							
55	4130	- Aspen	Pole	etimber	Medium	7.2	55	51-80	N/A		
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Can	opy Species	Density	Avg. Height	Size	
	Quaking Aspen	60	Pole/Log	8	55	Red	d Maple	Medium	Variable	Sapling	
	Black Cherry	20	Pole	6		Whi	ite Pine	Low	Variable	Sapling	
	Red Oak	10	Log	10							•
	White Pine	10	Log	12							
56	310 - Herbac	ceous Open	land I	Nonsto	cked	1.8			No		old oil and gas site or sand trap dump
56 57	42250 -	Pine, Oak	Sa	awtimbe	er Well	44.9	83	51-80	N/A	Sizo	South part of stand was cut as part of M-72 Jack Pine, 61-061-99-01, finished August 2001. Cut all trees greater than 2" DBH except oak, re
	42250 - Canopy Species	Pine, Oak	Sa Size Class	awtimbe DBH		44.9 Sub-Can	opy Species	Density	N/A Avg. Height	Size	South part of stand was cut as part of M-72 Jack Pine, 61-061-99-01, finished August 2001. Cut all trees greater than 2" DBH except oak, re pine and white pine. Sale was chipped. More red pine than stand to
	42250 - Canopy Species Jack Pine	Pine, Oak **Cover** 10	Size Class Pole	awtimbe DBH	er Well	44.9 Sub-Can	nopy Species ed Pine	Density Low	N/A Avg. Height >20 feet	Pole	South part of stand was cut as part of M-72 Jack Pine, 61-061-99-01, finished August 2001. Cut all trees greater than 2" DBH except oak, re pine and white pine. Sale was chipped. More red pine than stand to
	42250 - Canopy Species Jack Pine White Pine	Pine, Oak **Cover** 10 25	Size Class Pole Log/Pole	DBH 8	er Well	44.9 Sub-Can Re Wh	nopy Species ad Pine ite Oak	Density Low High	N/A Avg. Height >20 feet 5 - 10 feet	Pole Sapling	South part of stand was cut as part of M-72 Jack Pine, 61-061-99-01, finished August 2001. Cut all trees greater than 2" DBH except oak, repine and white pine. Sale was chipped. More red pine than stand to south. BA is patchy. Some pole-sized oak in understory. Some old, fire
	42250 - Canopy Species Jack Pine	Pine, Oak **Cover* 10 25 30	Size Class Pole Log/Pole Log	DBH 8 10 12	er Well	44.9 Sub-Can Re Wh	nopy Species ed Pine	Density Low	N/A Avg. Height >20 feet	Pole Sapling Sapling	South part of stand was cut as part of M-72 Jack Pine, 61-061-99-01, finished August 2001. Cut all trees greater than 2" DBH except oak, repine and white pine. Sale was chipped. More red pine than stand to south. BA is patchy. Some pole-sized oak in understory. Some old, fire
	42250 - Canopy Species Jack Pine White Pine Red Oak	Pine, Oak **Cover* 10 25 30	Size Class Pole Log/Pole	DBH 8 10 12	Age	44.9 Sub-Can Re Wh Whi	nopy Species ad Pine ite Oak ite Pine	Low High Low	N/A Avg. Height >20 feet 5 - 10 feet >20 feet	Pole Sapling	South part of stand was cut as part of M-72 Jack Pine, 61-061-99-01, finished August 2001. Cut all trees greater than 2" DBH except oak, re pine and white pine. Sale was chipped. More red pine than stand to south. BA is patchy. Some pole-sized oak in understory. Some old, fire
	42250 - Canopy Species Jack Pine White Pine Red Oak	Pine, Oak **Cover* 10 25 30	Size Class Pole Log/Pole Log	DBH 8 10 12	Age	44.9 Sub-Can Re Wh Whi Re	nopy Species ad Pine ite Oak ite Pine ad Oak	Density Low High Low Low	N/A Avg. Height >20 feet 5 - 10 feet >20 feet Variable	Pole Sapling Sapling Sapling	South part of stand was cut as part of M-72 Jack Pine, 61-061-99-01, finished August 2001. Cut all trees greater than 2" DBH except oak, re pine and white pine. Sale was chipped. More red pine than stand to south. BA is patchy. Some pole-sized oak in understory. Some old, fire
	42250 - Canopy Species Jack Pine White Pine Red Oak Red Pine	Pine, Oak **Cover* 10 25 30	Size Class Pole Log/Pole Log Log/Pole/XLog	DBH 8 10 12	Age 83	44.9 Sub-Can Re Wh Whi Re Black	nopy Species and Pine ate Oak ate Pine and Oak ate Cherry	Density Low High Low Low Low	N/A Avg. Height >20 feet 5 - 10 feet >20 feet Variable 5 - 10 feet	Pole Sapling Sapling Sapling Sapling	South part of stand was cut as part of M-72 Jack Pine, 61-061-99-01, finished August 2001. Cut all trees greater than 2" DBH except oak, re pine and white pine. Sale was chipped. More red pine than stand to south. BA is patchy. Some pole-sized oak in understory. Some old, fire
57	42250 - Canopy Species Jack Pine White Pine Red Oak Red Pine	Pine, Oak Cover 10 25 30 35 Density Tre	Size Class Pole Log/Pole Log Log/Pole/XLog	8 10 12 10	Age 83	44.9 Sub-Can Re Wh Whi Re Black	nopy Species and Pine ate Oak ate Pine and Oak ate Cherry	Density Low High Low Low Low	N/A Avg. Height >20 feet 5 - 10 feet >20 feet Variable 5 - 10 feet 5 - 10 feet	Pole Sapling Sapling Sapling Sapling	South part of stand was cut as part of M-72 Jack Pine, 61-061-99-01, finished August 2001. Cut all trees greater than 2" DBH except oak, repine and white pine. Sale was chipped. More red pine than stand to south. BA is patchy. Some pole-sized oak in understory. Some old, fire scarred red pine. Stand is adjacent to M-72. Small opening between M-72 and woods road. Scattered trees includir cherry, red pine, oak and shrubs. Small mixed aspen and pine stand. Clump of old, large, fire-scarred research.
57	42250 - Canopy Species Jack Pine White Pine Red Oak Red Pine	Pine, Oak Cover 10 25 30 35 Density Tre	Size Class Pole Log/Pole Log Log Log/Pole/XLog es I	Bawtimber Barbara Barb	Age 83 cked	44.9 Sub-Can Re Wh Whi Re Black Jac 1.1	nopy Species and Pine and Pine and Oak and Oak and Cherry	Density Low High Low Low Medium	N/A Avg. Height >20 feet 5 - 10 feet >20 feet Variable 5 - 10 feet 5 - 10 feet No	Pole Sapling Sapling Sapling Sapling	South part of stand was cut as part of M-72 Jack Pine, 61-061-99-01, finished August 2001. Cut all trees greater than 2" DBH except oak, repine and white pine. Sale was chipped. More red pine than stand to south. BA is patchy. Some pole-sized oak in understory. Some old, fire scarred red pine. Stand is adjacent to M-72. Small opening between M-72 and woods road. Scattered trees including cherry, red pine, oak and shrubs. Small mixed aspen and pine stand. Clump of old, large, fire-scarred repine at southwest edge of stand.
58	42250 - Canopy Species Jack Pine White Pine Red Oak Red Pine 330 - Low-	Pine, Oak Cover 10 25 30 35 Density Tre	Size Class Pole Log/Pole Log Log/Pole/XLog	Bawtimber Barbara Barb	Age 83	44.9 Sub-Can Re Wh Whi Re Black Jac 1.1 8.7 Sub-Can	nopy Species d Pine ite Oak ite Pine ed Oak k Cherry ck Pine	Density Low High Low Low Low Medium	N/A Avg. Height >20 feet 5 - 10 feet >20 feet Variable 5 - 10 feet 5 - 10 feet No	Pole Sapling Sapling Sapling Sapling Sapling Sapling	South part of stand was cut as part of M-72 Jack Pine, 61-061-99-01, finished August 2001. Cut all trees greater than 2" DBH except oak, repine and white pine. Sale was chipped. More red pine than stand to south. BA is patchy. Some pole-sized oak in understory. Some old, fire scarred red pine. Stand is adjacent to M-72. Small opening between M-72 and woods road. Scattered trees including cherry, red pine, oak and shrubs. Small mixed aspen and pine stand. Clump of old, large, fire-scarred repine at southwest edge of stand.
57	42250 - Canopy Species Jack Pine White Pine Red Oak Red Pine 330 - Low-	Pine, Oak Cover 10 25 30 35 Density Tre White F	Size Class Pole Log/Pole Log Log/Pole/XLog es I Pine Po Size Class	BH Nonsto	Age 83 cked er Poor Age	44.9 Sub-Can Re Wh Whi Re Blact Jac 1.1 8.7 Sub-Can	nopy Species d Pine ite Oak ite Pine ed Oak k Cherry ck Pine	Density Low High Low Low Medium 1-50 Density	N/A Avg. Height >20 feet 5 - 10 feet >20 feet Variable 5 - 10 feet 5 - 10 feet No N/A Avg. Height	Pole Sapling Sapling Sapling Sapling Sapling	South part of stand was cut as part of M-72 Jack Pine, 61-061-99-01, finished August 2001. Cut all trees greater than 2" DBH except oak, repine and white pine. Sale was chipped. More red pine than stand to south. BA is patchy. Some pole-sized oak in understory. Some old, fire scarred red pine. Stand is adjacent to M-72. Small opening between M-72 and woods road. Scattered trees including cherry, red pine, oak and shrubs. Small mixed aspen and pine stand. Clump of old, large, fire-scarred repine at southwest edge of stand. Middlin' Mix, 61-123-15-01. Prepped by summer student. Cut early spread to the stand of the stand of the stand. One of the stand of the stand of the stand of the stand. Shelterwood cut, leaving mostly white pine. Oak declined
58	42250 - Canopy Species Jack Pine White Pine Red Oak Red Pine 330 - Low-	Pine, Oak Cover 10 25 30 35 Density Tre wral White F Cover 70	Size Class Pole Log/Pole Log Log/Pole/XLog es Pine Po Size Class Pole/Log	Bawtimber Barbara Barb	Age 83 cked er Poor Age	44.9 Sub-Can Re Wh Whi Re Black Jac 1.1 8.7 Sub-Can Whi Oak	nopy Species and Pine and Oak and Oak be Cherry and Pine and Oak be Cherry and Pine and Oak be Cherry and Pine and Oak be Cherry and Oak and Oak be Cherry a	Density Low High Low Low Medium 1-50 Density Low	N/A Avg. Height >20 feet 5 - 10 feet >20 feet Variable 5 - 10 feet 5 - 10 feet No N/A Avg. Height Variable	Pole Sapling Sapling Sapling Sapling Sapling Sapling	South part of stand was cut as part of M-72 Jack Pine, 61-061-99-01, finished August 2001. Cut all trees greater than 2" DBH except oak, repine and white pine. Sale was chipped. More red pine than stand to south. BA is patchy. Some pole-sized oak in understory. Some old, fire scarred red pine. Stand is adjacent to M-72. Small opening between M-72 and woods road. Scattered trees including cherry, red pine, oak and shrubs. Small mixed aspen and pine stand. Clump of old, large, fire-scarred repine at southwest edge of stand. Middlin' Mix, 61-123-15-01. Prepped by summer student. Cut early spread to the stand of the stand of the stand. One of the stand of the stand of the stand of the stand. Shelterwood cut, leaving mostly white pine. Oak declined
57	42250 - Canopy Species Jack Pine White Pine Red Oak Red Pine 330 - Low- 42200 - Nate Canopy Species White Pine White Oak	Pine, Oak Cover 10 25 30 35 Density Tre Cover 70 10	Size Class Pole Log/Pole Log Log/Pole/XLog Poine Poine Pole/Log Log/Pole/Log Pole/Log Log/Pole	Nonsto DBH 8 10 12 10 Nonsto DBH 8 10	Age 83 cked er Poor Age	44.9 Sub-Can Re Wh Whi Re Black Jac 1.1 8.7 Sub-Can Whi Oak	nopy Species and Pine are Oak are Pine and Oak are Cherry are Pine are Oak by Pine are Oak are Pine are Oak by Pine are Oak are Pine by Species are Pine by (spp.)	Density Low High Low Low Medium 1-50 Density Low Medium	N/A Avg. Height >20 feet 5 - 10 feet >20 feet Variable 5 - 10 feet 5 - 10 feet No N/A Avg. Height Variable 5 - 10 feet	Pole Sapling Sapling Sapling Sapling Sapling Sapling Sapling Sapling	South part of stand was cut as part of M-72 Jack Pine, 61-061-99-01, finished August 2001. Cut all trees greater than 2" DBH except oak, repine and white pine. Sale was chipped. More red pine than stand to south. BA is patchy. Some pole-sized oak in understory. Some old, fire scarred red pine. Stand is adjacent to M-72. Small opening between M-72 and woods road. Scattered trees includir cherry, red pine, oak and shrubs. Small mixed aspen and pine stand. Clump of old, large, fire-scarred repine at southwest edge of stand. Middlin' Mix, 61-123-15-01. Prepped by summer student. Cut early spr
58	42250 - Canopy Species Jack Pine White Pine Red Oak Red Pine 330 - Low- 42200 - Nate Canopy Species White Pine White Oak Red Oak	Pine, Oak **Cover** 10	Size Class Pole Log/Pole Log Log/Pole/XLog Poine Poine Pole/Log Log/Pole/Log Pole/Log Pole/Log Pole/Log	Nonsto	83 cked	44.9 Sub-Can Re Wh Whi Re Black Jac 1.1 8.7 Sub-Can Whi Oak	nopy Species Id Pine Ite Oak Ite Pine Id Oak Ite Pine Id Oak Ite Pine Id Oak Ite Pine Id Oak Ite Pine	Density Low High Low Low Medium 1-50 Density Low Medium	N/A Avg. Height >20 feet 5 - 10 feet >20 feet Variable 5 - 10 feet 5 - 10 feet No N/A Avg. Height Variable 5 - 10 feet	Pole Sapling Sapling Sapling Sapling Sapling Sapling Sapling Sapling	South part of stand was cut as part of M-72 Jack Pine, 61-061-99-01, finished August 2001. Cut all trees greater than 2" DBH except oak, repine and white pine. Sale was chipped. More red pine than stand to south. BA is patchy. Some pole-sized oak in understory. Some old, fin scarred red pine. Stand is adjacent to M-72. Small opening between M-72 and woods road. Scattered trees including the cherry, red pine, oak and shrubs. Small mixed aspen and pine stand. Clump of old, large, fire-scarred repine at southwest edge of stand. Middlin' Mix, 61-123-15-01. Prepped by summer student. Cut early spine 2019. Shelterwood cut, leaving mostly white pine. Oak declined

Report 7 - Stands



Stand	d Level 4 C	over Type		Size De	ensity	Acres S	Stand Age B	A Range	Managed S	ite	General Comments
63	4191 - Mixed Upl Co	and Decidu	ous with	Sawtimb	er Well	4.4	88	81-110	N/A		
	Canopy Species	% Cover	Size Class	DBF	l Age	Sub-Cand	py Species	Density	Avg. Height	Size	
	Red Oak	35	Log/Pole	10	88	Oak	(spp.)	Low	5 - 10 feet	Sapling	
	White Oak	20	Log/Pole	10		Whit	e Pine	Low	Variable	Sapling	
	White Pine	10	Pole/Log	8		Red	Maple	Low	5 - 10 feet	Sapling	
	Bigtooth Aspen	5	Pole	8	63						
	Red Pine	10	Pole/Log	8							
	Red Maple	20	Pole/Log	8							
64	310 - Herbad	ceous Open	lland	Nonsto	ocked	3.7	I	mmature	No		Consumers Energy gas pipeline and facility near M-72. Pipeline also runs along Forest Trail.
65		Aspen, Oak	ı	Poletimb		2.7		111-140	N/A		Small, mixed stand along M-72. Mostly poor quality with heavy browse on seedlings.
	Canopy Species	% Cover			l Age	Sub-Cand	ppy Species	Density	Avg. Height	Size	- cocamings.
	Bigtooth Aspen	70	Pole/Log	8	63		(spp.)	Low	Variable	Sapling	
	White Pine	10	Log/Pole	10		Whit	e Pine	Low	5 - 10 feet	Sapling	
	Red Oak	20	Log/Pole	10							
66		Red Oak		Sawtimb		4.5	96	81-110	N/A		Middlin' Mix, 61-123-15-01. Prepped by summer student. Cut early spring 2019.
	Canopy Species	% Cover			l Age		ppy Species	Density	Avg. Height	Size	2010.
	Red Maple	15	Pole	6			Maple	Medium	>20 feet	Pole	
	White Oak	5	Log/Pole	10			I Pine	Trace	10 - 20 feet	Sapling	
	Red Oak	80	Log/Pole	12	96	Red	d Oak	Trace	< 5 feet	Sapling	
67	42220 - Nat	tural Jack P	Pine I	Poletimb		77.4	44	81-110	N/A		A few oaks and larger white pine and red pine.
	Canopy Species	% Cover	Size Class	DBH	l Age		ppy Species	Density	Avg. Height	Size	
	Jack Pine	96	Pole	7	44		Cherry	Low	5 - 10 feet	Sapling	
	White Pine	2	Pole/Sapling	9 6		Oak	(spp.)	Low	5 - 10 feet	Sapling	
	Red Pine	2	Pole/Log	8							
70	42210 - Na	tural Red P	ine Sa	awtimbe	· Mediur	n 10.8	83	1-50	N/A		Stand was cut as part of M-72 Jack Pine, 61-061-99-01, finished August
	Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Cand	py Species	Density	Avg. Height	Size	2001. Cut all trees greater than" DBH except oak, red pine and white pine. Sale was chipped. Regeneration has been patchy. Stand is mostly
	Red Oak	10	Pole/Sapling	g 7		Jack	k Pine	Medium	5 - 10 feet	Sapling	sapling and pole-sized with clumps of log-sized pine and oak. Denser
	White Pine	30	Pole/Sapling	g 6		Quakin	g Aspen	Medium	5 - 10 feet	Sapling	canopy left along M-72. Small opening at southeast corner is filling in.
	Red Pine	60	Log/Pole	10	83	Black	Cherry	Low	5 - 10 feet	Sapling	

Report 7 – Stands

Compartment: 121
Year of Entry: 2025

OF NATURAL
DNR
MICHIGAN .

tand	Level 4 C	over Type		Size De	ensity	Acres	Stand Age B	A Range	Managed S	ite	General Comments
71	4129 - I	Mixed Oak		Sawtimb	er Well	48.1	88	81-110	N/A		Sale 61-055-99-01, completed October 2002. Remove aspen and thin
(Canopy Species	% Cover	Size Class	DBH	l Age	Sub-Car	nopy Species	Density	Avg. Height	Size	oak. Not a lot of oak in understory. Some pole/sapling red maple. Heavy browse. Moderately hilly. Adjacent to M-72.
	Red Pine	5	Pole/Log	8		Re	d Maple	Low	>20 feet	Pole	
	Red Oak	35	Log/Pole	12	88	Wh	ite Pine	Low	>20 feet	Sapling	
	White Oak	35	Pole/Log	8		Oa	k (spp.)	Low	Variable	Sapling	
	White Pine	15	Log/Pole	10				'	1	1	
C	Quaking Aspen	10	Pole	8	21						