

Compartment Review Presentation

Gaylord Forest Management Unit

Compartment 52101 Entry Year 2024 Acreage: 2,039

County Emmet
Management Area: Emmet Moraines

Stand Examiner: Donald Stacks

Legal Description:

T37N R06W Sections 19 - 21, 28 - 30, 32, 33.

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:

Mostly Blue Lakes loamy sand on very hilly topography.

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

The compartment consists of mostly contiguous state ownership. Several private residences and small farms are located in, and adjacent to, the compartment.

Unique Natural Features:

Past red-shouldered hawk occurrences are listed.

Archeological, Historical, and Cultural Features:

Documented archeological sites and potential sites occurring within, and adjacent to, this compartment are listed in HAL.

Special Management Designations or Considerations:

The compartment contains habitat previously listed as Mesic Northern Forest, but this designation will be dropped due to the extensive ash/beech salvage harvests and the canopy gap research that have occurred in the last nine years. A designated SCA (Habitat Area/Corridor) presently exists in Stand 1.

Watershed and Fisheries Considerations:

This compartment contains portions of both Central Lake Michigan Management Unit and Northern Lake Huron Management Unit. Northern Lake Huron Management Unit has no concerns. This compartment contains many small Lake Michigan tributary streams, many of which are warm or even seasonally dry. Appropriate BMP's should be used in wet areas and disturbing dry creek beds should be avoided.

Wildlife Habitat Considerations:

Mineral Resource and Development Concerns and/or Restrictions

The nearest active sand/gravel pit is just over one mile to the northeast. There is good potential for sand & gravel within the compartment. There is no known potential for economic oil & gas production beneath the compartment. Encana leased State mineral rights in this area from 2011 to 2016 as part of their interest in testing the Collingwood Formation. No testing was completed in this area, and while some production from the Collingwood did occur elsewhere, neither Encana nor, subsequently, Marathon demonstrated the Collingwood to be a commercial success, and there is currently no interest in further development at this time. There is no known potential for metallic minerals in this part of the state.

Vehicle Access:

Multiple county and seasonal county roads provide access through, and adjacent to, the compartment. Numerous forest trail roads can also be found throughout the compartment.

Survey Needs:

No survey work is anticipated.

Recreational Facilities and Opportunities:

Multiple segments of designated snowmobile trail run through the compartment. Various outdoor recreation opportunities exist within the compartment.

Fire Protection:

This compartment consists almost entirely of lower risk northern hardwood fuel types. The Indian River DNR Field office is located about 35 miles to the east of the compartment, with the Friendship/Readmond VFD located about two miles to the west

Additional Compartment Information:

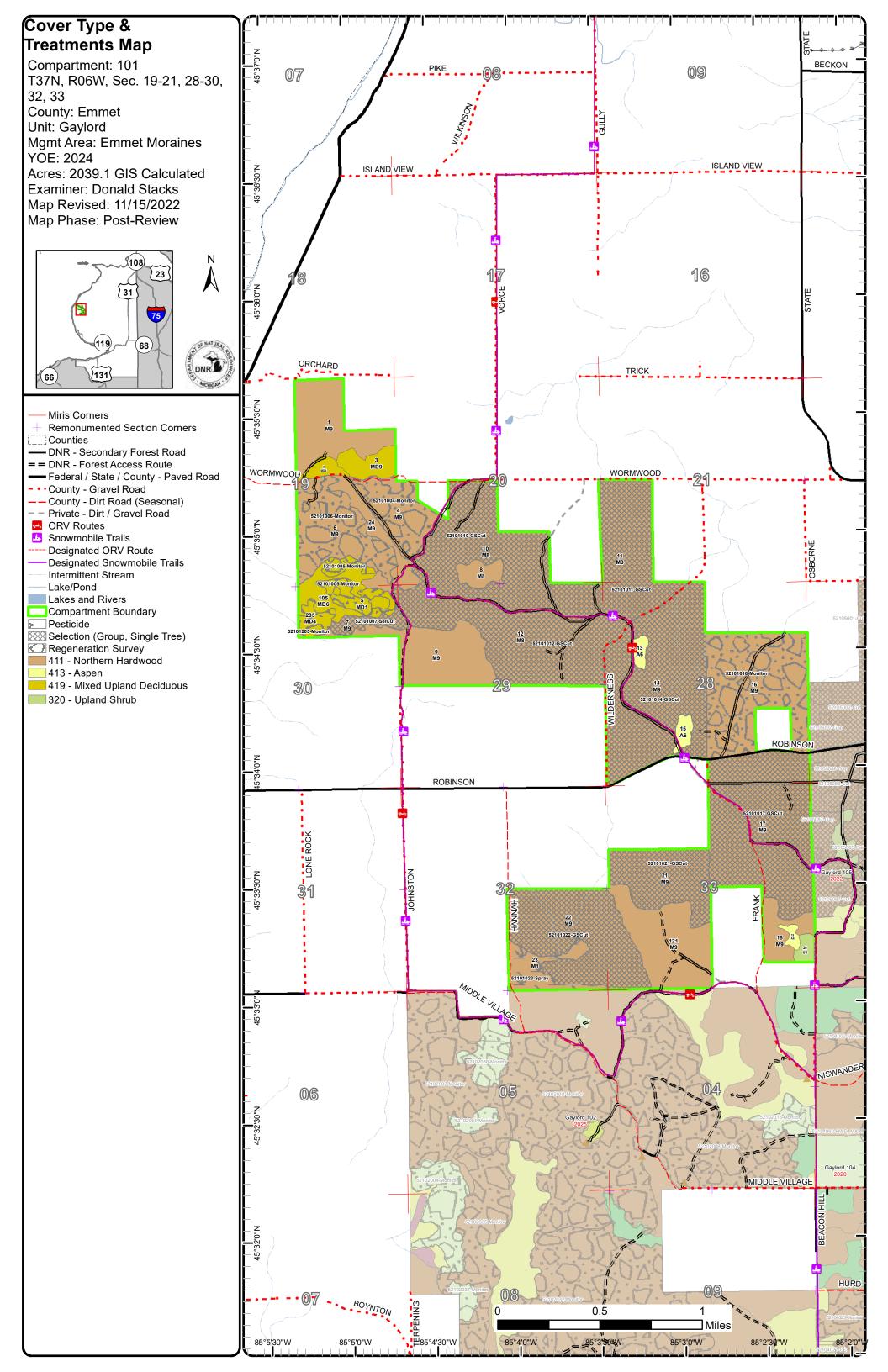
The entire compartment has been impacted by Beech Bark Disease and Emerald Ash Borer. Significant acreage within the compartment has received salvage harvests since 2013. These post harvest stands have been monitored for excessive beech and white ash regeneration. Multiple group selection harvests are prescribed this YOE with post-harvest MO's of natural regen mixed northern hardwoods, dependent on ash/beech density, with the possibility of planted oak and mixed conifers being considered also.

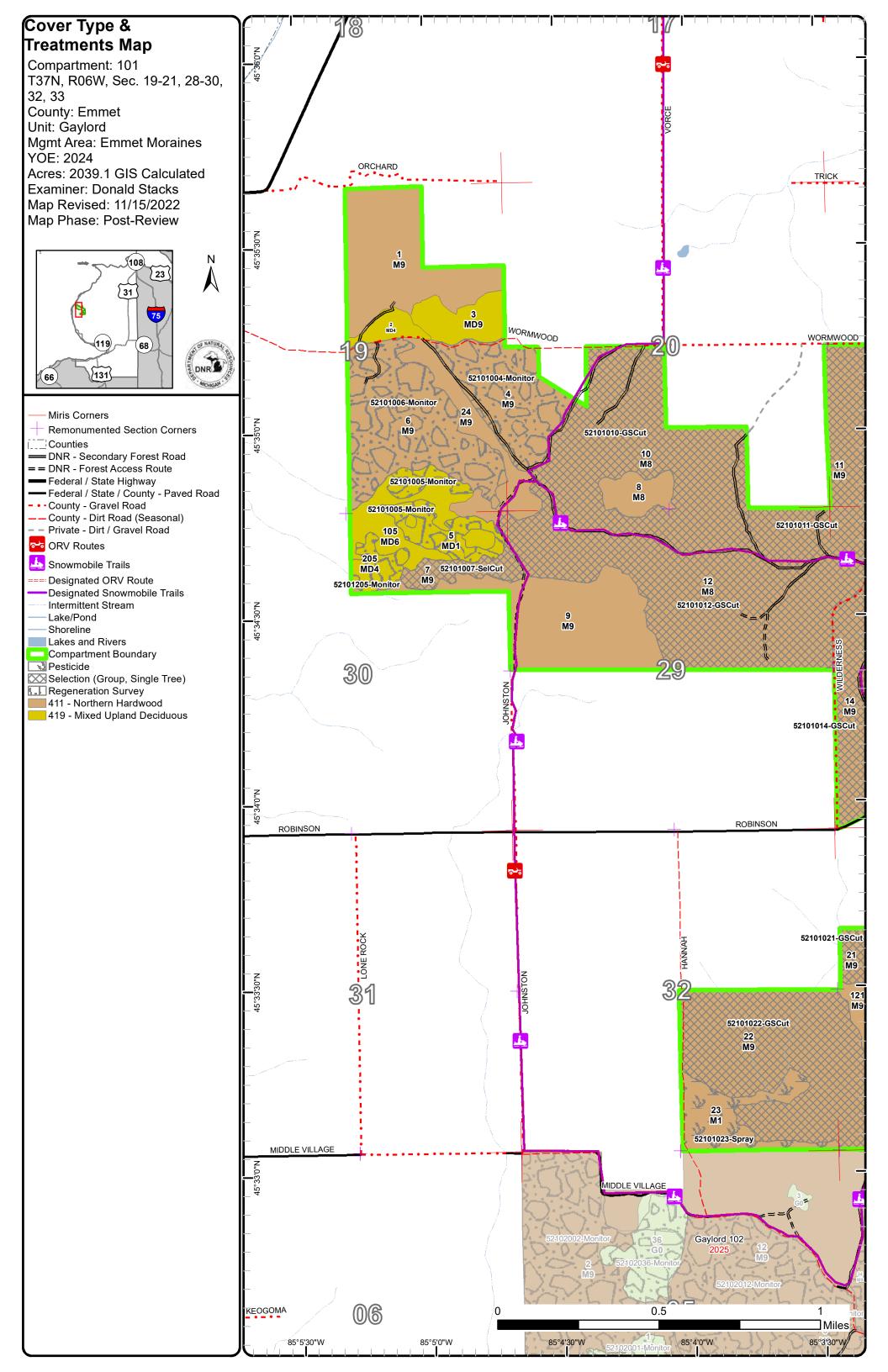
The following reports from the Inventory are attached:

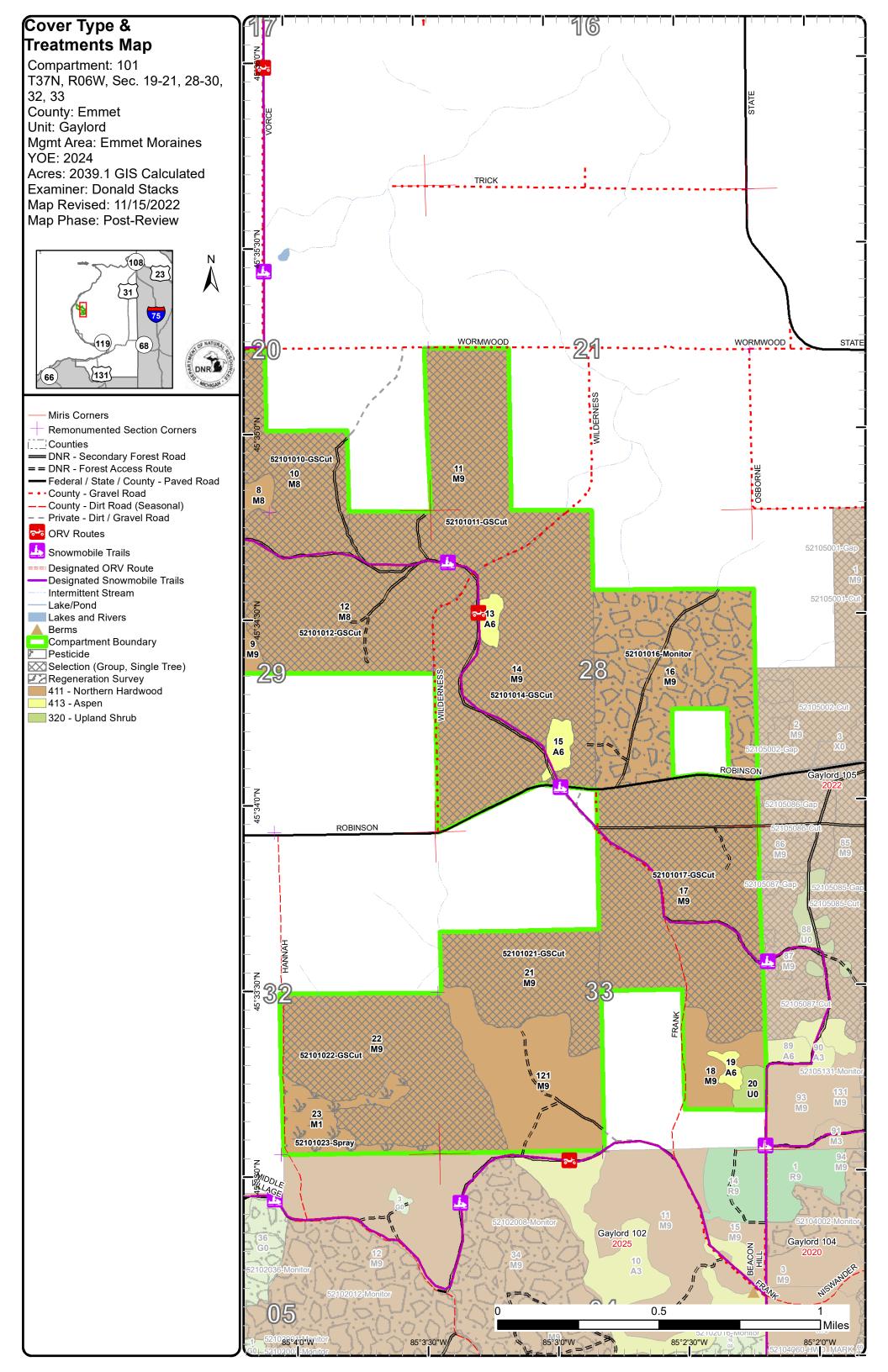
Total Acres by Cover Type and Age Class
Cover Type by Harvest Method
Proposed Treatments – No Limiting Factors
Proposed Treatments – With Limiting Factors
Stand Details (Forested and Nonforested)
Dedicated and Proposed Special Conservation Areas
Site Condition Details

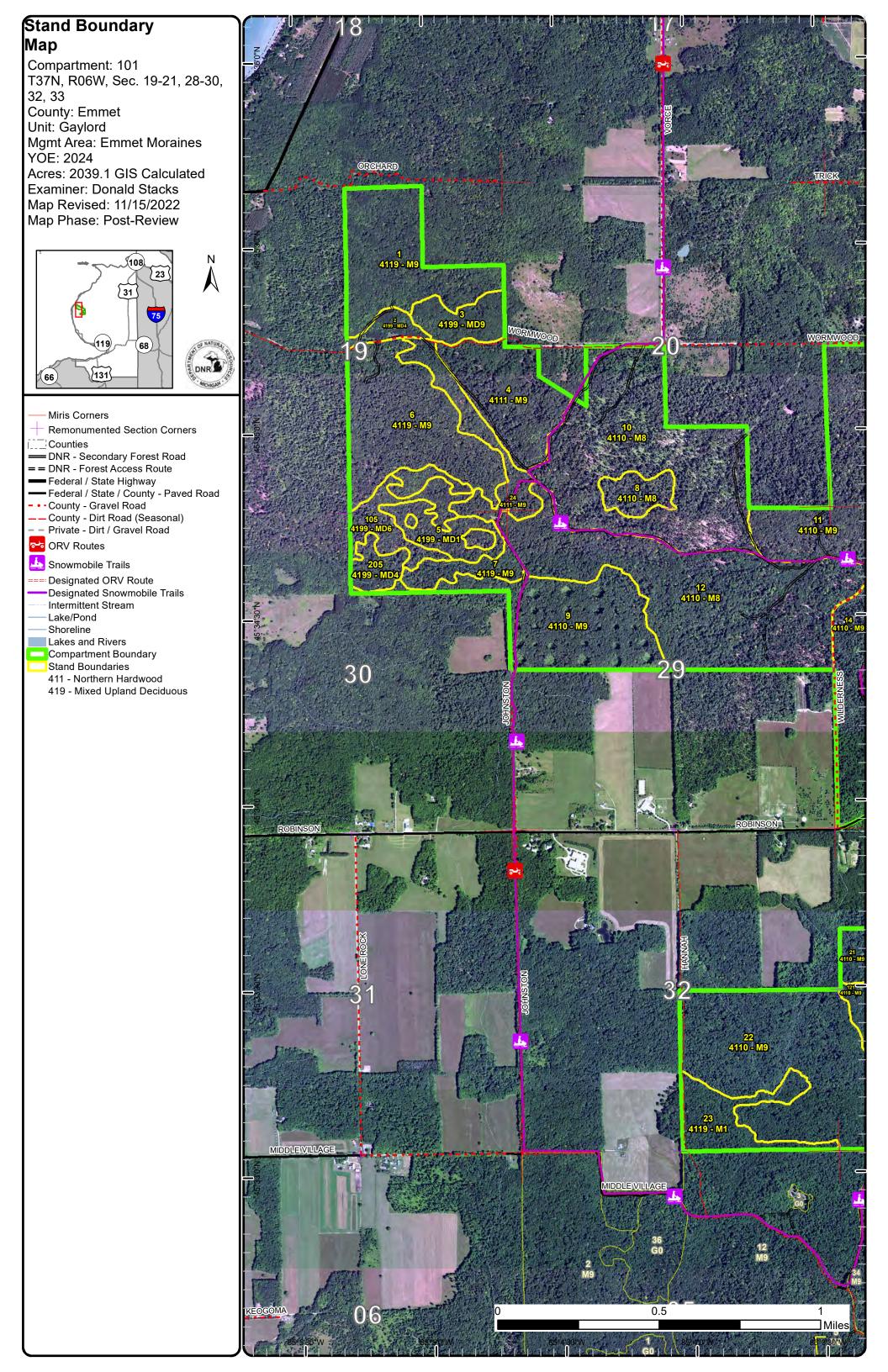
The following information is displayed, where pertinent, on the attached compartment maps:

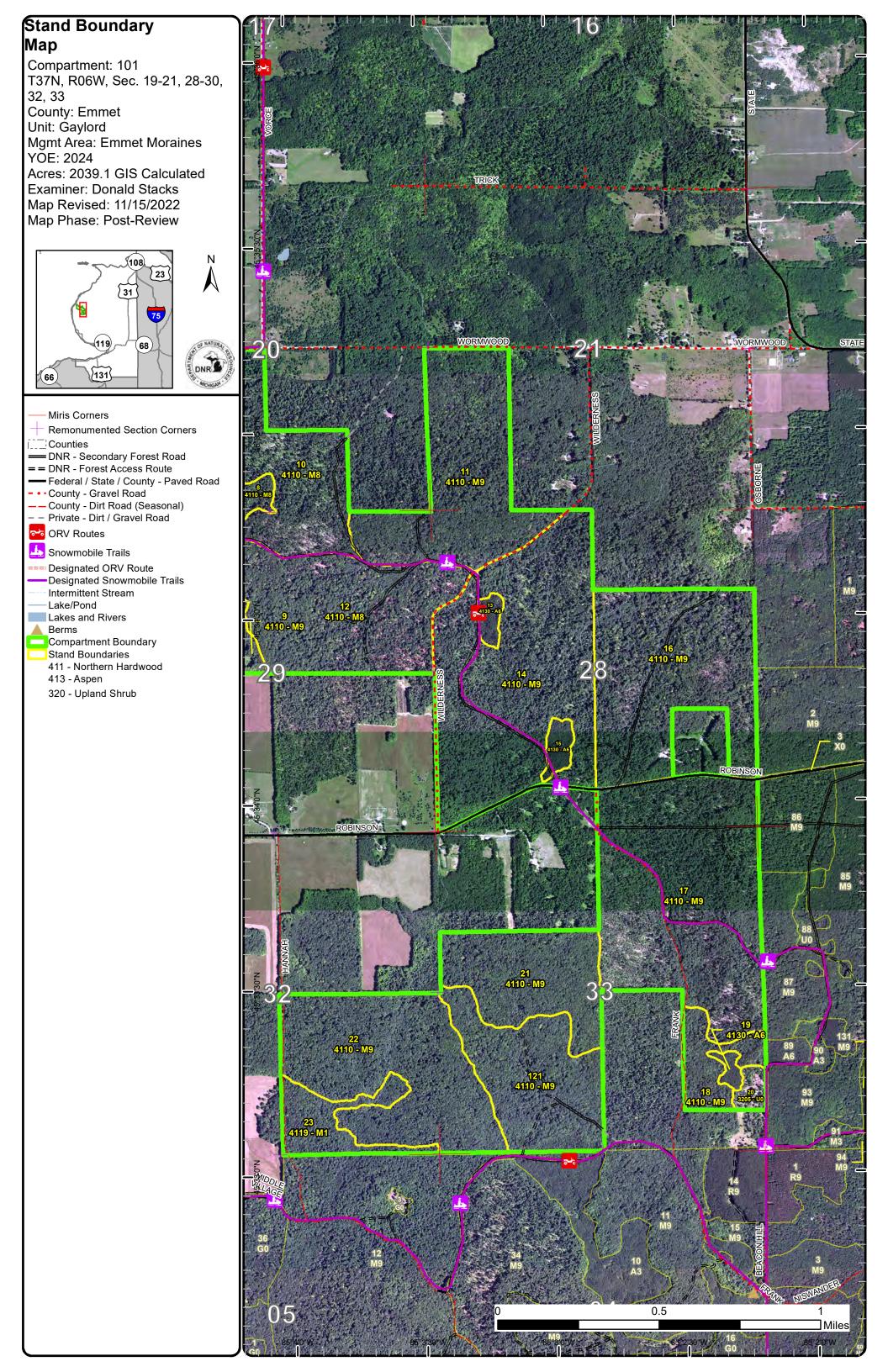
Base feature information, stand boundaries, cover types, and numbers Proposed treatments
Site condition boundaries
Details on the road access system

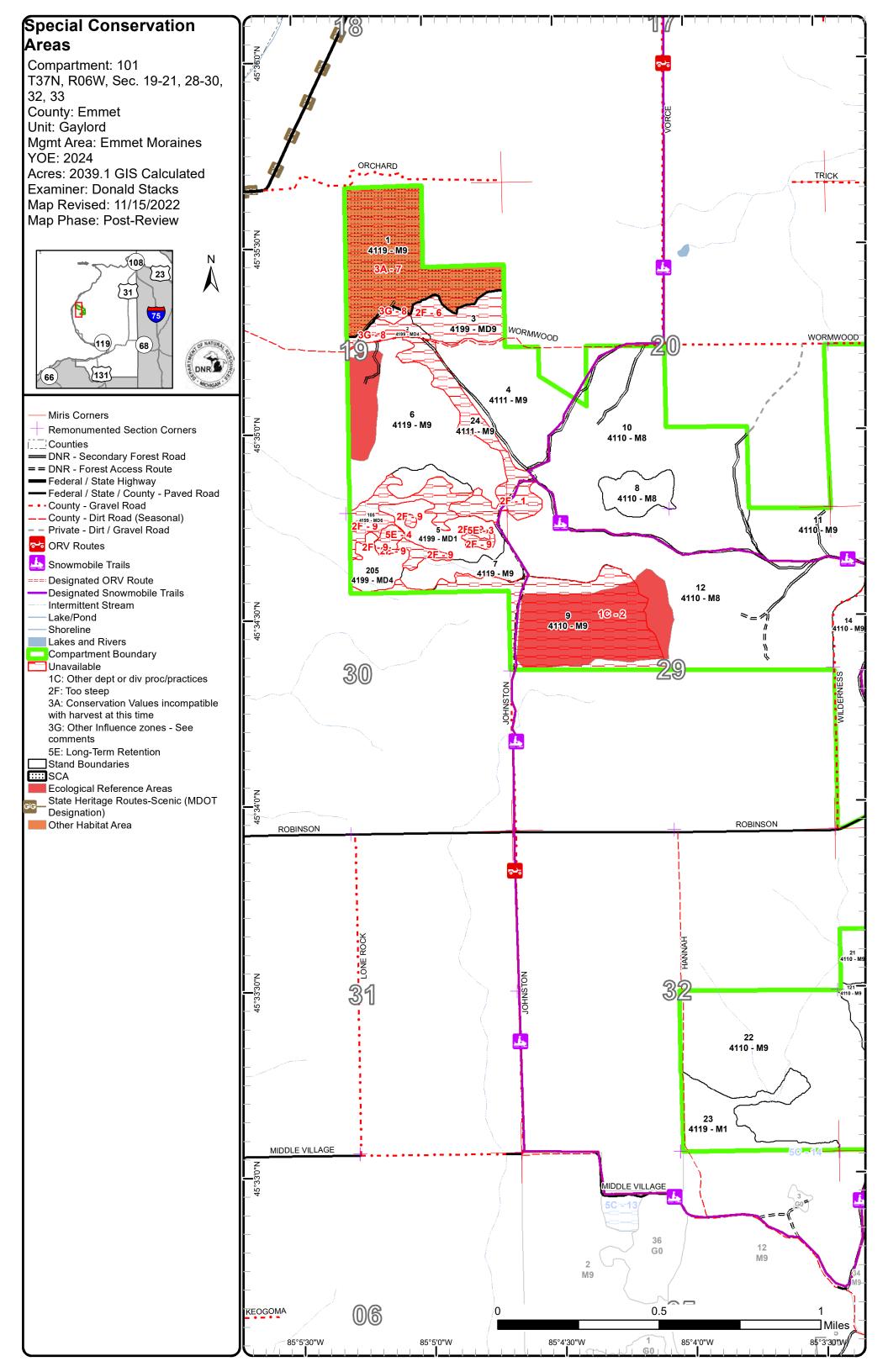


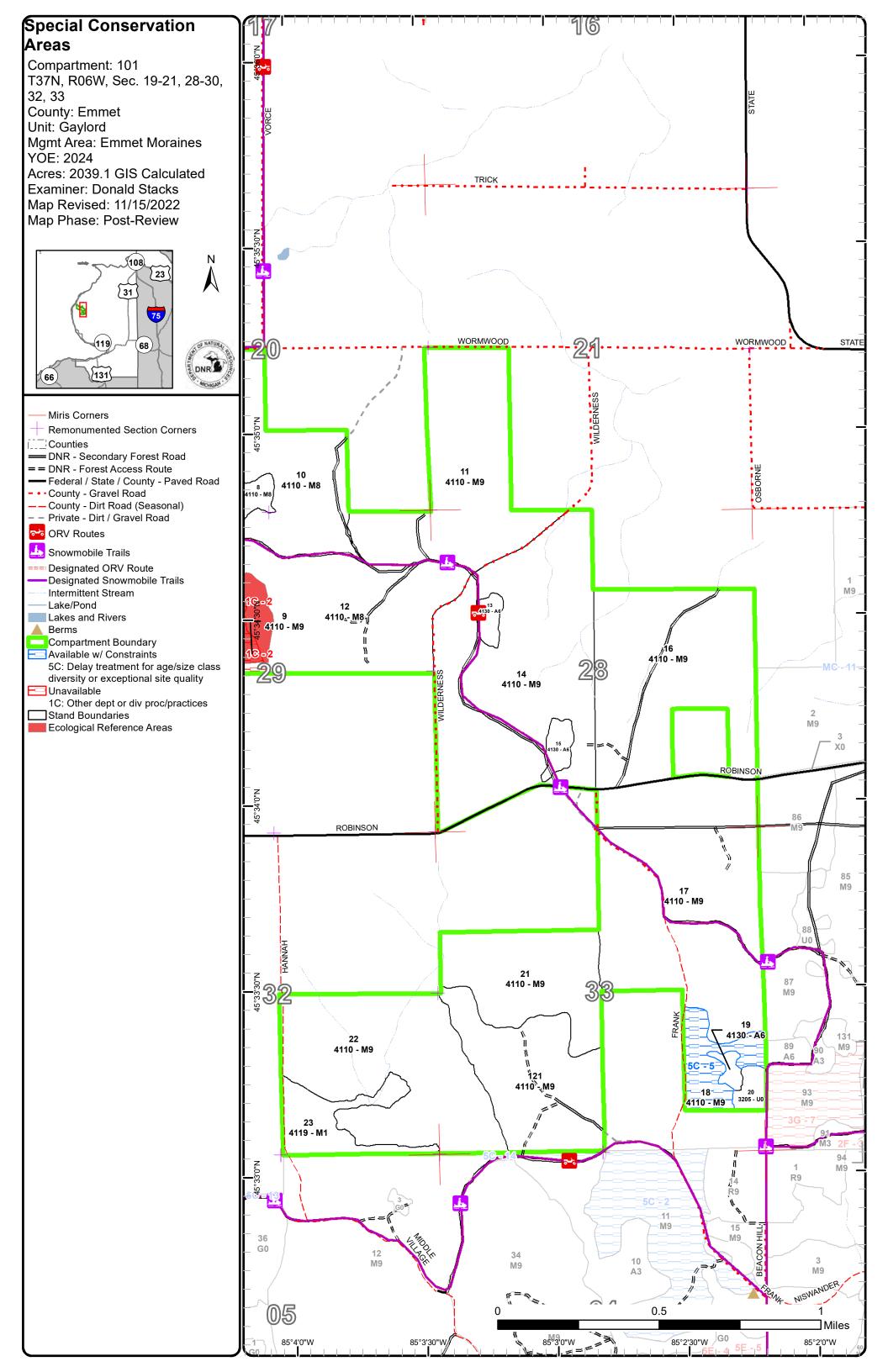












Gaylord Mgt. Unit

Donald Stacks: Examiner

Compartment 101 Year of Entry 2024



Age Class

	Age of the second	Kora C	3/2		P S	3/8		3/8			* * *	8 /16	W Za Za					St Just	N. S.	
Aspen	0	0	0	0	0	19	0	0	0	0	0	0	0	0	0	0	0	0	19	ĺ
Mixed Upland Deciduous	0	30	0	0	0	0	0	0	45	0	10	22	0	0	0	0	0	0	107	
Northern Hardwood	0	35	0	0	0	0	0	0	0	0	615	1257	0	0	0	0	0	0	1907	
Upland Shrub	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	
Total	8	65	0	0	0	19	0	0	45	0	625	1279	0	0	0	0	0	0	2041	



Report 2 – Treatment Summary

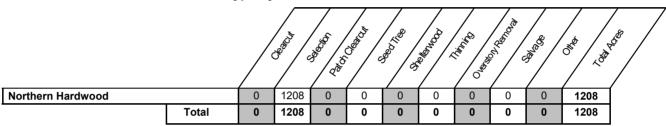
Gaylord Mgt. Unit Year of Entry: 2024

Acres of Harvest

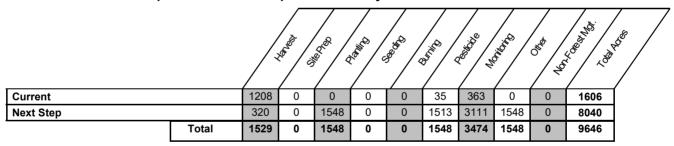
Compartment 101
Total Compartment Acres: 2,039

Commercial Harvest - 1208 Harvests with Site Condition - 0 Next Step Harvest - 320 Habitat Cut - 320

Cover Type by Harvest Method



Proposed and Next Step Treatments by Method





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

Approved Treatments:

4 52101004-59.1 4111 - S.Maple, Sawtimber 95 51-80 Monitoring Natural Regen 411 - Northern Two-Aged No Monitor Hard Mast Well (Intermediate) Hardwood

Association

Prescription Monitor mixed hardwood regen, especially the stocking density of ash and beech.

Specs:

Harvest, Group Selection; Pesticide, Skidder - Site Prep; Other,; Planting, Initial Plant; Monitoring, Artificial Regen(1yr); Monitoring, Next Step

Artificial Regen(3yr) **Treatments:**

Acceptable A fully stocked mix of northern hardwood species, without excessive ash/beech regen.

Regen:

Depending on future level of ash/beech regen, possible group selection cut followed by planting of red oak and mixed conifers is possible. Other

Comment:

Site Condition

Proposed Start Date: 10/1 /2028

29.4 4199 - Other Mixed Sapling 52101005-5 2 Immatu Monitoring Natural Regen 4116 - Mixed N. Even-Aged Nο **Upland Deciduous** (Intermediate) Hardwood -Monitor Poor Aspen

Prescription Monitor composition/density of regen. Possible future site prep and planting may occur based on regen survey results.

Specs:

Next Step **Treatments:**

Acceptable A mix of northern hardwood/aspen, that doesn't result in excessive ash/beech regen.

Regen:

Other

Comment:

Site Condition

Proposed Start Date: 10/1 /2026

6 52101006-95.4 4119 - Mixed Sawtimber 100 51-80 Monitoring Natural Regen 411 - Northern Two-Aged No Hardwood Monitor Northern Hardwoods Well (Intermediate)

Prescription Monitor mixed hardwood regen, especially the stocking density of ash and beech.

Specs:

Next Step Harvest, Group Selection; Pesticide, Skidder - Site Prep; Other,; Planting, Initial Plant; Monitoring, Artificial Regen(1yr); Monitoring,

Treatments: Artificial Regen(3yr)

Acceptable A fully stocked mix of northern hardwood species, without excessive ash/beech regen.

Regen:

Other Depending on future level of ash/beech regen, possible group selection cut followed by planting of red oak and mixed conifers is possible.

Comment:

Site Condition

Proposed Start Date: 10/1 /2028

Monitoring, Natural Regen (Intermediate)

Compartment: 101 Year of Entry: 2024

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а	

a n d	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Habitat Cut
7	52101007- SelCut	15.8 N	4119 - Mixed Iorthern Hardwoods	Sawtimbe Well	r 105	111- 140	Harvest	Single Tree Selection	4119 - Mixed Northern Hardwoods	Uneven- Aged	No

Specs:

Prescription Mark stand following 2012 ash and beech salvage guidelines. There may be areas within the stand where stocking level needs to be reduced to 70 - 80 to release crop trees. Overall stand BA will potentially be lower than desirable because of ash and beech salvage operations. Non-winter harvest only because of designated snowmobile trails.

Next Step Treatments:

Acceptable Regen:

Monitor and evaluate post-salvage regen composition and density. Potential next steps could consist of measures to encourage regen of species other than ash and beech, including, but not limited to, yellow birch, black cherry, red oak, hemlock, white pine, basswood, and sugar maple.

Other Comment: Large diameter northern hardwood. Areas of significant white ash and beech windthrow. Beech scale also present. Adjacent to MSU study area. Snowmobile trail lies along the east boundary of this stand. Old next step comments: Monitor and evaluate post-salvage regen composition and density. Potential next steps could consist of measures to encourage regen of species other than ash and beech, including, but not limited to, yellow birch, black cherry, red oak, hemlock, white pine, basswood, and sugar maple.

Site Condition

Proposed Start Date: 10/1 /2015

10 52101010-166.5 4110 - Sugar Maple Sawtimber 100 51-80 Harvest Group Selection 4123 - Red Oak Two-Aged Nο **GSCut** Association Medium

Regeneration gaps between .5 – 5 acres will be created throughout the stands. Gaps will be identified on the ground and all trees 6' or taller will be removed from the gap. Include trail protection specs. Specs:

Pesticide, Skidder - Site Prep; Other, ; Planting, Initial Plant; Monitoring, Artificial Regen(1yr); Monitoring, Artificial Regen(3yr) Next Step Treatments:

Acceptable Planted RO 2/3rds, 1/3 conifer at 8x8 spacing. Other desirable hardwood regen that is not ironwood, beech, or ash is acceptable. There are Regen: plans for a mechanical release at year 5.

Other No more than 30% of one stand will be gap harvested. Total amount of gap acres to be targeted of the 1,698 total acres will be around 280 Comment: acres. Incidental removal of trees between gaps will be required in many situations.

Site Condition

Proposed Start Date: 10/1 /2023

52101011-142.4 4110 - Sugar Maple Sawtimber 51-80 Harvest Group Selection 4123 - Red Oak Two-Aged Nο Association **GSCut** Well

Prescription Regeneration gaps between .5 - 5 acres will be created throughout the stands. Gaps will be identified on the ground and all trees 6' or taller Specs: will be removed from the gap. Include trail protection specs.

Next Step Pesticide, Skidder - Site Prep; Other,; Planting, Initial Plant; Monitoring, Artificial Regen(1yr); Monitoring, Artificial Regen(3yr) **Treatments:**

Planted RO 2/3rds, 1/3 conifer at 8x8 spacing. Other desirable hardwood regen that is not ironwood, beech, or ash is acceptable. There are <u>Acceptable</u> Regen: plans for a mechanical release at year 5.

No more than 30% of one stand will be gap harvested. Total amount of gap acres to be targeted of the 1,698 total acres will be around 280 Other 1 4 1 acres. Incidental removal of trees between gaps will be required in many situations. Comment:

Site Condition

Proposed Start Date: 10/1 /2023

s t

Year of Entry: 2024 а **Treatment Treatment Treatment Cover Type** Acres Stand Size Stand BA Age Habitat n Density Method Name CoverType Age Range Type Objective Structure Cut d 12 52101012-183.6 4110 - Sugar Maple Sawtimber 51-80 Harvest Group Selection 4123 - Red Oak Two-Aged **GSCut** Association Medium Prescription Regeneration gaps between .5 - 5 acres will be created throughout the stands. Gaps will be identified on the ground and all trees 6' or taller Specs: will be removed from the gap. Include trail protection specs. Next Step Pesticide, Skidder - Site Prep; Other, ; Planting, Initial Plant; Monitoring, Artificial Regen(1yr); Monitoring, Artificial Regen(3yr) Treatments: Acceptable Planted RO 2/3rds, 1/3 conifer at 8x8 spacing. Other desirable hardwood regen that is not ironwood, beech, or ash is acceptable. There are plans for a mechanical release at year 5. Regen: No more than 30% of one stand will be gap harvested. Incidental removal of trees between gaps will be required in many situations. **Other** Comment: Site Condition Proposed Start Date: 10/1 /2023 52101014-228.7 4110 - Sugar Maple Sawtimber 105 51-80 Harvest Group Selection 4123 - Red Oak Two-Aged Nο 14 **GSCut** Association Prescription Regeneration gaps between .5 – 5 acres will be created throughout the stands. Gaps will be identified on the ground and all trees 6' or taller Specs: will be removed from the gap. Include trail protection specs. Pesticide, Skidder - Site Prep; Other, ; Planting, Initial Plant; Monitoring, Artificial Regen(1yr); Monitoring, Artificial Regen(3yr) Next Step Treatments: <u>Acceptable</u> Planted RO 2/3rds, 1/3 conifer at 8x8 spacing. Other desirable hardwood regen that is not ironwood, beech, or ash is acceptable. There are Regen: plans for a mechanical release at year 5. Other No more than 30% of one stand will be gap harvested. Incidental removal of trees between gaps will be required in many situations. Comment: Site Condition Proposed Start Date: 10/1 /2023 52101016-Natural Regen 16 165.9 4110 - Sugar Maple Sawtimber 105 51-80 Monitoring 411 - Northern Two-Aged No Association Well (Intermediate) Hardwood Monitor Prescription Monitor mixed hardwood regen, especially the stocking density of ash and beech. Specs: Next Step Harvest, Group Selection; Pesticide, Skidder - Site Prep; Other, ; Planting, Initial Plant; Monitoring, Artificial Regen(1yr); Monitoring, <u>Treatments:</u> Artificial Regen(3yr) Acceptable A fully stocked mix of northern hardwood species, without excessive ash/beech regen. Regen: Other Depending on future density of ash/beech regen, possible group selection cut followed by planting of red oak and mixed conifers is possible. Comment: Site Condition Proposed Start Date: 10/1 /2028 52101017-Harvest 17 228.2 4110 - Sugar Maple Sawtimber 105 51-80 Group Selection 4123 - Red Oak Two-Aged No Association Well **GSCut** Prescription Regeneration gaps between .5 - 5 acres will be created throughout the stands. Gaps will be identified on the ground and all trees 6' or taller will be removed from the gap. Include trail protection specs. Specs: Next Step Pesticide, Skidder - Site Prep; Other, ; Planting, Initial Plant; Monitoring, Artificial Regen(1yr); Monitoring, Artificial Regen(3yr) **Treatments:** Acceptable Planted RO 2/3rds, 1/3 conifer at 8x8 spacing. Other desirable hardwood regen that is not ironwood, beech, or ash is acceptable. There are Regen: plans for a mechanical release at year 5. No more than 30% of one stand will be gap harvested. Incidental removal of trees between gaps will be required in many situations. **Other**

Proposed Start Date: 10/1 /2023

Comment: Site Condition Report 3 -- Treatments

Compartment: 101

s t			Guylord	ingt. Ome		Kepo		Treatments		Year of Entry		DNR
a n d	Treatr Nan		Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Habitat Cut
21		1021- Cut	86.7 4	110 - Sugar Maple Association	Sawtimbe Well	er 95	51-80	Harvest	Group Selection	4123 - Red Oak	Two-Aged	No
Pres Spe	scription	Regen				e create	ed through	nout the stands.	Gaps will be identi	fied on the ground	l and all trees	6' or taller
	t Step atments:	Pestici	ide, Skidde	r - Site Prep; Othe	er, ; Planti	ng, Init	ial Plant;	Monitoring, Ar	tificial Regen(1yr);	Monitoring, Artific	ial Regen(3yr)
Acce Reg		plans f	for a mecha	anical release at yea	ar 5.				n that is not ironwoo			
Othe Com	<u>er</u> nment:	No mo	re than 30%	% of one stand will b	be gap har	vested	. Incident	al removal of tr	ees between gaps v	vill be required in r	many situatio	is.
Site	Conditio	<u>n</u>										
Prop	oosed St	art Date	e: 10/1 /20	23								
22		1022- Cut	156.2 4	110 - Sugar Maple Association	Sawtimbe Well	er 100	51-80	Harvest	Group Selection	4123 - Red Oak	Two-Aged	No
Pres Spe				os between .5 – 5 acrom the gap. Includ				out the stands.	Gaps will be identi	fied on the ground	l and all trees	6' or taller
	t Step atments:	Pestici	ide, Skidde	r - Site Prep; Othe	er, ; Planti	ng, Init	ial Plant;	Monitoring, Ar	tificial Regen(1yr);	Monitoring, Artific	ial Regen(3yr)
Acce Reg				ls, 1/3 conifer at 8x8 anical release at yea		Other	desirable	hardwood rege	n that is not ironwoo	d, beech, or ash i	s acceptable.	There are
Othe Com	<u>er</u> nment:	No mo	re than 30%	% of one stand will b	be gap har	vested	. Incident	al removal of tr	ees between gaps v	vill be required in r	many situatio	ıs.
Site	Conditio	<u>n</u>										
Prop	oosed St	art Date	e: 10/1 /20	23								
23		1023- ray	35.0 N	4119 - Mixed Iorthern Hardwoods	Sapling Poor	2	Immatu re	Pesticide	ERROR	4199 - Other Mixed Upland Deciduous	Even-Aged	No
Pres Spe		Herbic	ide applicat	tion for pre-planting	site prep.							
	t Step atments:	Other,	; Planting	, Initial Plant; Mon	itoring, Art	ificial F	Regen(1yr); Monitoring, A	Artificial Regen(3yr)			
Acce Reg	•			and mixed conifer in se at year 5.	areas not	occupi	ed by des	irable hardwoo	d or aspen regen, at	8x8 spacing. The	ere are plans	for a
Othe Com	<u>er</u> nment:											
Site	Conditio	<u>n</u>										
Prop	oosed St	art Date	<u>e:</u> 10/1 /20:	23								
205		1205- nitor		1199 - Other Mixed Upland Deciduous	Poletimbe Poor	er 75	1-50	Monitoring	Natural Regen (Intermediate)	4116 - Mixed N. Hardwood - Aspen	Even-Aged	No
Pres Spe		Monito	r compositi	ion/density of regen	ı. Possible	future	site prep	and planting m	ay occur based on r	egen survey resul	ts.	
	t Step atments:											
Reg	en:	A mix	of northern	hardwood/aspen, th	hat doesn't	t result	in excess	ive ash/beech r	regen.			
	nment:											
Cit~	Conditio	n										

Proposed Start Date: 10/1 /2026

Site Condition

Gaylord Mgt. Unit Report 3 -- Treatments Compartment: 101 s t Year of Entry: 2024 а Cover Type Objective Age Structure **Treatment** Acres Stand Size Stand ВА Treatment **Treatment** Habitat n Name CoverType Density Age Range Type Method d Cut

Total Treatment Acreage Proposed: 1606.1

Compartment: 101

Gaylord Mgt. Unit

Donald Stacks : Examiner Year of Entry: 2024

Availa	ability for	Managemer	nt							
Total	Acres	Acres Avail	Acres	D	omina	nt Site	e Con	ditions	S	
Acres	Available	With Condition	Not Available		5C	1C	2F	3A	3G	5E
19	19	0	0	Aspen						
106	43	0	64	Mixed Upland Deciduous			54		5	5
1906	1677	29	200	Northern Hardwood	29	89	33	79		
8	8	0	0	Upland Shrub						
2,039	1,747	29	263	Total Forested Acres	29	89	86	79	5	5
	86%	1%	13%	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.

Comments: 2 Unavailable 1C: Other dept or div proc/practices Comments: MSU (Dr. Walters') research area. 3 Unavailable 5E: Long-Term Retention 1 Unspecified Un	Site No.	Dominant Site Cond Availability	Dominant Site Condition	Acres	Other Site Condition	Other Site Condition	Other Site Condition	Other Site Condition
2 Unavailable 1C: Other dept or div proc/practices 89 Unspecified	1	Unavailable	2F: Too steep	33	Unspecified	Unspecified	Unspecified	Unspecified
Comments: MSU (Dr. Walters') research area. Unavailable 5E: Long-Term Retention 1 Unspecified Unspeci	(Comments:						
MSU (Dr. Walters') research area. 3	2	Unavailable		89	Unspecified	Unspecified	Unspecified	Unspecified
Comments: Unavailable 5E: Long-Term Retention 4 Unspecified Unspecified Unspecified Unspecified Unspecified Unspecified			research area.					
Unavailable 5E: Long-Term Retention 4 Unspecified Unspecified Unspecified Unspecified	}	Unavailable	5E: Long-Term Retention	1	Unspecified	Unspecified	Unspecified	Unspecified
-		Comments:						
Comments:		Unavailable	5E: Long-Term Retention	4	Unspecified	Unspecified	Unspecified	Unspecified
Comments.	(Comments:						

Report 4 – Site Conditions

Gaylord Mgt. Unit

Compartment: 101 Year of Entry: 2024 **Donald Stacks: Examiner**

5	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	29	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
6	Unavailable	2F: Too steep	26	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: Multiple, very steep	o slopes.					
7	Unavailable	3A: Conservation Values incompatible with harvest at this time	79	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: Designated SCA, (Habitat Area/Corridor). Fragile	soil, old c	lune areas with steep slo	pes. Hemlock component	present. Groundwater see	eps present.
8	Unavailable	3G: Other Influence zones - See comments	5	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: Low acreage/volume	ne presently.					
9	Unavailable	2F: Too steep	28	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						

11/15/2022 1:17:41 PM - Page 2 of 2 **SWARTZN3** Gaylord Mgt. Unit

Compartment: 101 Year of Entry: 2024

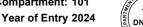


Report 5 - PROPOSED SPECIAL CONSERVATION AREA* (SCA) DETAILS

* 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
52101001	Habitat Area	Other Habitat Area	SCA	79
Comments				
Fragile soil, old dune a	areas with steep slopes. Hemlock o	componente present. Occassional see	ps.	

Gaylord Mgt. Unit Compartment: 101





Report 6 – EXISTING SPECIAL CONSERVATION AREA DETAILS

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

Conservat Area	ion Type	Description	ERA = Ecological Reference Area HCVA = High Conservation Value Area SCA = Special Conservation Area
SCA	Visual Management Area	An area of general social appreciation that is managed to recogn Examples of these areas include scenic vistas, scenic or natural	
ERA	Ecological Reference Areas	Ecological Reference Areas (ERAs) are high quality examples of identified as Element Occurrences (EOs) by the Michigan Natural context of their natural community classification system. Elemen (Excellent) or B (Good) and a Global (G) or State (S) element (rathreatened (2), or rare (3) serve as an initial base of ERAs. They the State. The system is comprised of individual or associations managed for restoration and maintenance of natural ecological public recommendations for lands as ERAs using the DNR Content of the property of the prope	al Features Inventory (MNFI) within the toccurrences with viability ranks of A writy) ranking of endangered (1), may be located upon any ownership in of natural community types that are processes and values. The public may

t 7 – Stands Compartment: 101 Year of Entry: 2024



Stand	Level 4 Co	over Type		Size De		Acres S	Stand Age B	A Italige	Managed S	Site	General Comments			
1	4119 - Mixed No	orthern Har	rdwoods S	awtimb	er Well	78.5	90	111-140	N/A		Stand is a designated SCA, (Habitat Area/Corridor). Mix of northern			
	Canopy Species	% Cover	r Size Class	DBH	Age	Sub-Cand	opy Species	Density	Avg. Height	Size	hardwood and oak sawtimber lying on old Lake Michigan shoreline dunes. Areas of desirable advanced sugar maple present. Fragile soil			
	Red Oak	22	Log/Pole/XLog	17		Ве	eech	Medium	10 - 20 feet	Sapling	with numerous steep valleys and ridges. Several groundwater seeps			
	Paper Birch	5	Log/Pole	14		Iron	nwood	Low	>20 feet	Sapling	present. Stand BA is about 120 sq. ft Fair amount of scattered			
	Basswood	4	Log/Pole	11		Suga	ır Maple	Medium	10 - 20 feet	Sapling	hemlock present, mostly in the north half of the stand. Most, if not all, of the white ash is dead, and beech is at various stages of dead/dying. Site			
Е	Bigtooth Aspen	8	Log	16		Whi	te Ash	Low	10 - 20 feet	Sapling	condition is also applied.			
	Beech	8	Log/Pole/XLog	12		Red	d Oak	Low	10 - 20 feet	Sapling				
	Sugar Maple	53	Log/Pole/Sap	10	90	Stripe	ed Maple	Low	10 - 20 feet	Sapling				
2	4199 - Other Mixed	d Upland [Deciduous P	oletimb	er Poor	9.7	92	51-80	N/A		Lesser stocked stand of mixed northern hardwood, big toothed aspen, and northern red oak. BA is about 70 sq. ft. Part of stand is inoperable			
	Canopy Species	% Cover	r Size Class	DBH	Age	Sub-Cand	opy Species	Density	Avg. Height	Size	on the side of a steep, south facing slope adjacent to seasonal county			
	Beech	10	Pole/Sap/Log	8		Bigtoot	th Aspen	Low	10 - 20 feet	Sapling	road.			
	Red Oak	10	Pole/Log	8		Serviceberr	ry (Juneberry)	Low	10 - 20 feet	Tall Shrub				
	Sugar Maple	45	Pole/Sap/Log	8	92	Iron	nwood	Low	10 - 20 feet	Tall Shrub				
		0.5	D 1 /0 //	8		Din (Cherry	Low	10 - 20 feet	Tall Shrub				
E	Bigtooth Aspen	35	Pole/Sap/Log	Ö		FIII	Onlong	2011						
E	Bigtooth Aspen	35	Pole/Sap/Log	8			eech	Low	10 - 20 feet	Sapling				
E	Bigtooth Aspen	35	Pole/Sap/Log	8		Ве				Sapling Sapling				
3	Bigtooth Aspen 4199 - Other Mixed	d Upland [Deciduous S	awtimb	er Well	Suga 21.7	eech ar Maple	Low	10 - 20 feet 10 - 20 feet N/A		High quality mixed deciduous, mostly red oak sawtimber, with lesser amounts of big-toothed aspen, sugar maple and beech also present			
3	4199 - Other Mixed	d Upland [% Cove r	Deciduous S	awtimb	er Well	Suga 21.7 Sub-Cand	eech ir Maple 100 opy Species	Low Medium 81-110 Density	10 - 20 feet 10 - 20 feet N/A Avg. Height	Sapling	High quality mixed deciduous, mostly red oak sawtimber, with lesser amounts of big-toothed aspen, sugar maple and beech also present. South half of stand is located on the side of a steep, south-facing slope			
3	4199 - Other Mixed	d Upland [Deciduous S	awtimb		Suga 21.7 Sub-Cand	eech ar Maple	Low Medium 81-110	10 - 20 feet 10 - 20 feet N/A	Sapling	amounts of big-toothed aspen, sugar maple and beech also present. South half of stand is located on the side of a steep, south-facing slope and is mostly inoperable. Ave. BA is about 100 sq. ft. Apply site			
3	4199 - Other Mixed	d Upland [% Cove r	Deciduous S	awtimb		Suga 21.7 Sub-Cane	eech ir Maple 100 opy Species	Low Medium 81-110 Density	10 - 20 feet 10 - 20 feet N/A Avg. Height 10 - 20 feet 10 - 20 feet	Sapling	amounts of big-toothed aspen, sugar maple and beech also present. South half of stand is located on the side of a steep, south-facing slope			
3	4199 - Other Mixed Canopy Species Sugar Maple	d Upland E % Cover	Deciduous S r Size Class Log/Pole	awtimb DBH 10 10 12		Suga 21.7 Sub-Cand Suga Red	eech Ir Maple 100 opy Species Ir Maple	Low Medium 81-110 Density Medium	10 - 20 feet 10 - 20 feet N/A Avg. Height 10 - 20 feet	Size Sapling Sapling Sapling Pole	amounts of big-toothed aspen, sugar maple and beech also present. South half of stand is located on the side of a steep, south-facing slope and is mostly inoperable. Ave. BA is about 100 sq. ft. Apply site			
3	4199 - Other Mixed Canopy Species Sugar Maple Beech	d Upland E % Cover 20 5	Deciduous S r Size Class Log/Pole Log/Pole	awtimb DBH 10 10	Age	21.7 Sub-Cane Suga Rec	eech Ir Maple 100 opy Species Ir Maple d Oak	81-110 Density Medium Low	10 - 20 feet 10 - 20 feet N/A Avg. Height 10 - 20 feet 10 - 20 feet	Size Sapling Sapling Sapling Pole Sapling	amounts of big-toothed aspen, sugar maple and beech also present. South half of stand is located on the side of a steep, south-facing slope and is mostly inoperable. Ave. BA is about 100 sq. ft. Apply site			
3	4199 - Other Mixed Canopy Species Sugar Maple Beech Red Oak	d Upland E % Cover 20 5 50	Deciduous S r Size Class Log/Pole Log/Pole Log/Pole	awtimb DBH 10 10 12	Age	21.7 Sub-Cane Suga Rec Iron Stripe	eech 100 opy Species Ir Maple d Oak nwood	81-110 Density Medium Low Low	10 - 20 feet 10 - 20 feet N/A Avg. Height 10 - 20 feet 10 - 20 feet 10 - 20 feet	Size Sapling Sapling Sapling Pole	amounts of big-toothed aspen, sugar maple and beech also present. South half of stand is located on the side of a steep, south-facing slope and is mostly inoperable. Ave. BA is about 100 sq. ft. Apply site			
3	4199 - Other Mixed Canopy Species Sugar Maple Beech Red Oak	d Upland E **Cover* 20 5 50 25	Deciduous S r Size Class Log/Pole Log/Pole Log/Pole Log/Pole	awtimb DBH 10 10 12 12 awtimb	100 er Well	21.7 Sub-Cane Suga Rec Iron Stripe Be	eech 100 opy Species Ir Maple d Oak Inwood	81-110 Density Medium Low Low Low Low	10 - 20 feet 10 - 20 feet N/A Avg. Height 10 - 20 feet 10 - 20 feet 10 - 20 feet 5 - 10 feet	Size Sapling Sapling Sapling Pole Sapling	amounts of big-toothed aspen, sugar maple and beech also present. South half of stand is located on the side of a steep, south-facing slope and is mostly inoperable. Ave. BA is about 100 sq. ft. Apply site condition. Mixed northern hardwood sawtimber, with scattered red oak especially in			
3	4199 - Other Mixed Canopy Species Sugar Maple Beech Red Oak Bigtooth Aspen	d Upland E Cover 20 5 50 25 ard Mast A	Deciduous S r Size Class Log/Pole Log/Pole Log/Pole Log/Pole	awtimb DBH 10 10 12 12 awtimb	100	Suga 21.7 Sub-Cane Suga Rec Iron Stripe Be 59.1	eech 100 opy Species Ir Maple d Oak nwood d Maple eech	81-110 Density Medium Low Low Low Medium	10 - 20 feet 10 - 20 feet N/A Avg. Height 10 - 20 feet 10 - 20 feet 10 - 20 feet 5 - 10 feet 10 - 20 feet	Size Sapling Sapling Sapling Pole Sapling	amounts of big-toothed aspen, sugar maple and beech also present. South half of stand is located on the side of a steep, south-facing slope and is mostly inoperable. Ave. BA is about 100 sq. ft. Apply site condition. Mixed northern hardwood sawtimber, with scattered red oak especially in northern 1/3 of stand. Stand received an ash/beech salvage harvest			
3	4199 - Other Mixed Canopy Species Sugar Maple Beech Red Oak Bigtooth Aspen	d Upland E Cover 20 5 50 25 ard Mast A	Deciduous S r Size Class Log/Pole Log/Pole Log/Pole Log/Pole	awtimb DBH 10 10 12 12 awtimb	100 er Well	21.7 Sub-Cane Suga Rec Iron Stripe Be 59.1 Sub-Cane	eech 100 opy Species Ir Maple d Oak nwood d Maple eech 95	B1-110 Density Medium Low Low Low Medium 51-80	10 - 20 feet 10 - 20 feet N/A Avg. Height 10 - 20 feet 10 - 20 feet 10 - 20 feet 5 - 10 feet 10 - 20 feet	Sapling Size Sapling Sapling Pole Sapling Sapling Sapling	amounts of big-toothed aspen, sugar maple and beech also present. South half of stand is located on the side of a steep, south-facing slope and is mostly inoperable. Ave. BA is about 100 sq. ft. Apply site condition. Mixed northern hardwood sawtimber, with scattered red oak especially in northern 1/3 of stand. Stand received an ash/beech salvage harvest (Emmet Salvage #5, 52-108-13) completed in 2015. Post-harvest residual BA is about 77 sq. ft. Many steep hills. Designated snowmobile			
3	4199 - Other Mixed Canopy Species Sugar Maple Beech Red Oak Bigtooth Aspen 4111 - S.Maple, Ha	d Upland I Cover 20 5 50 25 ard Mast A	Deciduous S r Size Class Log/Pole Log/Pole Log/Pole Log/Pole Association S r Size Class	awtimb DBH 10 10 12 12 awtimb	100 er Well	21.7 Sub-Cane Suga Rec Iron Stripe Be 59.1 Sub-Cane Blackberry	eech 100 opy Species Ir Maple d Oak Inwood d Maple eech 95 opy Species	81-110 Density Medium Low Low Low Medium 51-80 Density	10 - 20 feet 10 - 20 feet N/A Avg. Height 10 - 20 feet 10 - 20 feet 10 - 20 feet 5 - 10 feet 10 - 20 feet N/A Avg. Height	Sapling Size Sapling Sapling Pole Sapling Sapling Sapling	amounts of big-toothed aspen, sugar maple and beech also present. South half of stand is located on the side of a steep, south-facing slope and is mostly inoperable. Ave. BA is about 100 sq. ft. Apply site condition. Mixed northern hardwood sawtimber, with scattered red oak especially in northern 1/3 of stand. Stand received an ash/beech salvage harvest (Emmet Salvage #5, 52-108-13) completed in 2015. Post-harvest			
3	4199 - Other Mixed Canopy Species Sugar Maple Beech Red Oak Bigtooth Aspen 4111 - S.Maple, Ha Canopy Species Sugar Maple	d Upland E **Cover* 20 5 50 25 ard Mast A **Cover* 60	Deciduous S r Size Class Log/Pole Log/Pole Log/Pole Log/Pole Sessociation S r Size Class Log/Pole/XLog	awtimb DBH 10 10 12 12 awtimb DBH 11	100 er Well	21.7 Sub-Cane Suga Rec Iron Stripe Be 59.1 Sub-Cane Blackberry Suga	eech 100 opy Species Ir Maple d Oak Inwood d Maple eech 95 opy Species y/Raspberry	81-110 Density Medium Low Low Low Medium 51-80 Density Medium	10 - 20 feet 10 - 20 feet N/A Avg. Height 10 - 20 feet 10 - 20 feet 10 - 20 feet 5 - 10 feet 10 - 20 feet V/A Avg. Height < 5 feet	Sapling Size Sapling Sapling Pole Sapling Sapling Sapling Sapling	amounts of big-toothed aspen, sugar maple and beech also present. South half of stand is located on the side of a steep, south-facing slope and is mostly inoperable. Ave. BA is about 100 sq. ft. Apply site condition. Mixed northern hardwood sawtimber, with scattered red oak especially in northern 1/3 of stand. Stand received an ash/beech salvage harvest (Emmet Salvage #5, 52-108-13) completed in 2015. Post-harvest residual BA is about 77 sq. ft. Many steep hills. Designated snowmobile			
3	4199 - Other Mixed Canopy Species Sugar Maple Beech Red Oak Bigtooth Aspen 4111 - S.Maple, Ha Canopy Species Sugar Maple Yellow Birch	d Upland E **Cover* 20 5 50 25 ard Mast A **Cover* 60 10	Deciduous S r Size Class Log/Pole Log/Pole Log/Pole Log/Pole Sessociation S r Size Class Log/Pole/XLog Log/Pole	awtimb 10	100 er Well	Suga 21.7 Sub-Cand Suga Rec Iron Stripe Be 59.1 Sub-Cand Blackberry Suga	eech 100 opy Species Ir Maple d Oak Inwood Inwood Ir Maple	B1-110 Density Medium Low Low Low Medium 51-80 Density Medium Low	10 - 20 feet 10 - 20 feet N/A Avg. Height 10 - 20 feet 10 - 20 feet 10 - 20 feet 5 - 10 feet 10 - 20 feet V/A Avg. Height < 5 feet Variable	Sapling Size Sapling Sapling Pole Sapling Sapling Sapling Sapling Size Tall Shrub Sapling	amounts of big-toothed aspen, sugar maple and beech also present. South half of stand is located on the side of a steep, south-facing slope and is mostly inoperable. Ave. BA is about 100 sq. ft. Apply site condition. Mixed northern hardwood sawtimber, with scattered red oak especially in northern 1/3 of stand. Stand received an ash/beech salvage harvest (Emmet Salvage #5, 52-108-13) completed in 2015. Post-harvest residual BA is about 77 sq. ft. Many steep hills. Designated snowmobile			
3	4199 - Other Mixed Canopy Species Sugar Maple Beech Red Oak Bigtooth Aspen 4111 - S.Maple, Ha Canopy Species Sugar Maple Yellow Birch Red Oak	d Upland E % Cover 20 5 50 25 ard Mast A % Cover 60 10 20	Deciduous S r Size Class Log/Pole Log/Pole Log/Pole Log/Pole Association S r Size Class Log/Pole/XLog Log/Pole Log/XLog	awtimb 10	100 er Well	Suga 21.7 Sub-Cane Suga Rec Iron Stripe Be 59.1 Sub-Cane Blackberry Suga Be Stripe	eech In Maple 100 Opy Species In Maple d Oak Inwood Ind Maple Inwood	Low Medium 81-110 Density Medium Low Low Low Medium 51-80 Density Medium Low Medium Medium Medium	10 - 20 feet 10 - 20 feet N/A Avg. Height 10 - 20 feet 10 - 20 feet 10 - 20 feet 5 - 10 feet 10 - 20 feet V/A Avg. Height < 5 feet Variable Variable	Sapling Size Sapling Sapling Pole Sapling Sapling Sapling Sapling Size Tall Shrub Sapling Sapling	amounts of big-toothed aspen, sugar maple and beech also present. South half of stand is located on the side of a steep, south-facing slope and is mostly inoperable. Ave. BA is about 100 sq. ft. Apply site condition. Mixed northern hardwood sawtimber, with scattered red oak especially in northern 1/3 of stand. Stand received an ash/beech salvage harvest (Emmet Salvage #5, 52-108-13) completed in 2015. Post-harvest residual BA is about 77 sq. ft. Many steep hills. Designated snowmobile			
3	4199 - Other Mixed Canopy Species Sugar Maple Beech Red Oak Bigtooth Aspen 4111 - S.Maple, Ha Canopy Species Sugar Maple Yellow Birch Red Oak	d Upland E **Cover* 20	Deciduous S r Size Class Log/Pole Log/Pole Log/Pole Log/Pole Association S r Size Class Log/Pole/XLog Log/Pole Log/XLog	awtimb 10	100 er Well	Suga 21.7 Sub-Cane Suga Rec Iron Stripe Be 59.1 Sub-Cane Blackberry Suga Be Stripe Iron	eech 100 opy Species Ir Maple d Oak nwood d Maple eech 95 opy Species y/Raspberry Ir Maple eech d Maple	Low Medium 81-110 Density Medium Low Low Medium 51-80 Density Medium Low Medium Low Medium Low Medium Low Medium Low	10 - 20 feet 10 - 20 feet N/A Avg. Height 10 - 20 feet 10 - 20 feet 10 - 20 feet 5 - 10 feet 10 - 20 feet Variable Variable 5 - 10 feet	Sapling Size Sapling Sapling Pole Sapling Sapling Sapling Size Tall Shrub Sapling Sapling Sapling Sapling	amounts of big-toothed aspen, sugar maple and beech also present. South half of stand is located on the side of a steep, south-facing slope and is mostly inoperable. Ave. BA is about 100 sq. ft. Apply site condition. Mixed northern hardwood sawtimber, with scattered red oak especially in northern 1/3 of stand. Stand received an ash/beech salvage harvest (Emmet Salvage #5, 52-108-13) completed in 2015. Post-harvest residual BA is about 77 sq. ft. Many steep hills. Designated snowmobile			

Compartment: 101 Year of Entry: 2024



Stand	Level 4 C	over Type		Size De	nsity	Acres	Stand Age E	A Range	Managed S	Site	General Comments
5	4199 - Other Mixe	d Upland [Deciduous	Sapling	Poor	29.5	2	mmature	N/A		Stand consists of a sparse mix of northern hardwood/aspen
	Canopy Species	% Cove	r Size Class	DBH	Age						seedlings/saplings located on very hilly, steep topography, that was final harvested, completed in 2019. Sparse, scattered large red oak
	White Ash	20	Sapling	1	2						sawtimber can also be found in stand. Adjacent to private property on
	Beech	25	Sapling	1	2						west side.
	Bigtooth Aspen	25	Sapling	1	2						
	Paper Birch	20	Sapling	1	2						
	Sugar Maple	10	Sapling	1	2						
6	4119 - Mixed No	orthern Hai	rdwoods S	Sawtimb	er Well	95.5	100	51-80	N/A		Large diameter, mixed northern hardwood, mostly high quality sugar
	Canopy Species	% Cove	r Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	maple, especially in the north half of the stand. Stand sits on a plateau with significant slopes on the north and east sides. Ash/beech salvage
	Yellow Birch	5	Log/Pole	12		Strip	ed Maple	Low	10 - 20 feet	Sapling	(Emmet Salvage #4, 52-103-13), completed in 2019. Post-harvest BA is
	Basswood	10	Log/Pole	12		Sug	ar Maple	Medium	Variable	Sapling	64 sq. ft. A single tree selection harvest was completed in 2011.
	Paper Birch	10	Log/Pole	10		Ba	sswood	Low	5 - 10 feet	Sapling	Designated snowmobile trail located near SE corner of the stand.
	Bigtooth Aspen	5	Log	16		WI	hite Ash	Medium	< 5 feet	Sapling	
	Sugar Maple	64	Log/XLog/Pole	e 12	100	Blackbe	rry/Raspberry	High	< 5 feet	Tall Shrul	
	Black Cherry	3	Log/Pole	12			Beech	Medium	Variable	Sapling	
	Red Maple	3	Log/XLog/Pole	12				'			
7	4119 - Mixed No			Sawtimb		16.2		111-140	N/A		Large diameter mixed northern hardwood. Stand is currently under contract (Stymie's Selection, 52-129-16) until 03/31/2022. No harvest
	Canopy Species		r Size Class		Age		nopy Species		Avg. Height	Size	activity has taken place to date. Stand has been impacted by Emerald
	Beech	18	Log/XLog/Pole				ar Maple	Medium	10 - 20 feet	Sapling	Ash Borer and Beech Bark Disease. Mortality has increased since sale area was prepared in 2016. Areas of significant white ash and beech
	Bigtooth Aspen	2	Log	20			hite Ash	Low	10 - 20 feet	Sapling	windthrow were present 20 years ago. Adjacent to MSU study area.
	Sugar Maple	39	Log/Pole/XLog	_	105		per Birch	Low	10 - 20 feet	Sapling	Snowmobile trail lies along the east boundary of this stand.
	Basswood	4	Log/Pole/XLog				Beech	Medium	10 - 20 feet	Sapling	
	Red Oak	2	Log/XLog	20			onwood	Low	10 - 20 feet	Sapling	
	White Ash	27	Log/XLog/Pole			Strip	ed Maple	Low	5 - 10 feet	Sapling	
	Paper Birch	8	Pole/Log	14							
8	4110 - Sugar N	laple Asso	ociation Sa		Mediur	m 15.8	106	51-80	N/A		Small, lesser-stocked stand of northern hardwood, mostly sugar maple sawtimber, on hilly terrain. This stand contained the first known
	Canopy Species	% Cove	r Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	occurrence of beech bark disease in Emmet County. A plan was
	Sugar Maple	90	Log/XLog/Pole	e 14	106	Sug	ıar Maple	Low	5 - 10 feet	Sapling	implemented to try to contain the beech scale to this stand. All beech
	Paper Birch	8	Log/Pole	12			Beech	Medium	5 - 10 feet	Sapling	were harvested within the stand along with a few sugar maple and ash in 2005. After the harvest, 1,500 white pine seedlings and 2,000 red oak
	Red Oak	2	XLog	20			ed Maple	Low	5 - 10 feet	Sapling	acorns were planted over a two acre area with minimal survival.
					-	Black	Raspberry	Full	5 - 10 feet	Tall Shrul	Currently, the stand consists almost entirely of lower stocked sugar
											maple sawtimber, with a very dense growth of raspberry in the understory. BA is about 60 sq. ft. Beech regen, with lesser amounts of sugar maple and ash, is found throughout the stand.

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Stand	Level 4 Co	over Type	S	ize De	ensity	Acres	Stand Age B	BA Range	Managed \$	Site	General Comments
9	4110 - Sugar M	laple Asso	ociation Sa	wtimb	er Well	88.9	95	51-80	N/A		Stand consists of a mix of mature northern hardwood sawtimber, mostly
	Canopy Species	% Cover	r Size Class	DBH	l Age	Sub-Can	opy Species	Density	Avg. Height	Size	sugar maple. BA is presently about 80 sq. ft. Stand is currently being monitored as an MSU research area, presently studying hardwood regen
	Beech	5	Log/XLog/Pole	16		Suga	ar Maple	Medium	Variable	Sapling	in various sized canopy gaps, created in 2009 - 2011. Stand was also
	Sugar Maple	83	Log/Pole/XLog	14	95	Wh	ite Ash	High	Variable	Sapling	marked and thinned between gaps. Dense advanced mixed hardwood
	Red Oak	2	Log/XLog/Pole	14		В	eech	High	Variable	Sapling	regen found throughout stand. Beech bark disease, EAB, and ash decline has been documented in stand. Site condition applied to stand to
	Basswood	5	Log/Pole	12		Blackberr	ry/Raspberry	Medium	< 5 feet	Tall Shrub	allow MSU research to continue.
	Paper Birch	5	Log/Pole	10				1	1	1	•
10	4110 - Sugar M	laple Asso	ociation Saw	timbe	r Mediu	m 166.5	100	51-80	N/A		Large diameter mixed northern hardwood. Ash/beech salvage cut
	Canopy Species	% Cover	r Size Class	DBH	l Age	Sub-Can	opy Species	Density	Avg. Height	Size	(Emmet Salvage #2, 52-105-13) completed in 2015. Post-harvest BA is about 55 sq. ft. Selection harvest occurred during 2004 YOE
	Black Cherry	3	Log/Pole	12		Stripe	ed Maple	Low	10 - 20 feet	Sapling	Designated snowmobile trail runs along south and west boundaries of
	Sugar Maple	77	Log/XLog/Pole	12	100	Blackberr	ry/Raspberry	Full	< 5 feet	Tall Shrub	stand. Dense ash/beech regen in much of the stand. Many hills with
	Paper Birch	5	Log/Pole	10		В	eech	High	Variable	Sapling	steep slopes present
	Bigtooth Aspen	5	Log	16		Suga	ar Maple	Low	Variable	Sapling	
	Basswood	10	Log/Pole	12		Bas	sswood	Low	5 - 10 feet	Sapling	
			-			Wh	ite Ash	High	< 5 feet	Sapling	
11	4110 - Sugar M	laple Asso	ociation Sa	wtimb	er Well	142.4	95	51-80	N/A		Mix of northern hardwood, mostly sugar maple sawtimber, on rolling hills
	Canopy Species	% Cover	r Size Class	DBH	l Age	Sub-Can	opy Species	Density	Avg. Height	Size	Ash/beech salvage cut completed in 2018 (Emmet Salvage #3, 52-107- 13. Post-harvest BA is about 63 sq. ft. Snowmobile trail runs along
	Red Maple	2	Log/Pole	12		Stripe	ed Maple	Trace	5 - 10 feet	Sapling	south boundary of stand. Adjacent to county road and private property.
	Yellow Birch	2	Log/Pole	10		Blackberr	ry/Raspberry	High	< 5 feet	Tall Shrub	
	Paper Birch	2	Log/Pole	12		Suga	ar Maple	Medium	Variable	Sapling	
	Basswood	8	Log	12		Red	d Maple	Trace	Variable	Sapling	
	Bigtooth Aspen	5	Log/XLog	16		В	eech	High	Variable	Sapling	
	Sugar Maple	79	Log/XLog/Pole	12	95	Wh	ite Ash	Medium	< 5 feet	Sapling	
	Black Cherry	2	Log	16	<u> </u>						
12	4110 - Sugar M	laple Asso	ociation Saw	timbe	r Mediu	m 183.7	100	51-80	N/A		Large diameter mixed northern hardwood, mostly sugar maple
	Canopy Species	% Cover	r Size Class	DBH	l Age	Sub-Can	opy Species	Density	Avg. Height	Size	sawtimber. Ash/beech salvage cut (Emmet Salvage #1, 52-106-13) completed in 2016. Post-harvest BA was about 56 sq. ft. Areas of
	Red Maple	3	Log/XLog/Pole	12		В	eech	Full	< 5 feet	Sapling	heavy ash/beech regen. Designated snowmobile trail runs runs along
	Sugar Maple	76	Log/XLog/Pole	12	100	Bas	sswood	Low	5 - 10 feet	Sapling	north boundary of this stand. stand. Many hills with steep slopes
	Paper Birch	3	Pole/Log	10		Wh	ite Ash	Full	< 5 feet	Sapling	present
	Bigtooth Aspen	8	Log	16		Blackberr	ry/Raspberry	High	< 5 feet	Tall Shrub	
	Basswood	4	Log/Pole	12		Suga	ar Maple	Medium	5 - 10 feet	Sapling	
	Yellow Birch	3	Log/Pole	12		Stripe	ed Maple	Low	10 - 20 feet	Sapling	
	Black Cherry	3	Log/Pole	12						'	•
13	4130	- Aspen	Po	letimk	er Well	6.5	47	51-80	N/A		Small aspen poletimber stand from 1975 final harvest. Present BA is
	Canopy Species	% Cover	r Size Class	DBH	l Age	Sub-Can	opy Species	Density	Avg. Height	Size	about 80 sq. ft. To improve merchantability, final harvest this small acreage stand when Stand 14 is treated again to perpetuate aspen
	Bigtooth Aspen	100	Pole	8	47	Bigtoo	oth Aspen	Medium	10 - 20 feet	Sapling	covertype. Adjacent to snowmobile trail.

Sapling

10 - 20 feet

Medium

Sugar Maple

Stands Compartment: 101
Year of Entry: 2024

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Stand	d Level 4 C	over Type		Size De	nsity	Acres	Stand Age E	BA Range	Managed \$	Site	General Comments
14	4110 - Sugar N	/laple Asso	ociation S	awtimb	er Well	228.7	105	51-80	N/A		High quality mixed northern hardwood sawtimber, adjacent to Robinson Rd. and Wilderness Rd., on rolling hills with some steep slopes present.
	Canopy Species	% Cove	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	Designated snowmobile trail runs through stand. Ash/beech salvage
	Black Cherry	3	Log/Pole/XLog	14		Su	gar Maple	Medium	Variable	Sapling	harvest completed in 2015 (Emmet Salvage #9, 52-112-13). Post-
	Basswood	7	Log/Pole	12		Black	Raspberry	Medium	5 - 10 feet	Tall Shrub	harvest BA is about 69 sq. ft. Stand also received selection harvests from 1996 to 1999.
	Sugar Maple	80	Log/Pole	12	105		Beech	Medium	Variable	Sapling	11011 1990 to 1999.
	Red Maple	10	Log/Pole	11		W	hite Ash	High	< 5 feet	Sapling	
							onwood	Low	10 - 20 feet	Sapling	
						Stri	ped Maple	Low	Variable	Tall Shrub	
15	4130	- Aspen	P	oletimb	er Well	8.1	46	51-80	N/A		Small aspen poletimber stand from 1976 final harvest. Present BA is about 80 sq. ft. To improve merchantability, final harvest this small
	Canopy Species	% Cove	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	acreage stand when Stand 14 is treated again, to perpetuate aspen
	Bigtooth Aspen	100	Pole	8	46	Bigto	ooth Aspen	Medium	10 - 20 feet	Sapling	covertype. Adjacent to snowmobile trail.
						Su	gar Maple	Medium	10 - 20 feet	Sapling	
16	4110 - Sugar N	/laple Asso	ociation S	awtimb	er Well	165.9	105	51-80	N/A		High quality mixed northern hardwood sawtimber, adjacent to Robinson Rd. and Wilderness Rd., on rolling hills with some steep slopes present
	Canopy Species	% Cove	Size Class	DBH	Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	Designated snowmobile trail runs through stand. Ash/beech salvage
	Sugar Maple	75	Log/Pole	12	105		Beech	High	Variable	Sapling	harvest completed in 2017 (Emmet Salvage #10, 52-113-13). Post-
	Red Maple	15	Log/Pole	11		Su	gar Maple	Medium	Variable	Sapling	harvest BA is about 76 sq. ft. Stand also received selection harvests
	Basswood	7	Log/Pole	12		Stri	ped Maple	Low	Variable	Tall Shrub	from 1996 to 1999.
	Black Cherry	3	Log/Pole/XLog	14		Black	Raspberry	High	< 5 feet	Tall Shrub	
						W	hite Ash	Medium	Variable	Sapling	
						Ir	onwood	Low	10 - 20 feet	Sapling	
17	17 4110 - Sugar Maple Association Sawtimber Well					228.2	105	51-80	N/A		Stand consists of high quality mixed northern hardwood, mostly sugar maple sawtimber, adjacent to Robinson Rd. and designated snowmobile
	Canopy Species	% Cove	Size Class		Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	trail. Ash/beech salvage completed 2015-16 (Emmet Salvage #8, 52-111
	Black Cherry	5	Log/Pole	12		Su	gar Maple	Medium	Variable	Sapling	13). Post-harvest BA is about 75 sq. ft. Stand also received a selection
	Yellow Birch	3	Log/Pole	12		W	hite Ash	High	< 5 feet	Sapling	harvest in 2005.
	Red Maple	2	Log/Pole	12		Blackbe	erry/Raspberry	High	< 5 feet	Tall Shrub	
	Basswood	20	Log/Pole	12			Beech	High	< 5 feet	Sapling	
	Sugar Maple	70	Log/XLog/Pole	12	105						
18	4110 - Sugar N	/laple Asso	ociation S	awtimb	er Well	28.9	95	111-140	N/A		Stand consists of lesser quality mixed northern hardwood, mostly sugar
	Canopy Species	% Cove	Size Class		Age	Sub-Ca	nopy Species	Density	Avg. Height	Size	maple sawtimber, on relatively flat ground. This stand was not included in recent ash/beech salvage cuts within this compartment because of the
	Red Maple	3	Log/Pole	12			Beech	Low	5 - 10 feet	Sapling	low ash/beech component found in this stand. Present BA is about 113
	Quaking Aspen	15	Log	14		Ir	onwood	Low	>20 feet	Sapling	sq. ft. The sugar maple understory of smaller diameter poletimber
	Basswood	12	Log/Pole	11		Sug	gar Maple	Low	>20 feet	Sapling	consists of better quality trees than those found in the overstory. Prescribe a selection harvest in this stand in 10 - 20 years. Final harvest
	Black Cherry	9	Log/Pole	11						<u></u>	Stand 19 when this stand is treated. Possibly also final harvest Stand 89
	Sugar Maple	61	Log/Pole	11	95						at that time, which is adjacent to the east in Comp. 105. Snowmobile trail runs along the west boundary of the stand
					_						nairrons along the west boundary of the Stand

trail runs along the west boundary of the stand.

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Stand	Level 4 Cover Type		s	Size Density		Acres	Acres Stand Age BA Range Man		Managed Site		General Comments
19	4130 - Aspen			Poletimber Well		4.4	47	51-80	N/A		Small aspen poletimber stand from 1975 final harvest. Average BA is
	Canopy Species	% Cove	Size Class	DBH	Age	Sub-Car	nopy Species	Density	Avg. Height	Size	about 80 sq. ft. To make this stand more merchantable to producers, final harvest this stand, to perpetuate the aspen covertype, when
	Bigtooth Aspen	100	Pole	8	47	Sug	ar Maple	Medium	10 - 20 feet	Sapling	adjacent Stand 18 is treated.
						Bigto	oth Aspen	Medium	10 - 20 feet	Sapling	
20	3205 - Mixed	d Upland S	hrub	Nonsto	cked	7.7	U	nspecified	No		Upland brush and encroaching hardwood saps and poletimber adjacent to private property and seasonal county road/snowmobile trail.
21	21 4110 - Sugar Maple Association Sawtimber W					86.6 95 51-80			N/A		Stand consists of northern hardwood sawtimber and boltwood, on rolling
	Canopy Species	% Cove	Size Class	DBH	Age	Sub-Car	nopy Species	Density	Avg. Height	Size	hills, most of which are not as steep as most hardwood stands in Emmet county. Stand received an ash/beech salvage harvest, completed in
	Black Cherry	8	Log/Pole	11		Wh	ite Ash	High	< 5 feet	Sapling	2018. Post-harvest residual BA is about 70 sq. ft.
	Basswood	6	Log/Pole	11		Iro	nwood	Low	Variable	Sapling	
	Yellow Birch	1	Log/Pole	11		Sug	ar Maple	Low	Variable	Sapling	
	Sugar Maple	85	Log/Pole/XLog	11	95	Е	Beech	High	< 5 feet	Sapling	
	· ·					Blackber	ry/Raspberry	High	< 5 feet	Tall Shrub	
22	4110 - Sugar N	/laple Asso	ociation Sa	awtimb	er Well	156.2	100	51-80	N/A		High quality mixed northern hardwood stand. Ash/beech salvage harvest
	Canopy Species	% Cove	Size Class	DBH	Age	Sub-Car	nopy Species	Density	Avg. Height	Size	completed in winter 2019-2020, (Emmet Salvage #6, 52-122-18). Post-
	Basswood	2	Log/Pole	10			ar Maple	Low	< 5 feet	Sapling	harvest BA is 71 sq. ft. Stand also received selection harvests in various parts of stand in 1997, 2005-2006, and 2011. Rolling hills with some
	Black Cherry	5	Log/Pole	10			Beech	Medium	< 5 feet	Sapling	steep slopes present. Harbor Springs Gun Club adjacent to the north.
	Yellow Birch	3	Log/Pole	12		Wh	ite Ash	High	< 5 feet	Sapling	
	Sugar Maple	90	Log/Pole	10	100			3	-	1 3	
23	4119 - Mixed No	119 - Mixed Northern Hardwoods			Poor	35.0	2 I	mmature	N/A		Mixed northern hardwood regen. Final harvest completed in winter
	Canopy Species	% Cove	Size Class	DBH	Age	Sub-Car	nopy Species	Density	Avg. Height	Size	2019/2020. Red oak and mixed conifers will be planted in areas dominated by excessive ash/beech regen following herbicide application.
	Bigtooth Aspen	13	Sapling	1			ry/Raspberry	Medium	< 5 feet	Tall Shrub	
	Black Cherry	10	Sapling	1							
	White Ash	30	Sapling	1	2						
	Yellow Birch	2	Sapling	1							
	Sugar Maple	10	Sapling	1							
	Paper Birch	10	Sapling	1							
	Beech	25	Sapling	1							
24	4111 - S.Maple, H	ard Mast A	ssociation Sa	awtimb	er Well	32.5	95	81-110	N/A		Mixed northern hardwood sawtimber, with scattered red oak, located on a
	Canopy Species	% Cove	Size Class	DBH	Age	Sub-Car	nopy Species	Density	Avg. Height	Size	very steep slope which is inoperable. No salvage harvest took place here so the original mix of northern hardwood still exists. Much of the
	Red Oak	16	Log/XLog	17			nwood	Low	10 - 20 feet	Sapling	ash/beech is dead or dying. Site condition applied.
	Sugar Maple	62	Log/Pole/XLog	11	95	Pap	er Birch	Low	10 - 20 feet	Sapling	
	Paper Birch	10	Log/Pole	13		Sug	ar Maple	Medium	10 - 20 feet	Sapling	
	White Ash	3	Log/XLog/Pole	13			ite Ash	Low	10 - 20 feet	Sapling	
	Yellow Birch	6	Log/Pole	12		Strip	ed Maple	Low	5 - 10 feet	Sapling	
					——————————————————————————————————————	<u>'</u>	<u> </u>			1 0	

10 - 20 feet

Medium

Sapling

Beech

Log/Pole/XLog 12

Beech

3

Beech

Compartment: 101 Year of Entry: 2024



Stand	Level 4 Co	over Type	S	Size De	nsity	Acres Stand Age I	BA Range	Managed S	Site	General Comments
105	4199 - Other Mixed	d Upland D	eciduous Po	oletimb	er Well	32.1 75	111-140	N/A		Lesser quality hardwood poletimber, with a considerable amount of paper
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size	birch located on some steep slopes. Lesser amounts of mixed hardwood and big-toothed aspen sawtimber also present. Scattered large red oak
	Sugar Maple	32 L	Log/Pole/Sap	10		Beech	Medium	10 - 20 feet	Sapling	sawtimber can also be found in stand. Adjacent to private property on
	Paper Birch	32 Log/Pole		10	75	White Ash	Low	10 - 20 feet		west side. This stand was originally part of the Good Hart Mix (52-101-
	Beech	10	Log/Pole	10		Ironwood	Low	10 - 20 feet	Sapling	16) but was not harvested by the producer due to steep topography. Site condition applied.
	Bigtooth Aspen	26	Log	16		Striped Maple	Low	5 - 10 feet	Pole	onamon approar
						Serviceberry (Juneberry	/) Low	10 - 20 feet	Tall Shrub	
						Sugar Maple	Low	10 - 20 feet	Sapling	
121	Canopy Species	Maple Association Maple Association Size Class		DBH	l Age	97.7 95 Sub-Canopy Species	81-110 Density	N/A Avg. Height Size		Mixed northern hardwood stand, mostly sugar maple sawtimber, with sparse scattered BTA, basswood, and incidental yellow birch and black cherry on rolling hills. Lesser amounts of beech and white ash are also
	Basswood	3	Log/Pole	11	-3-	Beech	Low	Variable	Sapling	present but mostly dead/dying. This stand was included in the Emmet
	Bigtooth Aspen	2	Log	16		Ironwood	Low	Variable	Sapling	Salvage #7 sale, but this portion of the sale was never cut because of the
	Sugar Maple	95	Log/Pole	11	95	White Ash	Low	< 5 feet	Sapling	low volume of ash/beech present. Present BA is about 97 sq. ft. Stand could potentially have a selection harvest prescribed in about 20 years.
						Sugar Maple	Low	Variable	Sapling	good potentially have a selection harvest prescribed in about 25 years.
205	4199 - Other Mixed	d Upland D	eciduous Po	oletimb	er Pooi	13.2 75	1-50	N/A		Stand consists of mixed northern hardwood/aspen, that partially
	Canopy Species	% Cover	Size Class	DBH	Age	Sub-Canopy Species	Density	Avg. Height	Size	harvested as part of the Good Hart Mix (52-101-16) sale. The remaining overstory is located on the side and/or tops of ridges that were deemed
	Beech	15	Log/Pole	10		Ironwood	Low	10 - 20 feet	Sapling	to steep to cut by the producer. The result is a scattered, sparse
	Paper Birch	40	Pole	10	75	White Ash	Medium	< 5 feet	Sapling	overstory throughout the stand. The areas that were harvested will be
	Bigtooth Aspen	15	Log	16		Serviceberry (Juneberry	/) Low	10 - 20 feet	Tall Shrub	monitored for regen composition/density. Scattered large red oak sawtimber can also be found in stand. Adjacent to private property on
	Sugar Maple	30	Lag/Dala/Can	4.0		011 114 1	1	E 40.5 1	D -	, , , , ,
	Sugai Maple	30	Log/Pole/Sap	10		Striped Maple	Low	5 - 10 feet	Pole	west side.

Medium

Variable

Sapling