

Compartment Review Presentation

Gaylord Forest Management Unit

Compartment 52031 Entry Year 2021 Acreage: 283

County Otsego

Management Area: Grayling Outwash

Revision Date: 2019-03-04

Stand Examiner: Matthew Foster

Legal Description:

T31N R4W Section 35 and 36

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:

The major soil types throughout the compartment are Kalkaska sand, Islandlake sand, and Blue Lake loamy sand.

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

Stand land is interspersed with private land being developed extensively for residential within close proximity of the Gaylord City limits.

Unique Natural Features:

None.

Archeological, Historical, and Cultural Features:

None known.

Special Management Designations or Considerations:

There are six gas wells with associated buried pipelines throughout this compartment.

Watershed and Fisheries Considerations:

There are no bodies of water in this compartment.

Wildlife Habitat Considerations:

This compartment consists of mostly upland habitat consisting of aspen, red pine, and northern hardwoods. This area contains deer, grouse woodcock, snowshoe hare, and wild turkey.

Mineral Resource and Development Concerns and/or Restrictions

Sand/gravel pits are not located in the vicinity, but there is good sand & gravel potential within the compartment. The compartment has been developed for Antrim Shale gas production and nearly all state-owned mineral rights in this area are currently under lease and in production. There is no known metallic mineral potential in this part of the state.

Vehicle Access:

The road system leading to all the gas wells are currently gated which limits vehicle traffic. All other past logging roads have been closed with berms.

Survey Needs:

None.

Recreational Facilities and Opportunities:

There are no designated recreation facilities or trails in this compartment.

Fire Protection:

Additional Compartment Information:

The following reports from the Inventory are attached:

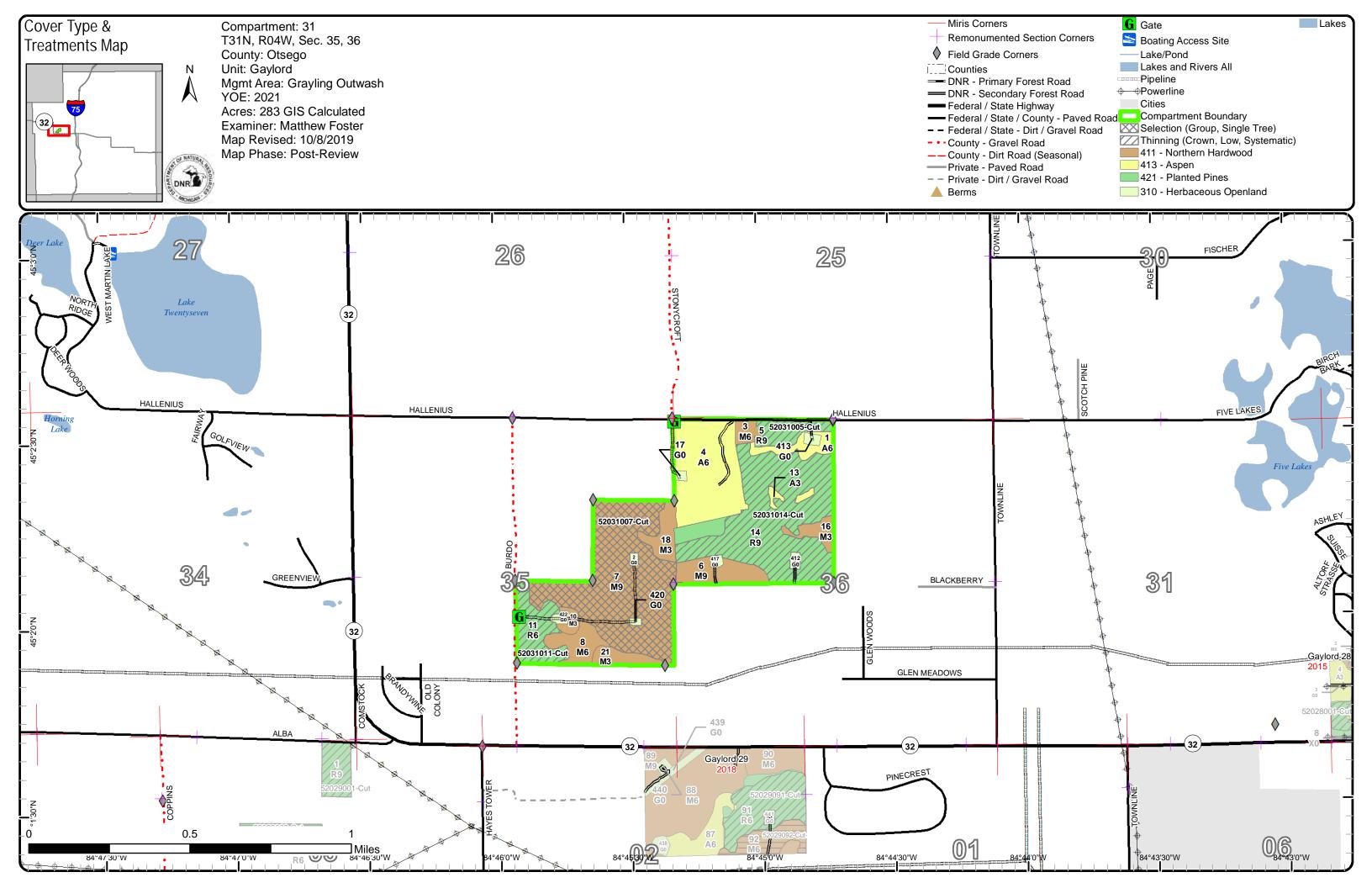
Total Acres by Cover Type and Age Class
Cover Type by Harvest Method
Proposed Treatments – No Limiting Factors
Proposed Treatments – With Limiting Factors
Stand Details (Forested and Nonforested)
Dedicated and Proposed Special Conservation Areas
Site Condition Details

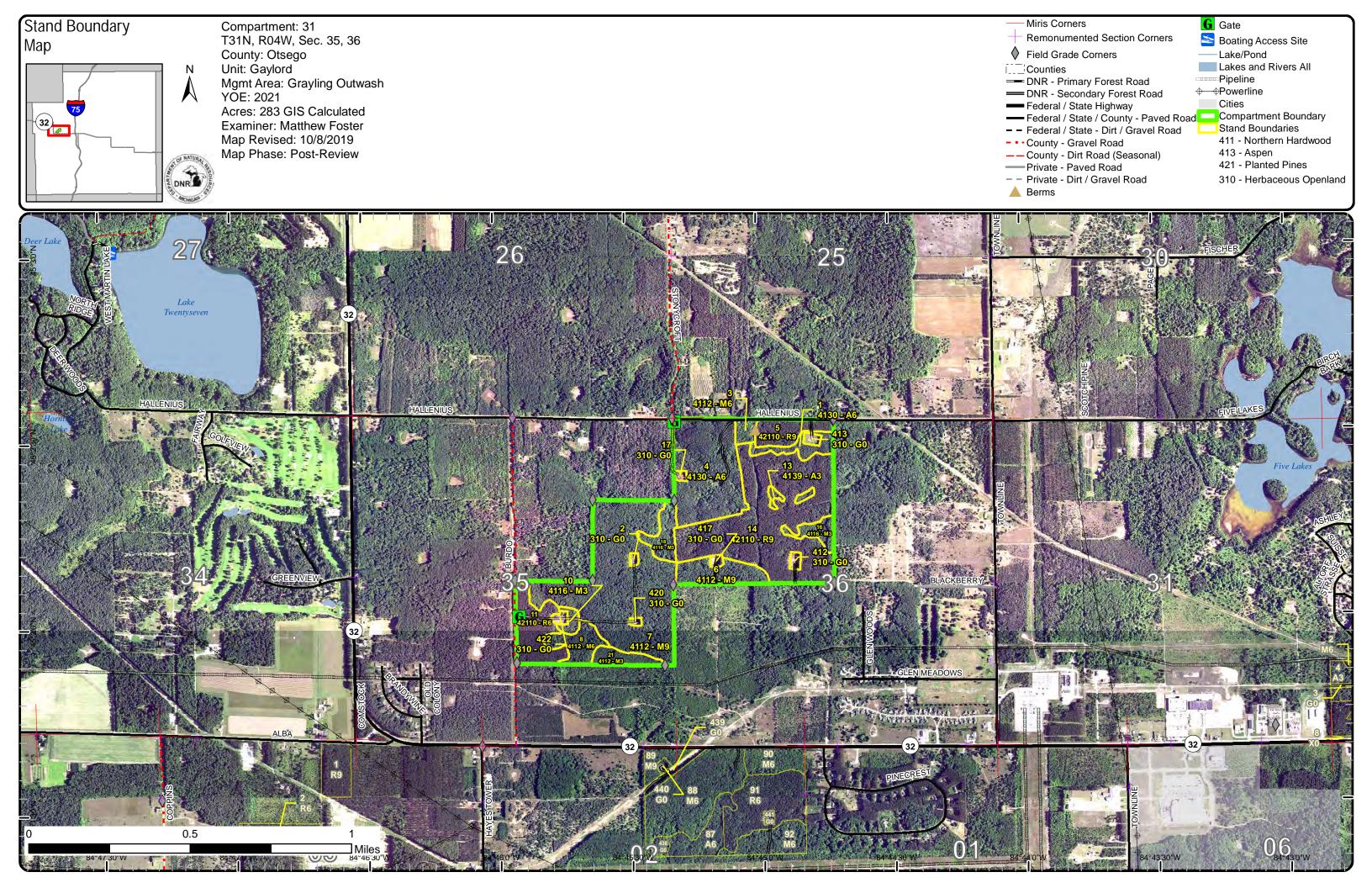
The following information is displayed, where pertinent, on the attached compartment maps:

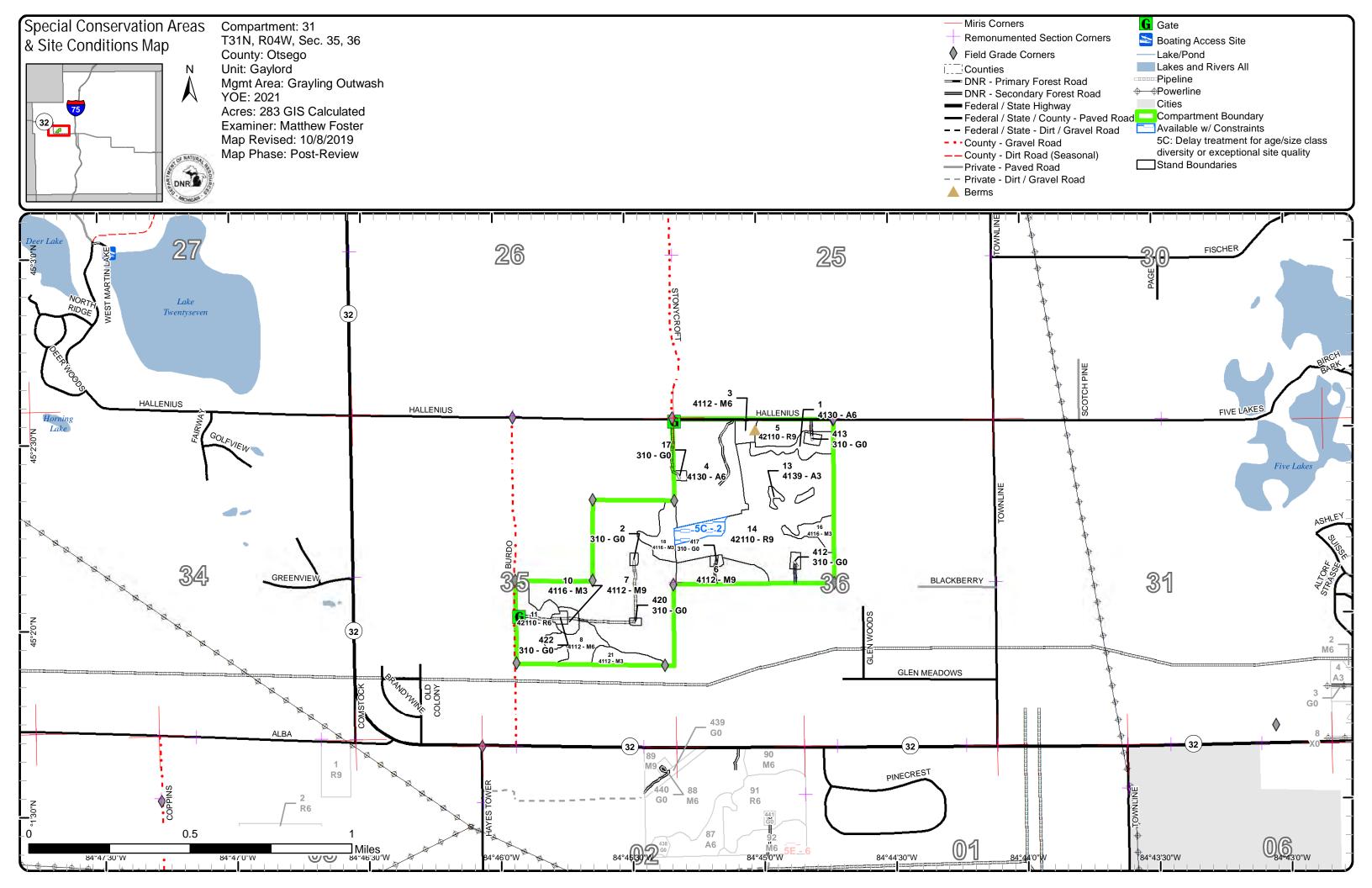
Base feature information, stand boundaries, cover types, and numbers

Proposed treatments
Site condition boundaries

Details on the road access system







Gaylord Mgt. Unit

Matthew Foster: Examiner

Compartment 31 Year of Entry 2021



Age Class

	Age.	? / c	\$ /s	. / -	, & &	§ /§		, , , , ,				\$ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	N / N	, , , , , , , , , , , , , , , , , , ,			J. LES	St Jug	Se Line	,
Aspen	0	0	0	8	41	0	0	0	0	0	0	0	0	0	0	0	0	0	49	
Herbaceous Openland	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	
Northern Hardwood	0	0	10	5	0	0	0	0	91	12	0	0	0	0	0	0	0	6	124	
Red Pine	0	0	0	0	0	0	0	105	0	0	0	0	0	0	0	0	0	0	105	
Total	6	0	10	13	41	0	0	105	91	12	0	0	0	0	0	0	0	6	284	



Report 2 – Treatment Summary

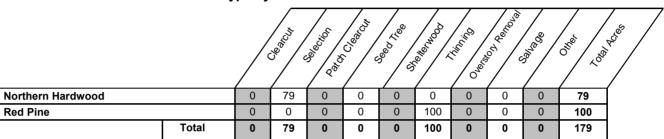
Gaylord Mgt. Unit Year of Entry: 2021

Acres of Harvest

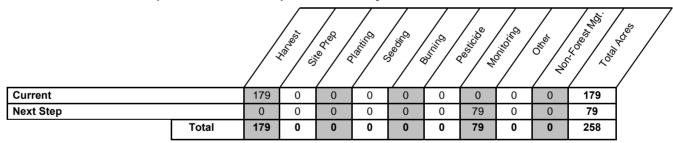
Compartment 31
Total Compartment Acres: 283

Commercial Harvest - 179 Harvests with Site Condition - 0 Next Step Harvest - 0 Habitat Cut - 0

Cover Type by Harvest Method



Proposed and Next Step Treatments by Method



Specs:

Next Step Treatments:

Acceptable Regen:

Other

Comment:

Proposed Start Date: 10/1 /2020

52031014-Cut 73.9 42110 - Planted Sawtimber 64 171-Harvest Crown Thinning 4211 - Planted Even-Aged Draft Field Red Pine Well 200 Red Pine Boundary

Habitat Cut: No Site Condition:

Prescription Thin stand down to 120 BA, focus on removing suppressed and low quality trees.

Specs:

Next Step

Treatments:

Acceptable

Regen:

Other There will be some areas with lower BA that won't need a lot of marking. Treatment shape has been adjusted to exclude the biggest area with

Comment: low pine BA.

Proposed Start Date: 10/1 /2020

Total Treatment Acreage Proposed:

178.9

Report 4 – Site Conditions

Compartment: 31

Gaylord Mgt. Unit

Matthew Foster : Examiner Year of Entry: 2021

Availa	ability for	r Managemer	nt							
Total	Total Acres Acres Avail		Acres		Dominant Site Conditions					
Acres	Available	With Condition	Not Available		5C					
49	49	0	0	Aspen						
6	6	0	0	Herbaceous Openland						
124	124	0	0	Northern Hardwood						
105	100	5	0	Red Pine	5					
283	278	5		Total Forested Acres	5					
	98%	2%	0%	Relative Percent						

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

Site No.	Dominant Site Cond Availability	Dominant Site Condition	Acres	Other Site Condition	Other Site Condition	Other Site Condition	Other Site Condition
2	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	5	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						

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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				

Mgt. Unit Compartment:
Year of Entry

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 Type Description
Area

ERA = Ecological Reference Area

HCVA = High Conservation Value Area

SCA = Special Conservation Area

Report 7 - Stands

Compartment: 31 Year of Entry: 2021



Stan	d Level 4 C	over Type		Size De	nsity	Acres	Stand Age	BA Range	Managed S	Site	General Comments
1	4130	- Aspen	I	Poletimb	er Well	6.2	25	Immature	N/A		Harvested in 1994, just entering pole size class.
	Canopy Species Bigtooth Aspen Black Cherry Red Maple	% Cover 60 25 10	Size Class Pole/Sapling Sapling/Pole Pole/Sapling	5 e 4	Age 25						
2	310 - Herbac	eous Open	ıland	Nonsto	cked	0.6			No		Gas well, Breitburn St. Elmira 1-35.
3	4112 - Maple Asso	, Beech, Ch ociation	nerry	Poletimbe	er Well	3.0	82	81-110	N/A		Small northern hardwood stand, some hemlock and beech in the northern half by the road.
	Canopy Species	% Cover	Size Class	DBH	Age	Cano	py Species	Density	Avg. Height	Size	
	Sugar Maple	68	Pole/Log	9	82	I	Beech	Low	5 - 10 feet	Sapling	
	Red Maple	25	Log/Pole	10		Iro	onwood	High	5 - 10 feet	Sapling	
						Sug	jar Maple	Low	Variable	Sapling	
						Н	emlock	Low	5 - 10 feet	Sapling	
4	4130	- Aspen	1	Poletimb	er Well	40.6	37	Unspecified	N/A		Aspen mixed in with some pockets of hardwood, a couple of open U type areas included.
	Canopy Species	% Cover	Size Class	DBH	Age	Cano	py Species	Density	Avg. Height	Size	aleas included.
	Quaking Aspen	45	Pole	7	37	Blad	ck Cherry	Medium	5 - 10 feet	Sapling	
	Bigtooth Aspen	25	Pole	7		Hawt	horn (spp.)	Trace	5 - 10 feet	Tall Shrub	
	Red Maple	15	Pole/Log	8			ch Hazel	Low	5 - 10 feet	Tall Shrub	
	Black Cherry	10	Pole	7		Sug	jar Maple	Low	5 - 10 feet	Sapling	
						I	Beech	Low	5 - 10 feet	Sapling	
5	42110 - Pla	nted Red P	ine	Sawtimbe	er Well	9.6	65	141-170	N/A		Third row thinning completed in 1994, thinned again in 2001. Nice pine, dense understory, average BA of 162 from five plots.
	Canopy Species	% Cover	Size Class	DBH	Age	Cano	py Species	Density	Avg. Height	Size	defise diffuersiory, average BA or 102 from five piots.
	Red Pine	100	Log/Pole	12	65	Sug	jar Maple	Medium	5 - 10 feet	Sapling	
							Beech	Medium	5 - 10 feet	Sapling	
						Re	d Maple	Medium	10 - 20 feet	Sapling	
						Blad	ck Cherry	Medium	5 - 10 feet	Sapling	
6	4112 - Maple Asso	, Beech, Ch ociation	nerry	Sawtimbe	er Well	12.0	78	81-110	N/A		Thinned in 2003, good amount of sugar maple in the understory. East half of stand is a little higher quality and bigger diameters. This stand is
	Canopy Species	% Cover	Size Class	DBH	Age	Cano	py Species	Density	Avg. Height	Size	similar to stand 7, just has slightly smaller average diameters and lower BA. Northwest corner has a small pocket that looks like it was clearcut
	Sugar Maple	37	Log/Pole	10		Sug	jar Maple	High	5 - 10 feet	Sapling	(1/2 acre).
	Red Maple	55	Log/Pole	11	78	-	Beech	Low	5 - 10 feet	Sapling	
						Blac	ck Cherry	Low	5 - 10 feet	Sapling	
					+						

Report 7 - Stands

Compartment: 31 Year of Entry: 2021



Stand	Level 4 C	over Type		Size De	nsity	Acres	Stand Age	tand Age BA Range Managed Site		Site	General Comments					
7	4112 - Maple Asso	, Beech, Ch ociation	nerry	Sawtimber Well		79.0	78	111-140	N/A		Selection cut completed in 2003, understory is variable but overall is mostly sugar maple. Average BA is 117 from 14 plots. Overstory is					
	Canopy Species % Cover Size Clas		Size Class	DBH	Age	Cano	py Species	Density	Avg. Height	Size	mostly red maple, log sized trees, a couple of elm and aspen found throughout the stand.					
	Red Maple	60	Log/Pole	13	78		jar Maple	High	Variable	Sapling	tilloughout the stand.					
	Sugar Maple	30	Log/Pole	11		Iro	onwood	Medium	5 - 10 feet	Sapling						
8	4112 - Maple Asso	, Beech, Ch ociation	nerry	Poletimb	er Well	9.1	82	81-110	N/A		Low quality, maple and cherry. Good amount of sugar maple in the understory coming up. Cherry is mostly near the two track at the north					
	Canopy Species	% Cover	Size Class	DBH	Age	Cano	py Species	Density	Avg. Height	Size	end.					
	Black Cherry	25	Pole/Log	9		I	Beech	Low	5 - 10 feet	Sapling						
	Red Maple	45	Pole/Log	9	82	Sug	ar Maple	Medium	Variable	Sapling						
10	4116 - Mixed N.	Hardwood -	- Aspen	Sapling	ı Well	2.4	16	Immature	N/A		Harvested in 2003, this stand is a big depression leading down to stand 422.					
	Canopy Species	% Cover	Size Class	DBH	Age						422.					
	Quaking Aspen	30	Sapling	3	16											
	Black Cherry	30	Sapling	3												
	Sugar Maple	20	Sapling	3												
	Red Maple	20	Sapling	3												
11	42110 - Pla	inted Red P	ine	Poletimb	er Well	16.4	60	201+	N/A		Third row thinned in 2002, good quality. BA is high, average of 210 from					
	Canopy Species	% Cover	Size Class	DBH	Age	Cano	py Species	Density	Avg. Height	Size	3 plots.					
	Red Pine	99	Pole/Log	9	60	I	Beech	Low	5 - 10 feet	Sapling						
						Sug	jar Maple	Low	5 - 10 feet	Sapling						
						Re	d Maple	Low	5 - 10 feet	Sapling						
						Blac	ck Cherry	Low	5 - 10 feet	Sapling						
13	4139 - Aspen,	Mixed Deci	duous	Sapling	y Well	1.9	25	Immature	N/A		Two small pockets of aspen and mixed hardwood, these were harvested					
	Canopy Species	% Cover	Size Class	DBH	Age						in 1994 when stand 14 was third row thinned.					
	Quaking Aspen	30	Sapling/Pol	e 4	25											
	Bigtooth Aspen	15	Sapling/Pole	e 4												
	Black Cherry	30	Sapling/Pol	e 4												
	Red Maple	15	Sapling/Pole	e 4												
	Sugar Maple	10	Sapling/Pol	e 3												
14	42110 - Pla	inted Red P	ine	Sawtimb		78.9	64	171-200	N/A		Third row thinning completed in 1994, thinned again in 2002. Pockets of A3,M3 from the thinnings. Pockets of lower BA red pine and more					
	Canopy Species	% Cover	Size Class	DBH	Age	Cano	py Species	Density	Avg. Height	Size	aspen, hardwood regeneration in the southwest corner of the stand.					
	Red Pine	100	Log	12	64	Re	d Maple	High	10 - 20 feet	Sapling	Average BA for the stand is 177 from 13 plots. A few areas with					
							Beech	Medium	10 - 20 feet	Sapling	porcupine damage observed.					
						Sug	jar Maple	Low	10 - 20 feet	Sapling						
						Bigto	oth Aspen	Low	10 - 20 feet	Sapling						

Report 7 - Stands

Compartment: 31 Year of Entry: 2021



Stand	Level 4 C	over Type		Size De	nsity	Acres	Stand Age	BA Range	Managed \$	Site	General Comments
16		ed N. Hardwood - Aspen			Well	5.1	25	Immature	N/A		Harvested in 1994, aspen and red maple mix with some cherry. Close to being a pole stand. Looks like a buffer of mature trees was left along the
	Canopy Species	% Cover			Age						private property.
	Quaking Aspen	30	Sapling/Pole		25						
	Red Maple	35	Sapling/Pole		25						
	Black Cherry	20	Sapling	3							
	Bigtooth Aspen	10	Sapling/Pole	9 4							
17	310 - Herbac	eous Open	land	Nonsto	cked	0.8		Immature	No		Gas well, Riverside Energy St. Elmira A 1-36.
18	4116 - Mixed N.	Hardwood -	- Aspen	Sapling		7.4	16	Immature	N/A		Harvested in 2003, mixed stand of aspen and hardwood.
	Canopy Species	% Cover	Size Class	DBH	Age	Cano	py Species	Density	Avg. Height	Size	
	Quaking Aspen	25	Sapling	3	16	Wit	ch Hazel	Low	5 - 10 feet	Tall Shrub	
	Sugar Maple	20	Sapling	2				,	ı		_
	Black Cherry	20	Sapling	4							
	Red Maple	20	Sapling	2							
	Bigtooth Aspen	15	Sapling	4							
21	4112 - Maple Asso	, Beech, Ch	nerry	Sapling	Well	5.6	20	Immature	N/A		OPIC - FMD: Wind storm 10-1998 caused most of hardwood to be blown down or damaged. Salvage completed the spring of 1999 by Northern
	Canopy Species	% Cover	Size Class	DBH	Age	Cano	py Species	Density	Avg. Height	Size	Timberlands. thick mostly cherry
	Black Cherry	50	Sapling	3	20	Wit	ch Hazel	Low	5 - 10 feet	Tall Shrub	
	Sugar Maple	25	Sapling	2				1	ı	1	
412	310 - Herbac	eous Open	land	Nonsto	cked	1.0			No		Gas well, Breitburn St. Elmira 7-36.
413	310 - Herbac	eous Open	land	Nonsto	cked	1.1		Immature	No		Gas well, Riverside Energy State Elmira A2-36.
417	310 - Herbac	eous Openi	land	Nonsto	cked	0.8			No		Gas well, Breitburn St. Elmira 10-36.
420	310 - Herbac	eous Open	land	Nonsto	cked	0.5			No		Gas well, Breitburn St. Elmira 2-35.
422	310 - Herbac	eous Open	land	Nonsto	cked	1.1			No		Gas well, Breitburn St. Elmira 4-35.