

## **Compartment Review Presentation**

**Gwinn Forest Management Unit** 

Compartment 32098 Entry Year 2021 Acreage: 1,732 County Alger

Management Area: Chatham-Autrain Moraines

**Revision Date:** 2019-07-25

Stand Examiner: Robert Tylka

#### Legal Description:

T45N R21W Sections 10,11, 13, 14 and 15

#### **Identified Planning Goals:**

Timber production and wildlife habitat management, including large forest openings maintained as part of the Autrain Wildlife Management Area

#### Soil and topography:

The topography features rolling upland terrain divided by numerous low, wet areas with streams and drainages through them.

Soils in this compartment consist primarily of sandy loams on the uplands and silty loams on the transitions into the lowlands, and drainage is generally good through these. The bottomlands feature muck soils with impeded drainage, resulting in limited operability for crossing these areas year-round. Numerous ponds dot the landscape across all levels of terrain, including the uplands.

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

The compartment boundaries exclude privately-owned lands, but there are permanent residences and hunting camps on all three of the county roads used to access the state lands in this compartment. Numerous forest roads connected to the county roads allow reasonably good access during the dry season, but this may become challenging during wetter periods. Recreational use of the state lands includes hunting, trapping and possibly fishing, and some limited use for snowmobiling by local residents.

#### Unique Natural Features:

Black Creek, Johnson Creek and several of their tributaries run through the compartment. In general these drain eastward into the Autrain Reservoir.

#### Archeological, Historical, and Cultural Features:

No known archeological sites, and nothing of notable cultural or historic value beyond local family histories.

#### **Special Management Designations or Considerations:**

N/A

#### Watershed and Fisheries Considerations:

Fisheries Values: Good

Fisheries Concerns: Black Creek and Johnson Creek both run through this compartment, along with various tributaries. All of these streams are designated trout streams and historically have support natural brook trout populations and providing natal habitat for juvenile brook trout. The proposed treatment in stands 15 and 70 should buffer the stream a minimum of 200 ft. This should help discourage any additional beaver activity in these corridors.

#### Wildlife Habitat Considerations:

Compartment 098 is found within the Chatham/AuTrain Management Area; on a Fluted Ground Moraine in northeastern Marquette County and western Alger County. The dominant Natural Communities are mesic northern forests and poor conifer swamps. This Management Area provides one of the best opportunities in the WUP State Forest system to manage for large grasslands and associated wildlife species. Large opening management, along with sharecropped agricultural practices will continue to be a high priority here. Wildlife management issues in this management area will focus on maintaining large open land complexes; habitat fragmentation (patch size for openings); and mowing and burning practice modifications (for the eastern compartments).

The following have been identified as featured species for the Chatham/AuTrain Management Area: bobolink, Canada goose, northern goshawk, and sharp-tail grouse.

#### Mineral Resource and Development Concerns and/or Restrictions

No commercial development other than the rock/sand pit located in stand 18, in the NENE of section 11. Products from this pit have been used to improve local roads for access to timber resources.

#### Vehicle Access:

Alger County administers & maintains East Cold Springs Rd., East Louds Spur Rd., and Johnson Creek Rd. Access to most of the compartment is reasonably good via forest roads connected to these three gravel roads, but may be challenging during periods of wet weather. Crossing drainages and wetlands is an issue, and access across private lands is also a concern for a couple of timber stands. At this time there is no vehicle access to stand 27, located in the SE 1/4 of section 14; it may become accessible if the timber to the south in Cmp 32097 is treated.

#### **Survey Needs:**

For activities proposed during this entry interval, it appears that either field-grade corners or previously accepted boundaries are in place.

#### **Recreational Facilities and Opportunities:**

There are no developed recreational facilities in this compartment. Local use includes hunting, fishing and trapping along with minor use for snowmobiling along county and forest roads.

#### **Fire Protection:**

The timber types in this compartment are generally classified as relatively low-risk fuel types. Access to some areas would be challenging and may be limited to walk-in efforts. Numerous acceptable water sources are present in or very close to the compartment.

#### Additional Compartment Information:

Timber management in this compartment is focused on aspen and northern hardwoods. Both of these timber associations offer the potential for high volume and good quality timber products.

Insect and disease issues observed locally include beech bark disease and losses to the spruce budworm. Emerald ash borer has not been reported in this immediate vicinity, but black ash is common in the low, wet areas. It is not regarded as a highly productive timber species here, so potential losses are of greater concern for their impacts to wildlife and biodiversity values.

#### 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



Stand Boundary Map

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DNR

(94)

Compartment: 98 T45N, R21W, Sec: 10, 11, 13-15 County: Alger Unit: Gwinn Mgmt Area: Chatham-Autrain Moraines YOE: 2021 Acres: 1,732 GIS Calculated Examiner: Robert Tylka Map Revised: 8/16/2019 Map Phase: Web-Post





Campground 310 - Herbaceous Openland 500 - Water Intermittent Stream 622 - Lowland Shrub Island in Lake or River 623 - Emergent Wetland 629 - Mixed non-forested wetland Perennial River 710 - Sand/Soil Lakes and Rivers All Compartment Boundary Stand Boundaries 411 - Northern Hardwood 413 - Aspen 419 - Mixed Upland Deciduous 611 - Lowland Deciduous Forest 613 - Lowland Mixed Forest 211 - Cropland



# Report 1 – Total Acres by Cover Type and Age Class

Gwinn Mgt. Unit

## Robert Tylka : Examiner





Age Class

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Aspen	0	3	19	113	140	136	0	0	0	0	0	0	0	0	0	0	0	51	462
Cropland	61	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	61
Herbaceous Openland	74	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	74
Lowland Aspen/Balsam Poplar	0	0	0	0	23	0	0	0	0	10	0	0	0	0	0	0	0	0	33
Lowland Deciduous	0	0	0	0	0	0	0	0	0	9	0	6	0	0	0	0	0	89	104
Lowland Mixed Forest	0	0	0	0	0	0	0	0	0	0	0	37	0	0	0	0	0	5	42
Lowland Shrub	182	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	182
Marsh	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Mixed Upland Deciduous	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	6
Northern Hardwood	0	0	0	0	0	0	0	39	22	0	0	0	0	0	0	0	0	699	760
Sand, Soil	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Water	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
Total	324	3	19	113	163	136	0	45	22	19	0	43	0	0	0	0	0	844	1731

Acres of Harvest



#### Compartment 98 Total Compartment Acres: 1,732

Commercial Harvest - 467 Harvests with Site Condition - 2 Next Step Harvest - 0 Habitat Cut - 0

## Cover Type by Harvest Method

			C Les	Colocition at or	n Central	Contraction of the second	Let noo	One of the other of the other of the other of the other othe	(en option of the second secon	offener	Solution of the second	Poles -
Aspen		123	9	0	0	0	0	0	0	0	131	ĺ
Herbaceous Openland		2	0	0	0	0	0	0	0	0	2	
Lowland Aspen/Balsam Poplar		10	0	0	0	0	0	0	0	0	10	
Northern Hardwood		0	247	0	0	0	79	0	0	0	326	
	Total	135	256	0	0	0	79	0	0	0	470	

## Proposed and Next Step Treatments by Method

			IS. LOL	Color Color	Outin o	Color Color	and a second	NA COLOGIC	ining single	No No	ion di	Sec. Astronomy
Current		470	0	0	0	0	0	0	0	114	584	
Next Step		0	0	0	0	0	114	389	0	349	852	
	Total	470	0	0	0	0	114	389	0	463	1436	

S t		Gwinn Mgt. Unit			Re	port 3	Treatme	nts	Compar Year of	tment: 98 Entry: 2021	DNR	
a n d	Treat Nar	ment ne	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
8	320980	08-Cut	37.0 4	110 - Sugar Maple Association	Sawtimber Well	90	111- 140	Harvest	Single Tree Selection	411 - Northern Hardwood	Uneven- Aged	Proposal
<u>Ha</u> Pre Spe	bitat Cut escription ecs:	<u>t:</u> No Select o gaps pe If encou If asper	cut to abou or SOP but intered, do n clones ar	Site Condition: at 70-90 sq.ft./acre, t vary the size to er o not cut hemlock, re found within the	with an emp acourage rec cedar, white stand they m	ohasis o ruitmer pine, o nay be	on retainir nt of less- ak or elm regenerat	ng/releasing the shade tolerant ed to increase	e best crop trees. p associates. within-stand divers	rotect any vernal j	ponding areas.	Create regen
<u>Ne</u> Tre	<u>xt Step</u> atments:	Monitor	ing, Natura	al Regen (Re-Inver	itory)							
<u>Acc</u> Re	<u>ceptable</u> gen:	Norther	n hardwoo	ds and conifers.								
<u>Oth</u> Col	<u>ner</u> mment:	BMP's a WLD - I	and/or slop Favor base	bes into drainages i swood for seed pro	may be an is duction & ha	sue alo bitat fo	ong the so r cavity no	outhern & westers.	ern boundaries of t	ne stand. Buffer a	ll drainages pe	r the SOP
Pro	posed Sta	art Date:	10/1 /	2020								
10	320980	10-Cut	40.1	4130 - Aspen	Poletimber Well	45	111- 140	Harvest	Clearcut with Retention	413 - Aspen	Even-Aged	Proposal
<u>Pre</u> Spe <u>Ne</u> Tre	escription ecs: <u>xt Step</u> eatments:	Clearcu elm and Treatme bounda Monitor	t with rete l oak; subi ent bounda ries. ing, Natura	ntion: Cut all asper merchantable sprud aries already reflec al Regen (Re-Inver	n and others ce & fir may t buffers alor ttory)	down t also be ng the s	o 2" DBH e retained. steeper slo	except for the opes and wetla	following - If encou ands to avoid most	ntered retain all h	emlock, white ⁄IP issues alon	pine , cedar, g the stand
<u>Acc</u> Re	<u>ceptable</u> gen:	Aspen a	and conife	rs.								
<u>Oth</u> Col	<u>ner</u> mment:	Winter of Sale ac Addition WLD - F nesters	cut only du cess via E nal BMP is Retention s	le to access across ast Cold Springs R sues might be pres should also include	s the lowland d. sent within th some large	l areas le stand r asper	d and mus 1 - trees v	st be addresse vith forked crov	d during t-sale prep wns are particularly	valuable for rapto	r nesting sites	and/or cavity
Pro	posed Sta	art Date:	10/1 /	2020								
15	320980	15-Cut	27.3	4130 - Aspen	Poletimber Well	44	81-110	Harvest	Clearcut with Retention	413 - Aspen	Even-Aged	Proposal
<u>Ha</u> Pre Spe	bitat Cur escription ecs:	<u>t:</u> No Clearcu vernal p becomii	t to regene oonding are	Site Condition: erate the aspen. Re eas, and may also nt.	etention pocl include area	kets (3- s where	10% of th e the less	e area but not -frequently occ	limited to this amore curring species (nor	unt) should be use thern hardwoods a	ed to protect dr and/or conifers	ainages and ) are already
<u>Ne</u> Tre	<u>xt Step</u> atments:	Monitor	ing, Natura	al Regen (Re-Inver	itory)							
<u>Acc</u> Re	<u>ceptable</u> gen:	Aspen,	with a mix	of hardwood and s	softwood.							
<u>Oth</u> Col	<u>ner</u> mment:	Reserve WLD - F	e white pin Retention :	e, hemlock, cedar, should also include	elm and oal some large	k if any r asper	are enco 1 - trees v	untered in this vith forked crov	stand. wns are particularly	valuable for rapto	r nesting sites	and/or cavity

Proposed Start Date: 10/1 /2020



				Gwinn	Mat Upit		Ba	nort 2	Trootmo	nto			OF MATURA
S t				Gwiiii	Mgt. Ont		Re	ports	Treatme	#III.5	Compart Year of	ment: 98 Entry: 2021	
a n d	Treat Na	ment me	Acres	s Co	Stand verType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
24	320980	24-Cut	133.7	4110 - S Ass	Sugar Maple sociation	Sawtimber Well	100	111- 140	Harvest	Single Tree Selection	411 - Northern Hardwood	Uneven- Aged	Proposal
<u>Hat</u> <u>Pres</u> <u>Spe</u>	bitat Cu scription cs:	t: No Select of which of If encou where a species Any asp cherry a	cut to a t an be pr untered, appropria present oen clone and pape	Site arget res oblemat do not c ate to rec as may l er birch i	Condition: sidual of 80-5 ic in this are ut hemlock, cruit the less be regenerat f possible.	90 BA. Crea a. cedar, white shade-tolera ed to increa	te reger pine, y ant spec se withi	n gaps pe ellow birc cies of the n-stand d	r SOP but be o h, elm or oak. e northern hard iversity but this	careful to maintain of Maintain and encou dwood association, s is not considered	enough BA around urage species dive and by keeping he a high priority. End	them to avoid rsity by using althy example courage sprou	d blowdown, larger gaps es of all ting of black
<u>Nex</u> Trea	<u>t Step</u> atments:	Monitor	ing, Nati	ural Reg	en (Re-Inver	ntory)							
<u>Acc</u> Reg	eptable en:	Norther	n hardw	oods an	d associated	conifers.							
<u>Othe</u> Con	<u>er</u> nment:	Hilly, ro that sur WLD - I	lling terr mmer log Favor ba	ain - dur gging is a isswood	ing sale layo a probability, for seed pro	ut, consider so efforts to duction and	excludi avoid habitat	ng areas rutting an for cavity	that are too st d other source nesters.	eep for standard log s of erosion will be	gging operations. C critical.	Given the terra	iin it is likely
<u>Pro</u> p	posed Sta	art Date:	10/1	/2020									
26	320980	26-Cut	11.2	4110 - S Ass	Sugar Maple sociation	Sawtimber Well	70	111- 140	Harvest	Single Tree Selection	411 - Northern Hardwood	Uneven- Aged	Proposal
Hat Pres Spe	scription cs:	t: NO Select of which of If encou- but if ou gaps which species Any asp cherry a	cut to a t an be pr untered, utting any here app present oen clone and pape	Site arget res oblemat do not c y cherry, propriate es may l er birch i	<b>Condition:</b> sidual of 80-9 ic in this are ut hemlock, provide ade to recruit the be regenerat f possible.	90 BA. Crea a. cedar, white quate gap s e less shade ed to increa	te reger pine, b pace ar -toleran se withi	n gaps pe asswood, round it to it species n-stand d	r SOP but be elm or oak. C ensure sprou of the norther iversity but this	careful to maintain of Only cut cherry if the ting. Maintain and e n hardwood associa s is not considered	enough BA around re is evidence of d ncourage species ation, and by keepi a high priority. End	them to avoid isease such a diversity by u ng healthy ex courage sprou	d blowdown, as black knot; sing larger amples of all ting of black
<u>Nex</u> Trea	<u>t Step</u> atments:	Monitor	ing, Nati	ural Reg	en (Re-Inver	ntory)							
<u>Acc</u> <u>Reg</u>	<u>eptable</u> en:	Norther	n hardw	oods and	d associated	conifers.							
<u>Othe</u> Con	<u>er</u> nment:	During	sale layo	out, watc	h for BMP's	and possible	e vernal	ponds, p	lus rolling terra	ain where erosion p	roblems may occu	r if logged whe	en snow-free.
<u>Prop</u>	posed Sta	art Date:	10/1	/2020									
28	320980	28-Cut	20.8	4112 Beec Ass	2 - Maple, h, Cherry sociation	Sawtimber Well	90	111- 140	Harvest	Single Tree Selection	411 - Northern Hardwood	Uneven- Aged	Proposal
<u>Hat</u> Pres Spe	<u>pitat Cu</u> scription cs:	<u>t:</u> No Select of cut elm adequa Protect If prese	cut to a r , oak, he te gap s any verr ent, aspe	Site esidual emlock, o pace arc nal pond n clones	Condition: basal area o cedar, or whi bund it to ens s and watch may be reg	f approximat te pine. Only sure sproutir for drainage enerated to	ely 80 s / cut ch g. s & oth increase	sq. ft./acre erry if the er BMP is e stand di	e. Emphasize : re is evidence ssues near the iversity.	stand improvement of disease such as non-forested wetla	and crop tree rele black knot; but if o nds. These may re	ase. If encour cutting any ch equire buffers.	itered, do not erry, provide
<u>Nex</u> Trea	<u>t Step</u> atments:	Monitor	ing, Nati	ural Reg	en (Re-Inver	ntory)							
<u>Acc</u> Reg	eptable en:	Norther	n hardw	oods and	d associated	conifers.							
<u>Othe</u> Con	<u>er</u> nment:	Stand a diversit	appears f y. Mainta Favor ve	to be on ain targe	a high qualit t basal area h and bassw	y site for ha to avoid issu ood for see	rdwood ues with d produ	production blow down ction and	on. Variable reg vn as this is a habitat for cay	gen gap sizes may notable problem in /ity nesters.	be used as approp this area.	riate to increa	ise species
<u>Pro</u> p	posed Sta	art Date:	10/1	/2020									

S t a			Gwinn Mgt. Unit		Re	eport 3	Treatme	nts	Compart Year of	tment: 98 Entry: 2021	DNR
a n Trea d Na	itment ame	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
29 32098	029-Cut	48.2	4139 - Aspen, Mixed Deciduous	Poletimber Medium	44	81-110	Harvest	Clearcut with Retention	413 - Aspen	Even-Aged	Proposal
Habitat Cu Prescription Specs:	ut: No Clearcu not cut	ut with rete any heml	Site Condition ention- during sale lock, cedar, white pi	<u>:</u> layout identi ine, or oak if	fy patch encou	nes where ntered.	no aspen is pr	esent and retain 3-	5 acres, wherever	it is convenier	nt to do so. Do
<u>Next Step</u> <u>Treatments</u>	Monito	ring, Natu	ral Regen (Re-Inve	ntory)							
<u>Acceptable</u> <u>Regen:</u>	Aspen	+ all othe	r species present.								
<u>Other</u> Comment	Starting	g this star	nd over to manage a	aspen on an	even-a	ged basis	i.				
	WLD- ( around Favor E food, fu	Only cut E it to ensu Basswood iture cavit	Black Cherry (2%) if ire sprouting - mast I (3%) –seed product ty trees.	there is evic production ction and ca	lence o – black vity nes	f disease bear, ruff ters- pilea	such as black l ed. ated woodpecke	knot; but if cutting a er, ruffed grouse an	any cherry, provide nd Yellow Birch (29	e adequate gap %) – seed soui	o space rce and wildlife
Proposed S	tart Date	<u>:</u> 10/1	/2020								
42 32098	042-Cut	10.2	6112 - Lowland Aspen	Poletimbe Well	r 80	81-110	Harvest	Clearcut	6112 - Lowland Aspen	Even-Aged	Proposal
Habitat Cu Prescription Specs: Next Step Treatments	ut: No Clearcu encour forked Monito	ut - cut all itered. Alc or irregula ring, Natu	Site Condition trees down to 1" Do ong the edges of the ar crowns. These ar ral Regen (Re-Inver	<u>:</u> BH to regen e stand, con: e important ntory)	erate th sider re for pote	e aspen. tention to ential rapto	Do not cut heal reserve some or nests and/or	thy black cherry, el of the larger aspen cavity nesters.	lm, hemlock, ceda , placing emphasis	r, white pine o s on retaining t	r oak if hose with
<u>Acceptable</u> <u>Regen:</u>	Aspen										
<u>Other</u> <u>Comment:</u>	Cut in v	winter or c	dry summer.								
Proposed S	tart Date	<u>:</u> 10/1	/2020								
45 32098	045-Cut	23.6	4110 - Sugar Maple Association	e Sawtimber Well	100	111- 140	Harvest	Single Tree Selection	411 - Northern Hardwood	Uneven- Aged	Proposal
Habitat Cu	<u>ut:</u> No		Site Condition	<u>:</u>							
Prescription Specs:	Selection DBH pl species space a be reta	on cut to a lus creatir s and do r around it f ined unles	a target basal area ng regeneration gap not cut yellow birch. to ensure sprouting. ss they appear to be	of 80-90 sq. s and releas Only cut ch If encounte e high risk (e	ft./acre, sing poo erry if tl red, do example	with emp ckets of ac here is ev not cut o e - large d	hasis on estab dvanced regene idence of disea ak, elm, hemloo iameter spruce	lishing a balanced a eration where appro se such as black k ck, white pine or ce likely to blow over.	age/size-class disi opriate. Favor the i not; but if cutting c dar; other conifers )	tribution of tree infrequently-oc cherry, provide s such as sprue	es up to 22" ccurring adequate gap ce and fir may
<u>Next Step</u> Treatments	Monito	ring, Natu	ral Regen (Re-Inve	ntory)							
<u>Acceptable</u> <u>Regen:</u>	All Nor	thern hard	lwood species and	associated o	conifers						
<u>Other</u> Comment:	Good ti factors WLD - potenti	imber on a and/or po place em al cavity ti	a high-quality site, s porer form. phasis on favoring t rees.	so marking s basswood fo	hould p r seed	blace emp productior	hasis on retaini n/cavity nesters	ing the most vigoro , and retain some o	us trees while rem other large diamet	noving others v er/low-quality t	vith risk trees for
Proposed S	tart Date	<u>:</u> 10/1	/2020								



			(	Gwinn M	lgt. Unit		Re	port 3	Treatmo	ents	Compar	tment: 98	A CO MATURAL OF
S t								-			Year of	Entry: 2021	
a n d	Treat Na	ment me	Acres	Sta Cove	and erType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
50	320980	50-Cut	21.1 4	4110 - Su Asso	gar Maple ciation	Sawtimber Well	70	111- 140	Harvest	Single Tree Selection	411 - Northern Hardwood	Uneven- Aged	Proposal
Hak Pres Spe	<u>bitat Cu</u> scription <u>cs:</u>	t: No Select of which c Do not black kr using la example Any asp birch if	cut to a ta an be pro cut bassw not; but if irger gaps es of all s ben clone possible.	Site C arget residublematic vood, elm cutting a s where a pecies pu s may be	ondition: dual of 80-s in this area , hemlock, ny cherry, ppropriate esent. regenerat	90 BA. Creat a. , cedar, white provide adec to recruit the ed to increas	e rege e pine o juate g e less s e withi	n gaps pe or oak if e ap space shade-tole in-stand d	r SOP but be ncountered in around it to e rant species o iversity but thi	careful to maintain this stand. Only co nsure sprouting. M of the northern hard is is not considered	enough BA around ut cherry if there is Aaintain and encou dwood association, d a high priority. En	d them to avoid evidence of dis rage species d and by keepin courage sprou	l blowdown, sease such as iversity by g healthy ting of paper
<u>Nex</u> Trea	<u>t Step</u> atments:	Monitor	ing, Natu	ral Reger	n (Re-Inver	ntory)							
<u>Acce</u> Reg	eptable en:	Norther	n hardwo	ods and a	associated	conifers.							
<u>Othe</u> Com	<u>er</u> nment:	Some h BA too SOP.	illy terrain low espec	n in place cially nea	s so be ca r regen ga	reful during s ps, as blowd	sale lay own is	/out - avoi often a pr	id areas likely oblem in this	to have erosion pr area. Vernal ponds	oblems. Also be ca s may be present a	areful not to dro nd require prot	op the residual ection per
<u>Pro</u> p	posed Sta	art Date:	10/1	/2020									
58	320980	58-Cut	16.3 ا	4119 - Northern	Mixed Hardwoods	Sawtimber s Well	80	81-110	Harvest	Crown Thinning	g 411 - Northern Hardwood	Uneven- Aged	Proposal
Hat Pres Spe Nex Trea	bitat Cu scription cs: t Step atments:	<u>t:</u> No Cut to r ponds. black ki	emove th Do not cu not is clea	<u>Site C</u> e survivir it yellow b arly visible	ondition: ng aspen w birch, heml e. If cherry	hile emphas lock, cedar, v or paper bird	izing s vhite p ch is cu	tand impro ine, oak o ut provide	ovement/crop r elm if encou adequate gap	tree release for th ntered. Retain blac space for it to spr	e best quality hardv ck cherry unless ev out.	voods. Protect idence of disea	any vernal ase such as
<u>Acce</u> Reg	eptable en:	Norther	n hardwo	ods									
<u>Othe</u> Con	<u>er</u> nment:	Target I lower th WLD - I	basal area ian 70. No Favor bas	a should o special sswood fo	generally b effort to re or seed pro	be managed generate the duction and	per SC asper potenti	P for nort compone al habitat	hern hardwoo ent is recomm for cavity nes	ds, but removing t ended but it is not ters.	he aspen may resu necessary to avoid	It in areas whe regenerating	re it drops clones either.
<u>Prop</u>	posed Sta	art Date:	10/1	/2020									
62	320980	62-Cut	7.0	4130 -	Aspen	Poletimber Well	44	81-110	Harvest	Clearcut with Retention	413 - Aspen	Even-Aged	Proposal
Hat	<u>oitat Cu</u>	<u>t:</u> No		<u>Site C</u>	ondition:	<u>.</u>							
Pres Spe	<u>scription</u> <u>cs:</u>	Clearcu vernal p becomi	it to reger oonding a ng domin	ierate the reas, and ant.	e aspen. Re may also	etention pock include area	kets (3∙ s wher	-10% of th e the less	e area but no -frequently oc	t limited to this am curring species (no	ount) should be us orthern hardwoods	ed to protect d and/or conifers	ainages and are already
<u>Nex</u> Trea	<u>t Step</u> atments:	Monitor	ing, Natu	ral Reger	n (Re-Inver	ntory)							
<u>Acc</u> Reg	eptable en:	Aspen,	with a mi	x of hard	wood and s	softwood.							
<u>Othe</u> <u>Con</u>	<u>er</u> nment:	Reserve	e white pi	ne, hemlo	ock, cedar,	, spruce, bas	swood	, elm and	oak if any are	encountered in th	is stand.		

Proposed Start Date: 7 /12/2019

		(	Gwinn Mgt. Unit		Re	eport 3	Treatmei	nts	Compar	tment: 98	and the second
S									Year of	Entry: 2021	DNR
t a n d	Treatmen Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
67	32098067-0	ut 8.5	4130 - Aspen	Poletimber Well	44	81-110	Harvest	Group Selection	411 - Northern Hardwood	Uneven- Aged	Proposal
<u>Hab</u>	oitat Cut: No	)	Site Condition	<u>:</u>						0	
Pres Spec	<u>cription</u> Cut <u>cs:</u> thin hem	all merchant to about 70 lock, cedar,	able aspen. If areas BA keeping the bes pine, paper birch, e	s where more at quality trees alm or oak.	e than 8 s in pla	30 sq.ft./ao ace. Other	cre of hardwood wise cut hardwo	ls and/or conifer ba oods/conifers only a	asal area are pres as needed to acco	ent (not includ ess the aspen	ling the aspen) . Do not cut
<u>Next</u> Trea	<u>t Step</u> Mor <u>Itments:</u>	itoring, Natu	ral Regen (Re-Inve	ntory)							
<u>Acce</u> <u>Reg</u>	eptable_Nor en:	hern hardwo	oods with a conifer o	component is	desira	ble. Aspe	n regen is acce	ptable.			
<u>Othe</u> Com	er Poc iment: layo	kets of advar ut and later v	nced hardwood reg while administering	en are import the timber sa	ant to ale.	the succe	ss of this conve	rsion, so emphasis	on protecting the	em is critical b	oth during sale
Prop	osed Start D	<u>ate:</u> 10/1	/2020								
69	32098069-0	ut 62.3	4110 - Sugar Maple Association	e Poletimber Well	70	111- 140	Harvest	Crown Thinning	411 - Northern Hardwood	Uneven- Aged	Proposal
<u>Hab</u>	oitat Cut: No	)	Site Condition	<u>:</u>						0	
Pres Spec	cription Thir	to about 80	sq.ft./acre of basal	area with an	empha	asis on sta sirable do	and improvement als However c	nt and releasing the	e best crop trees.	Maintaing spe idual basal are	ecies diversity
0000	blov	down is a po	otentially serious pr	oblem when s	soils ar	re saturate	ed in this area. I	Favor basswood for	seed production	and potential	habitat for
	cavi blac	ty nesters. D k knot is pre	o not cut hemlock, sent; but if cherry is	cedar, pine, j s cut provide a	paper i adequa	oirch, eim ate gap sp	or oak if encou	ntered. Do not cut o sprouting.	cherry unless evic	lence of disea	se such as
<u>Next</u> Trea	<u>t Step</u> 										
<u>Acce</u> Reg	eptable_Alls en:	pecies prese	ent with an emphas	is on northerr	n hardv	voods.					
<u>Othe</u> Com	er Not i <u>ment:</u> clas of e	a lot of trees s distribution ntries to read	over 12" DBH in m is developed over th the site's potentia	uch of the sta successive e al for producti	and, so ntries. ion of c	o keeping Although quality sav	larger trees for this stand is alr vlogs.	their wildlife values eady recognized as	could be prioritiz being unevenag	ed until a bette ed, it may still	er age/size take a couple
Prop	osed Start D	ate: 10/1	/2020	·		. ,	0				
402	32098402-0	<b>ut</b> 2.4	3102 - Grass	Nonstocked	1	Unspec ified	Harvest	Clearcut	31021 - Cool Season Grass		Proposal
<u>Hab</u>	oitat Cut: No	<b>)</b>	Site Condition	: BMPs							
<u>Pres</u> Spec	<u>cription</u> Cut	all trees dow	/n to 2" DBH - Oper	ning maintena	ance in	conjuncti	on with the corr	nmercial timber sale	e surrounding this	small opening	<b>]</b> .
<u>Next</u> Trea	<u>t Step</u> Non <u>Itments:</u>	ForestMgt, C	Other - Specify								
<u>Acce</u> <u>Reg</u> e	eptable_N/A en:										
<u>Othe</u> Com	er iment:										
Prop	osed Start D	ate: 10/1	/2020								
406	32098406-1	IF 49.7	3102 - Grass	Nonstocked	ł	Unspec	NonForestMgt	Herbaceous/Crop	2113 - Forage		Draft Field
<u>Hab</u> Pres	<u>bitat Cut:</u> No <u>scription</u> Per	<b>)</b> WLD specs.	Site Condition	<u>:</u>		nied			Crops		Doundary
<u>Next</u> Trea	<u>t Step</u> Pes <u>ttments:</u>	icide, Other	- Specify; NonFor	estMgt, Fruit	Tree/S	Shrub Plar	nting; ; NonFo	prestMgt, Mowing;	NonForestMgt, N	Nowing	
<u>Acce</u> Reg	eptable_ en:										
<u>Othe</u> Com	er Mai Iment:	ntained as pa	art of the Autrain Go	oose preserve	Ð.						
Prop	osed Start D	ate: 7 /26	6/2019								

S t	Gwinn Mgt. Unit S t a			R	eport 3	Treatme	nts	Compar Year of	tment: 98 Entry: 2021	AND	
a n d	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
407	32098407- AuTrain North Unit	3.4	3102 - Grass	Nonstocke	ed	Unspec ified	NonForestMgt	Herbaceous/Crop /Grass Planting	2113 - Forage Crops		Draft Field Boundary
<u>Habi</u> Presc Specs	tat Cut: No ription The go s: done w These	al is to ma ith the hel	Site Condition anage these openin p of sharecropping will be managed for	<b>1:</b> ngs for wildlin g, through the pr forage crop	fe and t e use of os or ot	o create a f contract her herba	a partnership wit s, or with DNR p aceous openland	h the local agricultu personnel. I types. Mechanica	ral community. Il treatment may	The work nee	ded will be g, disking, and
	plantin require not to b	g of forage d. Comm be used. N	e crops. Other pra nercial fertilizer and Management goals	tivestock m may require	nclude anure a e replan	herbicide are accep ting of for	use, fertilizing, table fertilizer op rage crops as ne	mowing, frost-seedi otions however, bio- eeded. Annual mai	ng, and other no solids (human w ntenance of thes	rmal agricultur aste water trea se openings wil	al practices as atments) are I be performed.
	In addi	tion, Wildli	ife Division would a	also like to p	lant tree	es or shru	bs within these	openings to enhanc	e wildlife habitat		
	All fore are nat	st certifica ive or are	ation rules will be for considered non-in	ollowed. No vasive.	GMO p	plants will	be planted. Al	l trees, shrubs, and	seed mixes will	be selected to	ensure they
<u>Next S</u> Treati	<u>Step</u> Pestici <u>ments:</u> Mowing	de, Other - g; NonFo	- Specify; NonFo restMgt, Mowing	restMgt, Her	baceou	s/Crop/Gi	rass Planting; 1	NonForestMgt, Fruit	Tree/Shrub Plai	nting; NonFor	estMgt,
<u>Acce</u> p <u>Rege</u> i	<u>otable</u> n:										
<u>Other</u> <u>Comr</u>	nent:										
Propo	sed Start Date	: 7 /26/	/2019								
410	32098410-NF	61.3 2	2113 - Forage Crop	os Nonstocke	ed	Unspec ified	NonForestMgt	Herbaceous/Crop /Grass Planting	2113 - Forage Crops		Draft Field Boundary
<u>Habi</u> Presc Specs	<u>tat Cut:</u> No ription Annual <u>s:</u>	work by s	Site Condition	<u>l:</u> 19.				-			
<u>Next S</u> Treatr	<u>Step</u> Pestici ments:	de, Other ·	- Specify; NonFo	restMgt, Frui	t Tree/S	Shrub Pla	nting; NonFore	estMgt, Mowing; No	onForestMgt, Mo	wing	
<u>Accep</u> <u>Rege</u> i	<u>otable</u> n:										
<u>Other</u> Comn	Percen	t to Treat	= 100%								
Propo	osed Start Date	<u> </u>	/2019								
Ac	Total Treatme creage Propos	ent 5 ed:	84.1								

#### Robert Tylka : Examiner

Compartment: 98 Year of Entry: 2021

## Availability for Management

Total	Acres	Acres Avail	Acres	D	omina	nt Site	e Cono	ditions	5	
Acres	Available	With Condition	Not Available		2B	2G	2H	3J	3L	ed
463	397	0	66	Aspen				66		0
61	61	0	0	Cropland						
74	74	0	0	Herbaceous Openland				0		
33	32	0	1	Lowland Aspen/Balsam Poplar				1		
104	58	8	38	Lowland Deciduous	8	9	11	12	6	
42	0	0	42	Lowland Mixed Forest		37	5			
182	4	0	177	Lowland Shrub		25	0	153		
1	0	0	1	Marsh				1		
6	0	0	6	Mixed Upland Deciduous				6		
760	708	0	52	Northern Hardwood			21	28	4	
2	2	0	0	Sand, Soil						
4	3	0	2	Water		2				
1,732	1,338	8	386	Total Forested Acres	8	73	37	266	9	0
	77%	0%	22%	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 Cond Availability	Dominant Site Condition	Acres	Other Site Condition	Other Site Condition	Other Site Condition	Other Site Condition
1	Unavailable	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	21	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
2	Available	2B: Unknown if access through adjacent landowner(s) is possible	8	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						

# Report 4 – Site Conditions

Compartment: 98

Robert Tylka : Examiner

Gwinn Mgt. Unit

Year of Entry: 2021

3	Unavailable	3L: Other wildlife concerns	4	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: Hold for undisturbe	ed closed-canopy habitat near J	ohnson (	Creek.			
4	Unavailable	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	11	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
5	Unavailable	2H: Blocked by physical obstacle (e.g. upland stand in a lowland area)	5	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
6	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	36	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
7	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	206	Unspecified	Unspecified	Unspecified	Unspecified
	Comments: Crossings will requ	ire appropriate measures for bo	oth strear	n protection and access	suses.		
8	Unavailable	3L: Other wildlife concerns	6	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						

	( Robert	Gwinn Mgt. Unit Tylka : Examiner		Report 4 – Site Cor	ditions	Compartment: 98 Year of Entry: 202	21
9	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	11	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
10	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	37	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
11	Unavailable	3J: Water quality / BMPs (stream, river, or lake)	49	Unspecified	Unspecified	Unspecified	Unspecified
	Comments:						
13	Unspecified	Unspecified	0				
	Comments:						
14	Unspecified	Unspecified	0				
	Comments:						



#### 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	Spring Wetlands Riparian Area	Spring Seep	SCA	10
<b>Comments</b> Johnson Creek tributaries	Spring Wetlands Riparian Area	Spring Seep	SCA	169

Compartment: 98 Year of Entry 2021



## Report 6 – EXISTING SPECIAL CONSERVATION AREA DETAILS

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

Conservatio Area	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 speci- 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	ons that allow naturally-reproduced or lies to persist from year to year. Suitable by are relatively deep, have substantial the state. Such lakes are established by Order 200.
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.	itions that allow naturally-reproduced or ies (e.g., slimy sculpin) to persist from se conditions due to substantial are established by Director's action and
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 (th High and Hog Islands, all state owned land on Beaver, South Fo Wildlife Research Area, the 3,000 acre Hunt Creek Fisheries Re Nursery, and over 144,000 acres of Military Lands.	r research, or other purposes. They 0 acre Houghton Lake Wildlife Research at includes most of Garden Island, all of x and North Fox Islands), the Cusino search Station, the 125 acre Wyman
SCA	Riparian Area	A transitional area between aquatic and terrestrial ecosystems in influences the aquatic ecosystem and vice-versa. Because of the streams and open water wetlands, riparian areas harbor a high o communities are ecologically and socially significant in their effer as aesthetics, habitat, bank stability, timber production, and their	n which the terrestrial ecosystem e unique conditions adjacent to lakes, liversity of plants and wildlife. Riparian cts on water quality and quantity, as well contribution to overall biodiversity.

Report 7 – Stands

Gwinn Mgt. Unit



1 DN

Stand	Level 4 C	over Type	:	Size De	nsity	Acres	Stand Age	BA Range	Managed S	Site	General Comments	
1	4116 - Mixed N.	Hardwood	- Aspen S	Sawtimb	er Well	38.9	80	81-110	N/A		Stand appears to have some odd history - apparently it was cut hard with the intention of converting it to aspen but there must have been many	
	Canopy Species	% Cover	Size Class	DBH	Age	Cano	py Species	Density	Avg. Height	Size	hardwood poles left. These are now log-sized trees and have reproduced	
	Sugar Maple	58	Log/Pole	10	80	Sug	ar Maple	Full	Variable	Sapling	a generation of maple poles and regen; but quality is an issue in some of	
	Quaking Aspen	30	Pole/Log	9	44	Ba	sswood	Low	Variable	Sapling	the larger maples, as they were probably open-grown. Sugar maple now	
						Bal	lsam Fir	Low	Variable	Sapling	occupied by a mix of guaking aspen and balsam poplar. There are	
						Whit	e Spruce	Low	Variable	Sapling	scattered pockets where spruce/fir is dominant, and numerous lower, wet	
						Re	d Maple	Low	Variable	Sapling	swales where ash and red maple are more common - this is especially	
2	4112 - Maple, Asso <b>Canopy Species</b> Sugar Maple Red Maple	, Beech, Ch ociation % Cover 45 45	nerry P Size Class Pole/Sap/Log Pole/Sap/Log	Poletimb DBH 9 9	er Well <b>Age</b> 80 80	1.4 Cano Sug Re	80 <b>py Species</b> ar Maple d Maple	111-140 Density Full Full	N/A <b>Avg. Height</b> Variable Variable	Size Sapling Sapling	south A few birches and elm were also observed in the stand. The terrain is rolling and hilly in places, with the wetter swales in between. Several small ponds are included within the stand. Density and species composition are variable, with the basal area presently averaging just over 100 sq.ft./acre. Overall the site itself appears to be capable of producing decent quality hardwood logs, and indicator species support this. The second- generation maple has reasonably good form in most places where they are growing on dryer ground above the swales. Last cut in mid 90's.	
					L	Bal	lsam Fir	Low	Variable	Sapling		
3	6117 - Lowland Con	Deciduous iferous	, Mixed P	oletimb	er Poor	9.4	88	1-50	N/A		Wet area with scattered trees and lowland brush. Appears to be inoperable in most of the stand. Some patches of denser timber are present on the clightly driver areas of the stand, but these are year along	
	Canopy Species	% Cover	Size Class	DBH	Age	Cano	py Species	Density	Avg. Height	Size	growing and the site indices suggest that commercial timber	
	Red Maple	33	Pole/Sap/Log	7	88	Та	g Alder	Medium	5 - 10 feet	Tall Shrub	management is impractical.	
	Black Ash	33	Pole/Sapling	5	88	Wil	low spp.	Medium	Variable	Sapling		
	Balsam Fir	20	Sapling/Pole	4								
4	4110 - Sugar N	laple Asso	ciation P	oletim	er Well	23.8	100	51-80	N/A		Good quality sugar maple & basswood, last thinned YOE 2001. Basal	
	Canopy Species	% Cover	Size Class	DBł	Age	Cano	py Species	Density	Avg. Height	Size	the regen gaps created with the last cut. The density of the understory is	
	Sugar Maple	80	Log/Pole	12	100	Sug	ar Maple	Medium	Variable	Sapling	extremely variable.	
	Basswood	20	Log/Pole	10		Bal	lsam Fir	Low	Variable	Sapling		
						Irc	onwood	Low	Variable	Sapling		
5	4130	- Aspen		Saplin	y Well	18.6	16	Immature	N/A		Cut prescribed from YOE 2001 entry. Now fully-stocked with aspen regen	
	Canopy Species % Cover Size Class DBH Age		Age	Canopy Species		Density	Avg. Height	Size	about 2-5" DBH, with a few trees already reaching merchantable size.			
	Quaking Aspen	100	Sapling/Pole	3	16	Sug	ar Maple	Medium	Variable	Sapling	maple seedlings, with a few ironwood and balsam fir mixed in.	

## Report 7 – Stands

Compartment: 98 Year of Entry: 2021 DNR DNR

Stand	d Level 4 C	over Type		Size Dens	ity	Acres	Stand Age	BA	Range	Managed S	ite	General Comments
6	4130 Canopy Species Quaking Aspen	- Aspen <b>% Cover</b> 100	Size Class Sapling	Sapling V DBH A	/ell <b>.ge</b> 6	3.2	6	lmr	mature	N/A		Fully-stocked aspen regen about 0-2" DBH , 12-18' tall. No developed understory yet other than raspberry and other herbaceous plants.
7	629 - Mixed nor	n-forested v	vetland	Nonstock	ed	24.9		Uns	pecified	No		Non-forested wetland, including seasonally-flooded areas in the eastern end of this stand. Water levels appear to fluctuate rapidly throughout the area. Several small pockets of merchantable timber are present on elevated knobs above the flood zone, but these are inaccessible.
8	4110 - Sugar N	/laple Assoc	ciation	Sawtimber	Well	38.6	90	11	1-140	N/A		Good quality northern hardwoods averaging about 120 sq.ft./acre of
	Canopy Species	% Cover	Size Class	DBH A	qe	Cano	py Species		Density	Avg. Height	Size	basal area. Scattered conifers and aspen along the fringes of the stand
	Sugar Maple	75	Log/Pole	12	90	Sug	ar Maple		Medium	Variable	Sapling	
	Basswood	18	Log/Pole	12		Irc	onwood		Medium	Variable	Sapling	
			0			Ba	lsam Fir		Low	Variable	Sapling	
						Sug	ar Maple		Low	Variable	Pole	
9	4110 - Sugar N	laple Assoc	ciation	Poletimber	Well	16.5	80	8	1-110	N/A		Northern hardwoods on rolling terrain, last cut in the mid-90's. Scattered
	Canopy Species	% Cover	Size Class	DBH A	ge	Cano	py Species		Density	Avg. Height	Size	quality, but this may be the result of past management as the site itself
	Sugar Maple	83	Pole/Log	9	30	Sug	ar Maple		Full	Variable	Sapling	features cobbly sandy loam soils with acceptable drainage and habitat
	Basswood	12	Log/Pole	10		Ba	lsam Fir		Low	Variable	Sapling	types (AVO/AOC) that suggest the potential for higher quality hardwood
												spots.Avg BA is variable but generally around 80-120 sq.it./acre in most of the stand. On the eastern edge, there is an area of about 3 acres where the stand is more of a conifer-hardwood regen mix on slightly lower and flatter terrain, and the BA is generally lower; most of the spruce is located here.
10	4130	- Aspen		Poletimber	Well	68.5	45	11	1-140	N/A		Previous inventory identified this as aspen cut in 1986, but there are
	Canopy Species	% Cover	Size Class	DBH A	qe	Cano	py Species		Density	Avg. Height	Size	indicators that more age class diversity in the aspen is present
	Quaking Aspen	90	Pole/Log	9	45	Sug	ar Maple		Medium	Variable	Sapling	areas, and these now feature spruce up to 12" DBH. The age shown is a
	0 1		0			Ba	lsam Fir		Low	Variable	Sapling	reasonable guess at an average age for the aspen.
						Blac	ck Cherry		Low	Variable	Pole	NOTE: There is a major issue with blowdown and excessive breakup
						Whi	te Spruce		Low	Variable	Sapling	not likely to replace. At present the average DBH of the aspen runs
												anywhere from 7" to 11" with merchantable heights of 4 to 6+ pulpsticks. Therefore, HARVEST IS RECOMMENDED ASAP.
11	4130	- Aspen		Poletimber	Well	0.0	45	11	1-140	N/A		Previous inventory identified this as aspen cut in 1986, but there are
	Canopy Species	% Cover	Size Class	DBH A	ge	Cano	py Species		Density	Avg. Height	Size	throughout the stand. Pockets of conifers were probably left as reserve
	Quaking Aspen	90	Pole/Log	9	45	Sug	ar Maple		Medium	Variable	Sapling	areas, and these now feature spruce up to 12" DBH. The age shown is a
						Ba	lsam Fir		Low	Variable	Sapling	reasonable guess at an average age for the aspen.NOTE: There is a major issue with blowdown and excessive breakup occurring throughout
						Blac	ck Cherry		Low	Variable	Pole	this stand, resulting in lost volume that ingrowth is not likely to replace. At
						Whi	te Spruce		Low	Variable	Sapling	present the average DBH of the aspen runs anywhere from 7" to 11" with
												merchantable heights of 4 to 6+ pulpsticks. Therefore, HARVEST IS RECOMMENDED ASAP.

Stand

12

13

14

15

16

17

18

## Report 7 – Stands

Compartment: 98 Year of Entry: 2021

A NATURA

						•				Year of Entry: 2021			
d Level 4 Co	over Type	S	Size Density	Acres	Stand Age	BA R	ange	Managed S	ite	General Comments			
6229 - Mixed	l lowland s	hrub	Nonstocked	4.3	0	Unsp	ecified	No		Riparian corridor/buffer along Black creek. Some trees included but the banks and low area should be protected.			
4134 - Aspe	en, Spruce	/Fir Pol	etimber Medium	4.4	33	51	-80	N/A		Cut in 1986. Aspen/hardwoods/fir mix, generally good quality timber. BA			
Canopy Species	% Cover	Size Class	DBH Age	Cano	opy Species	Density		Avg. Height	Size	appear to be growing well but some blowdown is taking place. Beaver			
Quaking Aspen	50	Pole/Sap/Log	8 33	Ba	alsam Fir	ľ	Medium	Variable	Sapling	activity is also evident along the edge adjacent to the non-forested			
Balsam Poplar	m Poplar 12 Pole/Sapling 6						High	Variable	Sapling	wetlands.			
Balsam Fir	20	Pole/Sapling	6										
Sugar Maple	9	Pole/Sapling	6										
Red Maple	9	Pole/Sapling	6										
500 -	Water		Nonstocked	2.7		Unsp	ecified	No		Flooded area/pond - water level appears tp vary somewhat throughout the seasons.			
4130	- Aspen	P	oletimber Well	45.1	44	81-	·110	N/A		Aspen showing signs of breakup such as conks, blowdown and other			
Canopy Species	% Cover	Size Class	DBH Age	Cano	opy Species	D	ensity	Avg. Height	Size	been cut in 1975. The understory is generally dominated by hardwood			
Quaking Aspen	pen 80 Log/Pole 10 44				Sugar Maple			Variable	Sapling	regen.Ready to harvest now before mortality becomes a major factor.			
Sugar Maple	6	Pole/Sapling	7	Ba	alsam Fir		Low	Variable	Sapling	The aspen appears to be mature for this site and merchantable heights			
Red Maple	6	Pole/Log	8							are generally 5 - 6 pulpsucks.			
White Spruce	6	Log/Pole	10										
4130	- Aspen	P	oletimber Well	55.9	33	51	-80	N/A		Cut in the 80's - Nice stand of aspen mixed with scattered bam, black			
Canopy Species	% Cover	Size Class	DBH Age	Cano	opy Species	D	ensity	Avg. Height	Size	present but not common. Hawthorn brush is present in the small but			
Quaking Aspen	83	Pole	7 33	Su	gar Maple		High	Variable	Sapling	numerous upland semi-open areas, often mixed in with hardwood regen			
				Ba	alsam Fir		Low	Variable	Sapling	and other brush species.			
				Wh	ite Spruce		Low	Variable	Sapling	sq.ft./acre. with an additional 20+ square feet of the other species listed.			
										The understory is heavy to sugar maple with scattered conifers mixed in. Site indicator species such as leatherwood suggest that the upland areas are highly productive for aspen/hardwoods. The lower areas seem to favor a variable mix of aspen, balsam poplar, other hardwood species and spruce/fir, though few areas appear to be wet enough to limit operations			
4112 - Maple, Asso	Beech, Cl ociation	herry P	oletimber Well	7.9	70	81-	110	N/A		Cut under TS 29-01-01. Mostly sugar maple with red maple & yellow birch throughout on slightly rolling terrain. Basal area is currently			
Canopy Species	% Cover	Size Class	DBH Age	Cano	py Species	D	ensity	Avg. Height	Size	approaching 100 sq.n./acre - Mostly poles but scattered log-size trees are present. Balsam fir along the edges and around the lower spots			
Sugar Maple	73	Log/Pole	10 70	Su	gar Maple		Full	Variable	Sapling	where water collects. A small pond is included within the stand			
Red Maple	18	Pole/Log	9	Ir	onwood	ľ	Medium	Variable	Sapling	boundary. This stand is close to reaching the desired basal area to			
Yellow Birch	7	Pole/Log	9	Ba	alsam Fir		Low	Variable	Sapling	trigger the next selection cut.			
710 - S	and, Soil		Nonstocked	1.9		Unsp	ecified	No		Sand/Gravel Pit, Filling in with balm, fir, spruce, & jack pine,			

## Report 7 – Stands

Compartment: 98 Year of Entry: 2021 A MATUR

		-								Year of Entry: 2021
Stan	d Level 4 C	Cover Type	s	ize Density	Acres	Stand Age	BA Range	Managed S	Site	General Comments
19	4130	) - Aspen	Pole	etimber Medium	22.3	25	1-50	N/A		Cut in the mid-90's. Now there is about 20-40 sq.ft./acre of merchantable
	Canopy Species	% Cover	Size Class	DBH Age	Cano	py Species	Density	Avg. Height Size		aspen 5-7" DBH, with a lot of submerchantable stems still in the 3-4"
	Quaking Aspen	90	Pole	6 25	Qual	king Aspen	Mediun	n Variable	Sapling	growing as expected. Should become a fully-stocked pole stand by next
					Sug	gar Maple	High	Variable	Sapling	YOE.
					Ba	Isam Fir	Mediun	n Variable	Sapling	The true understory is heavy to sugar maple saplings 6-8' tall, with balsam fir and spruce scattered throughout. Small pockets of
										merchantable conifers and/or hardwoods are also present, and these pockets generally lack aspen regeneration. The terrain is rolling with predictable changes in species composition - more conifers in the wetter areas, etc. Somewhat steeper ground in the south end near Black Creek. The soils and habitat data suggest that this area could produce reasonably good quality hardwoods if that option is considered in the future.
20	622 - Lowland Shrub Nonstocked						Unspecified	Managed O	pening	Wet grassy areas and stream channel dropping off the open wetlands to the west and continuing eastward through the adjacent timber stands. The width of the riparian zone varies and includes pockets of timber on ground that is best left undisturbed.
21	6130 - Fir,	Aspen, Map	ole Pole	timber Medium	5.2	100	51-80	N/A		Poor quality hardwoods, appear to be very slow-growing. Apparently this
	Canopy Species	% Cover	Size Class	DBH Age	Cano	py Species	Density	Avg. Height	Size	has made any growth response negligible due to increased blowdown,
	Red Maple	50	Pole/Log	9 100	Re	ed Maple	Mediun	n Variable	Sapling	etc. Operability within the stand looks challenging, and the balsam fir
	Balsam Fir	37	Pole/Sapling	5	Ba	Ilsam Fir	Mediun	n Variable	Sapling	present appears to be the second cohort as the first was either cut or
22	4110 - Sugar I	Maple Asso	ciation Sa	awtimber Well	14.2	100	81-110	N/A		Northern hardwoods thinned last entry. This site is better than it was
	Canopy Species	% Cover	Size Class	DBH Age	Cano	py Species	Density	Avg. Height	Size	evaluated as last time (called a poor site) but it appears that prior cutting
	Sugar Maple	89	Log/Pole/XLog	12 100	Sug	gar Maple	Mediun	n Variable	Sapling	Overall this stand appears to sit on a medium-quality site for hardwood
	Basswood	10	Pole/Log	9	Ir	onwood	Low	Variable	Sapling	production, and the last thinning has improved the quality of the timber
					Ba	Ilsam Fir	Low	Variable	Sapling	considerably. The basal area is now back up into the mid-90's, and areas
										feature dense pockets of sugar maple regeneration. 0-3" DBH.
23	4110 - Sugar I	Maple Assoc	ciation Pole	timber Medium	38.7	66	51-80	N/A		Stand was aspen/hardwood mix but converted to northern hardwoods by
	Canopy Species	% Cover	Size Class	DBH Age	Cano	py Species	Density	Avg. Height	Size	but the hardwood understory is starting to fill in the canopy gaps. As a
	Sugar Maple	80	Pole/Log	9 66	Qual	king Aspen	Low	5 - 10 feet	Sapling	result crown closure and stand density are still variable but over time the
	Red Maple	10	Pole/Log	9	Sug	gar Maple	High	Variable	Sapling	stand should easily become an unevenaged hardwood stand of
	Black Cherry	Black Cherry 10 Pole 8						<sup>1</sup> reasonably good quality. There is a drainage that runs north-south in the eastern half of the stand. It appears to be seasonally wet but important as a vernal ponding area.		
24	4110 - Sugar I	Maple Assoc	ciation Sa	awtimber Well	133.7	100	111-140	N/A		Good quality sugar maple on a medium-to-high-quality hardwood site.
	Canopy Species	% Cover	Size Class	DBH Age	Cano	py Species	Density	Avg. Height	Size	The terrain is rolling and hilly. Several size classes of both logs and poles
	Sugar Maple	87	Log/Pole	14 100	Sug	gar Maple	Mediun	n Variable	Pole	(small poles and saplings) plus ironwood and others.
	Basswood	8	Log/Pole	16	Ire	onwood	Low	Variable	Sapling	

## Report 7 – Stands

Stan	nd Level 4 Cover Type Size Density					Acres	Stand Age	BA Range	Managed S	lite	General Comments
25	4130	- Aspen	F	Poletimbe	er Well	67.9	26	81-110	N/A		Young, healthy aspen just reaching merchantable size on hilly, rolling
	Canopy Species	% Cover	Size Class	DBH	Age	Cano	py Species	Density	Avg. Height	Size	terrain. Some submerchantable aspen stems still growing and may reach merchantable size. Current aspen BA averages 80 sg.ft/acre: a few
	Quaking Aspen	88	Pole/Sapling	j 6	26	Sug	ar Maple	Full	Variable	Sapling	merchantable sugar maple and balsam fir are also present. In places
	Sugar Maple	12	Sapling/Pole	e 4		Ba	lsam Fir	Low	Variable	Sapling	where the aspen is thin, 4-5" DBH sugar maple is dominant. The understory is dense M3 with sugar maple very dominant.
26	4110 - Sugar N	/laple Asso	ciation s	Sawtimbe	er Well	11.2 70		111-140	N/A		Reasonably good quality hardwood logs & poles on a high-quality
	Canopy Species	% Cover	Size Class	DBH	Age	Cano	py Species	Density	Avg. Height	Size	hardwood sile. Stand's average BA is now between 110-120.
	Sugar Maple	96	Log/Pole	12	70	Sug	ar Maple	Full	Variable	Pole	
						Ва	lsam Fir	Low	Variable	Sapling	
						Irc	onwood	Low	Variable	Sapling	
27	411 - Northern Hardwood Poletimber W				er Well	21.8	72	81-110	N/A		Old OI comments:Aspen stand converted to maple, spruce and fir. Leave for old growth, it is surrounded by streams and private land.
											YOE 2021 - Uncertain of the precise history of this stand but no reasonable access is available at this time. It could be treated if access was developed from the south or southeast, through timber in compartment 97; however that appears to be difficult and the relatively low value of the timber available by doing so makes it improbable.
											The recommendation to nominate this stand for preservation as Type 2 Old Growth and undisturbed wildlife habitat appears to be reasonable.
28	4112 - Maple Asso	, Beech, Cł ociation	nerry S	Sawtimbe	er Well	23.5 90		111-140	N/A		Good quality hardwoods, on a relatively high quality site. Basal area is approximately 117 sq. ft./acre.
	Canopy Species	% Cover	Size Class	DBH	Age	Cano	py Species	Density	Avg. Height	Size	
	Sugar Maple	57	Log/Pole	11	90	Sug	ar Maple	Medium	Variable	Pole	
	Red Maple	35	Log/Pole	12		Irc	onwood	Medium	Variable	Sapling	
						Ва	lsam Fir	Trace	Variable	Sapling	
29	4139 - Aspen,	Mixed Deci	duous Po	oletimber	Mediur	m 51.4	44	81-110	N/A		Species composition and density are highly variable with evidence that
	Canopy Species	% Cover	Size Class	DBH	Age	Cano	py Species	Density	Avg. Height	Size	resulting in multiple age classes. Overall, the aspen appears to be in
	Quaking Aspen	48	Pole	9	44	Sug	ar Maple	Medium	Variable	Sapling	relatively poor condition, balsam fir is falling out, etc. Several size classes
	Balsam Fir	12	Pole/Log/Sap	p 9		Ba	lsam Fir	Medium	Variable	Sapling	of aspen were observed. Signs of trunk rot, break up, blow down, etc.
	Red Maple	22	Sapling/Pole	e 4		Irc	onwood	Low	Variable	Sapling	
	Yellow Birch	11	Log/Pole	10	70	Re	d Maple	Medium	Variable	Sapling	
						Hazeln	ut (Beaked)	Medium	< 5 feet	Tall Shrub	
			Serviceberry (Juneberry) Low			10 - 20 feet	Sapling	g			
					-						

## Report 7 – Stands

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Stand	Level 4 C	over Type		Size Den	sity	Acres	Stand Age	BAF	Range	Managed S	ite	General Comments
30	4116 - Mixed N.	Hardwood	- Aspen F	Poletimbe	r Well	30.5	80	81	-110	N/A		Stand of mixed timber - northern hardwoods represent about 2/3 of the
	<b>Canopy Species</b>	% Cover	Size Class	DBH	Age	Cano	py Species	I	Density	Avg. Height	Size	understory is heavy to sugar maple with a mix of ironwood and balsam fir.
	Sugar Maple	48	Log/Pole	10	80	Sug	gar Maple		High	Variable	Sapling	plus a few spruce. Ground cover consists of a variety of ferns, hazelnut
	Quaking Aspen	27	Pole/Sapling	7	30	Ir	onwood		Medium	Variable	Sapling	and honeysuckle, indicating a site with reasonable potential for medium-
	Basswood	8	Pole/Log	8		Ba	alsam Fir		Medium	Variable	Sapling	ground indicates that at least one aggressive partial cut was done prior to
	Black Cherry	8	Log/Pole	10								the cutting treatment that was applied in YOE 2001.
	Balsam Fir	6	Pole/Sapling	6								
31	4191 - Mixed Upl C	and Decidu onifer	ous with F	Poletimbe	r Well	5.7	60	11 <sup>-</sup>	1-140	N/A		Small stand with a variable mix of timber on sharply rolling terrain, split into two blocks by Black Creek. There is another drainage running from
	Canopy Species	% Cover	Size Class	DBH	Age	Cano	py Species	I	Density	Avg. Height	Size	northwest to southeast through the western block that is impassable due
	Balsam Fir	30	Pole/Sap/Log	g 7		Ba	lsam Fir		Medium	Variable	Sapling	their are pockets on steep-sided ridges that have aspen over 18"DBH.
	Red Maple	50	Pole/Log	9	60	Sug	gar Maple		Medium	Variable	Sapling	along with red maple & yellow birch logs over balsam fir. Other areas are
	Quaking Aspen	12	Log/Pole	14	90				1		1	heavily dominated by balsam fir and scattered spruce, with scattered
	Yellow Birch	8	Log/Pole	10								but difficult to determine accurately.
32	6233 - V	/et Meadow	J.	Nonstoc	ked	1.2	0	Unsp	pecified	No		Low, non-forested wet meadow leading into a narrow drainage off the south end of the stand. This drainage crosses eastward through the aspen into a large non-forested wetland complex. Aerial photos suggest that water levels vary significantly throughout the seasons.
33	6220 - /	Alder/willow		Nonstoc	ked	1.7		Unsp	pecified	No		Man-made ponds - seasonally flooded, filling in with trees and brush These serve as water sources for deer etc.
34	4110 - Sugar I	Maple Asso	ciation S	Sawtimbe	r Well	18.8	80	5	1-80	N/A		Sugar maple with other hardwoods and a few balsam fir. Reasonably
	Canopy Species	% Cover	Size Class	DBH	Age	Cano	py Species	I	Density	Avg. Height	Size	good quality and the site indicators suggest potential for high-quality log
	Sugar Maple	75	Log/Pole	10	80	Sug	gar Maple		Full	Variable	Sapling	70-100, with an average in the high 80's.
	Basswood	10	Log/Pole	12		Sug	gar Maple		Low	Variable	Pole	
	Red Maple	8	Log/Pole	10			· · ·					1
35	4112 - Maple Ass	, Beech, Cł ociation	nerry S	Sawtimbe	r Well	53.1	90	81	I-110	N/A		Reasonably good hardwoods with scattered spruce & fir also present on slightly rolling terrain. Many trees 14-16" DBH onsite but the average
	Canopy Species	% Cover	Size Class	DBH	Age	Cano	py Species	l	Density	Avg. Height	Size	DBH as shown is fairly accurate. The site is generally a medium-quality hardwood site but there are many areas where the ground is somewhat
	Sugar Maple	40	Log/Pole	11	90	Sug	gar Maple		Full	Variable	Sapling	lower and wetter, and the timber's overall growth rate appears to be
	Red Maple	55	Log/Pole	11	90	Re	ed Maple		Full	Variable	Sapling	slightly lower there. The understory is fairly dense, with the maples and
						Ba	alsam Fir		Medium	Variable	Sapling	paisam fir the predominant species.Last prescribed & cut from the YOE 2001 inventory. Basal area now varies from about 70 to 110 sq ft /acre
						Yel	low Birch		Low	Variable	Sapling	but the overall average is around 93.
						Ir	onwood		Low	Variable	Sapling	
						Whi	te Spruce		Low	Variable	Sapling	
						Haze	elnut (Spp.)		Medium	< 5 feet	Tall Shrub	

## Report 7 – Stands

Compartment: 98

											Year of Entry: 2021			
Stand	Level 4 C	over Type	S	ize De	nsity	Acres	Stand Age	BA Range	Managed S	Site	General Comments			
36	6130 - Fir,	Aspen, Ma	ple Po	letimbe	er Well	37.2	105	111-140	N/A		Low, very wet area - lots of evidence that this stand is beginning to break			
	Canopy Species	% Cover	Size Class	DBH	Age	Canop	oy Species	Density	Avg. Height	Size	up but the ground appears to be virtually inoperable. Slow-growing red			
	Red Maple	45	Log/Pole	10	105	Bal	sam Fir	Medium	Variable	Sapling	have fallen out of the stand. The cedar is generally in pockets, and the			
	Balsam Fir	25	Pole/Sapling	6	50	Red	d Maple	Medium	Variable	Sapling	second cohort of balsam fir is reaching merchantable size. A few cherry,			
No	rthern White Cedar	12	Log/Pole	11	105						tamarack and even sugar maple were observed but overall timber quality			
	Black Ash	10	Pole/Sapling	6							is not impressive.			
37	6117 - Lowland Con	Deciduous iferous	, Mixed Pole	timber	Medium	11.3	100	51-80	N/A		Cut after YOE 2001 inventory - Poor quality hardwoods, poor wet access. Appears to be very similar to lowland mixed stand to the north that is surrounded by the inoperable lowland timber.			
38	3 4130 - Aspen Poletimber Wel				er Well	35.6	33	51-80	N/A		Cut in 1986. This stand features fairly good quality aspen along with			
	Canopy Species	% Cover	Size Class	DBH	Age	Canop	oy Species	Density	Avg. Height	Size	primarily a mix of sugar maple, balsam fir, and various upland and			
	Quaking Aspen	87	Pole/Sap/Log	8	33	Suga	ar Maple	Medium	Variable	Sapling	lowland brush species. BA generally falls between 50 - 90 sq.ft./acre in			
						Bal	sam Fir	Medium	Variable	Sapling	most areas, with an average of about 70. Small (1/4-1/2 acre) upland and			
					ι	Jnlisted - S	See Commer	nts Low	Variable	Tall Shrub	lowiand openings are scattered throughout the stand, along with one larger grassy opening in the eastern part of the stand. Several unmapped			
										1	drainages are also present.			
39	6113 - Lo	wland Map	le Po	letimbe	er Well	15.3	80	81-110	N/A		Hardwoods/aspen with scattered conifers on a lowland site that varies			
	Canopy Species % Cover Size Class DBH Age		Age	Canop	oy Species	Density	Avg. Height	Size	the species composition site indices and stand density vary widely from					
	Red Maple	50	Log/Pole	10	80	Red	d Maple	Full	Variable	Sapling	place to place. Overall the timber quality is medium to low. The stand's			
	Sugar Maple	15	Pole/Sapling	7	50	Sugar Maple		Medium	Variable	Sapling	basal area generally stays around 70-90 sq.ft./acre and canopy closure			
	Yellow Birch	13	Log/Pole/XLog	12		Black Ash		Low	Variable	Sapling	There is evidence of unevenaged stand structure. However the site			
	Black Ash	7	Pole/Sapling	5		Whit	e Spruce	Low	Variable	Sapling	characteristics dictate that evenaged management is a more logical			
	White Spruce	7	Log/Pole	11		Bal	sam Fir	Low	Variable	Sapling	approach, as within-stand access issues/BMP's strongly suggest that			
	Balsam Fir	6	Pole/Sapling	6							management.			
40	6112 - Lo	wland Aspe	en Pole	timber	Medium	22.7	35	81-110	N/A		Cut in '84 - low, wet site operable only under frozen winter			
	Canopy Species	% Cover	Size Class	DBH	Aae	Canor	ov Species	Density	Ava. Heiaht	Size	conditions.Timber is a mix of poplars (quaking aspen and balsam			
	Quaking Aspen	45	Pole	8	35	Bal	sam Fir	Medium	Variable	Sapling	about 93 sq ft /acre			
	Balsam Poplar	13	Pole	8		Bla	ick Ash	Low	Variable	Sapling				
	Balsam Fir	15	Pole/Sapling	7		Whit	e Spruce	Low	Variable	Sapling				
	Red Maple	10	Pole/Sapling	6		Red	d Maple	Medium	Variable	Sapling				
	Black Ash	7	Sapling	4						1 0				
41	4110 - Sugar N	/laple Asso	ciation Sa	wtimbe	er Well	27.9	80	81-110	N/A		High quality sugar maple on very gently rolling terrain. Cut in 1981 and			
	Canopy Species	% Cover	Size Class	DBH	Age	Canor	oy Species	Density	Avg. Height	Size	again in YOE 2001. Site indicators suggest high productivity for bardwood logs. Basel area is			
	Sugar Maple	97	Log/Pole	12	80	Suga	ar Maple	Medium	Variable	Sapling	presently in the high 80's/low 90's, with some areas already up over 100.			
											edge of the stand.			

## Report 7 – Stands

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Stand	nd Level 4 Cover Type Size Density				Acres	Stand Age	BA Range	Managed S	Site	General Comments		
42	6112 - Lov	vland Aspe	n F	oletimber Well	10.2	80	81-110	N/A		Mix of lower-quality sugar maple and overmature aspen on a sight that is		
	Canopy Species	% Cover	Size Class	DBH Age	Cano	py Species	Density	Avg. Height	Size	best described as a low, flat transitional zone between true upland bardwood babitat and a bottomland site. The size of the large aspen		
	Quaking Aspen	65	Log/Pole	13 80	Sug	jar Maple	Full	Variable	Sapling	(numerous trees 15-18" DBH and a few larger) indicates that this site will		
	Sugar Maple	30	Log/Pole	11					1	probably grow reasonably good aspen. It appears that the smaller aspen still surviving are now well on their way to falling out of the stand.		
43	500 -	Water		Nonstocked	1.7		Unspecified	No		Pond surrounded by wetlands		
44	4 622 - Lowland Shrub Nonstocked				0.6	0.6 Unspecified I			pening	Wet grassy area and stream channel dropping off the open grasslands to the west and continuing eastward through the adjacent timber stands. The width of the riparian zone varies and includes pockets of timber on ground that is best left undisturbed.		
45	4110 - Sugar M	laple Asso	ciation S	Sawtimber Well	23.6	100	111-140	N/A		Last selection cut in YOE 2001. Good quality sugar maple with some		
	Canopy Species	% Cover	Size Class	DBH Age	Cano	py Species	Density	Avg. Height	Size	basswood, red maple and scattered black cherry. Understory density varies widely but overall about an M2 Site indicators suggest a very high		
	Sugar Maple	80	Log/XLog/Pole	e 13 100	Sug	jar Maple	Low	Variable	Pole	quality site and for the most part the timber quality backs this up.		
	Basswood	14	Log/Pole	12	Sug	jar Maple	Medium	Variable	Sapling			
					Ire	onwood	Low	Variable	Sapling			
46	46 6118 - Lowland Deciduous v		ith Cedar S	Sawtimber Well	5.7	105	141-170	N/A		Mixed timber on a low, wet site - might be operable under hard-frozen		
	Canopy Species	% Cover	Size Class	DBH Age	Cano	py Species	Density	Avg. Height	Size	stand as undisturbed wildlife habitat as there isn't much true lowland		
	Balsam Poplar	33	Log/Pole/XLog	g 14 105	Re	d Maple	Medium	Variable	Sapling	habitat with cedar on state forest lands in this vicinity.		
No	orthern White Cedar	33	Log/Pole	10 105	Ba	lsam Fir	High	Variable	Sapling			
	Red Maple	15	Pole/Log	9 60								
	Sugar Maple	12	Pole/Sapling	7								
47	4130	- Aspen	F	oletimber Well	17.2	36	111-140	N/A		Cut around 1982-84.Now a healthy aspen pole stand with sugar & red		
	Canopy Species	% Cover	Size Class	DBH Age	Cano	py Species	Density	Avg. Height	Size	but it is not a major component. Basal area is currently averaging around		
	Quaking Aspen	70	Pole/Log	8 36	Sug	jar Maple	Full	Variable	Sapling	117 sq.ft./acre.		
	Sugar Maple	20	Pole/Log/Sap	9	Ire	onwood	Medium	Variable	Sapling	The understory is very heavily dominated by sugar maple anywhere from		
	Red Maple	7	Pole/Sapling	6	Ba	lsam Fir	Low	Variable	Sapling	0-4" DBH, forming almost pure pockets in some spots.		
48	4110 - Sugar M	laple Asso	ciation S	Sawtimber Well	57.8	80	81-110	N/A		Last cut YOE 2001.Medium to good quality hardwood site on rolling		
	Canopy Species	% Cover	Size Class	DBH Age	Cano	py Species	Density	Avg. Height	Size	maidenhair ferns and trilliums throughout, though other ferns and		
	Sugar Maple	85	Log/Pole	11 80	Sug	jar Maple	Full	Variable	Sapling	hazelnut etc. are more prevalent. Sugar maple is the dominant tree		
	Basswood	6	Log/Pole	12	Ba	Isam Fir	Medium	Variable	Sapling	species in most of the stand. Pockets of lower, wetter terrain feature a		
										pockets of aspen are surviving as well, but these are breaking up and being replaced by the hardwoods. The understory is dense in most places, and again heavily dominated by sugar maple with a mix of balsam fir and ironwood depending on the terrain and aspect.		

## Report 7 – Stands

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Stan	Level 4 C	4 Cover Type Size Density Acres Stand Age BA Range Managed Site		Site	General Comments					
49	4130		Poletimber Well	0.0	44	81-110	N/A		Aspen showing signs of breakup such as conks, blowdown and other	
	Canopy Species	% Cover	Size Class	DBH Age	Cano	py Species	Density	Avg. Height	Size	progressive mortality. Previous inventory identified the area as having been cut in 1975. The understory is generally dominated by hardwood
	Quaking Aspen	80	Log/Pole	10 44	Sug	gar Maple	Medium	Variable	Sapling	regen.Ready to harvest now before mortality becomes a major factor.
	Sugar Maple	6	Pole/Saplin	g 7	Ba	llsam Fir	Low	Variable	Sapling	The aspen appears to be mature for this site and merchantable heights
	Red Maple	6	Pole/Log	8				1		are generally 3 - 6 pulpsticks.
	White Spruce	6	Log/Pole	10						
50	4110 - Sugar I	Maple Asso	ciation	Sawtimber Well	21.1	70	111-140	N/A		Reasonably good quality hardwood logs & poles on a high-quality
	Canopy Species	% Cover	Size Class	DBH Age	Cano	py Species	Density	Avg. Height	Size	hardwood site. Stand's average BA is now between 110-120.
	Sugar Maple	96	Log/Pole	12 70	Sug	gar Maple	Full	Variable	Pole	
				· · · · · · · · · · · · · · · · · · ·	Ba	llsam Fir	Low	Variable	Sapling	
					Ire	onwood	Low	Variable	Sapling	
51	4110 - Sugar I	Maple Asso	ciation	Poletimber Well	3.7	100	111-140	N/A		Good quality sugar maple on a medium-to-high-quality hardwood site.
	Canopy Species	% Cover	Size Class	DBH Age	Cano	py Species	Density	Avg. Height	Size	M3 understory comprised of sugar maple (small poles and saplings) plus
	Sugar Maple	87	Log/Pole	14 100	Sug	gar Maple	Medium	Variable	Pole	ironwood and others.
	Basswood	8	Log/Pole	16	Ire	onwood	Low	Variable	Sapling	
52	4130	) - Aspen		Poletimber Well	6.9	33	51-80	N/A		Cut in 1986. This stand features fairly good quality aspen along with
	Canopy Species	% Cover	Size Class	DBH Age	Cano	py Species	Density	Avg. Height	Size	scattered nardwoods and spruce/fir on rolling terrain. The understory is primarily a mix of sugar maple balsam fir and various upland and
	Quaking Aspen	87	Pole/Sap/Lo	og 8 33	Sug	gar Maple	Medium	Variable	Sapling	lowland brush species. BA generally falls between 50 - 90 sq.ft./acre in
					Ba	llsam Fir	Medium	Variable	Sapling	most areas, with an average of about 70. Small (1/4-1/2 acre) upland an
					Unlisted -	See Commer	nts Low	Variable	Tall Shrub	lowiand openings are scattered throughout the stand, along with one larger grassy opening in the eastern part of the stand. Several unmapped
										drainages are also present.
53	4110 - Sugar I	Maple Asso	ciation	Sawtimber Well	24.0	80	81-110	N/A		Last cut in YOE 2001. Basal area now varies from about 60 to 110, with
	Canopy Species	% Cover	Size Class	DBH Age	Cano	py Species	Density	Avg. Height	Size	an average roughly 90 sq.ft./acre. Scattered yellow birch, red maple and conjers are also present, and trees of all species up to 16" DBH are
	Sugar Maple	90	Log/Pole	10 80	Sug	gar Maple	Medium	Variable	Sapling	scattered throughout. The understory varies significantly from a sparse
					Ire	onwood	Medium	Variable	Sapling	M1 to a dense M3. Unevenaged structure is still developing in places,
					Ba	llsam Fir	Low	Variable	Sapling	and both the ratio of logs vs. poles and the quality of the timber are
									1	hardwood production, so managing for unevenaged timber is a valid choice.
54	4110 - Sugar I	Maple Asso	ciation	Sawtimber Well	7.6	70	81-110	N/A		Good quality northern hardwoods on rolling terrain. Avg. Ba = about 100
	Canopy Species	% Cover	Size Class	DBH Age	Cano	py Species	Density	Avg. Height	Size	sq.rt./acre.
	Sugar Maple	83	Log/Pole	11 70	Sug	gar Maple	Medium	Variable	Pole	
	<b>D</b>	0	l og/Pole	13	Suc	ar Maple	Medium	Variable	Sapling	
	Basswood	9	Log/1 old	15		J				
	Basswood	9	209/1010	10	Ba	Ilsam Fir	Low	Variable	Sapling	

## Report 7 – Stands

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Stand	Level 4 C	Level 4 Cover Type Size Density Acres Stand Age BA Range Managed Site		Site	General Comments						
55	4119 - Mixed N	orthern Har	dwoods s	Sawtimber Well		3.4	100	81-110	N/A		Stand has been thinned resulting in unevenaged characteristics. This
	Canopy Species	% Cover	Size Class	D	BH Age	Cano	py Species	Density	Avg. Height	Size	stand is basically a mix of maples over spruce-fir on slightly rolling
	Sugar Maple	45	Log/Pole		12 100	Ba	Isam Fir	Medium	Variable	Pole	presently at about 80 sq.ft./acre. The understory is fully-stocked with a
	Red Maple	30	Log/Pole		12	Whi	te Spruce	Medium	Variable	Sapling	mix of the overstory species but in many areas it leans more toward the
	Balsam Fir	11	Pole		7	Sug	ar Maple	Medium	Variable	Sapling	conifers.
	White Spruce	11	Log/Pole		12	Re	d Maple	Medium	Variable	Sapling	
56	56 4112 - Maple, Beech, Cherry Association			Sawti	mber Well	20.3	20.3 100 81-110		N/A		Reasonably good quality sugar maple with a mix of other hardwood species and a spruce-fir component. The terrain is rolling with some
	Canopy Species	% Cover	· Size Class	D	BH Age	Cano	py Species	Density	Avg. Height	Size	seasonally wetter areas. Thinned in the past as recently as YOE 2001.
	Sugar Maple	60	Log/Pole		12 100	Sug	ar Maple	Full	Variable	Sapling	basal area averages in the low 50 s but in places it's suil at 00-00.
	Red Maple	20	Log/Pole		12	Ba	lsam Fir	Medium	Variable	Sapling	4
57	4130	- Aspen	F	Polet	imber Well	22.8	25	81-110	N/A		Cut in 1994. healthy young aspen - basal area of 5-6" aspen poles now
	Canopy Species	% Cover	Size Class	Class DBH Age Canopy Species Density Avg. H		Avg. Height	Size	up to 70-90 sq.tt./acre throughout most of the stand. Sugar maple			
	Quaking Aspen	80	Pole/Sapling	1	6 25	Sug	ar Maple	Full	Variable	Sapling	seedings dominate the understory.
	Sugar Maple	15	Pole		8		•				
58	4119 - Mixed N	orthern Har	dwoods s	Sawti	imber Well	16.3	80	81-110	N/A		Good quality hardwoods developing age class diversity. Average basal
	Canopy Species	% Cover	· Size Class	D	BH Age	Cano	py Species	Density	Avg. Height	Size	area is right at the trigger point at 110 sq.ft./acre, but the stand has just
	Sugar Maple	52	Log/Pole		12 80	Sug	ar Maple	Full	>20 feet	Sapling	should be cut before it all falls out. The understory is fairly well stocked
	Quaking Aspen	19	Log/Pole		10	Re	d Maple	Full	>20 feet	Sapling	with maples up to 4" DBH, and a few paper birch are scattered in the stand.
	Red Maple	22	Log/Pole		11	Ва	lsam Fir	Low	Variable	Sapling	
						Irc	onwood	Low	Variable	Sapling	
59	4112 - Maple Ass	, Beech, C ociation	herry F	Polet	imber Well	7.3	80	81-110	N/A		Northern hardwoods on rolling ground, last cut in 1994 - probably with a major emphasis on stand improvement. Average BA is now back up to
	Canopy Species	% Cover	Size Class	D	BH Age	Cano	py Species	Density	Avg. Height	Size	97 sq.ft./acre. The yellow birch are relatively poor quality but present
	Sugar Maple	62	Pole/Log		9 80	Ba	lsam Fir	Low	Variable	Sapling	The tree species mix tends to vary somewhat with position on the terrain.
	Red Maple	20	Pole/Log		9	Sug	ar Maple	Low	< 5 feet	Sapling	and a few paper birch are also present. There is a strong possibility that
	Basswood	6	Pole/Log		9						the quality issues observed are more a result of past management than
											drainage and a productive hardwood habitat type (AVO - A/AOC.)This stand may be ready to select cut next entry.
60	4130	- Aspen	F	Poletimber Well		20.8	36	111-140	N/A		Cut in approx. 1982-84. Healthy aspen poles with about 1/3 of the canopy
	Canopy Species	% Cover	Size Class	D	BH Age	Cano	py Species	Density	Avg. Height	Size	made up of sugar & red maples, plus a few scattered cherry, yellow birch
	Quaking Aspen	67	Pole/Log/Sa	p	8 36	Sug	ar Maple	High	Variable	Sapling	
	Sugar Maple	25	Pole/Log/Sap	p	9	Irc	onwood	Low	Variable	Sapling	1
	Red Maple	8	Pole/Sapling	1	6	Ba	Isam Fir	Low	Variable	Sapling	

## Report 7 – Stands

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Stan	Level 4 Cover Type			Size De	nsity	Acres	res Stand Age BA Range		Managed Site		General Comments		
61	4112 - Maple, Beech, Cherry F Association			Poletimber Well		4.0	80	81-110	N/A		Northern hardwoods on rolling ground, last cut in 1994 - probably with a major emphasis on stand improvement. Average BA is now back up to		
	Canopy Species	% Cover	Size Class	DBH	Age	Cano	py Species	Density	Avg. Height	Size	97 sq.ft./acre. The yellow birch are relatively poor quality but present		
	Sugar Maple	62	Pole/Log	9	80	Ba	Isam Fir	Low	Variable	Sapling	The tree species mix tends to vary somewhat with position on the terrain.		
	Red Maple	20	Pole/Log	9		Sug	ar Maple	Low	< 5 feet	Sapling	and a few paper birch are also present.		
	Basswood	6	Pole/Log	9							There is a strong possibility that the quality issues observed are more a		
											sandy loam soil with acceptable drainage and a productive hardwood habitat type (AVO - A/AOC.) This stand may be ready to select cut next entry.		
62	4130	- Aspen	Р	oletimb	er Well	13.4	44	4 81-110	N/A		Aspen showing signs of breakup such as conks, blowdown and other		
	Canopy Species	% Cover	Size Class	DBH	Age	Cano	py Species	Density	Avg. Height	Size	progressive mortality. Previous inventory identified the area as having		
	Quaking Aspen	80	Log/Pole	10	44	Sug	ar Maple	Medium	Variable	Sapling	regen.		
	Sugar Maple	6	Pole/Sapling	7		Ba	lsam Fir	Low	Variable	Sapling			
	Red Maple	6	Pole/Log	8						1	Ready to harvest now before mortality becomes a major factor. The aspen appears to be mature for this site and merchantable beights are		
	White Spruce	6	Log/Pole	10							generally 3 - 6 pulpsticks.		
63	6113 - Lo	wland Mapl	e P	oletimb	er Well	10.9	80	51-80	N/A		Hardwoods with scattered conifers on a lowland site that varies from wet		
	Canopy Species	% Cover	Size Class	DBH	Age	Cano	py Species	Density	Avg. Height	Size	species composition, site indices and stand density vary widely from		
	Red Maple	50	Log/Pole	10	80	Re	d Maple	Full	Variable	Sapling	place to place. Overall the timber quality is medium, with much of the		
	Sugar Maple	15	Pole/Sapling	7	50	Sug	ar Maple	Medium	Variable	Sapling	sugar maple displaying the poor form typical of that species on a wetter site. Overall the stand's basal area averages around 70 sg ft /acre but		
	Yellow Birch	13	Log/Pole/XLog	g 12		Bla	ack Ash	Low	Variable	Sapling	canopy closure is also variable.		
	Black Ash	7	Pole/Sapling	5		Whit	te Spruce	Low	Variable	Sapling	There is evidence that some partial cutting occurred in the past, resulting		
	White Spruce	7	Log/Pole	11		Ba	lsam Fir	Low	Variable	Sapling	In a patchwork stand with an overall unevenaged stand structure. However the site characteristics dictate that evenaged management is a		
	Balsam Fir	6	Pole/Sapling	6							more logical approach, as within-stand access issues/BMP's strongly suggest that blowdown and other problems limit the potential for unevenaged management.		
64	629 - Mixed non-forested wetland Nonstocked		1.7		Unspecified	No		Low, wet area with scattered trees and scrub. Ground is very soft and mucky.					
65	5 6229 - Mixed lowland shrub Non:			Nonsto	cked	107.3		Unspecified	No		Sprawling wetland/riparian complex with evidence of seasonal flooding in many areas. Ground cover varies from pockets of slow-growing timber to open marshland and rapidly fluctuating ponds. While some areas may afford the opportunity for winter crossings, this complex must be regarded as inoperable ground. Site indices for timber spp. are generally low enough to classify the area as unmanageable for timber production.		

## Report 7 – Stands

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Stand	Level 4 C	over Type		Size	Density	Acres	Stand Age	BA Range	Managed Site		General Comments
66	6113 - Lo	wland Map	le l	Poleti	imber Well	51.6	80	51-80	N/A		Hardwoods with scattered conifers on a lowland site that varies from wet
	<b>Canopy Species</b>	% Cover	Size Class	D	OBH Age	Cano	py Species	Density	Avg. Height	Size	species composition site indices and stand density vary widely from
	Red Maple	50	Log/Pole	-	10 80	Re	ed Maple	Full	Variable	Sapling	place to place. Overall the timber quality is medium, with much of the
	Sugar Maple	15	Pole/Sapling	g	7 50	Sug	gar Maple	Medium	Variable	Sapling	sugar maple displaying the poor form typical of that species on a wetter
	Yellow Birch	13	Log/Pole/XLo	bg ´	12	Bl	ack Ash	Low	Variable	Sapling	site. Overall the stand's basal area averages around 70 sq.tt./acre but
	Black Ash	7	Pole/Sapling	9	5	Whi	te Spruce	Low	Variable	Sapling	cutting occurred in the past, resulting in a patchwork stand with an overall
	White Spruce	7	Log/Pole	-	11	Ba	Ilsam Fir	Low	Variable	Sapling	unevenaged stand structure. However the site characteristics dictate that
	Balsam Fir	6	Pole/Sapling	9	6						evenaged management is a more logical approach, as within-stand access issues/BMP's strongly suggest that blowdown and other problems
					<u> </u>						limit the potential for unevenaged management.
67	4130	- Aspen	I	Poleti	imber Well	8.8	44	81-110	N/A		Cut in 1975. Stand is now about 1/2 aspen and 1/2 hardwood (sugar
	Canopy Species	% Cover	Size Class	D	OBH Age	Cano	py Species	Density	Avg. Height	Size	maple-ironwood) by basal area, though the crown closure demonstrates
	Quaking Aspen	67	Log/Pole		10 44	Sug	gar Maple	Full	Variable	Sapling	few yellow birch are also present plus some scattered balsam fir in the
	Sugar Maple	31	Pole/Sapling	g	6	Ire	onwood	Medium	Variable	Sapling	understory. Basal area is variable but generally runs between 80-140
						Ba	ılsam Fir	Low	Variable	Sapling	sq.ft./acre.
68	629 - Mixed noi	n-forested v	wetland	Nor	nstocked	34.5	0	Unspecified	No		Large wetland complex, including ponds, drainages, various lowland plant spp and some inaccessible patches of lowland timber too small to map as separate stands. Inoperable ground but might be crossed in places with proper use of roadbuilding/BMP techniques.
69	4110 - Sugar N	/laple Asso	ciation I	Poleti	imber Well	70.1	70	111-140	N/A		Cut under TS 29-01-01. Mostly sugar maple poles approaching the log
	Canopy Species	% Cover	Size Class	D	OBH Age	Cano	py Species	Density	Avg. Height	Size	plus a few red maple, ironwood and fir.
	Sugar Maple	85	Pole/Log		9 70	Sug	gar Maple	High	Variable	Sapling	· · · · · · · · · · · · · · · · · · ·
	Basswood	10	Log/Pole	-	10	Ire	onwood	Medium	Variable	Sapling	
						Ba	ılsam Fir	Low	Variable	Sapling	
402	3102	3102 - Grass Nonstocked		Nonstocked 2		2.6		Unspecified	Managed Op	pening	Last treated with Tordon in 1981. Trees beginning to encroach.
						Cano	py Species	Density	Avg. Height	Size	
						Sug	gar Maple	Low	Variable	Log	
406	3102 - Grass Nonstocked		49.2		Unspecified	Managed Opening		Maintained wildlife opening - some work done by sharecropper as recently as 2015.			
407	3102 - Grass Nonstocked		3.4		Unspecified	No		Maintained wildlife opening. Some trees present but encroachment is not a major issue at this time.			
408	3102	- Grass		Nor	nstocked	0.8		Unspecified	No		Small grassy opening.
409	3102	09 3102 - Grass Nonstocked		Nor	nstocked	2.7		Unspecified	No		Grassy opening - WLD may opt to maintain it.

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Stand	Level 4 Cover Type	Size Density	Acres	Stand Age BA Range	Managed Site	General Comments
410	2113 - Forage Crops	Nonstocked	61.0	Unspecified	Managed Opening	Annual mowing, fertilizing, and openings work done by sharecropper in this opening.FRD: Travis 9/14/06 - Sharecropper field - Bartlett spreads fertilizer in spring that wildlife purchases, and ensures that grass is between 6" and 8" on Sept 1st so as to provide appealing forage to migrating waterfowl. Bartlett mows and bales hay. Gate leading to field is closed on Sept. 1st, and re-opened Nov 10th. each year. Opening is surrounded by private fields to the north, and a wetland complex to south. This field is managed as part of the AuTrain Waterfowl Project. Some areas along the south end appear to be seasonally wet, in association with the variations in the water level of the ponds/lowland areas between this stand and Loud's Spur Rd.
411	3102 - Grass	Nonstocked	3.7	Unspecified	No	Open area, may have been maintained previously by WLD. Some trees encroaching.
413	3102 - Grass	Nonstocked	3.6	Unspecified	No	Grassy opening - the narrow corridor running to the north is now beginning to fill in with trees & brush, especially along the margins.
414	3102 - Grass	Nonstocked	2.2	Unspecified	No	Open grass with a few trees.
415	3102 - Grass	Nonstocked	2.5	Unspecified	No	Open grass with trees encroaching.
416	3102 - Grass	Nonstocked	1.3	Unspecified	No	grassy opening with trees & brush encroaching.
417	3102 - Grass	Nonstocked	2.0	Unspecified	No	Open grass with some trees/brush encroaching.