

COMPARTMENT REVIEW PRESENTATION

GAYLORD FOREST MANAGEMENT UNIT

COMPARTMENT: 108 ENTRY YEAR: 2013 ACREAGE: 1,715 COUNTY: Emmet

Revision Date: 05/19/2011

Stand Examiner: Don Stacks

Legal Description: T38N-R05W, Sections 19, 28, 30-33.

Management 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: North of Wycamp Lake, the soil association is a Deer Park-Dune land association which is a deep, well-drained nearly level to very steep sandy soil on lake beaches and dunes. The terrain is a series of rolling inland dunes and is mostly covered with jack pine and red pine. South and east of Wycamp Lake, the association is a Carbondale-Tawas-Roscommon mix which is deep and very poorly drained. The terrain here is relatively flat and is a mix of aspen/oak and a smaller amount of northern hardwoods, with cedar in the lower lying areas.

Ownership Patterns, Development, and Land Use in and Around the Compartment: The land north of Wycamp Lake is bordered on the north by Wilderness State Park property. The rest of the compartment is adjacent to private residences, many of which are larger acreage family-owned farms. There is also three fairly large contiguous blocks of undeveloped private ownership, one of which is owned by Shorter's Shooting Preserve.

Unique, Natural Features: The potential for unique species of flora and fauna exists and noted in the MNFI compartment notes.

Archeological, Historical, and Cultural Features: A search of the Archeological Sites database identified multiple recorded features.

Special Management Designations or Considerations: Protected sensitive dune area in section 19. Director's order prohibiting dispersed camping in a portion of the compartment.

Watershed and Fisheries Considerations: This compartment contains Wycamp Lake, its surrounding swamp and lowland areas, and Collins Creek. Buffers between surface water and the adjacent clear cuts are appropriate, and cutting in wetlands should be avoided as much as possible. As always, the appropriate BMP's should be applied when working in the proximity of surface water.

Wildlife Habitat Considerations: This compartments lies around Wycamp Lake which supports a variety of wetland associated species including; waterfowl, loons, bald eagles, furbearers and various amphibians and white-tailed deer in the associated cedar swamp south of the lake. The northern part of this compartment lies on remnant coastal dune which consists of mainly of oak and jack pine, with heavy deer use due to the hard mast production. Stands 14 and 39 are going to be clear cut to provide early successional habitat utilized by white-tailed deer, grouse and woodcock. Stand 18 contains a large amount of apple trees which are going to be pruned to increase wild apple production.

Mineral Resource and Development Concerns and/or Restrictions: . Surface sediments consist of dune sand in the northwest, coarse textured glacial till (highlands in the northeast), lacustrine (lake) sand and gravel and glacial outwash sand and gravel and postglacial alluvium. The glacial drift thickness varies between 200 and 400 feet. The Devonian Detroit River Group subcrops below the glacial drift. The nearest gravel pit is located two miles to the south. The glacial till deposits in Sections 21 and 28 have gravel potential. The nearest oil and gas production, the Antrim Shale gas play, is located 33 miles to the southeast. The Collingwood Formation may have oil and gas potential in the area. Section 28 and 33 were recently leased.

Note: Dune sand near Lake Michigan may be in critical dune area

Vehicle Access: Access to all parts of the compartment can be achieved by way of multiple county roads, seasonal county roads, and forest trail roads.

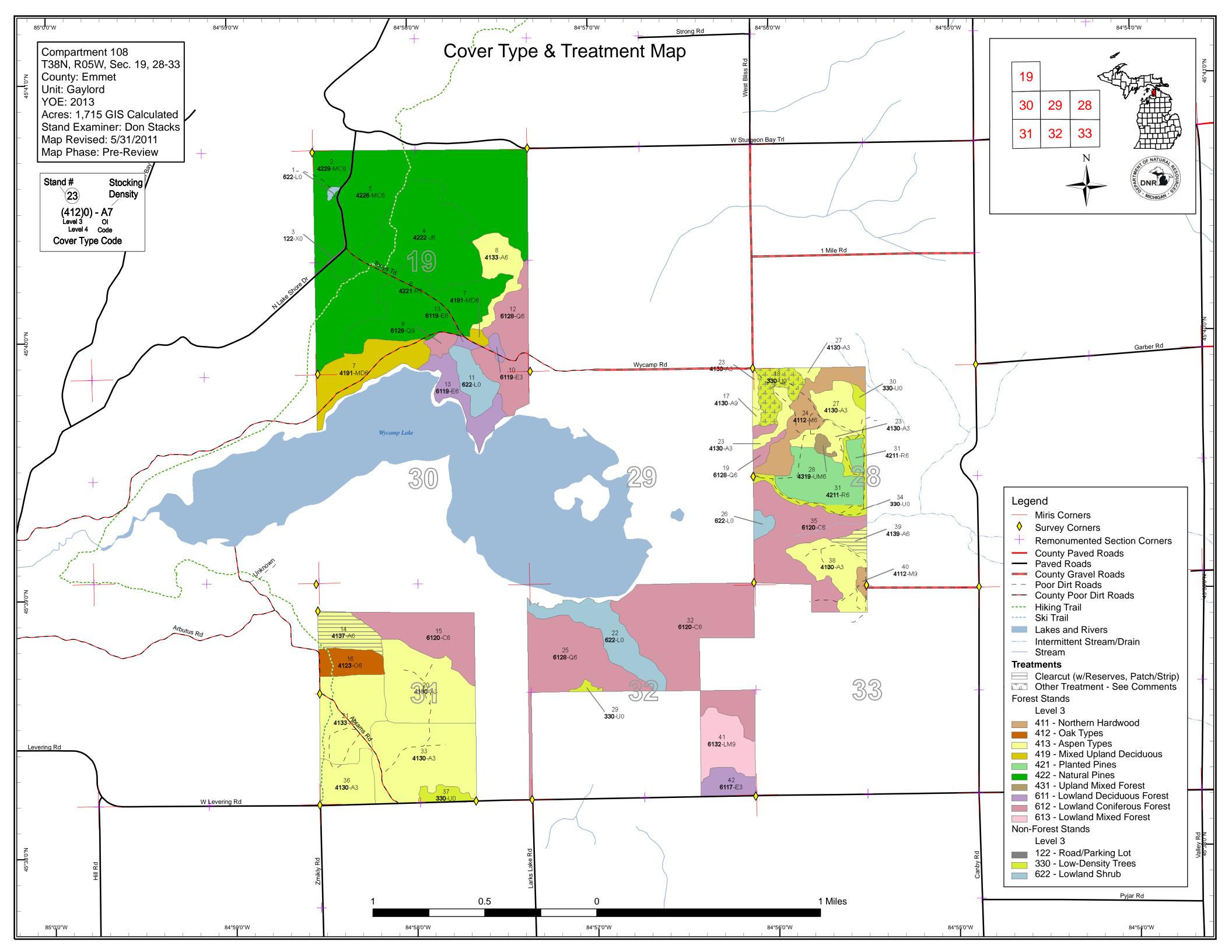
Survey Needs: None needed.

Recreational Facilities and Opportunities: The North Country Pathway runs through the compartment from north to south, around the southwest corner of Wycamp Lake. Dispersed camping around Wycamp Lake became a problem in the 1990's, which resulted in a 1993 director's order prohibiting camping around the western 2/3 of the lake, except in designated areas, of which, none presently exist. Fishing and waterfowl hunting take place on Wycamp Lake.

Fire Protection: The northwest corner of the compartment has a fairly large jack pine component on rolling sand dunes. The rest of the compartment consists of lower risk aspen/oak, hardwood, and cedar swamp cover types. Fire protection is provided by the Carp Lake VFD, located about nine miles to the northeast, and the Pellston DNR Field Office, located about 14 miles to the southeast.

Additional Compartment Information:

- > The following 3 reports from the IFMAP Inventory System are attached:
 - Cover Type by Age Class
 - **Proposed Treatments No Limiting Factors**
 - Proposed Treatments With Limiting Factors
- > The following information is displayed, where pertinent, on the attached compartment maps:
 - Base feature information, stand numbers, cover types
 - Proposed treatments
 - Proposed road access system
 - Suggested potential and current SCA's



Compartment 108 T38N, R05W, Sec. 19, 28-33 County: Emmet Unit: Gaylord YOE: 2013 Acres: 1,715 GIS Calculated Stand Examiner: Don Stacks Map Revised: 5/31/2011 Map Phase: Pre-Review

Stand # Stocking Density 23 (412)0) - A7 Level 3 Ol Level 4 Code Cover Type Code

Legend

Miris Corners

- Remonumented Section Corners +
- County Paved Roads
- Paved Roads ____
- County Gravel Roads ____
- Poor Dirt Roads _ _
- County Poor Dirt Roads ____ Intermittent Stream/Drain
- Stream
- Hiking Trail ----
- Ski Trail
- Stand Boundaries

Forest Stands

Level 3

- 411 Northern Hardwood

- 411 Northern Hardwood
 412 Oak Types
 413 Aspen Types
 419 Mixed Upland Deciduous
 421 Planted Pines
 422 Natural Pines
 431 Upland Mixed Forest
 611 Lowland Deciduous Forest
 612 Lowland Coniferous Forest
 613 Lowland Mixed Forest
- 613 Lowland Mixed Forest

Non-Forest Stands

- Level 3

- 122 Road/Parking Lot 330 Low-Density Trees 622 Lowland Shrub

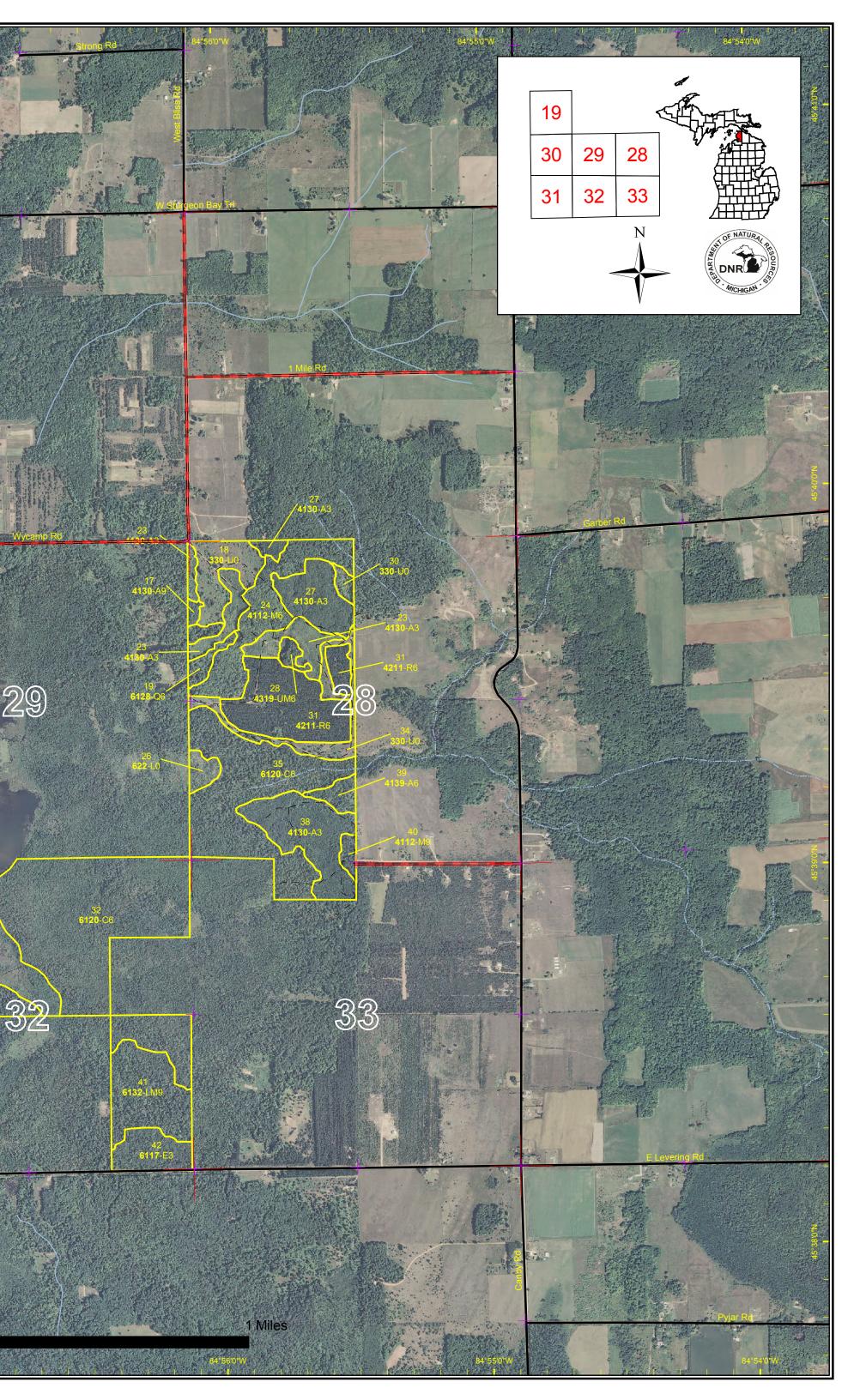


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19

30





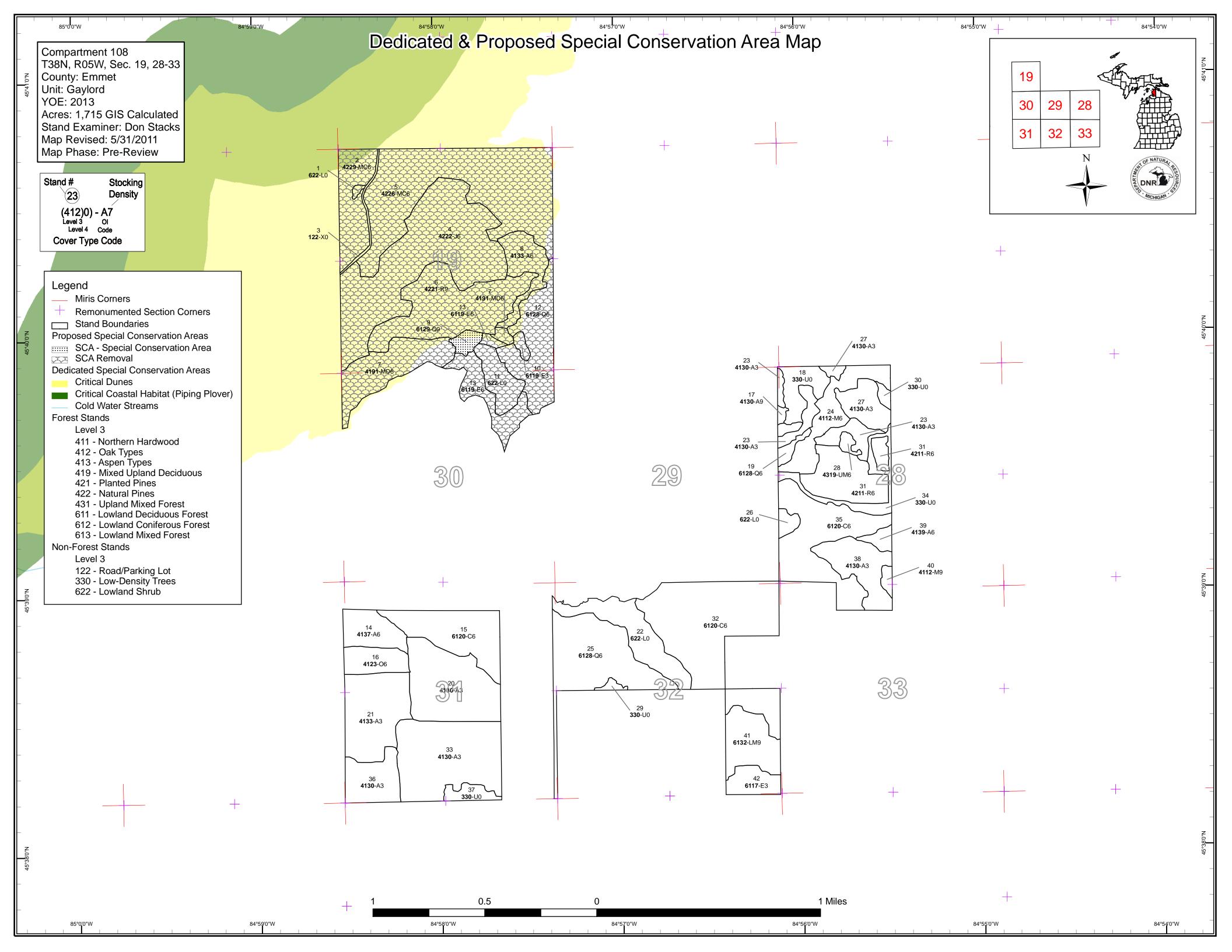


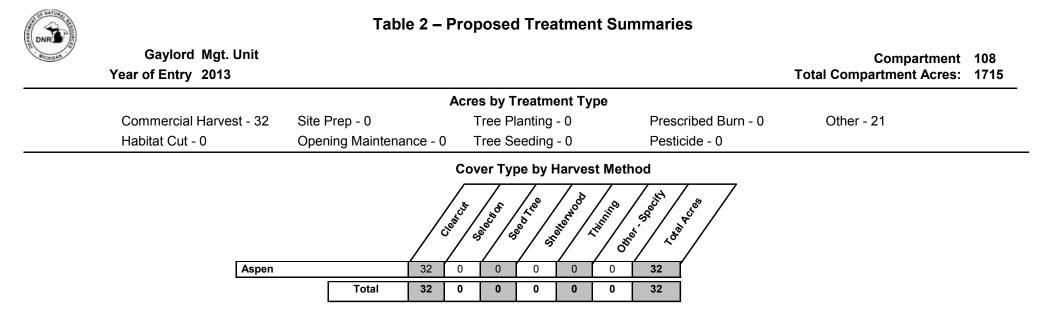
Table 1 – Total Acres by Cover Type and Age Class

Gaylord Mgt. Unit Donald Stacks : Examiner

Compartment 108 Year of Entry 2013



							Age	Class									
	Hor	de se	°.'	6, ⁷ 9	62.02	30 ⁻³⁰	100-02-	05:. 15	00.00	10,00	69.00	65.00	001.001	611.011	52× 55	400 K	100,000
Aspen	0	26	210	121	0	0	2	60	0	0	0	0	0	0	0	419	1
Cedar	0	0	0	0	0	0	0	0	0	143	0	57	82	0	0	281	1
Jack Pine	0	0	0	0	0	0	0	0	0	0	165	0	0	0	0	165	
Low-Density Trees	54	0	0	0	0	0	0	0	0	0	0	0	0	0	0	54	
Lowland Conifers	0	0	0	0	0	0	0	0	57	0	84	8	0	7	0	156	
Lowland Deciduous	0	0	0	20	0	0	0	0	0	31	0	0	0	0	0	52	
Lowland Mixed Forest	0	0	0	0	0	0	0	0	0	0	0	37	0	0	0	37	
Lowland Shrub	74	0	0	0	0	0	0	0	0	0	0	0	0	0	0	74	
Mixed Upland Deciduous	0	0	0	0	0	0	0	55	0	0	0	0	0	0	0	55	
Natural Mixed Pines	0	0	0	0	0	0	0	42	0	0	169	0	0	0	0	211	
Northern Hardwood	0	0	0	0	0	0	0	0	0	43	0	0	0	0	0	43	
Oak	0	0	0	0	0	0	0	0	0	0	21	0	0	0	0	21	
Red Pine	0	0	0	50	0	0	0	0	92	0	0	0	0	0	0	142	
Upland Mixed Forest	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	4	
Urban	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	1
Total	131	26	210	192	0	0	2	156	149	217	442	102	82	7	0	1715	



Gaylord Mgt. Unit

Table 3 -- Treatments Prescribed with No Limiting Factor

Compartment: 108 Year of Entry 2013



a n d	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
14	52108014- CCRes.	26.0	4137 - Aspen, Birch	High Density Pole	68	Harvest	Clearcut with Reserves	4137 - Aspen, Birch	Cmpt. Review Proposal

Prescription Prescribe a final harvest this Y.O.E. Leave white pine and red oak. Also leave two smaller islands for retention purposes. Mixed regen will be acceptable. Heavy deer browsing activity. Stand is adjacent to cedar swamp.

Other
Comments:Stand now consists of a mix of big-toothed aspen, paper birch, and red maple, with lesser amounts of white pine and balsam fir. Most of the
paper birch has had it's bark stripped for crafts by local residents, which has resulted in a significant amount of mortality over the last ten years.
The last year of entry showed 100ft of paper birch. This year there is twenty.

<u>Next</u> Steps:

s

39	52108039-CC	6.4	4139 - Aspen, Mixed Deciduous	High Density Pole	64	Harvest	Clearcut	4139 - Aspen, Mixed Deciduous	Cmpt. Review Proposal
Pres Spec	it more o	commerci	ally attractive to proc	•	ate buff	er between north		rease acreage/volume fo d the stream in the adjac	
<u>Othe</u> Com		and. Adja						paper birch and balsam the north of this stand, ju	
<u>Next</u> Step									
18	NF_52108018- Other		Non-Forested		0	Other	Unspecified	3303 - Mixed Low Density Trees	Cmpt. Review Proposal
Pres Spec	<u>cription</u> Prune a <u>s:</u>	ople trees	3.						
<u>Othe</u> Com	<u>r</u> ments:								
<u>Next</u> Step									
A	Total Treatmer creage Propose		53.6						

S t a		Gay	lord Mgt. Unit	Table 4		ents Prescrib ng Factor	ed with	Compartment: 108 Year of Entry 2013	DI NATURAL
n d	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status
			#Error						
Presc Spece	ription <u>s:</u>								
<u>Other</u> Comr									
<u>Next</u> <u>Steps</u>	<u>:</u>								
	ng Factor and No ment Reason	<u>)</u>							
Ac	Total Treatmer creage Propose		0						

Year of	Entry:	2013
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NATUR

Out of YOE -- Treatments Prescribed with No Limiting Factor

Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective	Approval Status	~
Prescription Specs:									
<u>Other</u> Comments:									
Next									

Steps:

Total Treatment Acreage Proposed:

0

S	Gayloro	Gaylord Mgt. Unit		5 – Fo	orested Sta	nds Compartment: 108 Year of Entry: 2013
t a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
2	42290 - Natural Mixed Pine	High Density Pole	41.5	67	111-140	Old shoreline dune location with a mix of jack pine, red pine, white pine, quaking aspen and red oak. Between dunes small cedar inclusions exist. Adjacent to N. Lake Shore Dr.
4	42220 - Natural Jack Pine	High Density Pole	164.5	90	81-110	Jack pine poletimber/saplings growing on many rolling sand dunes. Seasonal county road runs through stand, as well as North Country Pathway. Scattered red pine, white pine, red oak, and big-toothed aspen also present. Occasional pockets of mortality.
5	42260 - Natural Pine, Mixed Deciduous	High Density Pole	169.1	93	81-110	Stand consists of mixed natural pine poletimber/sawtimber, as well as red oak and big-toothed aspen. White pine saplings are consistent in the understory. North Country Pathway runs through stand. Adjacent to county road.
6	42210 - Natural Red Pine	High Density Log	92.4	70	81-110	Stand consisits of mostly red pine sawtimber/poletimber. There is also jack pine and red oak poletimber found uniformly within the stand. A seasonal county road runs through this stand.
7	4191 - Mixed Upland Deciduous with Conifer	High Density Pole	54.6	65	81-110	Red oak poletimber/sawtimber with lesser amounts of red pine, white pine, and big-toothed aspen running along Wycamp Rd.
8	4133 - Aspen, Mixed Pine	High Density Pole	27.2	65	111-140	Lesser quality, mature/overmature big-toothed aspen. Lesser amount of red oak poletimber/sawtimber, and a mix of large red pine/white pine, and jack pine poletimber. Stand lies on old shoreline sand dunes.
9	6129 - Mixed Coniferous Lowland Forest	High Density Log	6.7	164	200+	Small, mature hemlock stand adjacent to Wycamp Rd. Large cedar and white pine present also. A few paper birch and red maple poletimber trees in understory. Not much present for ground cover.
10	6119 - Mixed Lowland Deciduous Forest	High Density Sapling	3.6	20		Small stand of swamp hardwood saplings/tag alder.
12	6128 - Lowland Coniferous, Mixed Deciduous	High Density Pole	57.0	73	111-140	Mixed swamp conifers with an old, overmature aspen overstory. Very wet in most places. Good thermal cover. Browsing evident. Seasonal county road runs through stand.
13	6119 - Mixed Lowland Deciduous Forest	High Density Pole	31.3	88	51-80	A lesser-stocked peninsula of poorly drained land extending south into Wycamp Lake, consisting of mostly red maple, paper birch, overmature quaking aspen, and scattered red oak. Dense balsam fir understory.
14	4137 - Aspen, Birch	High Density Pole	26.0	68	51-80	Stand now consists of a mix of big-toothed aspen, paper birch, and red maple, with lesser amounts of white pine and balsam fir. Most of the paper birch has had it's bark stripped for crafts by local residents, which has resulted in a significant amount of mortality over the last ten years. The last year of entry showed 100ft of paper birch. This year there is twenty.
15	6120 - Lowland Cedar	High Density Pole	56.7	100	111-140	Stand is dominated by cedar poletimber, with a few sawlogs. Lesser amounts of black spruce, balsam fir, and dying big- toothed aspen.

S t	Gaylor	d Mgt. Unit		5 – Forested Stands		nds Compartment: 108 Year of Entry: 2013
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
16	4123 - Red Oak	High Density Pole	20.9	90	51-80	A mix of mostly red oak pole timber sawlogs, with small volumes of big-toothed aspen, red maple, paper birch, and white pine. Adjacent to seasonal county road.
17	4130 - Aspen	High Density Log	1.8	58	81-110	Stand consists of quaking aspen sawtimber/poletimber, paper birch sawlogs and poletimber, and scattered red maple and black ash poletimber growing on a very wet site containing numerous groundwater seeps. The area was not included in the adjacent harvest six years ago because of the wet, fragile ground. The aspen is starting to windthrow. Heavy deer browsing in understory.
19	6128 - Lowland Coniferous, Mixed Deciduous	High Density Pole	7.8	100	141-170	Stand consists of two low-lying gully areas where numerous groundwater seeps flow through them. Multiple lowland species exist in this stand.
20	4130 - Aspen	High Density Sapling	77.2	16		Aspen/mixed hardwood regen from 1995 final harvest.
21	4133 - Aspen, Mixed Pine	High Density Sapling	63.6	17		Stand received a final harvest in 1994, with everything being cut except red oak and white pine, which exists today in the overstory over the BTA regen. Some red oak in the regen.
23	4130 - Aspen	High Density Sapling	26.4	6		Aspen/hardwood regen from 2005 final harvest.
24	4112 - Maple, Beech, Cherry Association	High Density Pole	39.2	85	81-110	Northern hardwood poletimber, 2/3 of which is stocked mostly with red maple and beech. The NW 1/3 of stand has much more sugar maple, some nice sawlog crop trees, but has a lower BA at present.
25	6128 - Lowland Coniferous, Mixed Deciduous	High Density Pole	84.3	98	141-170	Mixed swamp conifers and cedar with scattered quaking aspen, paper birch, black ash, and red maple. Mostly poletimber but some sawlogs also present. Drainages present in stand, flowing into Wycamp Lake.
27	4130 - Aspen	High Density Sapling	25.4	20		Aspen hardwood regen from 1991 final harvest.
28	4319 - Mixed Upland Forest	High Density Pole	3.6	90	141-170	Unique stand on upland site where a seep and a perched water table is present, resulting wet, fragile ground. Majority of stand is made up of cedar and paper birch.
31	42110 - Planted Red Pine	High Density Pole	49.8	29	111-140	Young, 2-3 stick red pine poletimber. Trees have not yet started self-pruning yet.
32	6120 - Lowland Cedar	High Density Pole	142.7	80	200+	N. white cedar, mostly poletimber, with a lesser amount of black spruce, tamarack, and paper birch. A nice creek runs through stand to the northwest and empties into Wycamp Lake.
33	4130 - Aspen	High Density Sapling	95.9	28		B.T.A. regen from 1983 final harvest. Some red oak and paper birch regen present also. Scattered large red oak and white pine in overstory.

S t	Gaylor	Gaylord Mgt. Unit		5 – Fo	orested Sta	nds Compartment: 108 Year of Entry: 2013
a n d	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
35	6120 - Lowland Cedar	High Density Pole	82.0	111	171-200	High quality cedar stand, with scattered paper birch, big-toothed aspen, red maple, balsam fir, black spruce, and hemlock present in lesser amounts. Several drainages exist in stand.
36	4130 - Aspen	High Density Sapling	30.8	17		B.T.A. regen from 1994 final harvest. Some red oak and paper birch regen present also. A little scattered red oak and white pine poletimber in overstory.
38	4130 - Aspen	High Density Sapling	38.2	17		Aspen/hardwood regen from 1994 final harvest. Deer browsing along edge of swamp.
39	4139 - Aspen, Mixed Deciduous	High Density Pole	6.4	64	81-110	Small stand of mixed big-toothed aspen/red maple poletimber, with a few scattered sawlog trees. A little paper birch and balsam fir is also found in the stand. Adjacent to cedar swamp. Significant browsing in understory. A small stream is located to the north of this stand, just into the cedar stand.
40	4112 - Maple, Beech, Cherry Association	High Density Log	3.6	87	81-110	Small stand of poorer quality, larger diameter red maple adjacent to private property on the east. Red maple, balsam fir, and a little hemlock in the understory.
41	6132 - Mixed Lowland Forest with Cedar	High Density Log	37.0	103	111-140	Mixed lowland conifers, with a steady component of larger diameter paper birch, red maple, and old dying big-toothed aspen. Lower BA and older age classes than adjacent cedar stand to the north. Fragile, poorly drained soil. Small drainage runs through stand into Wycamp Lake to the northwest.
42	6117 - Lowland Deciduous, Mixed Coniferous	High Density Sapling	16.9	26		Small aspen sapling stand with a consistent balsam fir component, on wet soil. A small1 chain buffer strip lies between stand and Levering Rd.

Gaylord Mgt. Unit

6 – Nonforested Stands

Compartment: 108 Year of Entry: 2013



Stand	Cover Type	Acres	Managed	Management Priority	General Comments:
Stanu	Cover Type	Acres	Site	(Objective)	General Comments.
1	6220 - Alder/willow	1.3	No	Unspecified	Small lowland shrub stand.
3	122 - Road/Parking Lot	3.5	No	Unspecified	County road, N. Lake Shore Dr.
11	6220 - Alder/willow	22.0	N\A	Unspecified	
18	3303 - Mixed Low Density Trees	21.2	No	Unspecified	Many apple trees scattered throughout stand. Heavily browsed sumac also.
22	6220 - Alder/willow	45.1	No	Unspecified	Lowland shrub with scattered lowland hardwood species. Drainage flows into Wycamp Lake through this stand.
26	6220 - Alder/willow	5.6	No	Unspecified	
29	3303 - Mixed Low Density Trees	2.5	No	Unspecified	
30	3301 - Low Density Deciduous Tree	3.1	No	Unspecified	Encroaching hardwood/aspen saps.
34	3303 - Mixed Low Density Trees	17.9	No	Unspecified	Scattered, low density BTA, paper birch, pin cherry, quaking aspen, white pine, red pine, spruce. Stand has a two-track running the entire length.
37	3303 - Mixed Low Density Trees	9.1	No	Unspecified	Scattered jack pine, quaking aspen, paper birch saplings encroaching into grassy opening. A strip of larger jack pine poletimber runs along the south edge of the stand near Levering Rd. and acts as a buffer.



7 – 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.

Stand	SCA Type	SCA Name	Acres	Comments
2	SCA Removal	52108002	41.5	SCA removal of "Stand Condition 8 - Potential Old Growth", because this stand is already coded as "Critical Dune Area".
4	SCA Removal	52108004_SCAR	164.5	SCA removal of "Stand Condition 8 - Potential Old Growth", because this stand is already coded as "Critical Dune Area".
5	SCA Removal	52108005	169.1	SCA removal of "Stand Condition 8 - Potential Old Growth", because this stand is already coded as "Critical Dune Area".
6	SCA Removal	52108006	92.4	SCA removal of "Stand Condition 8 - Potential Old Growth", because this stand is already coded as "Critical Dune Area".
7	SCA Removal	52108007	54.6	SCA removal of "Stand Condition 8 - Potential Old Growth", because this stand is already coded as "Critical Dune Area".
8	SCA Removal	52108008SCAR	27.2	SCA removal of "Stand Condition 8 - Potential Old Growth", because this stand is already coded as "Critical Dune Area".
9	Unique Site - SCA	52108009	6.7	Large hemlock and cedar stand, which is not currently part of the adjacent critical dune habitat.
10	SCA Removal	52108010	3.6	Stand needs to have "Stand Condition 8 - Potential Old Growth" designation, from previous OI, removed for lack of habitat attributes.
12	SCA Removal	52108012	57.0	Stand needs to have "Stand Condition 8 - Potential Old Growth" designation, from previous OI, removed for lack of habitat attributes.
13	SCA Removal	52108013_SCAR	31.3	Stand needs to have "Stand Condition 8 - Potential Old Growth" designation, from previous OI, removed for lack of habitat attributes.
1	SCA Removal	NF_52108001	1.3	SCA removal of "Stand Condition 8 - Potential Old Growth", because this stand is already coded as "Critical Dune Area".
11	SCA Removal	NF_52108011	22.0	Stand needs to have "Stand Condition 8 - Potential Old Growth" designation, from previous OI, removed for lack of habitat attributes.



8 – DEDICATED CONSERVATION AREA DETAILS

* This is a list of Dedicated Biodiversity Areas for this compartment along with a 1/4 mile buffer surrounding the compartment. Refer to Dedicated Conservation Area Map for areas that the below listed Conservation Areas are located.

Conservatio Area	n Type	Description	ERA = Ecological Reference Area HCVA = High Conservation Value Area SCA = Special Conservation Area
HCVA	Critical Dunes	Critical dune areas are established via the public legislative proc Dune Protection and Management, of the Natural Resources an 451. The program is administered by the Michigan Department of current distribution of designated critical dunes is established by Areas.	d Environmental Protection Act, 1994 PA of Environmental Quality (DEQ). The
HCVA	Designated Critical Habitat	Critical habitat areas are established via a consultative and coo U.S. Fish and Wildlife service for the recovery of threatened and 365, Endangered Species Protection, of the Natural Resources PA 451, and the Federal Endangered Species Act of 1973. This species plans in various stages of review. As of now only two e Plover Habitat.	l endangered species, as governed by Part and Environmental Protection Act, 1994 is an active program, with proposed