

Gwinn FOREST MANAGEMENT UNIT COMPARTMENT REVIEW PRESENTATION

COMPARTMENT #237 ENTRY YEAR: 2010 Compartment Acreage: 1568 County: Marquette

Revision Date: July 18, 2008

Stand Examiner: Tom Seablom

Legal Description: T45N R28W Sec's 19, 20, and 21

RMU (if applicable):

Management Goals: Management goals range from maintaining and, if possible, improving timber quality and production to improving wildlife habitat as well as protecting water quality. Timber types within this compartment will continue to be managed on an even-aged basis mainly for fiber production with some saw log production occurring on the more productive sites. Managing as such will provide both cover and feed for wildlife.

Soil and Topography: Soil composition ranges from sandy outwash to low peat and muck wetlands. Topography is nearly level to slightly rolling with steep ridges surround bogs and swamps. Soils range from the Rubicon-Keweenaw complex to Greenwood and Dawson peat. Soil productivity is higher in this compartment with respect to the surrounding landscape to the north and west. Soils grade from sands in the west to loamy sands in the east.

Ownership Patterns, Development, and Land Use in and Around the Compartment: Ownership in and around the compartment is almost entirely state land. There are some private parcels within the compartment and a hunting club immediately to the northwest of the compartment. There is no development besides the Flat Rock Road and the old ELF ROW. Land use is in timber production and recreation.

Unique, Natural Features (include only non-site specific and non-sensitive information):

Archeological, Historical, and Cultural Features (include only non-site specific and non-sensitive information):

Special Management Designations or Considerations: There are 10 stands that were designated as potential old growth at the last entry and have been carried forward for review. These stands include: 5, 6, 19, 20, 33, 37, 39, 40, 41, and 69.

Watershed and Fisheries Considerations: The Flat Rock, Whiskey, and Wild West Creek all flow in or around this compartment. Care will be taken when setting up timber sale's to protect the water quality of the creeks.

Wildlife Habitat Considerations: Special Conservation Areas along Flatrock Creek and smaller tributaries that run through this compartment for riparian protection and wildlife corridor. Maintain or increase oak types and strive to increase hard mast production. Try to attain best possible age class distribution in aspen habitat types.

Mineral, Oil and Gas Considerations: Sections 19 - 21, T45N-R28W, Marquette County Surface sediments consist of coarse-textured till and peat & muck. There is insufficient data to determine the glacial drift thickness. The Precambrian Archean Granite/Gneiss subcrops below the glacial drift. This rock could be used as dimension stone and there is a rock quarry is located in Section 19. Sand and gravel are not known in this area. The abandoned Republic iron mine is located eight miles to the northwest. This Compartment was not previously leased for metallic exploration. There is no economic oil and gas production in the UP.

Vehicle Access: Primary access to this compartment is via Co. Rd. CAA (Flat Rock Road). Various two tracks allow access through the remainder of the compartment. Closed roads do exist that will be reopened temporarily for timber sale purposes.

Survey Needs: A survey is required to establish ownership boundary along the private parcel within the compartment as 20 acres were acquired since the last entry period.

Recreational Facilities and Opportunities: No developed recreation exists in the compartment. Potential for snowmobile trail along the old ELF ROW does exist.

Fire Protection: This compartment is located within the South Ishpeming-581 Zone dispatch area. Predominate cover type surrounding the compartment is jack pine. Fire prone species do exist within the compartment but not at the scale as adjacent compartments. The majority of this compartment is dominated by aspen. Adequate roads exist to aid in fire protection within the area.

Additional Compartment Information:

- **➤** The following 5 reports from the Operations Inventory System (OIPC) are attached:
 - **♦** Cover Type by Age Class
 - **♦** Cover Type by Management Objective
 - **♦** Compartment Volume Summary
 - **♦** 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 old growth

TABLE 3: Page 1 of 1

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Michigan Department of Natural Resources - Operations Inventory System Individual Compartment Report

ESCANABA RIVER STATE FOREST GWINN FOREST MGT UNIT MARQUETTE COUNTY COMPARTMENT: 237

Table 3

(acres shown in boxes)

STAND AGE CLASS

								•	I AIND AO	LOLAGO									
COVER TYPE	Not Coded	0-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100- 109	110- 119	120- 129	130- 139	140- 149	150- 159	All Aged	Total
Aspen		42	213	294	190	28			20	2									789
Black Spruce								21	75	98									194
Cedar										12									12
Grass	66																		66
Jack Pine		29	25	5		16													75
Lowlnd Brush	93																		93
Mx Swmp Cnfr								14	20										34
Non Stocked	6																		6
Oak										44									44
Paper Birch									55	5	59								119
Red Pine						59												5	64
Spruce Fir									8										8
Treed Bog	53																		53
Upland Hdwds										10									10
Water	1																		1
Total	219	71	238	299	190	103		35	178	171	59							5	1568

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Michigan Department of Natural Resources - Operations Inventory System Individual Compartment Report

ESCANABA RIVER STATE FOREST

GWINN FOREST MGT UNIT

MARQUETTE COUNTY

COMPARTMENT: 237

Table 3A

(acres shown in boxes)

MANAGEMENT OBJECTIVE TYPE

COVER TYPE	Α	S	V	С	G	Н	J	I	L	Р	N	Q	Χ	0	В	R	K	Υ	F	Е	Т	D	U	М	Z	W	Total
A Aspen	789																										789
S Black Spruce		194																									194
C Cedar				12																							12
G Grass					66	3																					66
J Jack Pine							75																				75
L Lowlnd Brush									93																		93
Q Mx Swmp Cnfr												34															34
X Non Stocked													6														6
O Oak														44	1												44
B Paper Birch	21														75	23	3										119
R Red Pine																64	1										64
F Spruce Fir																			8	}							8
D Treed Bog																						53					53
M Upland Hdwds																										10	10
Z Water																									1		1
Total	810	194		12	6	6	75	i	93			34	6	44	1 75	87	7		3	3		53			1	10	1568

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ESCANABA RIVER STATE FOREST

Michigan Department of Natural Resources - Operations Inventory System Individual Compartment Report

TABLE 10: Page 1 of 1

GWINN FOREST MGT UNIT

MARQUETTE COUNTY

COMPARTMENT: 237

Table 10 - COMPARTMENT VOLUME SUMMARY - ALL STANDS

COMPARTMENT SUMMARY

TOTAL V	OLUME	CUT V	OLUME	
Hardwood	7623 Cds	Hardwood	3904 Cds	
Hardwood	178 Mbf	Hardwood	19 Mbf	
Softwood	4392 Cds	Softwood	538 Cds	
Softwood	22 Mbf	Sum CutVol	4480 Cds	
Sum TotVol	12415 Cds			
Total Cm	npt Acres	Acres Propos	sed For Cut	276
		1		

Proposed Treatments With NO Limiting Factors **GWINN FOREST MGT UNIT**

Compartment: 237 Entry Year: 2010

Cover Cove							With NO Lim	iting Factors			
Commis Find Clearout leaving only oak, herbicide, trench and plant red pine, 2-0 or 3-0 stock at a stocking of approx. 600-650 trees per acre. Hardwood is very poor quality as is birch. There are a few aspen clones within the stand and some scattered oak. Cut no existing red pine. Wild I Leave the few scattered large nak, white pine and red pine as legacy trees. 17	Stand		Acres	Age		•	Condition				
Hardwood is very poor quality as is birch. There are a few aspen clones within the stand and some scattered oak. Cut no existing red pine. Wild: Leave the few scattered large oak, white pine and red pine as legacy trees. 17 R6 13 44 65 red pine immature binning 1 28 R6 13 44 65 red pine immature binning 1 28 R6 18 44 65 red pine immature binning 1 28 R6 18 14 4 65 red pine immature binning 1 29 red pine binning harvesting. 31 R6 28 46 65 aspen (upland) immature final harvest 3 29 remains Find: Free thin to 120 sq. ft. residual basal area, concentrate removal on smaller diameter stems. Leave aspen for diversity. Try to protect cherry during harvesting. 31 R6 28 46 65 aspen (upland) immature final harvest 3 29 remains Find: 9/18/2009: It was decided to clearcut this stand during the 2010 YOE. Aspen with patches of jack pine (7/9/2008). 43 Acre controlled burn on 5-31-1963 to insure regeneration of jack pine. Was commercially cut prior to this burn, permit 89/62; Alfred Millimaki. Completed Nov. 1962/2, 2 acres cut. Also note that jack pine seed trees were left in this said (1977 comments). 46 R6 54 33 60 aspen (upland) immature final harvest 3 29 ments Find: It was decided to clearcut this stand during the 2010 YOE. 49 M6 10 79 69 white pine mature shelterwood prep 1 planting 20 ments Find: This stand is to be clearcut, reserving some white birch and hardwood (30-40 sq. ft) and planted with white pine at a density of 650 tre per acre. Wild: This stand is to one clearcut, reserving some white birch and hardwood (30-40 sq. ft) and planted with white pine per acre. Wild: This stand is to one clearcut, reserving some white birch and hardwood (30-40 sq. ft) and planted with white pine per acre. Wild: This stand is to one clearcut, reserving some white birch and hardwood (30-40 sq. ft) and planted with white pine per acre. Wild: This stand is to one clearcut, reserving some white birch and hardwood (30-40 sq. ft) and planted with white pine per acre. Wild: This stand is to one clearcut, reserving som	13	В6	23	76	65	red pine	mature	final harvest	1	planting	
ments Find: Row thin every third row. Row's are discernable but some effort will be needed. Crown ratio is 40-50%. Aspen should be left to provide for diversity and vehicle pine if it exists in this stand. 28 R6 18 44 65 red pine immature thinning 1 29 ments Find: Free thin to 120 sq. ft. residual basal area, concentrate removal on smaller diameter stems. Leave aspen for diversity. Try to protect cherry during harvesting. 31 A6 28 46 65 aspen (upland) immature final harvest 3 3 sometimes Find: 9718/2009; It was decided to clearcut this stand during the 2010 YOE. Aspen with patches of jack pine (79/2008), 43 Acre controled but no n5-31-1963 to insure regeneration of jack pine. Was commercially cut prior to this burn, permit #9/62; Alfred Millimaki. Completed Nov. 1962, 25 acres cut. Also note that jack pine seed irces were left in this sale (1997 comments). 46 A6 54 33 60 aspen (upland) immature final harvest 3 5 ments Find: It was decided to clearcut this stand during the 2010 YOE. 49 M6 10 79 69 white pine mature sheltewood-prep 1 planting 5 ments Find: It was decided to clearcut this stand during the 2010 YOE. 49 M6 10 79 69 white pine mature sheltewood-prep 1 planting 6 ments Find: This stand is to be clearcut, reserving some white birch and hardwood (30-40 sq. ft) and planted with white pine at a density of 650 to general acre. 40 Wild: This stand is comprised of mostly of maple, birch, and aspen, but contains a few large wolf tree oak and scattered pine. Cut no white pine, red pine, or oak, and leave advanced regen of same. Reserve some birch as seed trees. Plant to white pine after harvest. 51 O6 44 79 63 oak immature sheltemwood-seed 1 planting 6 ments Find: Remove all birch, aspen, sagar and red maple. Some oak may be harvested for manuverability only if needed. Where the oak is removed use the stump as a center point and open up around it at least 2 tree lengths to allow for stump sprouting to occur and oak to seed in. Underplant with white pine upon completion of harvesting. Wildlife will		Hare pine	dwood is	very po	or quality	as is birch. The	re are a few aspen	clones within the			
Sometis Find : Row thin every third row. Row's are discernable but some effort will be needed. Crown ratio is 40-50%. Aspen should be left to provide for diversity and retention. Wild : Leave any oak and white pine if it exists in this stand. 28 R6 18 44 65 red pine immature thinning 1 Provide for diversity and retention. 31 A6 28 46 65 aspen (upland) immature final harvest 3 Provide for 28 de 65 aspen (upland) immature final harvest 3 Provided Signature of Signature (upland) immature final harvest 3 Provided No. 1962, 25 acres cut. Also note that jack pine. Was commercially cut prior to this burn, permit #9/62; Alfred Millimaki. Completed Nov. 1962, 25 acres cut. Also note that jack pine seed trees were left in this sale (1997 comments). 46 A6 54 33 60 aspen (upland) immature final harvest 3 Provided Nov. 1962, 25 acres cut. Also note that jack pine seed trees were left in this sale (1997 comments). 49 M6 10 79 69 white pine mature shelterwood-prop 1 planting mature per acre. Wild : This stand is to be clearcut, reserving some white birch and hardwood (30-40 sq. ft) and planted with white pine at a density of 650 to per acre. Wild : This stand is comprised of mostly of maple, birch, and aspen, but contains a few large wolf tree oak and scattered pine. Cut no white pine red pine, or oak, and leave advanced regen of same. Reserve some birch as seed trees. Plant to white pine after harvest. 51 O6 44 79 63 oak immature shelterwood-seed 1 planting emmature shelterwood-seed 1 planting emmature in the stump as a center point and open up around it at least? tree lengths to allow for stump sprouding to occur and oak to seed in. Underplant with white pine upon completion of harvesting. Wildlife will assist with the marking of this stand. Wild : (1999 Comments) Prour mini-review held on 6-2-29 bit was agreed to drop all oak cuts scheduled for 2000 (even though they were be intermediate cuts with no actual oak cut, to try to get into better compliance with our Forest Plan, and increase and restore diversity	Wld	: Leav	e the fev	w scattei	ed large o	ak, white pine ar	nd red pine as legac	cy trees.			
provide for diversity and retention. Wild: Leave any oak and white pine if it exists in this stand. 28 R6 18 44 65 red pine immature thinning 1 Free thin to 120 sq. ft. residual basal area, concentrate removal on smaller diameter stems. Leave aspen for diversity. Try to protect cherry during harvesting. 31 A6 28 46 65 aspen (upland) immature final harvest 3 Sometis Find: 9/18/2009: It was decided to clearcut this stand during the 2010 YOE. Aspen with patches of jack pine (7/9/2008), 43 Acre controlled burn on 5-31-19/63 to insure regeneration of jack pine. Was commercially cut prior to this burn, permit #9/62; Alfred Millimaki. Completed Nov. 1902. 25 acres cut. Also note that jack, pine seed trees were left in this sale (1997 comments). 46 A6 54 33 60 aspen (upland) immature final harvest 3 Sometis Find: This stand is to be clearcut this stand during the 2010 YOE. 49 M6 10 79 69 white pine mature shelterwood-prep 1 planting or acre. Wild: This stand is to be clearcut, reserving some white birch and hardwood (30-40 sq. ft) and planted with white pine at a density of 650 to per acre. Wild: This stand is to be clearcut, reserving some white birch and hardwood (30-40 sq. ft) and planted with white pine at a density of 650 to per acre. Wild: This stand is to be clearcut, reserving some white birch and hardwood (30-40 sq. ft) and planted with white pine at a density of 650 to per acre. Wild: This stand is comprised of mostly of maple, birch, and aspen, but contains a few large wolf tree oak and scattered pine. Cut no white pine, red pine, or oak, and leave advanced regen of same. Reserve some birch as seed trees. Plant to white pine after harvest. 51 Q6 44 79 63 oak immature shelterwood-seed 1 planting Sometis Find: Remove all birch, aspen, sugar and red maple. Some oak may be harvested for manuverability only if needed. Where the oak is removed use the sturm as a center point and open up around it at least 2 tree lengths to allow for stump sprooting to occur and oak to seed in. Underplant with white p	17	R6	13	44	65	red pine	immature	thinning	1		
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with the second		be in oak to compose standenco acorr	ntermedia type to b ponent of egeneration d which in burage su n produc	e treated f red ma on or re s evider nlight p	with no ac I per year. uple, paper cruitment nce of a spe enetration oak will be	tual oak cut), to We are already birch, and asper except at edges v ecies long ago re to allow for rege e able to crown o	try to get into bette over this acreage in. Aspen and birch where sunlight stime emoved. By harvest eneration and recru	er compliance with n this decade. (20 are mature and dy nulates by edge eff sting maple, birch, itment of maple an	our Forest Pl 008 Comment ving back at to ect. Old white aspen, and li- nd oak through	lan which calls for a s) Stand is heavy to ops. Closed canopy the pine stumps are p mited oak, we shoul th seed and stump sp	pprox. 100 acres of oak type with stand with little to revalent throughout d be able to routing, increased
Wild: Cut no oak, white pine, or red pine. Protect advanced regeneration of oak and white pine. 61	55	В6	59	95	58	paper birch	mature	seed tree	1		
61 A5 6 76 63 aspen (upland) mature final harvest 1 commits Fmd: Clearcut this stand retaining any oak (if present). Mark out some of the mature aspen, particularly along the edges, for wildlife trees. Access this stand from the north. Wld: 64 B6 21 76 62 aspen (upland) mature final harvest 1 commits Fmd: Clearcut this stand leaving some birch where aspen is lacking in stocking. Retain any oak, cut all spruce, balsam fir and red maple regardless of merchantability. Retain 3% by acreage through transition zone protection on the south side and east end of this stand.	omnts Fmd	: Seed	d tree har	rvest (bi	rch) leavin	ng all oak and an	y softwood. Cut al	ll maple regardless	s of merchanta	ability.	
Clearcut this stand retaining any oak (if present). Mark out some of the mature aspen, particularly along the edges, for wildlife trees. Access this stand from the north. Wild: 64 B6 21 76 62 aspen (upland) mature final harvest 1 Clearcut this stand leaving some birch where aspen is lacking in stocking. Retain any oak, cut all spruce, balsam fir and red maple regardless of merchantability. Retain 3% by acreage through transition zone protection on the south side and east end of this stand.	Wld	: Cut	no oak, v	white pir	ne, or red p	oine. Protect adv	anced regeneration	n of oak and white	pine.		
Access this stand from the north. Wld: 64 B6 21 76 62 aspen (upland) mature final harvest 1 commts Fmd: Clearcut this stand leaving some birch where aspen is lacking in stocking. Retain any oak, cut all spruce, balsam fir and red maple regardless of merchantability. Retain 3% by acreage through transition zone protection on the south side and east end of this stand.	61	A5	6	76	63	aspen (upland)	mature	final harvest	1		
64 B6 21 76 62 aspen (upland) mature final harvest 1 omnts Fmd: Clearcut this stand leaving some birch where aspen is lacking in stocking. Retain any oak, cut all spruce, balsam fir and red maple regardless of merchantability. Retain 3% by acreage through transition zone protection on the south side and east end of this stand.	omnts Fmd						a). Mark out some	of the mature aspe	en, particularl	y along the edges, fo	or wildlife trees.
commts Fmd: Clearcut this stand leaving some birch where aspen is lacking in stocking. Retain any oak, cut all spruce, balsam fir and red maple regardless of merchantability. Retain 3% by acreage through transition zone protection on the south side and east end of this stand.	Wld	:									
regardless of merchantability. Retain 3% by acreage through transition zone protection on the south side and east end of this stand.	64	В6	21	76	62	aspen (upland)	mature	final harvest	1		
Total Acres 276	omnts Fmd										
	Total Acr	es	276								

Proposed Treatments With Limiting Factors

Compartment: 237

Entry Year: 2011

Cover Site Mgt Method Harvest Cultural FDF Stand Type Acres Age Index Obj Condition Cut Priority Need Status

TREATMENT LIMITING FACTORS:

Total Acres..... 0

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