



**GWINN FOREST MANAGEMENT UNIT
COMPARTMENT REVIEW PRESENTATION**

COMPARTMENT #97 ENTRY YEAR: 2007

Compartment GIS acres: 2350 County: 2 Alger

Revision Date: 09/01/2005

Stand Examiner: Jerry Mohlman

Legal Description: T45N R21W Sections 23, 24, 25, 26, 35, 36

Management Goals: This compartment contains the north part of the AuTrain refuge and basin shore. Much of the open areas here are sharecropped under permit to benefit waterfowl primarily by maintaining and cutting hay at certain periods on an annual basis. There are other large openings we wish to maintain by prescribed burning this entry period to benefit sharptail grouse, which occur here. For timber management, all hardwood stands will be marked to be cut to basal area 70-90 sq.ft./acre, concentrating on improving the timber quality of the stand by removing poor quality trees and releasing vigorous trees of good quality potential. At least 2 wildlife trees per acre will be left as well as all remnant old growth trees. No species will be eliminated from the stands. In this compartment we manage aspen intensively to keep a large proportion of the landscape in open or young forest to benefit wildlife that depend on that ecosystem. In our aspen harvests, we will leave some pockets of advance fir regeneration and all dead trees, but the primary management goal is to regenerate aspen.

Soils and topography: Area is mostly flat to gently rolling. There are some moraines and other glacial features. Notable are a series of steep north-south ridges that are the former riverbanks of the ancient mighty river that drained glacial Lake Duluth several thousand years ago. Chatham cobbly fine sandy loam, Shoepac-Trenary silt loam, Traunik gravelly fine sandy loam, Trenary silt loam, Kalkaska sand, Kalkaska-Waiska complex, Charlevoix-Ensley complex, Eben very cobbly fine sandy loam, Charlevoix silt-loam, Carbondale, Lupton, and Tawas soils, Chippany-Nahma mucks are the predominant soil types in the compartment.

Ownership Patterns, Development, and Land Use in and Around the Compartment: Year round residences and hunting camps. Some active farms are nearby. Hiawatha National Forest is east of compartment and the basin. The area is not rapidly developing, but new homes and residences are appearing here as elsewhere.

Unique, Natural Features: Large spring semi-developed by early settlers appears and disappears back underground. Large open areas. Old terraces from drainage of glacial Lake Duluth. Johnson creek splits into two streams and rejoins downstream in this compartment.

Archeological, Historical, and Cultural Features: Old stone walls and apple trees from early homesteads. Old logging camp sites and railroad grades are in and around the compartment.

Special Management Designations or Considerations: Potential old growth or biodiversity stewardship stands: 1,2,3,7,33,38,40,41,42,43,44,50,52,54,400.

Watershed and Fisheries Considerations: Autrain Basin and Johnson Creek. Johnson creek is a trout stream and fisheries division supports putting adjacent stands into potential old growth or biodiversity stewardship. Large spring appears in the southwest part of this compartment and then disappears about ½ mile downstream.

Wildlife Habitat Considerations:

Mineral Resource and Development Concerns and/or Restrictions: Compartment 97 Sections 23 - 26, 35 and 36, T45N-R21W, Alger County

Surface sediments consist of medium-textured glacial till. The glacial drift thickness varies between 10 and 50 feet. The Ordovician Black River Group subcrops below the glacial drift. The Black River is quarried for stone/dolomite elsewhere in the UP. Gravel pits are located to the west and potential appears to be good. This compartment has never been leased for metallic exploration. There is no economic oil and gas production in the UP.

Vehicle Access: Good throughout compartment except section 23 which is blocked by private land. Some roads are closed in the refuge area during hunting season. Johnson creek is not accessible by vehicle in this compartment.

Survey Needs: Some corners needed throughout compartment. We should be able to accomplish our objectives this entry without new surveyed corners but long term survey work is needed here. Some work is currently being done by the re-monumentation project.

Recreational Facilities and Opportunities: This area is very popular for bird-watching. Hunting on the edge of the refuge is popular as well as in the refuge once restrictions are removed for the year. Johnson creek is a trout stream and the Autrain Basin is very popular for fishing. Access sites are nearby.

Fire Protection: We are planning to burn some of the large openings to maintain them in an open condition. Wildfires are rare in the compartment but when they occur, response times are larger because of the distance to the nearest field office.

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**

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

ESCANABA RIVER STATE FOREST

GWINN FOREST MGT UNIT

ALGER COUNTY

COMPARTMENT: 97

Table 3

(acres shown in boxes)

STAND AGE CLASS

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		27	294	114	155	46	49		103										788
Black Spruce									3										3
Bog or Marsh	1																		1
Grass	910																		910
Lowlnd Brush	43																		43
Marsh	1																		1
Mx Swmp Cnfr									49	6		27							82
Red Pine					4														4
Spruce Fir					5	6		10	10										31
Swamp Hrdwds							47												47
Upland Brush	4																		4
Upland Hdwds			64	25			13											329	431
Water	5																		5
Total	964	27	358	139	164	52	109	10	165	6		27						329	2350

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

ESCANABA RIVER STATE FOREST

GWINN FOREST MGT UNIT

ALGER COUNTY

COMPARTMENT: 97

Table 3A

(acres shown in boxes)

MANAGEMENT OBJECTIVE TYPE

COVER TYPE	A	S	V	C	G	H	J	I	L	P	N	Q	X	O	B	R	K	Y	F	E	T	D	U	M	Z	W	Total
A Aspen	788																										788
S Black Spruce		3																									3
V Bog or Marsh			1																								1
G Grass					910																						910
L Lowlnd Brush									43																		43
N Marsh											1																1
Q Mx Swmp Cnfr												82															82
R Red Pine																4											4
F Spruce Fir																			31								31
E Swamp Hrdwds																				47							47
U Upland Brush																								4			4
M Upland Hdwds																								431		431	
Z Water																									5	5	
Total	788	3	1		910				43		1	82				4			31	47			4	431	5	2350	

ESCANABA RIVER STATE FOREST

GWINN FOREST MGT UNIT

ALGER COUNTY

COMPARTMENT: **97**

Table 10 - COMPARTMENT VOLUME SUMMARY - ALL STANDS

TOTAL VOLUME		CUT VOLUME	
Hardwood	13169 Cds	Hardwood	1203 Cds
Hardwood	284 Mbf	Hardwood	64 Mbf
Softwood	1968 Cds	Softwood	136 Cds
Sum TotVol	15705 Cds	Sum CutVol	1467 Cds
Total Cmpt Acres		Acres Proposed For Cut.....	
2350		155	

GWINN FOREST MGT UNIT

**Proposed Treatments
With NO Limiting Factors**

Compartment: 97

Entry Year: 2007

Stand	Cover Type	Acres	Age	Site Index	Mgt Obj	Condition	Method Cut	Harvest Priority	Cultural Need	FDF Status	
16	M6	88		70	northern hardwood	unevenaged	selection	2		stand with fdf potential	
comnts Fmd : Thinned 1987. Steep hills in stand especially NW so those will not be marked. Stand will be reduced to about 80-90 sq ft BA leaving trees of all sizes but emphasizing opening up the good quality crop trees. At least 2 wildlife trees per acre will be left. All cedar and white pine will left. Underplant hemlock to increase diversity post harvest by wildlife division.											
25	R6	4	28	56	red pine	immature	thinning	2			
comnts Fmd : Mostly 3-5 stick red pine plantation. Would be hard to row thin(not straight) so will have to individually mark trees. Some areas over 200 sq. ft. BA. Some porcupine damage. Some cherry in stand will be left for diversity.											
37	M6	10		65	northern hardwood	unevenaged	selection	2			
comnts Fmd : Small trees north, bigger south. Access through private may be difficult to get. Otherwise ready for thinning. Good quality potential. SE more sparse and poorer quality.											
408	G0	260		54	grass	nonstocked		0	opening maintenance		
comnts Fmd : Mostly scattered cherry. Other trees invading. Would like to burn this some time this next entry period to maintain in an open condition.											
409	G0	406		54	grass	nonstocked		0	opening maintenance		
comnts Fmd : This area is intensively managed by wildlife division. Area divided by fields mostly hay cut at times beneficial to waterfowl. Disking or sharecropped this entry period.											
410	G0	127		54	grass	nonstocked		0	opening maintenance		
comnts Fmd : Mostly scattered cherry. Other trees invading. Would like to burn this some time this next entry period to maintain in an open condition.											
412	G0	34		54	grass	nonstocked		0	opening maintenance		
comnts Fmd : This area is intensively managed by wildlife division. Area divided by fields mostly hay cut at times beneficial to waterfowl. Disking or sharecropped this entry period.											
413	G0	62		54	grass	nonstocked		0	opening maintenance		
comnts Fmd : Mostly scattered cherry. Other trees invading. Would like to burn this some time this next entry period to maintain in an open condition.											
Total Acres.....		991									

GWINN FOREST MGT UNIT

**Proposed Treatments
With Limiting Factors**

Compartment: 97

Entry Year: 2007

Stand	Cover Type	Acres	Age	Site Index	Mgt Obj	Condition	Method Cut	Harvest Priority	Cultural Need	FDf Status
20	A6	49	55	69	aspen (upland)	mature	final harvest	2		

TREATMENT LIMITING FACTORS: Land survey needed

comnts Fmd : Need land survey for this stand. This is spotty. Patches of aspen mostly mature esp. east but some areas of smaller and younger aspen. Thick sugar maple regeneration 1-3" dbh throughout so if cut some parts of stand may convert to hardwood. A lot of this stand is A5 only. Some semi-open areas. If stand cannot be cut, it will hold as aspen.

51	M6	2		68	northern hardwood	unevenaged	selection	2		
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TREATMENT LIMITING FACTORS: Inadequate volume due to low stocking/small diameter/etc.

comnts Fmd : Small stand good quality hardwood left when surrounding aspen was clearcut. Stand has not been treated. Should be treated but low volume by itself, possible to combine with other sales when feasible. Will manage for high timber quality hardwood by selection reducing BA to 80 sq. ft., leaving good quality trees and some den trees.

53	M6	2		68	northern hardwood	unevenaged	selection	2		
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TREATMENT LIMITING FACTORS: Inadequate volume due to low stocking/small diameter/etc.

comnts Fmd : Small stand good quality hardwood left when surrounding aspen was clearcut. Stand has not been treated. Should be treated but low volume by itself, possible to combine with other sales when feasible. Will manage for high timber quality hardwood by selection reducing BA to 80 sq. ft., leaving good quality trees and some den trees. This stand has a steep slope so part may be hard to harvest.

Total Acres.....		53								
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