



**FOREST MANAGEMENT UNIT
COMPARTMENT REVIEW PRESENTATION**

COMPARTMENT 53 ENTRY YEAR: 2007

Compartment Acreage: 1113 County: Gladwin

Revision Date: December 2004: May 2005: July 8, 2005: August 19, 2005

Stand Examiner: Steven Nyhoff

Legal Description: T19N R2E Sections 21, 22

RMU (if applicable):

Management Goals:

This compartment has been heavily cut over in the past 30 years keeping it in early secessional ecosystems. Therefore the compartment is heavy to aspen and jack pine. The aspen type is heavily skewed to younger trees (most stands are = 35 years of age). What is left are jack pine stands and some swamp hardwood stands that need management this year of entry. In these stands there is a component of aspen that will regenerate, adding to the younger age classes of aspen. Also, the jack pine in the area has a high percentage of trees that have semi-serotinous cones.

The management objectives are to continue to maintain current cover types while looking for opportunities to promote more diversity where possible. There are several stands that have oak, maple, and/or tamarack coming in as under story species. In these stands look for opportunities to retain some of these species to promote diversity.

Soil and Topography:

The soils in the compartment range from well drained Grayling sand to very poorly drained Roscommon sand. The main soils types are Grayling, Au Gres, Croswell, and Roscommon.

The topography is generally flat but there are old sand dunes running though the compartment as well as a river valley along the Molasses River and its tributaries. The valleys are bordered by high steep banks. These features give some topographical relief to the east side of the compartment. In addition, many of the soils in section 21 have considerable micro relief by having hummocky ground.

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

The compartment is mainly one contiguous block of state ownership surrounded by state land. There is one 160 acre private parcel in the northwest corner of the compartment. This parcel has state land on four sides.

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

No known or identified occurrence of threatened or endangered species in the compartment. There are records of Red-shoulder to the northeast, and Eagle to the west of the compartment.

Archeological, Historical, and Cultural Features

No know or identified occurrence in the compartment.

Special Management Designations or Considerations:

None

Watershed and Fisheries Considerations: The compartment has the Molasses River and several tributaries flowing in section 22. These rivers are sand bottom rivers that are not high quality fisheries. This year of entry there are no harvests taking place along these waterways or on the associated flood plains so there should be no problems with erosion adversely affecting the waterways.

Wildlife Habitat Considerations:

Compartment 53 is traditionally a high use area by grouse/woodcock, archers and firearm deer hunters. Shrub cover types adjacent to the Molasses River provide the necessary high stem density conditions preferred by grouse and woodcock. The Cherry Hill Deer Yard, located in the NE ¼ of Sec. 21, historically provided essential conifer shelter/habitat for deer during severe winter periods. This site was well known by the residents of Gladwin County and frequently many individuals/hunting groups supplemented wintering animals, in the above area, prior to the establishment of the existing baiting regulations. The above yarding area, due to over-mature conditions, was treated and commercially cut as prescribed from the last Y.O.E. – currently a J3. Several other stands (C6) in Sec. 22 also provide habitat critical for wintering deer.

Oak mast crops attract turkeys during the spring, summer and fall periods.

ORV use issues are a major concern in this compartment. Restoration projects for several sites should be considered.

Mineral Resource and Development Concerns and/or Restrictions:

Surface sediments consist of lacustrine (lake) sand and gravel. The glacial drift thickness varies between 100 and 200 feet. Beneath the glacial drift are the Pennsylvanian Grand River and Saginaw Formations. The Saginaw Formation is used for clay/shale in other areas of the State. This area is predominantly sand, and gravel potential in the compartment is considered limited. Very little oil and gas exploration has occurred in this area. North Buckeye Field is located six miles to the southwest. The field, discovered in 1936, has produced over 21 MBO from the Devonian Dundee Formation. There are no current State oil and gas leases in the compartment.

Vehicle Access:

The compartment has an abundance of trails that are drivable. Many of the trails are heavily used and overall access to the compartment is good. There are some problems with erosion on some of these trails, especially along Herner Road and on the ORV Trail that goes through the compartment.

Survey Needs:

A survey is needed in the compartment to establish the private line on the 160 in the northwest corner. The private land owner appears, from aerial photography, to be in trespass with signs and road.

Recreational Facilities and Opportunities:

Part of the north loop of the Gladwin ORV Trail is in this compartment. The trail is in poor shape because of erosion caused by ORVs on the old sand dunes that are in the compartment. The north loop of the ORV trail has been closed for evaluation. This has been done because heavy ORV use of this portion of the trail is negatively impacting the wet soils the trail is on.

Fire Protection:

The compartment is heavy to aspen and other less flammable trees species. There are stands of jack pine in the compartment but they are not contiguous or of large acreage. Access to the compartment is generally good in the eastern side of the compartment, but there are some access problems to some of the areas in the west end of the compartment, especially in the spring because of wetness.

Overall the fire hazard in the compartment is moderate because of the ORV Trail, heavy hunting activity, and the amount of land in state ownership.

Additional Compartment Information:

The area is heavily used by hunters and ORV riders which have lead to some problem with erosion on the ORV trail and some of the roads. Also there is a definite increase of tamarack trees in the compartment. They appear to be coming back on the wetter soils throughout the compartment.

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

AUSABLE STATE FOREST

GLADWIN FOREST MGT UNIT

GLADWIN COUNTY

COMPARTMENT: 53

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			207	59	108		9	11											394
Cedar												19		10					29
Grass	28			1															29
Jack Pine		48	77		21	28		137	14										325
Lowlnd Brush	64																		64
Non Stocked	1																		1
Oak			70		11			4											85
Swamp Hrdwds				40				79	38										157
Tamarack			7																7
Upland Hdwds								20											20
Water	2																		2
Total	95	48	361	100	140	28	9	251	52			19		10					1113

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AUSABLE STATE FOREST

GLADWIN FOREST MGT UNIT

GLADWIN COUNTY

COMPARTMENT: 53

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	385						9																				394
C Cedar				29																							29
G Grass					29																						29
J Jack Pine							325																				325
L Lowlnd Brush									64																		64
X Non Stocked													1														1
O Oak	57													28													85
E Swamp Hrdwds																				157							157
T Tamarack																					7						7
M Upland Hdwds														20													20
Z Water																									2		2
Total	442			29	29		334		64				1	48						157	7				2	1113	

AUSABLE STATE FOREST

GLADWIN FOREST MGT UNIT

GLADWIN COUNTY

COMPARTMENT: **53**

Table 10 - COMPARTMENT VOLUME SUMMARY - ALL STANDS

COMPARTMENT SUMMARY			
TOTAL VOLUME		CUT VOLUME	
Hardwood	2744 Cds	Hardwood	1046 Cds
Hardwood	265 Mbf	Hardwood	53 Mbf
Softwood	2708 Cds	Softwood	1474 Cds
Softwood	70 Mbf	Sum CutVol	2626 Cds
Sum TotVol	6122 Cds		
Total Cmpt Acres		Acres Proposed For Cut.....	188
1113			

GLADWIN FOREST MGT UNIT

**Proposed Treatments
With NO Limiting Factors**

Compartment: 53

Entry Year: 2007

Stand	Cover Type	Acres	Age	Site Index	Mgt Obj	Condition	Method Cut	Harvest Priority	Cultural Need	FDF Status
12	J6	6	72	65	jack pine	mature	final harvest	2	natural regeneration	
comnts Fmd : Stand is a mix of Jack Pine, Red Pine, oak and aspen. The stand is mature and could be harvest and replant to jack pine or red pine. The stand has isolated pockets of whitches broom which is mainly on the jack pine. The jack pine in the area has semi-serotinous cones. All the branch material that is left needs to remain scattered for seed and horizontal structure. The stand is expected to regenerate as a jack pine site mixed with aspen and oak. As the stand regenerates there may be pockets that are dominated by aspen or oak and this will be acceptable. If it does not regenerate well plant or interplant jack pine.										
14	J6	82	61	57	jack pine	mature	final harvest	1	natural regeneration	
comnts Fmd : The quality of the jack pine is variable. There are also pockets of good looking jack pine and pockets of poor quality jack pine. There are areas of aspen and oak as well. The regen in the stand is heavy to oak. The branch material should be left scattered for seed and horizontal structure. The stand is expected to regenerate naturally to jack pine with pocket that will be thick with aspen and/or oak. If It does not regenerate well plant or interplant jack pine.										
21	J5	24	61	62	jack pine	immature	final harvest	1	natural regeneration	
comnts Fmd : The stand is a jack pine stand that has red maple coming in thick under the overstory. The stand has a seasonal high water table and this site may be better suited to swamp hardwood. Also a good swamp hardwood stand would increase biodiversity in the compartment. The oak and jack pine are poor quality and we may want to convert stand to red maple. The stand would be expected to regenerate as a jack pine stand with pocket of oak and red maple and it may even be heavy to red maple overall after harvest and this will be acceptable. If the stand does not regenerate well naturally plant or interplant jack pine.										
22	O5	2	60	55	oak	mature	shelterwood-seed	2	natural regeneration	
comnts Fmd : Stand is a small stand along Herner Road harvest as a heavy seed tree retaining 20-30 BA with oak that is 4" DBH or less being retained. This will yeild a two-aged stand with mix of size class from sawlogs to seedlings.										
32	J6	8	71	60	jack pine	mature	final harvest	1	natural regeneration	
comnts Fmd : This is part of stand 35 that was not harvest. The jack pine in the area has semi-serotinous cones so it is possible to get good natural regeneration. When harvesting the branch material will need to be scattered for seed and horizontal structure. The stand will need to be check for adequate regeneration. The stand is expected to regenerate to jack pine if not trench and plant to jack pine.										
37	M6	20	60	55	oak	mature	shelterwood-seed	1	natural regeneration	
comnts Fmd : The access to the stand is from the compartment to the south along an illegal ORV trail. This route would require a 24" culvert and an equalization tube. The harvest would be to remove all species besides oak mainly, mark some wildlife trees to save and mark some of the oak to remove depending on BA. The Residual BA should be between 20-30. The stand is expected to regenerate as an oak stand mixed with red maple and aspen. When it regenerates any cobination of red maple, oak and aspen is acceptable. If the stand does not regenerate well natural interplant with jack pine.										
43	A6	3	60	56	aspen (upland)	mature	final harvest	2	natural regeneration	
comnts Fmd : The stand appears to be close to the maturity could be harvested. It is expected to regenerate to aspen.										
44	J5	28	46	50	jack pine	mature	final harvest	1	natural regeneration	
comnts Fmd : This stand was cut with D7. The stand is in poor shape needs to be cut by clearcutting, may want to leave oak <4" DBH. The stand is a mix of jack pine, aspen, oak. Leave all the dead standing dead and dead and down for snag and course woody debrie. The stand is expected to regenerate as a oak and aspen stand. If it does not regenerate naturally plant or interplant jack pine.										
114	A6	8	61	60	aspen (upland)	immature	final harvest	1	natural regeneration	
comnts Fmd : The stand is a mix of aspen and jack pine. The stand is heavy to aspen and the stand needs to be harvested. Leave dead standing and dead down for snag and course woody debrie. The stand is expected to regenerate as and aspen stand.										
116	J6	5	61	57	jack pine	mature	final harvest	1	natural regeneration	
comnts Fmd : This stand was not harvested with stand 16; 10 years ago. The trees have semi-serotinous cones so when harvesting the stand the branch material should remine scattered. The stand is expected to regenerate natural to jack pine if not trench and plant or interplant to jack pine.										
122	O5	2	60	55	oak	mature	shelterwood-seed	2	natural regeneration	
comnts Fmd : Stand is a small stand along Herner Road is to be harvested as seed tree, retaining 10-20 BA as well as oak that is 4" DBH. This will field a two aged stand with a mixed size class distrubution with trees from sawlog through seedling.										
Total Acres.....		188								

**Proposed Treatments
With Limiting Factors**

Compartment: 53

Entry Year: 2007

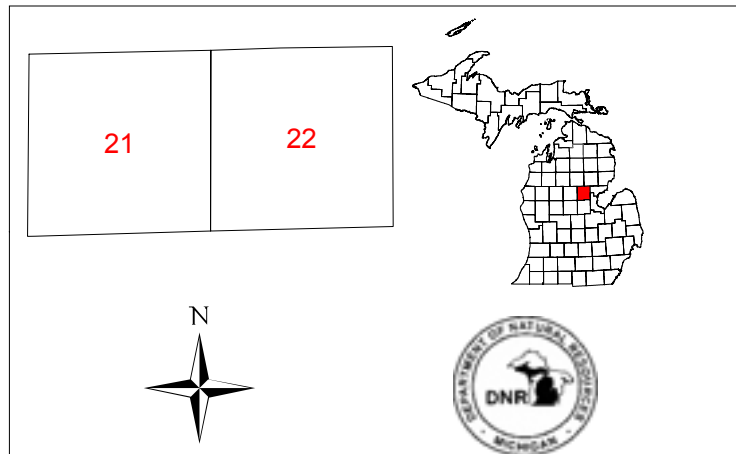
Stand	Cover Type	Acres	Age	Site Index	Mgt Obj	Condition	Method Cut	Harvest Priority	Cultural Need	FDF Status
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TREATMENT LIMITING FACTORS:

Total Acres..... 0

Field Map

Compartment 53
 T19N, R2E, Sec. 21, 22
 County: Gladwin
 Unit: Gladwin
 YOE: 2007
 Acres: 1,113 GIS Calculated
 Stand Examiner: Steven Nyhoff
 Map Revised: 8/22/2005
 Map Phase: Pre-review



Legend

- Miris Corners
- Poor Dirt Roads
- Trails
- Fireline
- ORV Trails
- Stand Boundary
- 148 - Final Harvest/Natural Regeneration/Other
- 348 - Shelterwood-seed/Natural Regeneration/Other
- Name Poor Dirt Roads
- Name Trails
- Name Water Features

