



**FOREST MANAGEMENT UNIT
COMPARTMENT REVIEW PRESENTATION**

COMPARTMENT # 71 ENTRY YEAR: 2009

Compartment Acreage: 1,414 County: Gladwin

Revision Date: 10-4-07

Stand Examiner: Mark Reichel

Legal Description: T 18N, R 20E, Sec 19-21

RMU (if applicable): N/A

Management Goals: Maintain current cover types. Even aspen age class distribution with early harvest of 100 acres of aspen. Ensure regeneration of aspen stands by harvesting during dormant season. Maintain oak in section 21 with regeneration harvests in two stands, and interplanting jack pine in one. Maintain stand 31 as a “Gladwin County” northern hardwood/aspen stand with selection harvest. Increase average diameter of one red pine stand with 3rd row thinning.

Soil and Topography: This compartment is comprised of about 50% level, low and often wet terrain that is hummocky in places, and about 50% drier uplands with level to undulating topography. It is dissected by the Little Molasses River, which has a shallow valley with short, steep banks, and Fish Creek. A good portion of section 21 is an upland of small dunes that are steep in places and have sparse ground cover. Soils in the compartment range from somewhat poorly drained, level soils in the Au Gres and Iosco series (about 40%), to moderately well drained Croswell series and well drained Grayling series soils (about 55%). There are small areas of poorly drained Roscommon and Evart soils along the river and Fish Creek.

Ownership Patterns, Development, and Land Use in and Around the Compartment: About half of the compartment’s perimeter borders private land, but they are larger holdings (7 properties North of Grim Road) and there are very few trespasses, with the exception of a large shooting alley cut in the SE ¼ sec. 20 and possibly incorrectly posted lines in the NW ¼ of the same section. There is a large amount of illegal ORV activity and ORV damage in section 21: the ORV mixing area to the East has spilled over into this compartment. This compartment had a few illegal blinds and small dump sites, but less than average.

Unique, Natural Features: None.

Archeological, Historical, and Cultural Features: None.

Special Management Designations or Considerations: None

Watershed and Fisheries Considerations: None. Neither the Little Molasses River nor Fish Creek are significant fisheries, and there are no timber harvests adjacent to these watercourses.

Wildlife Habitat Considerations: Compartment 71 has been aggressively managed to maintain the early forest successional cover type species such as aspen. With a good brushy under story of soft mast crops and the presence of the Little Molasses River meandering through this compartment, in conjunction with young aspen stands, this area has generated sustained interest from grouse, woodcock and deer hunters. Oak stands and numerous openings also generate considerable pressure from turkey hunters during both spring and fall hunting periods. Overall, this is a highly productive wildlife compartment.

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. This area has had little oil and gas activity. North Buckeye Field is located three miles to the west. 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: Access to this compartment is via Grim Rd., a county gravel road that runs along the entire southern edge of the compartment for 3 miles, and Deer Rd., another gravel county road that runs through the compartment. Highway 61 is a few miles North off of Deer Rd. A small portion of Fornier Rd., which is paved, runs along the Southwest edge. Fewer two-tracks are needed because of the county roads, which may be why there is a smaller than average amount of dumping in the compartment. Most of the existing berms have held.

Survey Needs: A survey may possibly be needed along the South and East 1/16 lines of NWNW Sec. 20.

Recreational Facilities and Opportunities: The primary recreational uses of the compartment are hunting and ORV riding. The Gladwin ORV trail as well as numerous illegal trails run through section 21. The Midland to Mackinaw Trail runs through the compartment as well; it is well-marked but does not have a good tread so it is hard to follow. The trail receives light foot and horse use.

Fire Protection:

Additional Compartment Information:

Cover Type details, Proposed Treatments, and Stand listings are listed in the attached reports:

- ◆ Cover Type by Age Class
- ◆ Proposed Treatments – No Limiting Factors
- ◆ Proposed Treatments – With Limiting Factors
- ◆ Stand Listing – Forested
- ◆ Stand Listing – Non Forested
- ◆ Special Conservation Area (SCA) Details

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
- ◆ SCA – Special Conservation Areas



Stage 1 Acres Summary By Level 3 Cover Type By Age

Compartment: 73071

Date: 11/5/2007

	0	1-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	>89	Uneven Age	Grand Total
Aspen Types	0	60.1	117.2	0	309.8	0	0	3.9	0	0	0	12.9	503.9
Emergent Wetland	34	0	0	0	0	0	0	0	0	0	0	0	34
Herbaceous Openland	22.6	0	0	0	0	0	0	0	0	0	0	0	22.6
Low-Density Trees	56.9	0	0	0	0	0	0	0	0	0	0	0	56.9
Lowland Coniferous Forest	0	0	0	0	0	0	0	0	0	0	9.1	12.4	21.5
Lowland Deciduous Forest	0	0	56.6	13.7	168.3	0	0	0	0	0	2.1	57	297.7
Lowland Shrub	114	0	0	0	0	0	0	0	0	0	0	0	114
Mixed Upland Deciduous	0	0	10.5	2.7	0	0	0	0	0	0	0	0	13.2
Natural Pines	0	0	0	0	0	0	4.1	0	0	0	0	17.7	21.8
Northern Hardwood	0	0	0	0	0	0	0	0	43.6	0	0	24.9	68.5
Oak Types	0	86.1	0	0	23.6	0	0	0	26.5	24.5	0	23.9	184.6
Other Upland Deciduous	0	0	14.5	0	0	0	0	0	0	0	0	0	14.5
Planted Pines	0	0	0	0	14.6	0	0	0	0	0	0	0	14.6
Upland Shrub	45.6	0	0	0	0	0	0	0	0	0	0	0	45.6
Grand Total	273.1	146.2	198.8	16.4	516.3	0	4.1	3.9	70.1	24.5	11.2	148.8	1413.4

**PROPOSED TREATMENTS
NO LIMITING FACTORS**

S
t
a
n
d

Treatment Name	Acres	Stage1 CovType	Size Density	1st Age	2nd Age	Treatment Method	Treatment Purpose	Cover Type Objective	Pg. 1
1 73071001-Cut	34.3	4130 - Aspen	6	35	0	Clearcut with Reserves	Regeneration	Aspen	

Rev
Cmnt:

Rev Final harvest, reserving patches of aspen with other spp., 3% by area, in and adjacent to lower areas. Harvest dormant season, NON-NEGOTIABLE.
Spec:

Next Expect aspen regeneration. Plant pine if regen fails. Survey regen according to regen timeclock WI.
Steps:

8 73071008-Cut	15.5	6112 - Lowland Aspen	6	32	0	Clearcut with Reserves	Regeneration	Aspen	
----------------	------	----------------------	---	----	---	------------------------	--------------	-------	--

Rev Early harvest to even aspen age class distribution. 20% log trees. Dense. Should get dense new stand.
Cmnt:

Rev Final harvest with reserves. Retain 3-10% by area, including all representative spp. Nearly pure aspen and higher ground, so expect succesful aspen regen.
Spec:

Next Almost pure aspen stand: new stand will be almost pure aspen. Survey regen according to regen timeclock WI.
Steps:

11 73071011-Cut	18.7	4130 - Aspen	5	35	0	Clearcut with Reserves	Regeneration	Aspen	
-----------------	------	--------------	---	----	---	------------------------	--------------	-------	--

Rev Poor vigor portion of stand. Early harvest to improve chances of regen. and to even aspen age distribution in compartment.
Cmnt:

Rev Final harvest during dry/frozen conditions (NON-NEGOTIABLE), reserving all oak saplings plus 3-10% aspen/red maple by area.
Spec:

Next Survey regen according to regen timeclock WI. Interplant J if regen is inadequate.
Steps:

15 73071015-Thin	14.7	42110 - Planted Red Pine	9	33	0	Crown Thinning	Intermediate Cut	Planted Red Pine	
------------------	------	--------------------------	---	----	---	----------------	------------------	------------------	--

Rev Focus on creating good rows for access.
Cmnt:

Rev 3rd row thin, reducing BA to 130. Retain trace of white pine and hardwoods that exist in stand.
Spec:

Next None: Intermediate thinning.
Steps:

31 73071031-Cut	22.1	4116 - Mixed N. Hardwood - Aspen	9	70	0	Group Selection	Regeneration	Mixed N. Hardwood - Aspen	
-----------------	------	----------------------------------	---	----	---	-----------------	--------------	---------------------------	--

Rev
Cmnt:

Rev --Mark Reichel : 10/03/2007 comments:
Spec:

Remove aspen, and mark additional red maple to BA of 90. Retain all oak to meet 3-10% requirement by BA. Remove all ash, regardless of merchantability, due to EAB. Harvest during dry or frozen conditions due to wet soils.

Next Stand will remain N Hardwood/Aspen stand. Expect some aspen and maple regen, and some release of oak seedlings and saplings. Any combination of maple and aspen acceptable.
Steps:

41 73071041-Cut	4.6	4139 - Aspen, Mixed Deciduous	6	75	0	Clearcut with Reserves	Regeneration	Aspen, Mixed Deciduous	
-----------------	-----	-------------------------------	---	----	---	------------------------	--------------	------------------------	--

Rev Aspen is decadent (75 years old).
Cmnt:

Rev Final harvest dry portion of stand, reserving all jack pine, paper birch and pin oak, plus additional aspen and red maple to equal 3-10% by basal area.
Spec:

Next Expect stand to regenerate to mixed aspen/maple in harvested area, and red maple in wet portion of stand, with a small oak component. Any combination of aspen and red maple is acceptable.
Steps:

S
t
a
n
d

Treatment Name	Acres	Stage1 CovType	Size Density	1st Age	2nd Age	Treatment Method	Treatment Purpose	Cover Type Objective	Pg. 2
51 73071051-Cut	9.4	6112 - Lowland Aspen	6	34	0	Clearcut with Reserves	Regeneration	Aspen	

Rev Cmnt: This AOI is one of 2 in stand 51 with identical Rx. Separate treatments because they are physically separated by wet portion of stand that won't be harvested.

Rev Spec: Final harvest dry portions of stand at NW and SW ends. Harvest during dry/frozen conditions- NON NEGOTIABLE. Green mark trace spp for retention, plus aspen to equal 3-10% by BA. There are 20 tree species in stand (a lot of them in wet portion of stand that won't be cut), including sugar maple and basswood. Keep this diversity.

Next Steps: Will get aspen stand. Interplant with J or R if regen inadequate. Survey regen according to regen timeclock WI.

51 73071051-North-Cut	7.7	6112 - Lowland Aspen	6	34	0	Clearcut with Reserves	Regeneration	Aspen	
-----------------------	-----	----------------------	---	----	---	------------------------	--------------	-------	--

Rev Cmnt: This AOI is one of 2 in stand 51 with identical Rx. Separate treatments because they are physically separated by wet portion of stand that won't be harvested.

Rev Spec: Final harvest dry portions of stand at NW and SW ends. Harvest during dry/frozen conditions- NON NEGOTIABLE. Green mark trace spp for retention, plus aspen to equal 3-10% by BA. There are 20 tree species in stand (a lot of them in wet portion of stand that won't be cut), including sugar maple and basswood. Keep this diversity.

Next Steps: Will get aspen stand. Interplant with J or R if regen inadequate. Survey regen according to regen timeclock WI.

56 73071056-Cut	13.7	6112 - Lowland Aspen	6	34	0	Clearcut with Reserves	Regeneration	Aspen	
-----------------	------	----------------------	---	----	---	------------------------	--------------	-------	--

Rev Cmnt:

Rev Spec: Final harvest during dry or frozen conditions - NON-NEGOTIABLE. Green mark 3-10% by basal area for retention, reserving all red oak saps plus aspen and red maple and any other representative spp.

Next Steps:

76 73071076-Seed	26.5	4129 - Mixed Oak	8	77	0	Seed Tree with Reserves	Regeneration	Planted Jack Pine, Mixed Deciduous	
------------------	------	------------------	---	----	---	-------------------------	--------------	------------------------------------	--

Rev Cmnt: Dense vaccinium/sedge ground cover. Very little oak regen. Oak SI is 45, JP SI is 63. This is not R site.

Rev Spec: Seed tree harvest during dormant season (non-negotiable). Retain 10 BA (3-10% by BA) oak for mast and seed. Cut all aspen (trace) to increase aspen component and b/c aspen is decadent. Retain all JP. Interplant with JP.

Next Steps: Interplant JP. Survey regen according to regen timeclock WI. Expect J/O mixed stand, heavier to J, with small A component. Any combo of J and O acceptable.

85 73071085-Shelter	22.5	4129 - Mixed Oak	8	81	0	Shelterwood	Regeneration	Black, N. Pin Oak	
---------------------	------	------------------	---	----	---	-------------	--------------	-------------------	--

Rev Cmnt: Ave BA 87: too dense for O regen currently. Better site than stand 76: SI 53 vs 45, therefore chance of natural regen.

Rev Spec: Reduce BA to 30. Cut trace of aspen to preserve aspen component in stand. Retain trace of white oak and jack pine to contribute to 3-10% retention by BA (leave all J- there's a strip of J along road, which will serve as visual buffer).

Next Steps: Evaluate regen next YOY: plant to JP if shelterwood seed cut does not provide adequate regen next YOY.

**Total Treatment
Acreage Proposed: 189.6**

S
t
a
n
d

Gladwin

Mgt. Unit

**PROPOSED TREATMENTS
WITH LIMITING FACTORS**

Compartment: 71

Entry Yr: 2009

Inventory Method: IFMAP

Treatment
Name

Acres

Stage1
CovType

Size
Density

1st
Age

2nd
Age

Treatment
Method

Treatment
Purpose

Cover Type
Objective

Pg. 1

Limiting Factor
and Comment:

Rev
Cmnt:

No Stands with Limiting Factors

Rev
Spec:

Next
Steps:

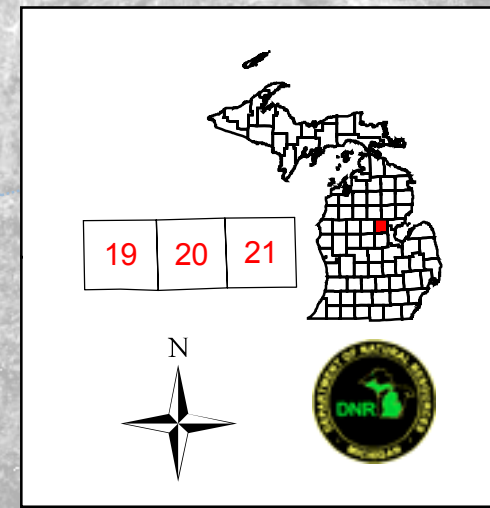
**Total Treatment
Acreage Proposed: 0**

Field Map

Compartment 071
 T18N, R02E, Sec. 19-21
 County: Gladwin
 Unit: Gladwin
 YOE: 2009
 Acres: 1,414 GIS Calculated
 Stand Examiner: Mark Reichel
 Map Revised: 10/01/2007
 Map Phase: Review

Stand # 23
 Stacking Density (A)(412)0 -7
 Ol Level 3
 Code Level 4
 Cover Type Code

Multi-Part Stands
 Stand 25, 2 Parts, Split by stand 12
 Stand 30, 2 Parts, Split by stand 34
 Stand 57, 2 Parts, Split by stand 51
 Stand 63, 2 Parts, Split by stand 70
 Stand 79, 2 Parts, Split by stand 76



Legend

- Miris Corners
- - - County Gravel Road
- Paved Road
- - - Poor Dirt Road
- - - Trails
- Intermittent Stream/Drain
- Stream
- Hiking Trails
- Stands
- Clearcut with Reserves
- Crown Thinning
- Group Selection
- Seed Tree with Reserves
- Shelterwood

Forest Stands

Level 3

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

Non-Forest Stands

Level 3

- 310 - Herbaceous Openland
- 320 - Upland Shrub
- 330 - Low-Density Trees
- 622 - Lowland Shrub
- 623 - Emergent Wetland

