



**TRAVERSE CITY FOREST MANAGEMENT UNIT
COMPARTMENT REVIEW PRESENTATION**

COMPARTMENT # 20 ENTRY YEAR: 2009

Compartment Acreage: 1,918 County: Benzie

Revision Date: 12/05/07

Stand Examiner: Craig Allen

Legal Description: T25N- R13W; Sections 2, 11, 14
Political Township: Colfax

Management Goals: Past management plans (The Pere Marquette State Forest Management Plan) identified this area as a part of a larger resource unit primarily designated towards mixed use.

Soil and Topography: The topography is mostly level. The soil types in this area include wet Roscommon sands and Kalkaska sands and loams.

Ownership Patterns, Development, and Land Use in and Around the Compartment: This compartment is part of a larger holding of state land that is surrounded by the communities of Bendon, Wallin, Nessen City, and Karlin. The compartment is almost entirely surrounded by state land.

Unique, Natural Features: The Grass Lake flooding and the surrounding marsh dominates the northeast portion of the compartment. The Betsie River and Pickerel Creek run through the compartment. The Betsie River is a designated Michigan Natural River system. The designation begins at the Grass Lake Dam, then extending downstream to its mouth at Betsie Lake.

Archeological, Historical, and Cultural Features: There is a potential for archaeological sites within this compartment. Early Native Americans would commonly establish settlements along the Betsie River.

Special Management Designations or Considerations: There is a portion of a Special Conservation Area (SCA) within this compartment. This involves part of stand 18, stands 69, and 70. This was a part of the "Proposed Potential Old-Growth Areas" that were identified in 1997. These areas will now be under consideration as Biodiversity Stewardship Areas which are currently under development and guided by the Biodiversity Conservation Planning Process.

Other management considerations involve all proposed treatments (see attached).

Watershed and Fisheries Considerations: The Grass Lake Flooding, the Betsie River, and Pickerel Creek are located in Compartment 20. The Grass Lake Flooding and the Betsie River in this area offer some fishing opportunities for warmwater fish species. MDNR BMPs should be followed for timber treatments near these water bodies.

Wildlife Habitat Considerations: Much of compartment 20 lays on either outwash or lake plains of poorly drained peat or muck (LTAs 5149 & 6149). These saturated soils support a variety of wetland communities within this compartment. A large expanse of cattail marsh runs along both the Betsie River and Pickerel Creek. Stands of cedar, spruce, hardwoods, and aspen are present as the terrain rises and becomes less saturated. Small bogs and

shrub communities are interspersed throughout the lowland forests. The Grass Lake Wildlife Dam is located in this compartment in the center of section 2 and allows the water level to be manipulated upstream, which includes Grass Lake along with the surrounding emergent wetland. Future management of The Grass Lake Wildlife Flooding will be based on its management plan, which is scheduled for updating. No treatments are prescribed during this entry period for the lowland deciduous forests, but future harvests or habitat cuts are appropriate and should be carefully designed to optimize regeneration and to mimic naturally occurring blowdown pockets. Treatments such as these will benefit species like snowshoe hare, woodcock, bobcats, and chestnut-sided warblers.

In sections 11 and 2 the topography transitions into excessively drained sandy outwash plains (LTA 5111). These fire prone soils currently support large stands of aspen as well as open barrens-type communities. There are several pine plantations within this compartment as well. Communities on this LTA should continue to be managed for a variety of forest age classes, successional stages, and patch sizes, as well as grass/shrub openings, consistent with the fire driven dynamics of these soils. Proposed aspen cuts have been designed to increase age class diversity and maximize the juxtaposition of the various age classes. These cuts will also include creation of dead and down logs which benefit many species of wildlife, such as deer, grouse, yellow-billed cuckoos, and cottontail rabbits. Parts of this landscape were, at times, shielded from fire, and therefore some management for successional advanced hardwood/conifer stands is fitting. Future management of pine stands should consider incorporating small (2-5 acre) islands that are left relatively un-thinned within mature stands to provide winter roosting cover for turkeys. Deciduous species should be encouraged within conifer plantations for diversity.

Openings and semi-forested habitats are an integral part of this dry outwash plain and where historically maintained by periodic wildfire. These communities provide grasses and forbs for forage, nesting, and “bugging” areas. Scattered fruiting shrubs and mast producing trees provide food and cover. The “edge” component created by these grasslands is yet another important habitat component provided. Prescribed burning has been proposed in several areas to maintain and enhance these communities by setting back woody (as well as bracken and sedge) encroachment, stimulating native herbaceous vegetation and berry production, preparing seed beds, and recycling nutrients. Where burning is not possible, selective hand felling will be used.

Mineral Resource and Development Concerns and/or Restrictions: Surface sediments consist of glacial outwash sand and gravel and postglacial alluvium. The glacial drift thickness varies between 400 and 600 feet. Beneath the glacial drift is the Devonian Ellsworth Shale. The Ellsworth is used for cement products. A gravel pit is located three miles to the east, but potential appears to be limited. This area is located along the north edge of the Niagaran reef trend and is in an area of Antrim Shale leasing and development. Most of the Compartment is leased for oil and gas development. (Tom Hoane, DNR Geologist, 9/07/06).

Vehicle Access: There are many gravel and seasonal county roads throughout the compartment within this area offering good and easy access to State lands. There are also many forest “2-track” roads in various areas of the compartment that are in good condition and are used for public and DNR land management accessibility.

Survey Needs: There are no survey needs in this compartment.

Recreational Facilities and Opportunities: The Platte River State Snowmobile Trail runs along the northwest edge of the compartment on Reynolds road. The Grass Lake State Forest Campground is also within the compartment. Hunting, fishing, kayaking and dispersed camping are popular recreational activities throughout the compartment.

Fire Protection: This area has wildfire protection by Thompsonville Fire Dept., and the DNR Platte River Field Office. Access is acceptable in this compartment, and there is only a minor history of wildfire. The majority of this compartment is a hardwood type, so the opportunity for a large fire is minimal.

Additional Compartment Information: none.

➤ **Lands recommended for disposal:** There are no lands within the compartment recommended for disposal.

➤ **Lands recommended for acquisition:** There are no interior private lands so there are no lands recommended for acquisition within this compartment.

The following information is displayed, where pertinent, on the attached compartment maps:

- ◆ **Base feature information, stand numbers, cover types**
- ◆ **Proposed treatments**

S
t
a
n
d

Traverse City Mgt. Unit
Inventory Method: IFMAP

**PROPOSED TREATMENTS
NO LIMITING FACTORS**

Compartment: 020

Entry Yr: 2009

Date 02/13/2008



Treatment Name	Acres	Stage1 CovType	Size Density	1st Age	2nd Age	Treatment Method	Treatment Purpose	Cover Type Objective
5 61020005-Cut	50.6		9	58	0	Clearcut	Regeneration	Planted Red Pine

Rev No retention due to red pine plantation (part of red pine project).
Cmnt:

Rev --Stephen Griffith : 11/19/2007 comments: Per discussion with local forester, leave a 2-5 acre island of uncut pine between stand 4 and stand 9 for
Spec: winter turkey roosting cover.

Clearcut and re-plant to red pine

Next Trench and replant to red pine after harvest.
Steps:

5 61020005-thin	45.3		9	58	0	Systematic Thinning	Intermediate Cut	Planted Red Pine
-----------------	------	--	---	----	---	---------------------	------------------	------------------

Rev Monoculture plantation - retention not applicable for this thinning prescription.
Cmnt:

Rev Individually select 1/3 volume or cut every third tree.
Spec:

Next
Steps:

15 61020015-Cut	10.3		6	47	0	Clearcut with Reserves	Regeneration	Aspen
-----------------	------	--	---	----	---	------------------------	--------------	-------

Rev Follow retention guidelines to apply either a leave patch(s) and/or scattered individual trees representative to existing stand.
Cmnt:

Rev --Stephen Griffith : 11/19/2007 comments: Create some (approximately 1-2 trees per acre) coarse woody debris (CWD) during harvest operations,
Spec: preferably via timber sale specs. CWD trees should be log sized or bigger, the more decay resistant the tree species is the better, and cut approximately at breast height (4.5 feet). The log should be left within 3 feet it's stump.

Clearcut to regenerate aspen. leave any oak and conifers.

Next Expect good aspen regeneration. Acceptable regen may include a mix of aspen, maple, cherry.
Steps:

3 NF_61020003-Hand Fell	1.1	Unspecified	0	0	0	Non-Forest Management	Opening Maintenance	
-------------------------	-----	-------------	---	---	---	-----------------------	---------------------	--

Rev
Cmnt:

Rev Selectively hand fell woody encroachment to maintain upland brush/grassland community. Leave scattered mast producing trees and shrubs and/or
Spec: conifers for wildlife food and cover. Pile slash for small mammal cover.

Next
Steps:

8 NF_61020008-Hand Fell	3.4	Unspecified	0	0	0	Non-Forest Management	Opening Maintenance	
-------------------------	-----	-------------	---	---	---	-----------------------	---------------------	--

Rev
Cmnt:

Rev Selectively hand fell woody encroachment to maintain upland brush/grassland community. Leave scattered mast producing trees and shrubs and/or
Spec: conifers for wildlife food and cover. Pile slash for small mammal cover.

Next
Steps:

S
t
a
n
d

Traverse City Mgt. Unit
Inventory Method: IFMAP

**PROPOSED TREATMENTS
NO LIMITING FACTORS**

Compartment: 020

Entry Yr: 2009

Date 02/13/2008



Treatment Name	Acres	Stage1 CovType	Size Density	1st Age	2nd Age	Treatment Method	Treatment Purpose	Cover Type Objective
13 NF_61020013- WGS	32.0	Unspecified	0	0	0	Non-Forest Management	Ecosystem Maintenance	

Rev
Cmnt:

Rev Terrain is generally flat and operable. Propose to hand fell some encroachment, burn, then plant native prairie species, centered around road to Grass Lake Campground.
Spec:

Next Maintain planting by periodic prescribed burn.
Steps:

18 NF_61020018- Flooding	201.8	Unspecified	0	0	0	Non-Forest Management	Habitat Management	
-----------------------------	-------	-------------	---	---	---	-----------------------	--------------------	--

Rev This stand was formerly under "potential old-growth" designation. Designation has been removed for this stand per compartment review decision in 2007.
Cmnt:

Rev Grass Lake Wildlife Management Area. Management of this SWMA will be based on the Management Plan which is currently being revised.
Spec:

Next
Steps:

24 NF_61020024- Burn	15.3	Unspecified	0	0	0	Prescribed Burn	Habitat Management	
-------------------------	------	-------------	---	---	---	-----------------	--------------------	--

Rev
Cmnt:

Rev Burn this and several other identical stands (# 24, #32, # 38, #37) several times per entry period in order to set back sedge and bracken. Repeated mowing a portion of this area would be a second alternative if burning regularly is not possible. Could burn within boundary created by existing two-tracks and then would have mix of burned and unburned habitat.
Spec:

Next As needed, add to resulting herbaceous growth with seeding of native herbaceous species.
Steps:

27 NF_61020027- Forage	14.3	Unspecified	0	0	0	Non-Forest Management	Opening Maintenance	
---------------------------	------	-------------	---	---	---	-----------------------	---------------------	--

Rev
Cmnt:

Rev Continue to maintain this wildlife opening as a pasture mix or similar herbaceous cover for forage needs of area wildlife. Maintain general consists of mowing and top dressing annually, or as needed.
Spec:

Next
Steps:

31 NF_61020031- Burn	68.2	Unspecified	0	0	0	Prescribed Burn	Habitat Management	
-------------------------	------	-------------	---	---	---	-----------------	--------------------	--

Rev
Cmnt:

Rev Burn this and several other identical stands (# 24, #32, # 38, #37) several times per entry period in order to set back sedge and bracken. Repeated mowing a portion of this area would be a second alternative if burning regularly is not possible. Could burn within boundary created by existing two-tracks and then would have mix of burned and unburned habitat.
Spec:

Next As needed, add to resulting herbaceous growth with seeding of native herbaceous species.
Steps:

**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
32 NF_61020032-Burn	68.2	Unspecified	0	0	0	Prescribed Burn	Habitat Management	

Rev
Cmnt:

Rev Burn this and several other identical stands (# 24, #32, # 38, #37) several times per entry period in order to set back sedge and bracken. Repeated
Spec: mowing a portion of this area would be a second alternative if burning regularly is not possible. Could burn within boundary created by existing two-tracks and then would have mix of burned and unburned habitat.

Next
Steps: As needed, add to resulting herbaceous growth with seeding of native herbaceous species.

37 NF_61020037-Burn	11.7	Unspecified	0	0	0	Prescribed Burn	Habitat Management	
----------------------------	------	-------------	---	---	---	-----------------	--------------------	--

Rev
Cmnt:

Rev Burn this and several other identical stands (# 24, #32, # 38, #37) several times per entry period in order to set back sedge and bracken. Repeated
Spec: mowing a portion of this area would be a second alternative if burning regularly is not possible. Could burn within boundary created by existing two-tracks and then would have mix of burned and unburned habitat.

Next
Steps: As needed, add to resulting herbaceous growth with seeding of native herbaceous species.

38 NF_61020038-Burn	30.6	Unspecified	0	0	0	Prescribed Burn	Habitat Management	
----------------------------	------	-------------	---	---	---	-----------------	--------------------	--

Rev
Cmnt:

Rev Burn this and several other identical stands (# 24, #32, # 38, #37) several times per entry period in order to set back sedge and bracken. Repeated
Spec: mowing a portion of this area would be a second alternative if burning regularly is not possible. Could burn within boundary created by existing two-tracks and then would have mix of burned and unburned habitat.

Next
Steps: As needed, add to resulting herbaceous growth with seeding of native herbaceous species.

40 NF_61020040-Invasives	3.7	Unspecified	0	0	0	Non-Forest Management	Habitat Management	
---------------------------------	-----	-------------	---	---	---	-----------------------	--------------------	--

Rev
Cmnt:

Rev Monitor, contain, eradicate leafy spurge.
Spec:

Next
Steps:

45 NF_61020045-Hand Fell	1.0	Unspecified	0	0	0	Non-Forest Management	Opening Maintenance	
---------------------------------	-----	-------------	---	---	---	-----------------------	---------------------	--

Rev
Cmnt:

Rev Selectively hand fell woody encroachment to maintain upland brush/grassland community. Leave scattered mast producing trees and shrubs and/or
Spec: conifers for wildlife food and cover. Pile slash for small mammal cover.

Next
Steps:

S
t
a
n
d

Traverse City Mgt. Unit
Inventory Method: IFMAP

**PROPOSED TREATMENTS
NO LIMITING FACTORS**

Compartment: 020

Entry Yr: 2009

Date 02/13/2008



Treatment Name	Acres	Stage1 CovType	Size Density	1st Age	2nd Age	Treatment Method	Treatment Purpose	Cover Type Objective
51 NF_61020051-Revegetate	1.8	Unspecified	0	0	0	Non-Forest Management	Opening Maintenance	

Rev
Cmnt:

Rev Degraded site. Revegetate to a low maintenance herbaceous vegetation suitable for wildlife forage or cover. Soil will most likely need considerable
Spec: reconditioning.

Next
Steps:

53 NF_61020053-Invasives	3.0	Unspecified	0	0	0	Non-Forest Management	Ecosystem Maintenance	
--------------------------	-----	-------------	---	---	---	-----------------------	-----------------------	--

Rev
Cmnt:

Rev Probable location of glossy buchthorn. Work with MNFI on containment and/or eradication strategy for this invasive shrub.

Spec:

Next
Steps:

54 NF_61020054-Invasives	13.3	Unspecified	0	0	0	Non-Forest Management	Ecosystem Maintenance	
--------------------------	------	-------------	---	---	---	-----------------------	-----------------------	--

Rev
Cmnt:

Rev Probable location of glossy buchthorn. Work with MNFI on containment and/or eradication strategy for this invasive shrub.

Spec:

Next
Steps:

59 NF_61020059-Revegetate	2.5	Unspecified	0	0	0	Non-Forest Management	Habitat Management	
---------------------------	-----	-------------	---	---	---	-----------------------	--------------------	--

Rev
Cmnt:

Rev Degraded site. Revegetate to a low maintenance herbaceous vegetation suitable for wildlife forage or cover. Soil will most likely need considerable
Spec: reconditioning.

Next
Steps:

68 NF_61020068-Hand Fell	10.6	Unspecified	0	0	0	Non-Forest Management	Opening Maintenance	
--------------------------	------	-------------	---	---	---	-----------------------	---------------------	--

Rev
Cmnt:

Rev Selectively hand fell woody encroachment to maintain upland brush/grassland community. Leave scattered mast producing trees and shrubs and/or
Spec: conifers for wildlife food and cover. Pile slash for small mammal cover.

Next
Steps:

**Total Treatment
Acreage Proposed: 588.6**

S
t
a
n
d

Traverse City Mgt. Unit
Inventory Method: IFMAP

PROPOSED TREATMENTS WITH LIMITING FACTORS

Compartment: 020 Entry Yr: 2009
Date 02/13/2008



Treatment Name	Acres	Stage1 CovType	Size Density	1st Age	2nd Age	Treatment Method	Treatment Purpose	Cover Type Objective
----------------	-------	----------------	--------------	---------	---------	------------------	-------------------	----------------------

Limiting Factor
and Comment:

Rev
Cmnt:

Rev
Spec:

Next
Steps:

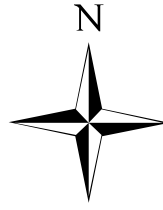
**Total Treatment
Acreage Proposed: 0**

Field Map

Compartment 20
 T25N, R13W, Sec. 2, 11, 14
 County: Benzie
 Unit: Traverse City
 YOE: 2009
 Acres: 1,918 GIS Calculated
 Stand Examiner: Craig Allen
 Map Revised: 12/17/2007
 Map Phase: Pre-review

Stand # **23**
 Stocking Density
 (A) (412)0 - **7**
 OI Level 3
 Code Level 4
 Cover Type Code

2
 11
 14



Multi-Part Stands
 Stand 4, 2 Parts, contained in stand 5
 Stand 18, 5 Parts, split by stand 16
 Stand 41, 3 Parts, contained in stand 42
 Stand 43, 2 parts, contained in stand 42
 Stand 46, 2 parts, contained in stand 42

Legend

- Miris Corners
- Paved Roads
- Poor Dirt Roads
- Trails
- Intermittent Stream/Drain
- Stream
- Grass Lake State Forest Campground
- Snowmobile Trails
- Stands
- SCA - Special Conservation Area
- Clearcut
- Clearcut with Reserves
- Systematic Thinning
- Prescribed Burn
- Opening Maintenance
- Other Treatment - See Comments
- Water Level Management

Forest Stands

- Level 3
- 411 - Northern Hardwood
 - 413 - Aspen Types
 - 421 - Planted Pines
 - 422 - Natural Pines
 - 423 - Other Upland Conifers
 - 611 - Lowland Deciduous Forest
 - 612 - Lowland Coniferous Forest

Non-Forest Stands

- Level 3
- 110 - Low Intensity Urban
 - 211 - Cropland
 - 310 - Herbaceous Openland
 - 330 - Low-Density Trees
 - 500 - Water
 - 622 - Lowland Shrub
 - 623 - Emergent Wetland

