Baraga Forest Management Unit
Compartment Review Presentation
Compartment #10 Entry Year: 2012
Compartment Acreage: 1,677 County: Baraga

Revision Date: 7/14/2010

Stand Examiner: Brad S. Carlson

Legal Description: T49N, R34W; Sec 3, 9, 10 and 11.

RMU (if applicable):

Management Goals: To maintain a healthy sustainable forest with special consideration to wildlife and fisheries habitat.

Soil and Topography: The majority of this compartment is level land that transitions to some rolling hills on its northern edge. Soils consist primarily of Grayling sand to the south and Rubicon sand to the north. There are also small areas of Yalmer loamy sand and Keweenaw-Kalkaska complex within the compartment.

Ownership Patterns, Development, and Land Use in and Around the Compartment: This is a solid block of state owned land. There are private lands to the east and south of the compartment.

Unique, Natural Features: Kirtland's warbler has been known to nest in the area.

Archeological, Historical, and Cultural Features: None

Special Management Designations or Considerations: None

Watershed and Fisheries Considerations: None.

Wildlife Habitat Considerations: Favor mesic conifers; White Pine and Hemlock, as well Northern Red Oak and Black cherry. The Baraga Unit also has a wildlife reserve which is contained within this compartment. This reserve consists of goose fields which are row cropped.

Mineral Resource and Development Concerns and/or Restrictions: Surface sediments consist of glacial outwash sand and gravel, postglacial alluvium and an end moraine of coarse-textured till. There is insufficient data to determine the glacial drift thickness. The Precambrian Michigamme Formation subcrops below the glacial drift. The Michigamme does not have a current economic use. The nearest gravel pit is located six miles to the south, but there should be potential on the uplands. The closest iron mines are located four miles to the east and are abandoned. An area one mile to the northwest was previously leased for metallic exploration. There is no economic oil and gas production in the UP.

Vehicle Access: The Menge Creek road is a county road that is the western border to this compartment, it is an improved gravel road that is seasonal and can be traveled by car during the summer months. The Prison Camp road is a county road that is the southern border to this compartment; this road is paved and kept open year-round. There are several forest roads in the compartment that are fairly well traveled by recreationalists. These roads range in condition from well traveled to almost impassable (usually due to "sugar sand" blowouts).

Survey Needs: None, sufficient survey corners exist to carry out timber harvest activities.

Recreational Facilities and Opportunities: A large part of this compartment includes the Baraga Plains Wildlife Refuge. Snowmobile trails border the compartment to the west and cross though in the north. A portion of the Baraga Plains ORV trail passes through the West side of this compartment.

Fire Protection: This is a jack pine area, and fire is a concern. The ROTC Fire burned in this compartment in 2007 along with a small fire to the north east of the compartment and one near Little Lake. A 307 acre wild fire which escaped from a 120 acre prescribed burn occurred in May of 1978. The summer cottages and permanent residences around Big Lake (compartment to the South) are a potential fire source.

Additional Compartment Information: None

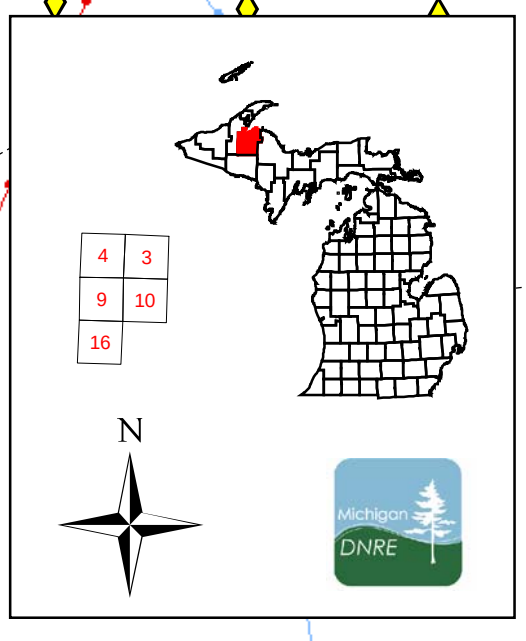
- **The following 5 reports from the Operations Inventory System (OIPC) are attached:**
  - **Cover Type by Age Class**
  - **Cover Type by Management Objective**
  - **Compartment Volume Summary**
  - **Proposed Treatments – No Limiting Factors**
  - **Proposed Treatments – With Limiting Factors**

- **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**

Cover Type & Treatment Map

Compartment 10
T49N, R34W, Sec. 3,4,9,10,16
County: Baraga
Unit: Baraga
YOE: 2012
Acres: 1,677 GIS Calculated
Stand Examiner: Brad Carlson
Map Revised: 4/02/2010
Map Phase: Pre-Review

Stand # 23 — Stocking Density
(412)0) - A7
Level 3 Level 4 — OI Code
Cover Type Code



88°34'0"W
88°33'0"W
88°32'0"W
46°41'0"N
46°40'0"N
46°39'0"N
46°38'0"N

Menge Rd
Little Lake Rd
Little Lake Rd
Little Lake

14 4199-MD9
15 4199-MD3
10 4191-MD3
17 4214-MC6
43 4310-UM6
6 4212-J6
3 4130-A6
16 310-G0
7 310-G0
20 4222-J3
2 4191-MD6
9 4130-A3
11 4212-J3
1 4225-MC2
8 4123-O6
21 4130-A3
19 4191-MD6
23 4221-R9
5 4222-J3
18 4222-J6
12 310-G0
4 4222-J2
13 4222-J3
22 4222-J1
27 4222-J3
24 4222-J3
30 4212-J6
25 4222-J6
26 310-G0
29 500-Z0
28 4222-J6
31 4222-J2
32 4222-J6
33 4222-J6
34 4222-J6

9
10
16

Legend

- GMM Survey Corners
- Paved Roads
- Poor Dirt Roads
- County Poor Dirt Roads
- Trails
- ORV Trails
- Motorcycle Trails
- Snowmobile Trails
- Intermittent Stream/Drain
- Stream
- Lakes and Rivers

Treatments
- Clearcut (w/Reserves, Patch/Strip)
- Selection (Group, Single Tree)

Forest Stands
- 412 - Oak Types
- 413 - Aspen Types
- 419 - Mixed Upland Deciduous
- 421 - Planted Pines
- 422 - Natural Pines

Non-Forest Stands
- 310 - Herbaceous Openland
- 500 - Water

1 0.5 0 1 Miles

Stand Boundary Map

Compartment 10
T49N, R34W, Sec. 3,4,9,10,16
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Stocking Density
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Level 3 Level 4 OI Code
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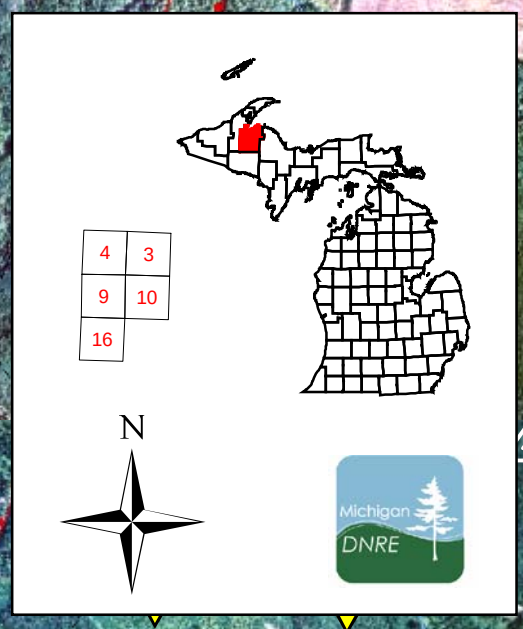

Menge Rd
Little Lake Rd
Little Lake

Legend

- GMM Survey Corners
- Paved Roads
- Poor Dirt Roads
- County Poor Dirt Roads
- Trails
- ORV Trails
- Motorcycle Trails
- Snowmobile Trails
- Stand Boundaries

Forest Stands
- 412 - Oak Types
- 413 - Aspen Types
- 419 - Mixed Upland Deciduous
- 421 - Planted Pines
- 422 - Natural Pines

Non-Forest Stands
- 310 - Herbaceous Openland
- 500 - Water

1 0.5 0 1 Miles

88°34'0"W 88°33'0"W 88°32'0"W
46°40'0"N 46°39'0"N 46°38'0"N

Dedicated & Proposed Special Conservation Area Map

Compartment 10
T49N, R34W, Sec. 3,4,9,10,16
County: Baraga
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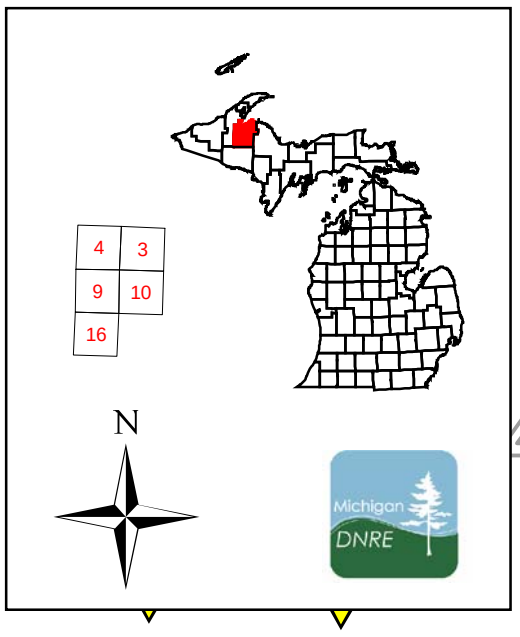

88°34'0"W
88°33'0"W
88°32'0"W
46°41'0"N
46°40'0"N
46°39'0"N
46°38'0"N

14 **4199**-MD9
15 **4199**-MD3
10 **4191**-MD3
17 **4214**-MC6
43 **4318**-UM6
6 **4212**-J6
3 **4130**-A6
16 **310**-G0
7 **310**-G0
20 **4222**-J3
2 **4191**-MD6
9 **4130**-A3
11 **4212**-J3
1 **4225**-MC2
8 **4123**-O6
21 **4130**-A3
19 **4191**-MD6
23 **4221**-R9
5 **4222**-J3
18 **4222**-J6
4 **4222**-J2
12 **310**-G0
13 **4222**-J3
22 **4222**-J1
27 **4222**-J3
24 **4222**-J3
30 **4212**-J6
25 **4222**-J6
26 **310**-G0
29 **500**-Z0
28 **4222**-J6
31 **4222**-J2
32 **4222**-J6
33 **4222**-J6
34 **4222**-J6

Legend
- GMM Survey Corners
- Stand Boundaries

Dedicated Special Conservation Areas
- Deer Wintering Areas
- Dedicated Management Areas

1 0.5 0 1 Miles

Table 1 – Total Acres by Cover Type and Age Class

Baraga Mgt. Unit *(Level 3 Cover Type)* **Compartment 010 Year of Entry 2012**

Age Class

	Non-Forested	1-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100-109	110-119	120 +	Uneven Age	Total
Aspen Types	0	0	38	0	0	0	0	3	0	0	0	0	0	0	0	**41**
Herbaceous Openland	294	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**294**
Mixed Upland Deciduous	0	0	110	0	0	0	0	0	0	25	0	32	0	0	15	**182**
Natural Pines	0	182	454	202	147	0	0	0	105	0	0	0	0	0	0	**1090**
Oak Types	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	**9**
Planted Pines	0	0	0	28	0	28	0	0	0	0	0	0	0	0	0	**56**
Water	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**6**
Total	**300**	**182**	**602**	**239**	**147**	**28**	**0**	**3**	**105**	**25**	**0**	**32**	**0**	**0**	**15**	**1678**

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Table 2 – Proposed Treatment Summaries

Baraga Mgt. Unit
Year of Entry 2012

Compartment 010
Total Compartment Acres: 1678

Acres by Treatment Type

Commercial Harvest - 160	Site Prep - 0	Tree Planting - 0	Prescribed Burn - 0	Other - 0
Habitat Cut - 0	Opening Maintenance - 0	Tree Seeding - 0	Pesticide - 0	

Cover Type by Harvest Method

	Clearcut	Selection	Seed Tree	Shelterwood	Thinning	Other - Specify	Total Acres
Aspen	3	0	0	0	0	0	**3**
Jack Pine	91	0	0	0	0	0	**91**
Mixed Upland Deciduous	51	15	0	0	0	0	**66**
Total	**145**	**15**	**0**	**0**	**0**	**0**	**160**

Stand	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective
2	11010002-Cut	19.4	4191 - Mixed Upland Deciduous with Conifer	High Density Pole	82	Harvest	Clearcut with Reserves	Mixed Upland Deciduous with Conifer

Prescription Specs: Cut all species except oak (also white pine and red pine if present), leave tree mark oak leaving 5 to 10 per acre where present. Leave a 33' buffer uncut along the Menge Creek Road.

Other Comments:

Next Steps:

Stand	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective
3	11010003-Cut	2.9	4130 - Aspen	High Density Pole	64	Harvest	Clearcut	Aspen

Prescription Specs: Clearcut. If present, any white pine, oak or hemlock should be reserved. No retention.

Other Comments:

Next Steps:

Stand	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective
14	11010014-Cut	14.8	4199 - Other Mixed Upland Deciduous	High Density Log	88	Harvest	Single Tree Selection	Other Mixed Upland Deciduous

Prescription Specs: Mark to 70-90 sq ba. where it is predominantly maple, areas that are predominantly oak should be marked down to 50 sqft to encourage more oak regeneration. Favor oak, white pine, and hemlock where present. Refer to the "Complete Marker" for further marking guidelines.

Other Comments:

Next Steps:

Stand	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective
18	11010018-Cut	3.3	42220 - Natural Jack Pine	High Density Pole	79	Harvest	Clearcut	Natural Jack Pine

Prescription Specs: Clear cut. If present reserve White Pine, Red Pine and Red Oak. no retention.

Other Comments:

Next Steps: Scarify, check for adequate regeneration within 4 yrs of scarifying.

Stand	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective
19	11010019-Cut	31.5	4191 - Mixed Upland Deciduous with Conifer	High Density Pole	101	Harvest	Clearcut with Reserves	Mixed Upland Deciduous with Conifer

Prescription Specs: Cut all species except oak (also white pine and red pine if present), leave tree mark oak leaving 5 to 10 per acre where present.

Other Comments:

Next Steps:

Stand	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective
25	11010025-Cut	37.3	42220 - Natural Jack Pine	High Density Pole	79	Harvest	Clearcut	Natural Jack Pine

Prescription Specs: Clear cut. If present reserve White Pine, Red Pine and Red Oak. no retention.

Other Comments:

Next Steps: Scarify, then check for adequate regeneration within 4 yrs of scarifying.

Stand	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective
28	11010028-Cut	39.5	42220 - Natural Jack Pine	High Density Pole	79	Harvest	Clearcut	Natural Jack Pine

Prescription Specs: Clear cut. If present reserve White Pine, Red Pine and Red Oak. no retention. Leave 100' buffer of trees around the lake for WLD.

Other Comments:

Next Steps: Scarify, then check for adequate regeneration within 4 yrs of scarifying.

Stand	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective
32	11010032-Cut	2.5	42220 - Natural Jack Pine	High Density Pole	79	Harvest	Clearcut	Natural Jack Pine

Prescription Specs: Clear cut. If present reserve White Pine, Red Pine and Red Oak. no retention.

Other Comments:

Next Steps: Scarify, then check for adequate regenation within 4 yrs of scarifying.

Stand	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective
33	11010033-Cut	1.3	42220 - Natural Jack Pine	High Density Pole	79	Harvest	Clearcut	Natural Jack Pine

Prescription Specs: Clear cut. If present reserve White Pine, Red Pine and Red Oak. no retention.

Other Comments:

Next Steps: Scarify, then check for adequate regeration within 4 yrs of scarifying.

Stand	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective
34	11010034-Cut	7.3	42220 - Natural Jack Pine	High Density Pole	79	Harvest	Clearcut	Natural Jack Pine

Prescription Specs: Clear cut. If present reserve White Pine, Red Pine and Red Oak. no retention.

Other Comments:

Next Steps: Scarify, then check for adequate regeneration within 4 yrs of scarifying.

Total Treatment Acreage Proposed: 159.8

Table 4 -- Treatments Prescribed with a Limiting Factor

Stand	Treatment Name	Acres	Stage1 CoverType	Size Density	Stand Age	Treatment Type	Treatment Method	Cover Type Objective

Prescription Specs:

Other Comment:

Next Steps:

Limiting Factor and No Treatment Reason

Total Treatment Acreage Proposed: **0**

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	42250 - Pine, Oak	Medium Density	22.5	4		Scarified. FTP 11-196, FTPC 6/2003
2	4191 - Mixed Upland Deciduous with Conifer	High Density Pole	25.1	82	81-110	
3	4130 - Aspen	High Density Pole	2.9	64	81-110	
4	42220 - Natural Jack Pine	Medium Density	102.8	17		Cut with 11-012-89-01. some larger Jack Pine scattered throughout.
5	42220 - Natural Jack Pine	High Density Sapling	146.5	30		Fire origin Jack Pine "Rice's Burn" 1979. It is very thick!
6	42120 - Planted Jack Pine	High Density Pole	27.5	44		Look at for next rotation (2019).
8	4123 - Red Oak	High Density Pole	9.1	29		
9	4130 - Aspen	High Density Sapling	3.0	16		
10	4191 - Mixed Upland Deciduous with Conifer	High Density Sapling	104.4	16		cut with 11-014-92-01, appears to be "Choppers Choice", Very uneven ages and sizes.
11	42120 - Planted Jack Pine	High Density Sapling	12.0	29		
13	42220 - Natural Jack Pine	High Density Sapling	72.9	16		cut with 11-013-92-01.
14	4199 - Other Mixed Upland Deciduous	High Density Log	14.8	Uneven Age	111-140	cut with 11-014-92-01, it ready again.
15	4199 - Other Mixed Upland Deciduous	High Density Sapling	6.0	16		cut with 11-014-92-01.
17	42140 - Planted Mixed Pine	High Density Pole	4.6	23	111-140	Was a study area for MTU. It is planted White Pine with a Jack Pine overstory.
18	42220 - Natural Jack Pine	High Density Pole	3.3	79		
19	4191 - Mixed Upland Deciduous with Conifer	High Density Pole	31.5	101	51-80	was factor limited as screening for the goose pasture as surrounding stands were harvested in previous inventory cycles. Those stands are now regenerated and there is no apparent reason to keep this stand as factor limited.
20	42220 - Natural Jack Pine	High Density Sapling	56.7	16		cut with 11-014-92-01

Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
21	4130 - Aspen	High Density Sapling	35.2	17		cut with 11-014-92-01
22	42220 - Natural Jack Pine	Low Density Sapling	159.8	4		"Life Jacket Jack Pine" 11-003-02-01, Stand was scarified (FTP 11-197 and 11-198; FTPC 6/2003) but had significant die off due to a Diplodia outbreak. Stand was trenched in the summer of 2009 and is to be replanted.
23	42210 - Natural Red Pine	High Density Log	9.7	71		Stand had most of the Jack Pine removed about 15 yrs ago. Need to find a cutting record!
24	42220 - Natural Jack Pine	High Density Sapling	201.9	26		25' to 30' tall.
25	42220 - Natural Jack Pine	High Density Pole	37.3	79		Cut!! no retention.
27	42220 - Natural Jack Pine	High Density Sapling	205.4	16		"Section 10 Pine" 11-013-89-01
28	42220 - Natural Jack Pine	High Density Pole	43.6	79		
30	42120 - Planted Jack Pine	High Density Pole	11.8	26		
31	42220 - Natural Jack Pine	Medium Density	15.9	14		North 1/2 was cut with sale 11-013-92-01.
32	42220 - Natural Jack Pine	High Density Pole	2.5	79	1-50	Cut!! Overmature. No retention.
33	42220 - Natural Jack Pine	High Density Pole	1.3	79	1-50	Cut!! Overmature. No retention.
34	42220 - Natural Jack Pine	High Density Pole	7.3	79		Cut!! Overmature. No retention.

6 – Nonforested Stands

Inventory Method: IFMAP

Compartment: 010
Year of Entry: 2012

Stand	Cover Type	Acres	Gen Cmts:
7	3102 - Grass	37.8	"Little Burn" Wildlife Field"
12	3102 - Grass	213.4	"Big Burn" Wildlife Feild.
16	3102 - Grass	9.8	
26	3102 - Grass	33.1	"Little Lake" wildlife field.
29	50 - Water	6.0	Little Lake

7 – PROPOSED SPECIAL CONSERVATION AREA* (SCA) DETAILS

* This is a partial list of SCAs for this compartment. Not included are those areas identified under other Department initiatlves (Natural Rivers, Deer Wintering Areas, etc.). Those will be identified in separate, future map and report products.

Inventory Method: IFMAP

Stand	SCA Type	SCA Name	Acres	Comments

8 – DEDICATED CONSERVATION AREA DETAILS

* This is a list of Dedicated Biodiversity Areas for this compartment along with a 1/4 mile buffer surrounding the compartment. Refer to Dedicated Conservation Area Map for areas that the below listed Conservation Areas are located.

ERA = Ecological Reference Area
HCVA = High Conservation Value Area
SCA = Special Conservation Area

Conservation Area	Type	Description
HCVA	Dedicated Management Areas	Such areas are dedicated by the DNR Director for specific management uses through the promulgation of rules, as governed by Part 5, Department of Natural Resources, of the NREPA (MCL 324.502(2) and 324.504). Section 38 of the Administrative Procedures Act (MCL 24.238) provides for public requests for the promulgation of rules. This is an active program, with one proposed site currently under review by the DNR.
SCA	Habitat Area	An area that provide some specific need for the life cycle of wildlife species, including State Wildlife Areas and Waterfowl Production Areas, deer wintering complexes in lowland conifer communities, grassland openings and savannas. Habitat areas are distinct from critical habitat designated for recovery of endangered or threatened species (such as Kirtland's warbler or piping plover areas) in that they are more general in nature, are not primarily associated with threatened or endangered species, and are not covered by species recovery plans that are developed in cooperation with Federal agencies.