



**GWINN FOREST MANAGEMENT UNIT
COMPARTMENT REVIEW PRESENTATION**

COMPARTMENT # 244 ENTRY YEAR: 2009

**Compartment Acreage: 1218
GIS acres County: 52**

Revision Date: 03/15/2007

Stand Examiner: Warren J Heikkila

Legal Description: T45N, R29W, Sec. 19, 21, 28, 29, and 30 .

Management Goals: For the 10 yr. period beginning in 2009, we will strive to perpetuate or increase the component of oak, birch, and dry, mesic conifers in a non-plantation setting, where they now occur. Enhancement of aesthetics and wildlife through in-stand retention principles for all treatments is also a priority here.

Soils and topography: Ranging from relatively level wetlands such as swamp conifers, treed bogs, tag alder, and bog/ marshlands, to upland which is only rolling to moderately hilly. Generally a good logging chance with decent access for the entire compartment.

Ownership Patterns, Development, and Land Use in and Around the Compartment: State ownership borders The major portion of the Cmpt boundary on the east and south. The remainder is bordered by private ownership about equally divided among corporate and some relatively small private forest holdings, - mostly non-industrial private owners with recreational objectives. Development is relatively limited with a scattering of seasonal cottages or hunting camps, with some concentration of cottages on the water bodies, such as Casey & Porterfield Lakes, and along the Michigamme River. Production of forest products along with low key recreational activities such as hunting, mushroom & berry picking, riding ORV's, motorcycles, or snowmobiles, hiking, fishing, and trapping make up the land uses here. Extra care should be taken to ensure single track trail stays in its original configuration. Work with Rec. Specialist to take extra precautions to ensure trail is not straightened, widened, moved, relocated, etc. Porterfield Motorcycle Trail is a unique resource and is very attractive to riders because of the tight and windy nature. Leave trees with confidence markers along trail. Where skid trails intersect motorcycle trail, extra confidence markers will be required. Using carsonite posts to mark the trail is a good option - if carsonite is available.

Unique, Natural Features (include only non-site specific and non-sensitive information): A number of bodies of water such as Casey Lake, Porterfield, Martells, Chain of Lakes, the Michigamme River, Wilson Creek, as well as some un-named ponds and creeks make up the unique natural features in this area.

Archeological, Historical, and Cultural Features (include only non-site specific and non-sensitive information): The Michigamme River, owing to it's size and depth, was used as a travel & transport route by both pre-settlement aboriginals and early settlement pioneers. Thus the potential exists for archeological artifacts and/or sites to be found within its riparian influence zone.

Special Management Designations or Considerations: Special Conservation Area stands are located in the compartment generally to act as riparian buffers along the water bodies or courses. See attached table for stand numbers. SCA Stands: 7, 20, 21, 23, 28, 41, 42, 44, 47, 51, 52, 55, 65, 66, 70, 72, 73, 74, 75, 79, 87, 95, 99, 408

Watershed and Fisheries Considerations:

Wildlife Habitat Considerations: Maintain and protect riparian “Special Conservation Area” stands as movement corridors and core habitat for a multitude of game and nongame wildlife species/communities. Promote habitat legacies in all “Special Conservation Area” stands, such as standing and fallen snags, supercanopy trees, and natural processes/disturbances. Ensure that some mature lowland conifer and spruce/fir upland stands (composed predominantly of evergreen conifer species, large cone/seed crop potential, closed canopies, minimal edge effect, and persistent dead and live branches creating complex vertical structure) are perpetually present and conserved. Harvested spruce/fir stands need to be regenerated to evergreen conifer species in similar proportions found in the canopy pre-harvest. Upland conifer types are to be managed in a sustainable manner to provide species, structural, and size-class diversity. Strive for best possible age class distribution in aspen stands while retaining a diversity of tree species. Oak is to be retained in all treated stands and oak regeneration should be promoted and protected wherever possible.

Mineral Resource and Development Concerns and/or Restrictions:

Vehicle Access: The Porterfield Lake Road provides primary vehicular access through this compartment connecting the Casey Lake Road to the north with the Floodwood Road to the south. It is a relatively narrow one lane dirt road built and maintained by the DNR /FMFM Division. It is one of the many roads in the State Forest system in need of upgrading and graveling. Secondary tributary roads leading into the compartment are in general poor dirt two track roads

Survey Needs: No survey needs in 2009.

Recreational Facilities and Opportunities: One of the main recreational features in this compartment is a FMFM Division developed and maintained Motorcycle Trail located in the south half of Sec 28 ... located entirely on State land, and also occupying a significant portion of the adjacent compartment to the south. This trail is known as the Porterfield Motorcycle Trail, and is relatively rustic, twisting, rugged, and scenic trail, all by design. A second recreational feature, which in this compartment is entirely on private land, is a State sponsored groomed snowmobile trail, utilizing the cleared right of way of a power transmission line. It traverses north-south through the west half of Sec 29, and is groomed and maintained by the Moose Country Snowmobile Club of Republic. Historically, a State Forest Campground was sited on the south side of Porterfield Lake, but this was closed for budget efficiency reasons in 1992. A tiny, carry down boat launch facility still exists on the lake. Other low-key recreational activities common to most compartments, such as hunting, fishing, hiking, berry & mushroom picking, trapping, etc. are a function of this compartment.

Fire Protection: This compartment is included within the “581 Zone Dispatch” area which provides for a pre-planned dispatch of specified fire equipment from within the Gwinn and Crystal Falls Mgt. Units, dependent upon the severity of forecast burning conditions for a specific day. Areas of jack/red pine cover types with the encroachment of recreational seasonal and/or residential dwellings have warranted this pre-planning. Mutual aid agreements with local volunteer fire departments also provide critical fire suppression response, especially in the area of structural fire and/or protection, and evacuations.

Additional Compartment Information: Mich. Natural Features Inventory information of record.

30	Loons* documented in e 1/2 of section 28 associated with Chain of Lakes. Osprey* documented in ne 1/4 of section 21. Numerous loon records to the sw, w, and nw.	IX.3.2	Mixed Conifer Swamp, Spruce-Fir-Cedar Forest, Shrub Swamp/Emergent Marsh, White Pine-Red Pine Forest, Hemlock-White Pine Forest
	Potential for eagle, osprey, and great blue heron rookery. Potential for moose and wolf. Potential for wood turtle.		
	Potential for auricled tway-blade, veiny meadow rue, western dock, Farwell's water-milfoil, alternate leaved water-milfoil and linear-leaved gentian along riparian areas.		

- **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

MARQUETTE COUNTY

COMPARTMENT: 244

Table 3

(acres shown in boxes)

STAND AGE CLASS

COVER TYPE	Not	STAND AGE CLASS																All Aged	Total
	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		
Aspen		43	273		163	62			90	1									632
Black Spruce									18		13								31
Cedar												63						6	69
Grass	37		3																40
Jack Pine					6		5												11
LowInd Brush	75																		75
Marsh	13																		13
Mx Swmp Cnfr																		11	11
Paper Birch									54										54
Red Pine		19		3														160	182
Spruce Fir			4							17								12	33
Treed Bog	6																		6
Water	61																		61
Total	192	62	280	3	169	62	5		162	18	13	63						189	1218

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

ESCANABA RIVER STATE FOREST

GWINN FOREST MGT UNIT

MARQUETTE COUNTY

COMPARTMENT: 244

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	632																										632
S Black Spruce		31																									31
C Cedar				69																							69
G Grass					40																						40
J Jack Pine							11																				11
L Lowlnd Brush									75																		75
N Marsh											13																13
Q Mx Swmp Cnfr												11															11
B Paper Birch															54												54
R Red Pine															182												182
F Spruce Fir																			33								33
D Treed Bog																						6					6
Z Water																									61		61
Total	632	31		69	40		11		75		13	11			54	182			33			6			61		1218

ESCANABA RIVER STATE FOREST

GWINN FOREST MGT UNIT

MARQUETTE COUNTY

COMPARTMENT: **244**

Table 10 - COMPARTMENT VOLUME SUMMARY - ALL STANDS

COMPARTMENT SUMMARY			
TOTAL VOLUME		CUT VOLUME	
Hardwood	8659 Cds	Hardwood	2059 Cds
Hardwood	122 Mbf	Softwood	43 Mbf
Softwood	3353 Cds	Sum CutVol	2145 Cds
Softwood	1107 Mbf		
Sum TotVol	14470 Cds		
Total Cmpt Acres		Acres Proposed For Cut.....	104
1218			

Stand	Cover Type	Acres	Age	Site Index	Mgt Obj	Condition	Method Cut	Harvest Priority	Cultural Need	FDF Status
10	A6	37	76	72	aspen (upland)	high risk	final harvest	1		
<p>comnts Fmd : Final Harvest with Reserves. Oak was the featured type here last entry, however a much more extensive sampling and some expansion of the type now reveals an average of only 20 sq.ft/acre of oak, versus about 50 sq.ft/acre for aspen. The aspen occurs in clones of heavy stocking (100 sq'ft/acre plus), with other areas or patches of sparse aspen where oak can be found. Retention : we will leave all oak for wildlife, as well as most, if not all of the pine in this stand. In addition, a number of those aspen or birch functioning as potential den trees (large crowns, cavities, dead limbs or tops, open seams, etc.) should be marked to save for in-stand retention as well. The extreme northeast corner of the stand contains an inclusion of mostly birch which would offer a small area for in-stand retention for both aesthetics & wildlife. ORV trail is present in stand - protect with appropriate VMS specs. Do not alter or straighten motorcycle trail since a winding route helps to keep speed in check.</p> <p>Wld : Sparse, erratic stocking of red oak pole clumps. Advance regeneration of red oak is very common across most areas of site. Red oak recruits range in size from 1 to 5 feet in height. Deer browse damage to this oak regen is extremely infrequent and not severe where present. Retain all oak. Do not cut white pine, cherry, or spruce. Leave at least 1/2 of the red pine. Exclude the NE corner of stand where white birch dominates. Leave on average 2 to 3 white birch clumps per acre. Buffer vernal areas. Wildlife personnel will assist with retention field work if needed. Located in the SESW & W1/2SE of Sec 28 for the most part.</p>										
11	R9	10		62	red pine	unevenaged	thinning	1		
<p>comnts Fmd : Thinning with Reserves. Combine with cutting of stand #10 for most efficient and practical timber sale purposes. Retention: Leave any oak present, plus trace species such as white spruce, white pine, fir. Potential wildlife den or nest trees will be left as well. Red pine will be marked for essentially a light thinning where needed to improve spacing and release crowns of residual trees. ORV trail present in both stands, but can be protected by VMS specs. Do not alter or straighten route of this motorcycle trail. A winding route is necessary to keep speeds in check.</p> <p>Wld : As Warren proposes, leave oak, white spruce, white pine, and fir. Leave tamarack and cherry as well. Buffer vernal wetlands. Leave a representation of larger diameter red pine. Located in the E1/2SW & W1/2SE of Sec 28.</p>										
14	A6	30	69	75	aspen (upland)	high risk	final harvest	1		
<p>comnts Fmd : Final harvest with Reserves. For retention purposes and to enhance the aesthetics here when cutting, consider leaving most or all of the birch, all oak, cherry, and conifer, and at least some of the maple for Fall color. This should comprise at least 5% retention. Patches can be left if needed to reach this goal.</p> <p>Wld : Per Warren's comments, leave all white birch, oak, cherry, and conifers. Leave several red maple per acre. Located in the E1/2NW & W1/2NE of Sec 28, and SWSE of Sec 21, between the Porterfield Lake Road and the ELF row.</p>										
49	R9	9		62	red pine	unevenaged	thinning	1		
<p>comnts Fmd : Thinning with Reserves. Combine with cutting of stand #10 and #11 for most efficient and practical timber sale purposes. Retention: Leave any oak present as well as trace species such as white spruce, white pine, fir and any potential den/nest trees. Red pine will be marked for essentially a light thinning where needed to improve spacing and release crowns of residual trees. Save some birch & maple for aesthetics where appropriate. Small swamp inclusions should be withdrawn from sale area for diversity & in-stand retention purposes. RETAIN BLACK SPRUCE AND TAMARACK.</p> <p>Wld : Retain oak, spruce, white pine, cedar, fir, and tamarack. Save some white birch and maple. Small swamp inclusions should be withdrawn from sale. Leave representative distribution of larger size-class red pines. Located in the NWSE of Sec 28.</p>										
85	A6	17	72	65	aspen (upland)	high risk	final harvest	1		
<p>comnts Fmd : Final Harvest with Reserves. Note that we wish to cut the adjacent timber stand # 56 in Cmpt 243 in the NWNW of Sec 27 with this stand. Warren. 5/05/2004. Also add to this sale stand #29 of Cmpt 236, which is also adjacent. Retention goal of approx 5% here. Birch has been dying out, but we should leave some birch for retention purposes as well as aesthetics, seed trees, and wildlife (potential cavity den trees). Also leave all oak, cherry, and perhaps all conifer. Also in 2007, we seperated out the small swamp patches in this stand since we want to save them for wildlife cover when the surrounding upland is cut. If these can contribute to retention, the total may be between 5 & 10%.</p> <p>Wld : As per Warren's comments, leave all oak, cherry, and conifer. Leave white birch seed source across stand. Located in the NENE of Sec 28, and SESE of Sec 21.</p>										
88	A6	1	80	75	aspen (upland)	mature	final harvest	1		
<p>comnts Fmd : Final Harvest with Reserves. MTU research plot where tree measurements are still being taken in 1999 yr of entry. A news release by MTU indicated two lines of research on the effects of ELF electromagnetic fields. One monitored the effect on the life cycle of red pine and northern hwdws (changes in growth rates, nutrient levels, foliage production, and insect & disease status). The other monitored the effect on litter decomposition and nutrient flow for northern red oaks, red maple, and red pine. A grant of \$2.3 million was awarded. Even if the research need is no longer valid in 2009, Wildlife may desire to keep this for "in-stand retention" purposes. Combine with stand 85 for sale purposes. Potential retention here would be all oak, all trace species (conifers such as pine, spruce, fir), and any potential den/nest trees such as large crowned birch. DO NOT CLEARCUT/RETAIN OAK AND SOME MAPLE.</p> <p>Wld : Retain all oak, white pine, and red pine. Retain 1/2 of red maple and white birch. Located in the NENE of Sec 28, south of ELF row.</p>										

Total Acres..... 104

**Proposed Treatments
With Limiting Factors**

Compartment: 244

Entry Year: 2009

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

Total Acres..... 0

Field Map

Compartment 244
 T45N, R29W, Sec. 19-21, 28-30
 County: Marquette
 Unit: Gwinn
 YOY: 2009
 Acres: 1,218 GIS Calculated
 Stand Examiner: Warren Heikkila
 Map Revised: 9/10/2007
 Map Phase: Pre-Review

Legend

- ◆ RLS Corners
- Miris Corners
- ▬ Gravel Roads
- - - Poor Dirt Roads
- - - Trails
- ⚡ Powerlines
- ⦿ Water Features
- ⊕ Berms
- 🏍 Motorcycle Trails
- 🏂 Snowmobile Trails
- ▭ Stand Boundary
- ▨ Special Conservation Areas
- ▨ 100 - Final Harvest
- ▨ 400 - Thinning

