



**SHINGLETON FOREST MANAGEMENT UNIT
COMPARTMENT REVIEW PRESENTATION**

COMPARTMENT # 135 ENTRY YEAR: 2008

Compartment Acreage: 1,155 County: Alger, Schoolcraft

Revision Date: 10/09/2006

Stand Examiner: Jennifer Burnham

Legal Description: T49N R16W Sections 1, 25 & 36
T48N R16W Section 2, 12

RMU (if applicable):

Management Goals: The main goal in this compartment is to conduct multiple resource management for current and future generations.

Soil and Topography: The topography in this compartment is mainly flat with some areas of steep grades. The soil types are mainly poor Rubicon sands with heavy fire influence. The compartment is made up of the Kingston Outwash (Section 1), Pictured Rocks escarpment (Section 25 and north half of 36) and Munising Moraine II (Section 12 and south half of 36) LTA's.

Ownership Patterns, Development, and Land Use in and Around the Compartment: Ownership within the compartment is somewhat fragmented with PRNL, private property and industry. East of the compartment is mainly State land, including Kingston Lake Campground with some private ownership. To the west is the PRNL and private property.

Unique, Natural Features (include only non-site specific and non-sensitive information): Currently under review by Michigan Natural Features Inventory (MNFI).

Archeological, Historical, and Cultural Features (include only non-site specific and non-sensitive information): There are several old railroad grades that are in the compartment.

Special Management Designations or Considerations: The entire compartment is in the PRNL buffer areas.

Watershed and Fisheries Considerations: The compartment does not appear to have any fishable water. It is at least ½ mile east of Seven Mile Creek and ½ mile west of Kingston Lake. If there are any small tributary streams or isolated wetland pockets, they should be treated per the Best Management Practices handbook. It is an interesting area, caught between good trout fishing in Seven Mile and good musky and bass fishing in Kingston Lake. But there are no Fisheries concerns directly related to that compartment.

Wildlife Habitat Considerations: This compartment lies on the northwest corner of the Kingston Plains. The circa 1850 surveyors notes show the area forest at that time contained a heterogeneous mixture of white pine, hemlock, balsam fir, yellow birch, and beech. Sugar maple, white birch, and red maple were minor components of the forest. Mountain maple, mountain ash and yew contributed substantially to the

understory. Logging and hot slash fires resulted in a very open landscape. Subsequent reforestation efforts using red pine has produced the current land cover pattern that is dominated by pine plantations interspersed with grassy openings. The wildlife habitat management goals for this compartment include increasing the availability of hard mast through the planting of oak, enhancing the hemlock component within the compartment, and encouraging structural and species diversity with the hardwood stands.

Mineral Resource and Development Concerns and/or Restrictions: Surface sediments consist of glacial outwash sand and gravel and postglacial alluvium and lacustrine (lake) sand & gravel. There is insufficient data to determine the glacial drift thickness. The Cambrian Trempealeau and Munising Formations subcrop below the glacial drift. The Trempealeau could be used for stone and the Munising was used as a building stone in the past. Gravel pits are not located in this area, but there could be some potential. There is no commercial oil and gas production in the UP.

Vehicle Access: Access to the compartment is fair for regular four wheel drive and some two wheel drive vehicles. However, because of the sand and slopes trucking traffic is very limited. Access to section 25 is fair from the east because of past timber sales. Section 12 can be accessed through private property to the south. The remainder of the area has very sandy trail roads with steep slopes in enough areas to make access very difficult.

Survey Needs: The west boundary for sections 36, 2 and 12 need to be surveyed for accuracy. There are some old Shelter Bay lines but no corners were found during inventory.

Recreational Facilities and Opportunities: The Kingston Lake Campground is easily accessed when getting to the compartment. H-58 is also the snowmobile trail and the Fox River Pathway is found in the northern part of section 25. Access roads to the west can also lead into the PRNL boundary and the opportunities that are found there.

Fire Protection: Fire response to the area will be extended due the distance of the fire resources. The current road system would be difficult for fire operations because of the sandy soils and steep grades on the roads.

Additional Compartment Information:

- **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

LAKE SUPERIOR STATE FOREST

SHINGLETON FOREST AREA

ALGER COUNTY

COMPARTMENT: 135

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		116			65			16										47	244
Grass	157																		157
Hemlock																		53	53
Jack Pine						6													6
Paper Birch								3		17									20
Red Pine						160	188				22							69	439
Upland Hdwds																		40	40
White Pine																		196	196
Total	157	116			65	166	188	19		17	22							405	1155

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

LAKE SUPERIOR STATE FOREST

SHINGLETON FOREST AREA

ALGER COUNTY

COMPARTMENT: 135

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	244																										244
G Grass					157																						157
H Hemlock						53																					53
J Jack Pine							6																				6
B Paper Birch														7	13												20
R Red Pine																439											439
M Upland Hdws																								40			40
W White Pine																										196	196
Total	244				157	53	6							7	13	439								40		196	1155

LAKE SUPERIOR STATE FOREST

SHINGLETON FOREST AREA

ALGER COUNTY

COMPARTMENT: **135**

Table 10 - COMPARTMENT VOLUME SUMMARY - ALL STANDS

COMPARTMENT SUMMARY			
TOTAL VOLUME		CUT VOLUME	
Hardwood	2014 Cds	Hardwood	490 Cds
Hardwood	13 Mbf	Softwood	768 Cds
Softwood	8962 Cds	Softwood	227 Mbf
Softwood	1018 Mbf	Sum CutVol	1712 Cds
Sum TotVol	13038 Cds		
Total Cmpt Acres		Acres Proposed For Cut.....	165
1155			

SHINGLETON FOREST AREA

Proposed Treatments
With NO Limiting Factors

Compartment: 135 Entry Year: 2008

Stand	Cover Type	Acres	Age	Site Index	Mgt Obj	Condition	Method Cut	Harvest Priority	Cultural Need	FDF Status	
3	R9	23		60	red pine	unevenaged	selection	3			
comnts Fmd : Stand was not cut with sale from 2000. Treat again with remaining unit. Thin to promote red and white pine regeneration. There are some scattered hemlock, leave. Regeneration should be the same as overstory.											
6	B4	7	86	48	oak	mature	final harvest	3	planting		
comnts Fmd : North half was cut under TS # 017-95 and is now part of stand 2. Treat stand with rest of area that was not cut with the sale. There are some oak in the stand and surrounding area. Stand is being converted to an oak stand. Acorns and oak seedlings will be used to get oak reproduction into the stand. Leave some white birch for seed source and any oak present in the stand.											
7	M6	3		60	northern hardwood	unevenaged	selection	3	planting		
comnts Fmd : Stand was part of Unit 4 of 41-017-95-01 and was not cut. Stand will need to be cut with adjacent stands. There is beech scale on the trees. Thin to promote spp other than beech in the understorey. Heavy to striped maple in the understorey. Hand plant oak in the stand after cutting.											
33	W9	35		44	white pine	unevenaged	selection	2			
comnts Fmd : Stand is fairly flat until slope (25%) while entering stand 34. When cut, thin this area where able. Do not cut oak or hemlock. There is over mature aspen on the slope or dying out on the level ground. Trees mainly healthy. Remove aspen, maple and fir. Thin white pine, red pine and black spruce. Thinning will promote these species and help with a new flush of aspen, hemlock and oak. Thin BA down to 60-90 depending on what is present in the understorey. 98 = red pine and fir pulp. 99 = aspen and red maple. Dead white pine salvage cut in '46.											
44	R6	22	48	45	red pine	mature	thinning	2			
comnts Fmd : E. HALF OF STAND PLANTED SPRING 1958; W. HALF OF STAND PLANTED FALL 1959. The stand has pruned up well and height development has really slowed. North end is the best. Thin every third row. Scattered large white pine, mark where necessary for operability, remove other species, except oak and hemlock.											
45	W9	28		44	white pine	unevenaged	selection	2			
comnts Fmd : The large white pine and hemlock are healthy. Fir and yellow birch are over mature and starting to die out. Most of the trees in the understorey are small fir 2-5' tall. Not many other spp coming in. Thin to promote white pine, hemlock and yellow birch to come in. Thin pine, remove other spp to get residual BA to 60-90 depending on the spp present in the understorey/overstorey. Do not cut hemlock or oak. 98=BS, RP logs.											
47	M6	10		46	northern hardwood	unevenaged	selection	2			
comnts Fmd : GOOD HEMLOCK REPRODUCTION IN PLACES. Lots of dead/blow down aspen, fir. Yellow birch and beech are large cull trees. Mark to promote hemlock, yellow birch and white pine. Thin to 60-90 residual BA depending on what is in the understorey/overstorey. Do not cut the hemlock. Not sure of the property line. There is a good slope on the west side of the stand- b/c not sure of property line the stand acreage may decrease. Scattered large white pine. Beech scale present.											
Total Acres.....		128									

SHINGLETON FOREST AREA

**Proposed Treatments
With Limiting Factors**


Compartment: 135 **Entry Year: 2008**

Stand	Cover Type	Acres	Age	Site Index	Mgt Obj	Condition	Method Cut	Harvest Priority	Cultural Need	FDF Status	
11	R9	9	90	43	red pine	mature	selection	3			
TREATMENT LIMITING FACTORS: Road needed (resources not presently available)											
comnts Fmd : REMOVE OVERSTORY RED PINE WITH MINIMAL DAMAGE TO RESIDUAL. Some trees were planted but the "mother" trees have helped to seed in the other areas. Thin to promote more natural red pine regeneration.											
12	R8	4		48	red pine	immature	selection	3			
TREATMENT LIMITING FACTORS: Road needed (resources not presently available)											
comnts Fmd : Nice looking pine - scattered jack pine on the outer edges of the stand with aspen near the hardwood slope. Thin pine to promote red and white pine reproduction. Remove other merchantable spp within the stand. Do not cut oak. Jack pine and some aspen will also seed into the stand when cut. Access to the stand is poor because of the conditions of the sand roads into the area.											
14	R6	5	89	50	red pine	two aged	selection	2	natural regeneration		
TREATMENT LIMITING FACTORS: Road needed (resources not presently available)											
comnts Fmd : THIN,WHERE NEEDED,TO PROVIDE SEED SOURCE AND RELEASE REGENERATION ALEADY PRESENT. Red pine regen is almost 4 sticks tall. Would need to be thinned with another stand. Scarify to incourage red pine to come back, white pine and jack pine will come in on their own.											
20	R9	8	90	43	red pine	mature	selection	3			
TREATMENT LIMITING FACTORS: Road needed (resources not presently available)											
comnts Fmd : REMOVE OVERSTORY RED PINE WITH MINIMAL DAMAGE TO RESIDUAL. Some trees were planted but the "mother" trees have helped to seed in the other areas. Thin to promote more natural red pine regeneration.											
21	R9	6		50	red pine	unevenaged	selection	3			
TREATMENT LIMITING FACTORS: Road needed (resources not presently available)											
comnts Fmd : THIN RED PINE,REMOVE JACK PINE. Thin to get regeneration of red pine back. Jack and white pine will fill in on their own after the cut. Clumps of J5/J4 on either side of stand can be included when adjacents stands are cut. Remove other merchantable spp within the stand. Do not cut oak. Jack pine and some aspen will also seed into the stand when cut. Access to the stand is poor because of the conditions of the sand roads into the area.											
40	R8	5		48	red pine	immature	selection	3			
TREATMENT LIMITING FACTORS: Road needed (resources not presently available)											
comnts Fmd : Nice looking pine - scattered jack pine on the outer edges of the stand with aspen near the hardwood slope. Thin pine to promote red and white pine reproduction. Remove other merchantable spp within the stand. Do not cut oak. Jack pine and some aspen will also seed into the stand when cut. Access to the stand is poor because of the conditions of the sand roads into the area.											
Total Acres.....		37									



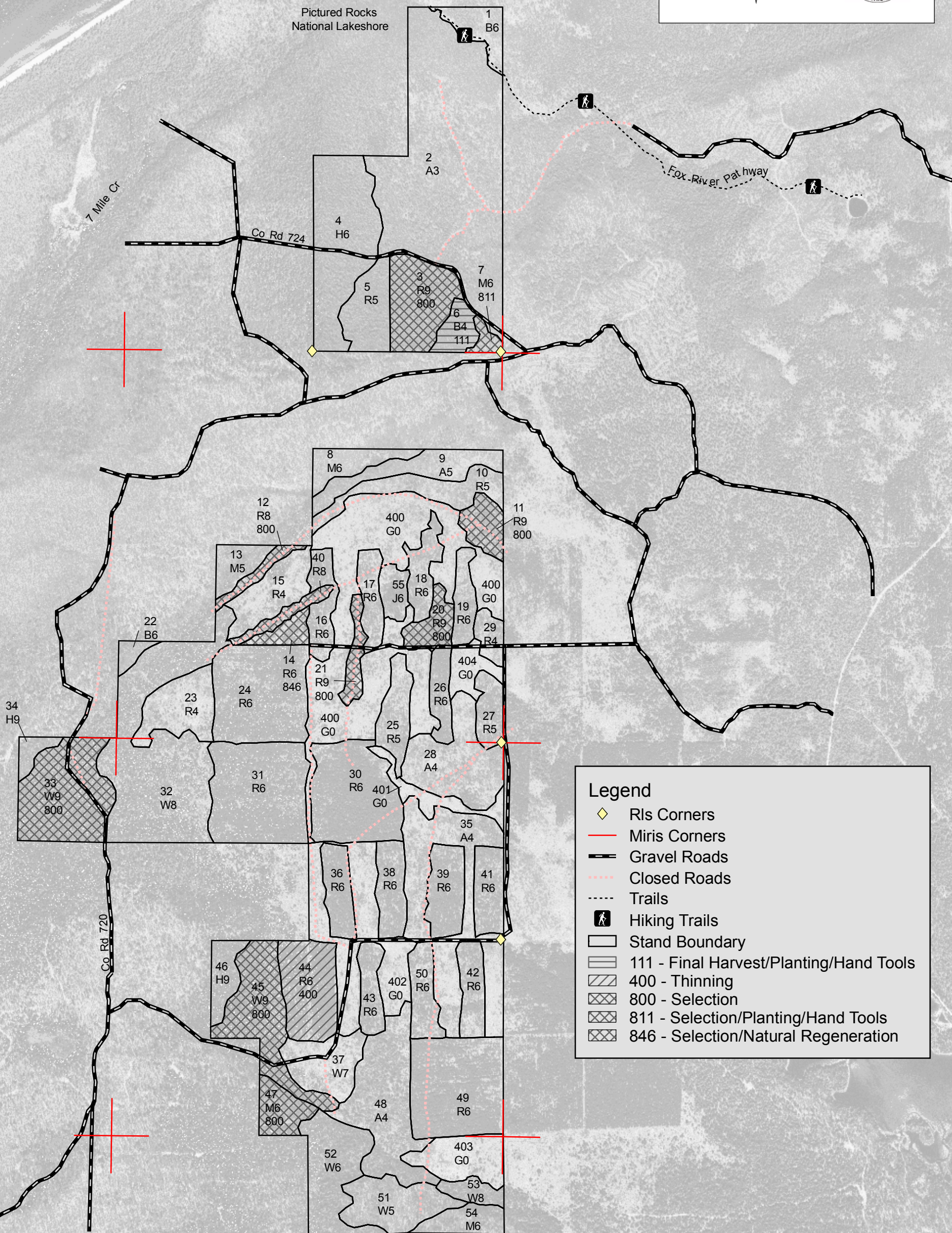
Compartment 135
 T48N, R16W, Sec. 1, 2, 12
 T49N, R16W, Sec. 25, 36
 County: Alger
 Unit: Shingleton
 YOE: 2008
 Acres: 1,155 GIS Calculated
 Stand Examiner: Jennifer Burnham
 Map Revised: 10/16/2006
 Map Phase: Pre-review

Field Map

		25	
		36	
02		01	
		12	



N

Legend

-  RIs Corners
-  Miris Corners
-  Gravel Roads
-  Closed Roads
-  Trails
-  Hiking Trails
-  Stand Boundary
-  111 - Final Harvest/Planting/Hand Tools
-  400 - Thinning
-  800 - Selection
-  811 - Selection/Planting/Hand Tools
-  846 - Selection/Natural Regeneration

