



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

**COMPARTMENT # 42 ENTRY YEAR: 2009**

**Compartment Acreage: 3243**

**County: Grand Traverse**

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**Stand Examiner:** Patrick Ruppen

**Legal Description:** T27N R10W Sections 11-14, 23-26

**Management Goals:** The Pere Marquette Management Plan indicates that this compartment will be managed for mixed use. This compartment is generally represented by two LTAs (land type associations).

The northern 1/3 of the compartment is represented by LTA 1111. This is the smallest subsection in Northern Lower Michigan and is 84% in private ownership. It is described as steep broken moraine ridges with extensively drained sand. It is sandwiched between drumlin fields to the north and outwash plains to the south. This end moraine topography was dominated by northern hardwood forests at settlement times. A portion of this LTA was covered by dry mesic forests dominated by red and white pine. Aspen and birch were only slightly represented in this LTA at settlement times but this cover type is now very evident. Wildfires which started on the outwash plains to the south spread in to these end moraines and favored the establishment of oak/pine/aspen types rather than northern hardwoods dominated by sugar maple.

The southern 2/3 of this compartment is primarily described by LTA 5211 which is glacial outwash plain pitted with ice block depressions. This is the largest LTA in Northern Lower Michigan and contains the largest percentage of public land of all the LTAs. In pre-settlement times, large areas of this LTA were covered by the entire spectrum of conifer-dominated forests with red pine as the predominant species. Pine/oak barrens covered 25% of this area and were represented in a portion of this compartment. Large wildfires were common and maintained the oak/pine barrens. These fires generally originated in the outwash plain and spread in to portions of the ice contact ridges. Oak dominated the less fire prone sites and northern hardwood communities the least prone. Due to fire suppression the extent of natural xeric pine associations, Pine Barrens and dry prairie openings have been greatly reduced.

Forest associations formed after the last cycle of extensive fires (1920-1930) are present in this compartment. These are generally stands with an oak, aspen and pine canopies. The most common under story species is white pine which is heavily stocked in places with an under represented red pine component. An attempt should be made through vegetative management and the use of prescribed fire to re-set the clock on some of these stands and recreate some new natural pine/oak/aspen mixes or to re-establish pine/oak barrens. Red pine inter-planting will be necessary in some instances to return this disturbance dependant species to the vegetative mix. Oak should be maintained as a canopy species to provide mast. The overall acreage of the mesic forest has changed little since pre-settlement times but the extent of aspen has changed from 1% to 16%. Much of the aspen in this compartment is age 80 years + and at the end of its lifespan. The aspen is showing decline with evidence of heart-rot and mortality in the clones. Much of it is located in close proximity to the recreational trails causing safety and maintenance concerns as it comes down. An effort should be made to remove this age class of aspen and regenerate this important wildlife species. Trail

corridors should be managed toward long lived species such as oak, maple and pine and away from aspen which is short lived. The oak in this compartment (particularly red oak) is generally better quality than in surrounding compartments. An effort should be made to promote health and vigor in selected oak stands through crown release.

**Soil and Topography:** Mix of end moraine, ice contact ridges and outwash plain. Slopes vary from flat to steep. Soils are described as deep, excessively drained acidic sands- mainly Grayling, Kalkaska and Rubicon.

**Ownership Patterns, Development, and Land Use in and Around the Compartment:** Rapidly growing residential area especially along the north and east side of compartment.

**Unique, Natural Features:** none known

**Archeological, Historical, and Cultural Features:** none known

**Special Management Designations or Considerations:** Stand 87 is a depression with old pine components that had been identified in previous inventory. Retain old pine characteristics.

**Watershed and Fisheries Considerations:** Acme Creek flows through this compartment. Acme Creek is a Designated Trout Stream that supports naturally sustaining populations of brown trout, brook trout, and rainbow trout. This creek also provides spawning and rearing habitat for Chinook and coho salmon. There is a proposed clearcut (with reserves) within the riparian area of Acme Creek in stand eight. The stream buffer is not delineated on the map. Fisheries Division recommends no harvest within at least 100 feet of Acme Creek, including the headwater wetland area.

**Wildlife Habitat Considerations:** Compartment 42 stretches across two glacial land types, moraine ridges to the north and an outwash plain which covers about the southern 1/3 of the compartment. Wildfire was a common natural disturbance of the sandy outwash plains. Consequently, many of the communities found here are comprised of fire dependant species. Present habitat types include oak and aspen communities with some conifer components. Some patches of hardwoods exist on the sites less prone to fire. Aspen cuts as well as other treatments should be designed to mimic wildfires of various intensities in order to promote a variety of successional stages and age classes of pine-oak-aspen forest and grass-shrub openings. Harvests should incorporate retention of snags, downed logs, and sturdy mature leave trees to mimic natural disturbances and improve wildlife habitat. Regeneration of the aging oak component should be a priority as well. Small wetlands or ponds are found in ice block depressions scattered about this area. Other depressions which function as frost pockets and cold air drainages support open or semi-open communities. Prescribed fire is an important tool in maintaining the health of these habitats. Opportunities to re-establish the currently rare barrens communities should be pursued when identified. A variety of wildlife species, including: deer, turkey, ruffed grouse, fox squirrel, red bat, badger, and eastern garter snake, call this fire derived mosaic home.

A number of abandoned oil well pads exist in this compartment and need to be revegetated. Most of these sites will be planted to appropriate herbaceous cover and some may be temporarily used as timber landings. Non-forested habitats provide essential life requirements for a variety of wildlife in the form of food (herbaceous forage, fruiting shrubs, insects, small mammals, etc.) and cover (thickets of shrubs, tall grasses, ferns, brushy edges, etc.).

The moraine ridges in the north part of the compartment are comprised of steep sandy hills supporting a mixture of oak, aspen, and northern hardwood. Considerations for northern hardwood stands include maintaining tree species diversity, the protection of den/nesting trees & snags, coarse woody debris (CWD), and maintaining a scattering of mast-producing trees/shrubs. Wildfire would occasionally make its way into these ridges from the adjacent outwash plains. Therefore, the south and west borders of this moraine complex are good areas to manage for earlier successional communities. Wildlife species benefiting from these communities include: deer, black bear, downy woodpecker, and eastern box turtle. The openings found among the ridges in compartment 42 are either of ice block depression origin or are products of drilling for fossil fuels.

**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 800 feet. Beneath the glacial drift is the Mississippian Coldwater Shale. There is no current economic use for the Coldwater. A gravel pit is located in Section 28 and there should be good potential. This area is located along the north edge of the prolific Niagaran reef trend and has production in the south half. Most of the Compartment is leased for oil and gas exploration. Additional reefs could be found in the compartment or the Antrim Shale may be developed in this area.

**Vehicle Access:** Access is generally good via county roads but access within the compartment is limited because many of the well placed roads are utilized by the VASA ski trail. Management activities will need to utilize portions of the trail for access.

**Survey Needs:** none known at this time

**Recreational Facilities and Opportunities:** This compartment has heavy recreation use. This compartment contains a significant portion of the VASA cross country ski trail and is adjacent to the trail head and parking lot for this trail. It also houses the parking lot/trailhead for the VASA Single Track mountain bike trail and a portion of this trail. There is also a significant amount of unauthorized mountain bike trail on old motorcycle event trails. Also, a stretch of the Boardman Valley Snowmobile Trail passes through the compartment. In addition, this compartment is used for other outdoor leisure activities such as hunting, hiking and camping.

**Fire Protection:** This area is protected by the Grand Traverse Fire Department and DNR fire protection is from the Traverse City Unit. Urban interface can be an issue in some parts of this compartment with scattered ownership of private land. Access is acceptable.

**Additional Compartment Information:** None.

**\*\*\* REVIEWED COPY \*\*\***

**\*\*\*\* Cover type details, proposed treatments and stands designated as FDF are listed in the attached reports:**

**Cover Type by Age Class**

**Proposed Treatments – No Limiting Factors**

**Proposed Treatments – With Limiting Factors**

**\*\*\*\* The following information is displayed on the attached compartment maps:**

**Base feature information, stand numbers, cover types**

**Proposed treatments**

**Proposed road access system**





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Treatment Name	Acres	Stage1 CovType	Size Density	1st Age	2nd Age	Treatment Method	Treatment Purpose	Cover Type Objective
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14	61042014-Cut	24.8		6	40	0	Single Tree Selection	Intermediate Cut	Red with White Oak
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Rev  
Cmnt: Should result and health and vigor for stand.

Rev  
Spec: Mark for Crop Tree Release. Treat with part of stand to east. Possibly Spec aspen-red maple?

Next  
Steps:

15	61042015-Cut	19.7		6	50	0	Crown Thinning	Intermediate Cut	Planted Red Pine
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Rev  
Cmnt:

Rev  
Spec: Stand has been third row and third tree thinned. Mark to retain growth and vigor.

Next  
Steps:

24	61042024-Cut	5.5		6	85	55	Single Tree Selection	Release	Red Oak
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Rev  
Cmnt: Expect increase in growth and vigor on remaining trees.

Rev  
Spec: Mark for crop tree release favoring quality red oak. Remove aspen by specification. Retain mixed canopy for diversity.

Next  
Steps:

30	61042030-Cut	19.7		9	90	70	Single Tree Selection	Release	Natural Pine, Mixed Deciduous
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Rev  
Cmnt: Retain variety of represented species in canopy and sub-canopy.

Rev  
Spec: Focus on release of red pine by marking for crop tree release and removal or aspen. Protect younger age classes of pine as possible.

Next  
Steps:

40	61042040-Cut	20.4		9	90	0	Single Tree Selection	Release	Oak, Aspen
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Rev  
Cmnt: --Stephen Griffith : 11/26/2007 comments: In areas dominated by aspen:Create some (approximately 1-2 trees per acre) coarse woody debris (CWD) during harvest operations, 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.

Stand is converting back to white pine. Expect mix of aspen, oak, maple and pine in second age that develops and increased vigor and growth on remaining crop trees.

Rev  
Spec: Focus on crop tree release of quality oak stems. Remove all aspen and follow WLD guidance on coarse woody debris creation i nareas heavily stocked with aspen.

Next  
Steps:



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Treatment Name	Acres	Stage1 CovType	Size Density	1st Age	2nd Age	Treatment Method	Treatment Purpose	Cover Type Objective
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42	61042042-Cut	22.5		9	80	100	Single Tree Selection	Release	Oak, Aspen
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Rev Cmmt: --Stephen Griffith : 11/26/2007 comments: Create some (approximately 1-2 trees per acre) coarse woody debris (CWD) during harvest operations, 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.

Expect patch regeneration of aspen/maple/pine and oak and increase vigor and growth on trees treated with crown release.

Rev Spec: Remove aspen and mark areas without heavy aspen stocking for crop tree release. Follow WLD guidance for creation of coarse woody debris in areas with heavy aspen stocking.

Next Steps:

43	61042043-Cut	16.9		9	110	0	Single Tree Selection	Pest Management	S.Maple, Hard Mast Association
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Rev Cmmt: Large high quality red oak left from last harvest is threatened by oak wilt which is present in stand.

Rev Spec: Remove most large valuable red oak. Reduce red oak basal area to 20 sq. ft or less per oak wilt management guidance.

Next Steps: Monitor success of stopping spread.

47	61042047-Cut	9.2		9	80	0	Clearcut with Reserves	Regeneration	Aspen, Oak
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Rev Cmmt: --Stephen Griffith : 11/26/2007 comments: Create some (approximately 1-2 trees per acre) coarse woody debris (CWD) during harvest operations, 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.

Follow WLD recommendations for creation of coarse woody debris. Expect good aspen regeneration with a mix of red and white pine and oak and red maple mixed in.

Rev Spec: Final harvest. Mark some pine and oak to retain for mast and seed production

Next Steps: monitor regeneration success

71	61042071-Cut	21.4		9	85	0	Clearcut with Reserves	Regeneration	Aspen, Mixed Pine
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Rev Cmmt: --Stephen Griffith : 11/26/2007 comments: Create some (approximately 1-2 trees per acre) coarse woody debris (CWD) during harvest operations, 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.

consider leaving retention strip along north part of stand against younger stand 58 for budding cover. Follow WLD recommendations on coarse woody debris creation.

Rev Spec: Select some pine and oak to retain and final harvest remaining stand.

Next Steps:



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Treatment Name	Acres	Stage1 CovType	Size Density	1st Age	2nd Age	Treatment Method	Treatment Purpose	Cover Type Objective
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74	61042074-Cut	150.8		6	100	6	Shelterwood	Cover Type Conversion	Natural White Pine, Mixed Deciduous
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Rev Cmnt: --Stephen Griffith : 11/26/2007 comments: Create some coarse woody debris (CWD) in areas of the stand where little or none currently exist, during harvest operations. Can be cull lengths, tops of significant volume, or whole unmerchantable trees.

Should see new age forming of pine/aspens and oak.

Rev Spec: Canopy is dominated by poor quality/formed off site oak with white pine understory. Open up canopy to begin conversion to pine and away from oak. Regenerate aspens by taking all aspens.

Next Steps:

77	61042077-Cut	20.2		9	80	0	Clearcut with Reserves	Regeneration	Aspen, Oak
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Rev Cmnt: --Stephen Griffith : 11/26/2007 comments: Create some (approximately 1-2 trees per acre) coarse woody debris (CWD) during harvest operations, 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 of its stump.

New stand should develop with aspens, red maple, oak and pine

Rev Spec: Final harvest but leave some pine and oak for mast and seed production.

Next Steps:

82	61042082-Cut	13.6		9	80	0	Single Tree Selection	Regeneration	Aspen, Mixed Pine
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Rev Cmnt: --Stephen Griffith : 11/26/2007 comments: Create some coarse woody debris (CWD) in areas of the stand where little or none currently exist, during harvest operations. Can be cull lengths, tops of significant volume, or whole unmerchantable trees.

Small seasonal pond in south end. Stand is converting to wp and wp in stand has good health and growth. New younger age expected to be aspens, maple, oak and pine mix.

Rev Spec: Remove aspens and some pine and other trees to regenerate aspens.

Next Steps:

88	61042088-Cut	35.8		9	100	80	Clearcut with Reserves	Regeneration	Aspen, Oak
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Rev Cmnt: --Stephen Griffith : 11/26/2007 comments: Create some (approximately 1-2 trees per acre) coarse woody debris (CWD) during harvest operations, 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 of its stump.

New stand should be mix of aspen regeneration and oak, pine, maple mixed in.

Rev Spec: Remove aspens. Keep some oak and pine for retention and protect some young oak and pine from aspens to grow through. Follow WLD recommendations for creation of coarse woody debris.

Next Steps:



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Treatment Name	Acres	Stage1 CovType	Size Density	1st Age	2nd Age	Treatment Method	Treatment Purpose	Cover Type Objective
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<b>89</b>	<b>61042089-Cut</b>	8.2		9	80	0	Clearcut with Reserves	Regeneration	Aspen, Mixed Pine
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Rev Cmnt: --Stephen Griffith : 11/26/2007 comments: Create some (approximately 1-2 trees per acre) coarse woody debris (CWD) during harvest operations, 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.

Resulting stand should have good aspen regen with pine, oak and maple mixed in.

Rev Spec: Final harvest. Retain some oak and pine for mast and seed production. Follow WLD coarse woody debris recommendations.

Next Steps:

<b>94</b>	<b>61042094-Cut</b>	20.0		9	80	65	Seed Tree with Reserves	Regeneration	Natural Red Pine, Mixed Deciduous
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Rev Cmnt: Attempt to regenerate red pine through scarification. If this is unsuccessful, burn to expose mineral soil.

Rev Spec: Cut back to seed trees with reserves

Next Steps: If Natural regeneration unsuccessful plant red pine.

<b>99</b>	<b>61042099-Cut</b>	25.5		9	65	100	Seed Tree	Regeneration	Natural Pine, Mixed Deciduous
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Rev Cmnt: Attempt to regenerate red pine through scarification. If this is unsuccessful, burn to expose mineral soil.

Rev Spec: Cut back to seed trees

Next Steps: Monitor regeneration success. Supplement with planted red pine if necessary.

<b>127</b>	<b>61042127-Burn</b>	31.2	42260 - Natural Pine, Mixed Deciduous	7	70	4	Prescribed Burn	Opening Maintenance	
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Rev Cmnt:

Rev Spec: This stand was cut in 2001 but regeneration is poorly developed at this time. Burn to maintain semi open community.

Next Steps: Burn stand at least once per entry period in order to set back woody encroachment, stimulate native herbaceous vegetation and/or berry production, and recycle nutrients.

<b>128</b>	<b>61042128-Cut</b>	34.2		9	100	20	Single Tree Selection	Release	Oak, Pine
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Rev Cmnt: --Stephen Griffith : 11/26/2007 comments: Create some coarse woody debris (CWD) in areas of the stand where little or none currently exist, during harvest operations. Can be cull lengths, tops of significant volume, or whole unmerchantable trees.

Result should be increased vigor and growth of residual stems.

Rev Spec: Crop tree release. Manage for diversity and quality.

Next Steps:



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Treatment Name	Acres	Stage1 CovType	Size Density	1st Age	2nd Age	Treatment Method	Treatment Purpose	Cover Type Objective
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131	61042131-Cut	27.3		9	70	90	Clearcut with Reserves	Regeneration	Aspen, Oak
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Rev --Stephen Griffith : 11/26/2007 comments: Create some coarse woody debris (CWD) in areas of the stand where little or none currently exist, during  
Cmnt: harvest operations. Can be cull lengths, tops of significant volume, or whole unmerchantable trees.

New stand should be nice mix of aspen, oak, pine and aspen.

Rev Final harvest and mark oak and pine to retain for mast and seed production. Consider visual impacts along road.  
Spec:

Next  
Steps:

136	61042136-Cut	40.4		9	90	15	Seed Tree with Reserves	Regeneration	Natural Pine, Mixed Deciduous
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Rev --Stephen Griffith : 11/26/2007 comments: Create some coarse woody debris (CWD) in areas of the stand where little or none currently exist, during  
Cmnt: harvest operations. Can be cull lengths, tops of significant volume, or whole unmerchantable trees.

White pine advanced regeration is advanced in places. Jack pine, aspen and red pine have previously been harvested.

Rev Final harvest but retain pine and oak for mast and seed production.  
Spec:

Next Plant red pine in openingc created by harvest to supplement natural regeneration.  
Steps:

57	7131_Openings	2.3	4133 - Aspen, Mixed Pine	3	17	0	Non-Forest Management	Habitat Management	
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Rev Consider location and wildlife forage needs when determining herbaceous species to plant (i.e. this is not near a deer yard so maybe plant forage that is  
Cmnt: available in mid to late summer instead of spring).

Rev Maintain three non-forested areas within this young aspen stand in herbaceous cover. Most of the treatment area is in a frost pocket. Most likely will  
Spec: need to do planting and maintenance with quad runner.

Next  
Steps:

10	NF_61042010-Hand Fell	1.7	Unspecified	0	0	0	Non-Forest Management	Habitat Management	
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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.

Next Will need to monitor and probably brush hog/mow as needed to encourage grasses and prevent woody encroachment. Possibly will need to recondition  
Steps: and seed scattered barren areas.

61	NF_61042061-Hand Fell	1.0	Unspecified	0	0	0	Non-Forest Management	Opening Maintenance	
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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.

Next Mow (and possibly fertilize) as needed to maintain opening and herbaceous cover.  
Steps:



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Treatment Name	Acres	Stage1 CovType	Size Density	1st Age	2nd Age	Treatment Method	Treatment Purpose	Cover Type Objective
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65	NF_61042065- Hand Fell	3.1	Unspecified	0	0	0	Non-Forest Management	Opening Maintenance
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Rev  
Cmnt:

Rev Check this stand for hand felling needs when performing opening maintenance on other stands within the compartment. If needed, selectively hand fell woody encroachment to maintain upland brush/grassland community. Leave scattered mast producing trees and shrubs and/or conifers for wildlife food and cover.

Next  
Steps:

93	NF_61042093- Burn	4.9	Unspecified	0	0	0	Prescribed Burn	Habitat Management
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Rev The old well pad portion of the stand needs soil reconditioning and planted to herbaceous cover conducive to wildlife foraging and cover. Take into consideration existing herbaceous vegetation.

Rev Burn majority of stand to set back woody encroachment, stimulate native herbaceous vegetation and/or berry production, and recycle nutrients.

Next  
Steps:

95	NF_61042095- Native Grass	1.4	Unspecified	0	0	0	Non-Forest Management	Ecosystem Restoration
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Rev VASA trail goes through this stand.

Rev Plant native grasses and forbs. Test and condition soil prior to planting.

Next Once grasses and forbs are established maintain with prescribed burning.

102	NF_61042102- Burn	8.8	Unspecified	0	0	0	Prescribed Burn	Opening Maintenance
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Rev If burning the stand is not possible, then cut back some of the white pine and red maple regen and address hill climb area.

Rev Ideally should burn this stand to set back woody encroachment, stimulate native herbaceous vegetation and berry production, and recycle nutrients.

Next  
Steps:

116	NF_61042116- Barricade	2.1	Unspecified	0	0	0	Non-Forest Management	Other - Specify
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Rev  
Cmnt:

Rev ORVs are causing some damage. Block access to stand.

Next  
Steps:

117	NF_61042117- Burn	1.7	Unspecified	0	0	0	Prescribed Burn	Habitat Management
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Rev If burning is not possible then mow for the same objectives.

Rev Fairly well vegetated but should be burnt to reduce slash, kill jp, reduce sedge and bracken component, recycle nutrients, and stimulate bb and grasses.

Next  
Steps:

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Traverse City Mgt. Unit  
Inventory Method: IFMAP

**PROPOSED TREATMENTS  
NO LIMITING FACTORS**

Compartment: 042

Entry Yr: 2009

Date 03/05/2008



Treatment Name	Acres	Stage1 CovType	Size Density	1st Age	2nd Age	Treatment Method	Treatment Purpose	Cover Type Objective
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122 NF_61042122-Burn	1.5	Unspecified	0	0	0	Prescribed Burn	Habitat Management	
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Rev Cmnt: If burning is not possible then mow for the same objectives.

Rev Spec: Fairly well vegetated but should be burnt to reduce slash, kill jp, reduce sedge and bracken component, recycle nutrients, and stimulate bb and grasses.

Next  
Steps:

**Total Treatment  
Acreage Proposed: 595.8**

**PROPOSED TREATMENTS  
WITH LIMITING FACTORS**



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Treatment Name	Acres	Stage1 CovType	Size Density	1st Age	2nd Age	Treatment Method	Treatment Purpose	Cover Type Objective	Page 1 of 1
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Limiting Factor and Comment:

Rev Cmnt:

Rev Spec:

Next Steps:

No Treatment Reason

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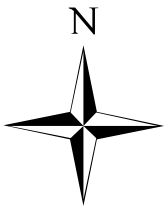
**Total Treatment  
Acreage Proposed:        0**

Compartment 42  
 T27N, R10W, Sec. 11-14, 23-26  
 County: Grand Traverse  
 Unit: Traverse City  
 YOE: 2009  
 Acres: 3,243 GIS Calculated  
 Stand Examiner: Patrick Ruppen  
 Map Revised: 12/17/2007  
 Map Phase: Pre-review

# Field Map

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

11	12
14	13
23	24
26	25



**Multi-Part Stands**  
 Stand 15, 3 Parts, Split by stand 13 & 20  
 Stand 25, 2 Parts, Split by stand 38  
 Stand 26, 2 Parts, Split by stand 38  
 Stand 31, 2 Parts, Split by stand 29  
 Stand 38, 2 Parts, Split by private  
 Stand 39, 2 Parts, Split by stand 38  
 Stand 54, 3 Parts, Split by stand 38  
 Stand 55, 2 Parts, Split by stand 38  
 Stand 59, 2 Parts, Split by stand 64  
 Stand 66, 2 Parts, Split by stand 64  
 Stand 67, 2 Parts, Split by stand 64  
 Stand 87, 2 Parts, Split by private  
 Stand 110, 2 Parts, Split by stand 125  
 Stand 114, 2 Parts, Split by stand 125  
 Stand 125, 2 Parts, Split by private  
 Stand 128, 2 Parts, Split by private  
 Stand 131, 2 Parts, Split by private  
 Stand 137, 2 Parts, Split by stand 125  
 Stand 140, 2 Parts, Split by stand 125  
 Stand 142, 2 Parts, Split by stand 125

## Legend

- Miris Corners
  - Highway
  - Paved Road
  - Gravel Road
  - Poor Dirt Road
  - Vasa Mt. Bike Trail
  - Snowmobile Trail
  - Vasa Ski Trail
  - Intermittent Stream/Drain
  - Stream
  - Ski Trails
  - Snowmobile Trails
  - Vasa Mt. Bike Trail
  - Stands
  - Clearcut with Reserves
  - Patch or Strip Clearcut
  - Crown Thinning
  - Other Harvest - See Comments
  - Single Tree Selection
  - Group Selection
  - Seed Tree
  - Seed Tree with Reserves
  - Shelterwood
  - Burn, 1; Prescribed Burn
  - Opening Maintenance
  - Other Treatment - See Comments
- Forest Stands**
- Level 3
- 412 - Oak Types
  - 413 - Aspen Types
  - 419 - Mixed Upland Deciduous
  - 421 - Planted Pines
  - 422 - Natural Pines
  - 430 - Upland Mixed Forest
  - 611 - Lowland Deciduous Forest
  - 612 - Lowland Coniferous Forest
- Non-Forest Stands**
- Level 3
- 122 - Road/Parking Lot
  - 310 - Herbaceous Openland
  - 320 - Upland Shrub
  - 330 - Low-Density Trees
  - 623 - Emergent Wetland
  - 629 - Mixed non-forested wetland

