

Natural Resource Management Plan

Prepared For: Omena Woods Association Inc.
N. Omena Point Road
Omena, Michigan 49674

Plan Prepared By: Rick Moore
Grand Traverse Conservation District
District Forester
1222 Veterans Drive
Traverse City, MI 49684
Ph: 231.946.8640
E-mail: rmoore@gtcd.org
Website: www.gtcd.org

Landowner Assessment

Landowner: Omena Woods Association Inc.

Date: June 2004

Address: N. Omena Point Road
Omena, MI 49674

Contact Person: Bob Krist
13140 Isthmus Road
Omena, MI 49674

Phone: 231.386.9242

Location of Property: Portions of Sections 25 & 36, T31N, R11W, South Leelanau Township,
Leelanau County, Michigan

Total Acres: 110

Management Goals:

1. Forest health
2. Diversity for wildlife
3. Recreation
4. Timber production

Summary of Property Conditions & Recommendations

The Omena area of Leelanau County is a very attractive corner of the County. At times the color of the water in Omena Bay has an aqua-turquoise appearance. The village is quiet and simple. Omena Point is a very aesthetic peninsula with rolling hills, cherry orchards and hardwood forests.

The Omena Woods Association is responsible for the management of 110 acres located on the peninsula. This acreage contains a variety of forest types including northern hardwoods, hemlock, and aspen/oak. An abandoned gravel pit as well as fields intermixed with young trees are also present.

The mature hardwood stand, Unit 6 in this plan, is the dominant feature of the property. This is due both to its aesthetics and the fact that Omena Point Road passes through it. Much of this summary discussion will focus on this area.

The hardwood stand has old-growth characteristics, however, it is second growth forest. Typical of mature forests, the canopy of the trees is closed and therefore, very little sunlight reaches the forest floor. This, in turn, leads to an understory with few seedlings or saplings. In essence, it has a “park-like” look.

In mature hardwood stands, as individual trees die from old-age, crowns of trees break off in storms, or trees succumb to windfall, gaps are formed in the canopy. Sunlight penetrates into the understory at the locations of the gaps, and consequently, seedlings establish in these locations. (Please refer to pictures.) These seedlings later become the future trees of the forest. If no management takes place, this cycle of individual tree death followed by seedlings growing into replacement trees, will continue indefinitely until a major disturbance such as a strong wind or insect infestation kill large numbers of trees. (A good example of this can be found along M-22 just north of Leland. Many mature trees went down in a recent wind storm.)

Though there are no health issues with this forest, the trees are not growing as vigorously as they could. This is due to the fact that there are too many trees per acre competing for available sunlight, water, and nutrients. Therefore all of the trees lack the vigor they could have at lower numbers of trees.

The quality of the hardwoods is overall very good. There are some over-mature trees present, however, there are also some vigorous veneer grade trees present. The following pictures demonstrate the difference in trees.

Recreation is an important use of the hardwood forest at this time. A trail system is present which gets year round use. Wildflowers are in places abundant, and wildlife trees – standing dead trees with numerous holes for wildlife use – are scattered throughout the stand.

It is easy to see why it is difficult to decide in an association setting on a management direction for this woodlot. It is possible, however, to actively manage for several of these goals simultaneously. The stocking density of the stand can be reduced and the tops of the trees cleaned-up in such a manner that it will not even be apparent a timber harvest was conducted. The aesthetics can be maintained, and the vigor of the stand improved, if the tree selection and logging is done correctly. This can either be done on the entire unit, or perhaps a 10 acre portion of the unit as a “test.”

If such a management scheme is initiated, certain portions of the stand might be designated as “off limits” to logging. Such a designation may apply to pockets of hemlock trees, or very aesthetic portions of the hiking trails.

Looking beyond the northern hardwood stand and on to the property as a whole, the different forest types and age classes all add to the value of this property for the goals desired. This diversity of forest types will attract a variety of wildlife species while also keeping the hiker observing new species of flowers, trees and wildlife.

Omena Woods Association



 Mgt.shp
 Boundary.shp



Management Unit 1

Acres: 3.5

===== Major Objectives for the Unit =====

1. Site restoration

===== Existing Conditions =====

Cover Type & Major Species: Abandoned gravel pit.

Aspen, choke cherry, pin cherry, white birch, various forbs and grasses, and exposed soil/gravel.

Size Class: Trees which are present are saplings

Soil Type: Gravel pit

Site Quality: Poor

Stand Quality: N/A

Stand Density: N/A

===== Management Unit Description =====

This is an abandoned gravel pit which is slowly reverting to an early successional forest. There is a mosaic of exposed sand/gravel, groups of sapling-size trees, and forb cover. The site is concave due to excavation.

===== Planned Management Activities =====

Restore the site to a more natural environment through planting native grasses, shrubs and trees. This will be done in such a manner as to maintain the mosaic of openings and trees, however, the areas of exposed gravel will be revegetated.

Little bluestem, a native grass with a deep root system, should be planted on the exposed gravel. Plant white pine and junberry randomly throughout the unit. Plant trees as single individuals and also in groups.

Management Unit 2

Acres: 20.5

=====**Major Objectives for the Unit**=====

1. Wildlife habitat
2. Recreation
3. Diversity

=====**Existing Conditions**=====

Cover Type & Major Species: Upland field with scattered variety of tree species. White ash, aspen, basswood, beech, white birch, choke cherry, pin cherry, juneberry, red maple, sugar maple, red oak, white pine, sumac, and common juniper.

Size Class: Saplings and small poletimber

Soil Type: EaB, EaC – East Lake loamy sand
AsC – Alpena gravelly sandy loam

Site Quality: Fair

Stand Quality: N/A

Stand Density: N/A

=====**Management Unit Description**=====

Similar to Unit 1, this unit may also be best described as a mosaic of grassy fields interspersed with pockets/groups of sapling and small pole-size trees. Unlike Unit 1, there are no areas of exposed sand/gravel.

=====**Planned Management Activities**=====

Maintain this unit in its current state of openings intermixed with forests. As the trees will continue to encroach into the openings, aggressive management efforts will be required to maintain the openings. Through mechanical or chemical means, prevent the sumac, juniper and other species from spreading into the open fields.

Management Unit 3

Acres: 11.0

=====**Major Objectives for the Unit**=====

1. Forest health
2. Diversity

=====**Existing Conditions**=====

Cover Type & Major Species: Aspen/Oak

Aspen, red oak, sugar maple, red maple, hemlock, white pine, white ash, and choke cherry. Balsam fir, maple leaf viburnum, and dogwood is present in the understory.

Size Class: A6/9 O8 – saplings, poletimber, and sawtimber

Soil Type: EsF – Emmet-Omena sandy loam

NsB – Nester silt loam

AsC – Alpena gravelly sandy loam

Site Quality: Fair

Stand Quality: Fair

Stand Density: Well-stocked, often dense, basal area approximately 155 sq. ft./acre

=====**Management Unit Description**=====

This stand is characterized by an overstory of aspen and some oak, and an understory of shade tolerant tree species – maple, hemlock and white pine. The northern end of the unit is dense sapling and pole-size timber, while the southern portion contains mainly sawtimber and poletimber-size trees.

=====**Planned Management Activities**=====

Aspen, both when it is young and when it is mature, is a very good wildlife tree. It is also a shade intolerant clonal species meaning it needs to be periodically clearcut in order to maintain it as part of the landscape.

In the interest of wildlife habitat and forest cover type diversity, the southern portion of this unit could be clearcut soon for the purpose of maintaining it as aspen habitat. This will create a young, dense stand of aspen. As the northern portion continues to grow and approach maturity, it too could be clearcut. By continuing to do this, you could maintain two age classes of aspen.

A second option would be to allow the stand to convert to northern hardwoods. If left unmanaged, this unit will eventually, though very slowly, convert to northern hardwoods. This conversion process could be accelerated by releasing the understory hardwoods to additional sunlight and growing space. To accomplish this, the stand should be entered on two occasions in the next ten years. The first stand entrance should remove approximately 50% of the overstory aspen. The second stand entrance should remove all, or nearly all, of the remaining aspen.

Though perhaps unpopular, there is wisdom in the clearcut idea as it will achieve the desired goal. If pursued, make sure the aspen is cut during the dormant season.

Management Unit 4

Acres: 6.5

===== Major Objectives for the Unit =====

1. Aesthetics
2. Erosion control
3. Wildlife habitat

===== Existing Conditions =====

Cover Type & Major Species: Aspen

Aspen, white pine, white ash, choke cherry, and sugar maple

Size Class: A3/6 WMs2 – saplings and poletimber

Soil Type: EaD – East Lake loamy sand

Site Quality: Fair

Stand Quality: Fair

Stand Density: Well-stocked, dense

===== Management Unit Description =====

Dense stand of poletimber and sapling-size aspen with some choke cherry and white ash interspersed. Sapling-size white pine and sugar maple are found in the understory. Stand is located on a fairly steep slope.

===== Planned Management Activities =====

This is an important site for aesthetics as it is found at a road intersection. The terrain is fairly steep in places. The dense young aspen also provides wildlife habitat, particularly for ruffed grouse.

No active management is recommended for this unit.

Management Unit 5

Acres: 11.0

===== Major Objectives for the Unit =====

1. Forest cover type diversity
2. Wildlife habitat
3. Water quality

===== Existing Conditions =====

Cover Type & Major Species: Lowland conifers

Hemlock, white cedar, white pine, white birch, yellow birch, red maple, sugar maple, black cherry, and beech.

Size Class: Q6 - poletimber

Soil Type: AsC – Alpena gravelly sandy loam

Hm – Hettinger muck

EaB, EaD – East Lake loamy sand

Site Quality: Fair

Stand Quality: Fair/Good

Stand Density: Well-stocked, at times dense

===== Management Unit Description =====

Very aesthetic, well-stocked stand of lowland conifers. Hemlock is the dominant species. The understory is quite dark, and regeneration is limited. Down woody material is scattered on the forest floor.

===== Planned Management Activities =====

This is an important aesthetic site as it is located along the road. It is also a unique site for this area. There is some concern in Michigan that hemlock sites such as this are disappearing. Cover types such as this provide for water quality, and wildlife food and thermal cover.

No active management is recommended for this unit.

Note: Do not disrupt the flow of water in this area as it will negatively impact the trees, particularly the cedar, in this unit.

Management Unit 6

Acres: 58.0

=====**Major Objectives for the Unit**=====

1. Aesthetics
2. Recreation
3. Forest health
4. Possibly timber production

=====**Existing Conditions**=====

Cover Type & Major Species: Northern Hardwoods

White ash, aspen, basswood, beech, black cherry, sugar maple, ironwood, red oak, hemlock, and white pine

Size Class: M6/9 – poletimber and sawtimber

Soil Type: EaB, EaD – East Lake loamy sand

Site Quality: Good

Stand Quality: Very good

Stand Density: Well-stocked to over-stocked, basal area approximately 163 sq. ft./acre (based on 3 plots)

=====**Management Unit Description**=====

Very good quality, well-stocked stand of northern hardwood trees. Mixed in with the traditional hardwood species are towering white pine and scattered red oak. The understory is quite dark due to the closed canopy. Species present in the understory include beech, black cherry, ironwood, sugar maple and white pine. Most of the understory trees are sapling size, and the stocking is low to moderate. Seedlings are present below gaps in the canopy.

=====**Planned Management Activities**=====

Aesthetics: Presently this stand is very aesthetic. It has a park-like, old growth appearance even though it is second growth. To achieve this goal, leave all or part of the stand alone.

Recreation: Several trails are present through the unit. These trails should be maintained and kept free of fallen trees, limbs etc. Benches and other amenities could be installed along the trail.

Forest Health: Forest health is a relative term. In this unit there are no forest health issues. Currently it is acting like a mature forest with individual trees dying, fallen, or breaking. The stand is overstocked, and therefore the trees are not as vigorous as they could be.

Timber Production: This unit has excellent timber production potential. Presently the stand is over-stocked, and if timber production is a goal, the stocking density should be reduced to approximately 90 sq. ft./acre. This can be done by selectively harvesting over-mature and poor quality trees. If done correctly, the stand could be re-entered approximately every 15 years in a sustainable manner.

It is possible to manage for all of these goals simultaneously. Timber harvesting, when done correctly and followed-up by the removal of the tops, will restore vigor to the stand and create opportunities for regeneration. It will also remove hazard trees near the trails. Harvesting timber should have minimal impact on recreation, though it will alter the aesthetics of the stand. If timber harvesting is pursued, it would be advisable to create areas where no logging is to take place in order to protect unique aesthetics (example: areas of hemlock). Income generated from a timber sale could be put back into the property.

Management Unit 7

Acres: 9.5

===== Major Objectives for the Unit =====

1. Aesthetics
2. Erosion control

===== Existing Conditions =====

Cover Type & Major Species: Aspen, mixed hardwoods

Aspen, sugar maple, white ash, basswood, beech, red maple, white birch, and ironwood.

Size Class: AM6/9 – poletimber and sawtimber

Soil Type: AsC – Alpena gravelly sandy loam

Site Quality: Fair

Stand Quality: Fair

Stand Density: Well-stocked

===== Management Unit Description =====

This unit is located on a short but steep slope along the west side of Omena Point Road. The understory contains trillium as well as other wildflowers. The crowns hang partially over the road somewhat forming a tunnel.

===== Planned Management Activities =====

This stand is providing excellent aesthetics and soil stabilization.

No active management is recommended.

**Summary of Planned Management Activities
To be Completed in the next 10 Years
2003 - 2012**

Unit No.	Acres	Prescription	Year Planned	Year Completed