FOREST MANAGEMENT PLAN

FOR

Al Malone 12 Pinedale Ave. Jamestown, MD 20305

MD GRID: 949,000 / 158,000

LOCATION

Woods Road, approximately .5 miles from River Run Road

IN

ST. MARY'S COUNTY

ON

29.0 Acres Forest 2.8 Acres Open Land 31.8 Acres Total

PREPARED BY:

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INTRODUCTION/OVERVIEW

This property is located off Woods Road in California, Maryland. The landowner's objectives are to manage the property to improve the wildlife habitat, to provide for forest products and to qualify for tax incentives. These objectives correspond to the Stewardship objectives of **fish and wildlife** (primary) and **forest products** (secondary). The forest is predominantly mixed hardwoods and a Virginia pine stand.

The landowner can be reached at 202-765-3406.

STAND DESCRIPTION AND RECOMMENDED PRACTICES

STAND NUMBER: 1

AREA ACRES: 13.2

DOMINANT OVERSTORY SPECIES: Virginia pine, red oak

DOMINANT UNDERSTORY SPECIES: American holly, sweetgum

TIMBER SIZE: sawtimber-pole

AGE: uneven

STOCKING: overstocked

DESIRABLE TREES: 85%

UNDESIRABLE TREES: 15%

SITE GROWTH POTENTIAL: fair

SOIL: Beltsville silt loam (B1B2)

RECOMMENDATIONS/PRACTICES:

This stand is comprised of sawtimber and pole size Virginia pine. The tree density (stocking) is high in relation to maintaining optimum growing space per tree. As trees in the stand continue to grow larger, growing space per tree will continue to decrease. In this "overstocked" condition the stand will become less vigorous due to excessive competition for limited resources such as soil nutrients, water, and sunlight. In this overstocked condition a stand is also vulnerable to insect and disease infestation as well as decline from drought.

An increment boring was taken from a 17.2 inch DBH, (diameter at breast height, 4.5 feet above ground) Virginia pine. It revealed that the tree is seventy four years old and has grown two inches in the last sixteen years.

The tree species distribution in this stand is as follows:

Virginia pine	39%
Red oak	35%
Yellow poplar	5%
Big tooth Aspen	2%
White oak	12%
Sweetgum	5%
Eastern red cedar	1%
Loblolly pine	1%
Total	100%

The current size class distribution in this stand is 55% saw timber (11.0 inches or greater in dbh [dbh = diameter at breast height - e.g. the tree diameter measured at 4.5 feet, approximately breast height]); 37% pole size (5.0 - 10.9 inches dbh); and 8% small tree (sapling to 4.9 inches dbh).

It usually takes about 45 to 50 years for Virginia pine to reach maturity. The Virginia pine is this stand is mature, and has been experiencing wind throw. When Virginia pine reaches maturity red heart disease also develops. Red heart disease (Fomes pini) causes a red stain in the wood of Virginia pine making it less valuable as a timber product and also weakens the stem. The best prescription for this stand is to perform a regeneration harvest by the clear cut method by June 2013. After the stand is harvested the site should be prepared for reforestation by prescribed burning and reforested with loblolly pine. The loblolly pine should be planted on a 7' x10'spacing (622 trees/acre). Seedlings for reforestation are available from the John S. Ayton State Forest Tree Nursery at cost to landowners.

Before any timber is sold the landowner should contact a registered professional forester before any timber is sold. A registered professional forester should mark the boundaries of the sale and determine the volume of the wood to be removed. A list of Private Consultant Foresters is available from the local DNR-Forest Service office upon request.

The Beltsville silt loam soils present in this stand is classified as a hydric soil, a possible indicator of additional non-tidal wetland areas. A hydric soil is a soil that, in it's undrained condition, is saturated, flooded, or ponded long enough during the growing season to favor the growth and regeneration of hydrophytic vegetation.

Timber harvesting in the wetland areas and areas with hydric soils present must include the implementation of Best Management Practices (BMPs) in order to minimize impact on the hydrology of these soils. BMPs are easily implemented conservation measures that control soil loss and minimize potentially adverse impacts during harvesting to protect water quality.

Best Management Practices are conservation measures that:

- * Control soil loss
- * Reduce water quality degradation
- * Maintain an area as a nontidal wetland after harvesting
- * Minimize any adverse impact to the chemical, physical or biological characteristics of nontidal wetlands.

Additional information describing how to implement BMPs is attached at the end of this plan.

The entire stand should be re-examined in 15 years (2026) to update the management recommendations.

STAND DESCRIPTION AND RECOMMENDED PRACTICES

STAND NUMBER: 2

AREA ACRES: 15.8

DOMINANT OVERSTORY SPECIES: white oak, red oak

DOMINANT UNDERSTORY SPECIES: American holly, sweetgum

TIMBER SIZE: sawtimber

AGE: even

STOCKING: fully stocked

DESIRABLE TREES: 85%

UNDESIRABLE TREES: 15%

SITE GROWTH POTENTIAL: good

SOIL: Beltsville silt loam (B1B2)

RECOMMENDATIONS/PRACTICES:

This stand is comprised of sawtimber size white oak and red oak. The tree density (stocking) is adequate in relation to maintaining optimum growing space per tree.

The tree species distribution in this stand is as follows:

White oak	60%
Red oak	21%
Yellow poplar	7%
Sweetgum	2%
Red Maple	10%
Total	100%

The current size class distribution in this stand is 62% saw timber (11.0 inches or greater in dbh [dbh = diameter at breast height - e.g. the tree diameter measured at 4.5 feet, approximately breast height]); 36% pole size (5.0 - 10.9 inches dbh); and 2% small tree (sapling to 4.9 inches dbh).

The prescription for this stand is to let it develop naturally over the next ten years at which time it should be re-examined for the feasibility of a commercial thinning.

The Beltsville silt loam soils present in this stand is classified as a hydric soil, a possible indicator of additional non-tidal wetland areas. A hydric soil is a soil that, in it's undrained condition, is saturated, flooded, or ponded long enough during the growing season to favor the growth and regeneration of hydrophytic vegetation.

Timber harvesting in the wetland areas and areas with hydric soils present must include the implementation of Best Management Practices (BMPs) in order to minimize impact on the hydrology of these soils.

BMPs are easily implemented conservation measures that control soil loss and minimize potentially adverse impacts during harvesting to protect water quality.

Best Management Practices are conservation measures that:

- * Control soil loss
- * Reduce water quality degradation
- * Maintain an area as a nontidal wetland after harvesting
- * Minimize any adverse impact to the chemical, physical or biological characteristics of nontidal wetlands.

Additional information describing how to implement BMPs is attached at the end of this plan. The entire stand should be re-examined in 15 years (2026) to update the management recommendations.

ADDITIONAL COMMENTS

1. Implementation of this Forest Stewardship Plan can be used to obtain a reduced (agricultural) property tax assessment. If so used, it should be realized that while the forestry office is available to assist you in implementing the plan, it is your responsibility to request assistance and make certain management activities are completed according to the written time schedule of the plan. The plan is written with the intent to give you a reasonable amount of time to complete the recommendations as given. Failure to follow the recommendations as given or to

keep current of the time schedule may result in the elimination of reduced tax benefits and/or tax penalties. You should work closely with the forestry office to make certain all practices are completed according to schedule and to keep your file updated.

- 2. For the timber harvesting recommended for your property, you should consider retaining a consulting forester to assist you. There are several good reasons for this. Nationwide, statistics show that landowners who retain a consulting forester receive about double the income from a forest harvest than landowners who do not retain a consulting forester. Additionally, hiring a consultant forester relieves you of worrying about all the details of a harvest, such as contracts, inspections, legal permits required, etc., which can be handled by the consulting forester. Most importantly, by hiring a forester to administer a harvest according to a management plan, you can be assured the condition of the woodland following the harvest will continue to be productive and valuable. You can contact the forestry office for a list of private consulting foresters licensed to practice forestry in Maryland.
- 3. Sediment and Erosion Control Permit is required before beginning any commercial harvest operation.
- 4. The term "Natural Heritage" is used to describe the plants, animals and natural ecosystems, which make up the landscapes of Maryland. The DNR-Natural Heritage Program maintains a database, which indicates your property **does not** provide habitat for rare and endangered plant species in need of conservation. Your property also provides important habitat for a group of bird species, which are considered in need of conservation. These groups of bird species are collectively called "Forest Interior Dwelling Species" (FIDS). More information on this species is provided at the end of this plan. This sheet also lists the general forest management practices, which should be utilized to help conserve FID

WILDLIFE MANAGEMENT RECOMMENDATIONS

Turkey:

Turkeys may range up to 4000 acres daily. When an appropriate interspersion of habitats is available, they may confine their daily activity to 400-1000 acres. Prime range is characterized by a diversity of forest types and age classes, predominated by mature hardwoods, well interspersed with small openings and some cultivated land.

Thus your property alone will not support turkeys. However, in conjunction with surrounding properties, all of the habitat requirements may be present.

The following are recommendations for the forest on your property. A variety of mast producing trees should be maintained including oaks, beech, cherry and ash. Grape thickets, briar patches, spring seeps, and small streams should all be protected because of their value as sources of food during winter.

Grazing by deer should be kept at a level so that food-producing plants are not destroyed and there is minimal competition for mast. This may require harvesting deer on your property if population levels are too high in the area.

Lastly, turkeys are very susceptible to human disturbances and disturbances from free ranging dogs. Therefore, every effort should be made to limit these disturbances.

Rabbits:

The cottontail rabbit is found throughout the state and is easily managed. They require good cover near food and a place to bear young. Home ranges of rabbits generally consist of 5 to 10 acres for males and 3 to 4 acres for females. They spend most of their life within 150 feet of dense brushy cover. Food supply for cottontails is generally adequate since they eat a great variety of plant foods. Rabbits need unmowed grass for nesting cover, grasses and legumes for food, dense brush and vines for escape cover and winter food. Planting clover plots or incorporating clover into the existing grass would be of help. Leaving uncut or overgrown brushy areas provide both escape and winter cover. The same browse areas created for deer also benefit rabbits.

Since rabbits nest on the ground, the young are very vulnerable. Controlling stray cats will help greatly.

Brush Piles:

Brush piles can provide important escape cover for many small animals. Please refer to the enclosed reference material on how to build brush piles included with this plan. You could build several large brush piles along your woodland edge.

MANAGEMENT PRACTICE SCHEDULE

Completion Date	Practice	Stand	Acres
June 2013	Regeneration Harvest	1	13.2
September 2013	Site Preparation	1	13.2
April 2014	Reforestation	1	13.2
Continuous	Maintain Property Boundaries	1-2	29.0
Continuous	Maintain Roads and Trails	1-2	29.0
Continuous	Monitor for Insect And Disease Problems	1-2	29.0
August 2026	Re-examine to Update Management Recommendations	1-2	29.0

To provide you with further assistance in carrying out the recommended practices please contact Michael Burns, Professional Forestry Services, 2000 M St. NW Suite 550, Washington, DC 20036 Phone: (202) 459-1702 email mburns@forestfoundation.org.