



Vision • Commitment • Pride

FOREST STEWARDSHIP MANAGEMENT PLAN

Prepared For:
Leflore County BOE

Prepared By:
Wesley James Howard
MS Forestry Commission

Time Period Covered by This Plan:
2012 - 2021

Date Plan Prepared:
2012-02-13

Plan Type:
Stewardship / Stewardship

This plan was developed in accordance with the rules of the Stewardship program.

Property Name: S16-T19N-R2W

TABLE OF CONTENTS

LANDOWNER INFORMATION	3
FORESTER INFORMATION	3
DISCLAIMER	3
INTRODUCTION	3
OBJECTIVES	4
PROPERTY DESCRIPTION	4
GENERAL PROPERTY RECOMMENDATIONS	5
SOIL TYPES	7
STRATA	8
PLAN MAP	12
STRATA ACTIVITY SCHEDULE	13

**MISSISSIPPI FORESTRY COMMISSION
FOREST STEWARDSHIP MANAGEMENT PLAN**

LANDOWNER INFORMATION

Name: Leflore County BOE
Mailing Address: 1901 HWY 82 West
City, State, Zip: Greenwood , MS 38930
Country: United States of America
Contact Numbers: Home Number:
Office Number: 662-453-8566
Fax Number:

E-mail Address:
Social Security Number (optional):

FORESTER INFORMATION

Name: Wesley James Howard , Service Forester
Forester Number: 02521
Organization: MS Forestry Commission
Street Address: 9600 Hwy 17
City, State, Zip: Carrollton, MS 38917
Contact Numbers: Office Number: 662-237-6732
Fax Number:

E-mail Address: whoward@mfc.state.ms.us

PROPERTY LOCATION

County: Leflore Total Acres: 640 Latitude: -90.41 Longitude: 33.51
Section: 16 Township: 19N Range: 2W

DISCLAIMER

This information was derived from a small sampling of the forest resources. It reflects a statistical estimation that is only intended to be accurate enough for the purposes of making decisions for the short-term management of these resources. These estimations are temporally static. Events and circumstances may occur within the survey area that will physically alter the forest resources and therefore will not be reflected in this plan.

INTRODUCTION

This Forest Stewardship Management Plan will serve as a guide for accomplishing the goals and objectives for your property. In addition to addressing your specific goals and objectives, this plan includes recommendations for maintaining soil and water quality and protecting your forest from insects, disease, and wildfire. Recommendations are based on observation and assessment of the site.

**MISSISSIPPI FORESTRY COMMISSION
FOREST STEWARDSHIP MANAGEMENT PLAN**

OBJECTIVES

Timber Production

The goal is to produce high quality sawtimber. This will be accomplished through reforestation and timber stand improvement practices such as herbicide applications, prescribed burning, thinning at specified intervals, and other silvicultural practices. Forestry Best Management Practices will be implemented to prevent erosion and protect water quality.

Wildlife Management - General

The goal is to provide a diversity of habitats suitable for a variety of game and non-game wildlife species. Habitat management will focus on developing a variety of food, cover, water, and space. This will be accomplished by establishing and maintaining access roads and firelanes, providing openings within the forest, and the management of trees located within the Streamside Management Zone.

PROPERTY DESCRIPTION

General Property Information

Section16_T19N_R2W is +/- 640 acres of catfish ponds, large lake, skeet range, and bottomland hardwood bottomland hardwood forest. The hardwood forest consists of 90 acres of sawtimber and pulpwood size timber, also consists of 123 acres of reproduction. Dominate species are nuttall oak, willow oak, overcup oak, and bitter pecan. The section is located approximately 5 miles West of Itta Bena, Mississippi. County road 536 runs along the South Boundary of the section. The section property's topography is low and is poorly drained site.

Water Resources

The section contains 42 catfish ponds ranging from 1.5 acres to 11 acres. The section also contains a 52 acre pond that resides in the North Central portion of the section. Gin Bayou runs from the North Central to the South East corner of the section. A Stream Side Management Zone has been permanently left around Gin Bayou. The section drains into the Yazoo River watershed. Mississippi's Best Management Practices will be followed at all times during any management activities.

Timber Production

The goal is to maximize the production of high quality timber. This will be accomplished through the application of timely thinning and other silvicultural practices designed to enhance timber quality and growth. Forestry Best Management Practices will be implemented to prevent erosion and protect water quality.

Threatened and Endangered Species

No threatened and endangered species were identified during the reconnaissance and evaluation of this property.

MISSISSIPPI FORESTRY COMMISSION FOREST STEWARDSHIP MANAGEMENT PLAN

If any threatened and /or endangered species are discovered, immediate management procedures will be applied to protect these sensitive natural resources for future generations.

Interaction with Surrounding Property

Prescribed practices should be carried out in a manner that will minimize adverse impacts on surrounding properties. Consideration should be given to potential air, water, visual, and other impacts. In addition, practices carried out should have positive effects on the surrounding community such as improved wildlife habitat and soil stabilization.

Soils General

Soils were evaluated on the property to determine the suitability of the site for the proposed activities. Forest practices were planned so as to minimize erosion or other adverse effects on the soil. Mississippi Best Management Practices will be implemented to prevent any adverse effects.

Archeological and Cultural Resources

The section contains a 52 acre fishing lake with docks and also a skeet range. Buffer stripes were left from previous harvesting activities for aesthetics purpose as well as providing a SMZ zone for the lake. Management measures will continue to be applied to protect these areas.

GENERAL PROPERTY RECOMMENDATIONS

Forest Protection

A vigorous growing stand is the best defense to an attack from a variety of forest insects, plants and pathogens.

Note: Some forest practices may cause temporary adverse environmental or aesthetic impacts. These practices will only cause short-term adverse impacts where they are installed. Special efforts will be made to minimize adverse effects when carrying out any of the practices. Examples include: site preparation, planting, prescribed fires, firebreak installation and maintenance, road installation and maintenance, pesticide applications and timber harvesting.

Insects and Diseases

Trees are subject to attack from insects and diseases. Different insects and diseases affect trees according to the age, species, and condition of the trees. Planted stands of pines and pure stands of hardwoods are particularly susceptible to attack. Since there are many different insects and diseases, no attempt will be made here to explain all of them. The property should be inspected at least annually for possible signs of insect and disease activity. Some things to look for are:

- Unseasonable leaf fall
- Discoloration of leaves or needles
- Pitch pockets on pine trees

MISSISSIPPI FORESTRY COMMISSION FOREST STEWARDSHIP MANAGEMENT PLAN

- Heavy defoliation of hardwood leaves
- Groups of three or more dying trees within a stand

This list does not cover all instances of insect or disease attacks. If anything unusual is noticed, report it to a forester. In most cases, insect and disease problems can be controlled if discovered early.

Fire Protection

Your forest should be protected from wildfire at all times. The best way to protect your investment is by establishing and maintaining firebreaks around the property. Guidelines for establishment and maintenance of firebreaks may be found in Mississippi Forestry Commission publication #107, *Mississippi's Best Management Practices*.

Grazing

Tree seedlings should be protected from grazing until such time as the terminal bud of the sapling is beyond reach of livestock. Domestic livestock should be denied access to the tree planting area.

Boundary Lines

Currently boundaries are not clearly marked on the section. Boundaries should be surveyed and clearly marked especially on the South West boundary of the section. This part of the section is still in timber and meets another landowner's property. Boundaries will need to be established before any management activities such as harvesting can take place. Once the boundaries have been surveyed the MFC will maintain these boundaries.

Water Quality Protection

The objective of the landowner is to protect, conserve, and enhance all water resources and drainages on or transecting the property. This objective can be met by implementing Mississippi's Best Management Practices in all aspects of management practices. Protection for water resources must be given in order to maintain the water quality. This protection will be done by the use of stream side management zones (SMZ's) as well as following all Mississippi Best Management Practices.

Aesthetics

The goal is to assure that the property is managed in such a way that is aesthetically pleasing to the landowner as well as the community. Activities could include, maintaining buffer strips along the road and adjacent to the home site, planting wildflowers along the road, and trees with attractive fall and spring color along the drive and near the home site.

Buffer strips were left around the Skeet range and lake for aesthetics purposes for the current lease holder of the property. Aesthetics will continue to be managed for during the plan period.

**MISSISSIPPI FORESTRY COMMISSION
FOREST STEWARDSHIP MANAGEMENT PLAN**

Ecological Restoration

Ecological restoration is the process of assisting the recovery of an ecosystem that has been degraded, damaged, or destroyed. A reconnaissance of the property has been conducted and no ecological restoration activities are recommended at this time.

Environmental Education

Environmental educational goals are to provide educational opportunities for children and adults through the development of items such as nature trails with tree identification markers, wildlife viewing areas, picnic areas, parking, public restroom facilities, "etc".

Wildlife Management General

The goal is to provide a diversity of habitats suited for a variety of game and non-game wildlife species. Habitat management will focus on providing a variety of food, cover, water, and space. This will be accomplished, in part, by establishing and maintaining access roads and firelanes, providing openings within the forest, and leaving mast producing and den trees.

Timber Management

Timber management goals for this property are to manage timber resources in such a manner as to maximize timber production throughout the life of the stand.

Recreation

According to landowner objectives the recreational use of the property could prove to be an avenue for personal enjoyment or for generating income. An evaluation of your property should be conducted and a plan developed to accomplish your specific goals for recreational activities on your property.

SOIL TYPES

6

The Alligator, depressional component makes up 95 percent of the map unit. Slopes are 0 to 1 percent. This component is on depressions. The parent material consists of clayey alluvium. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is very low. Available water to a depth of 60 inches is moderate. Shrink-swell potential is very high. This soil is rarely flooded. It is frequently ponded. A seasonal zone of water saturation is at 6 inches during January, February, March, April, December. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 5w. This soil meets hydric criteria.

21

The Dundee component makes up 95 percent of the map unit. Slopes are 0 to 1 percent. This component is on terraces. The parent material consists of loamy alluvium. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is somewhat poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is high. Shrink-swell potential is low. This soil is rarely flooded. It is not ponded. A seasonal zone of water saturation is at 30 inches during

**MISSISSIPPI FORESTRY COMMISSION
FOREST STEWARDSHIP MANAGEMENT PLAN**

January, February, March, April. Organic matter content in the surface horizon is about 1 percent. Nonirrigated land capability classification is 2w. This soil does not meet hydric criteria.

4

The Alligator component makes up 90 percent of the map unit. Slopes are 0 to 1 percent. This component is on backswamps. The parent material consists of clayey alluvium. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is very low. Available water to a depth of 60 inches is moderate. Shrink-swell potential is very high. This soil is rarely flooded. It is not ponded. A seasonal zone of water saturation is at 12 inches during January, February, March, April, December. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 3w. This soil meets hydric criteria.

STRATA

Strata 1

Strata Description

This 90 acre strata is made up of stands 1, 2, and 5. This strata was approximately established in 1948. This stand is a fully stocked bottomland hardwood mixed forest with overcup oak, bitter pecan, nuttall oak, and willow oak being the dominate species. This strata has a basal area of 96 and 112 trees per acre. This strata contains 43 tons of pulpwood and 54 tons of sawtimber per acre.

**MISSISSIPPI FORESTRY COMMISSION
FOREST STEWARDSHIP MANAGEMENT PLAN**

Strata Recommendations

Stand 5 will be harvested by final harvest method or seed tree method in 2016. The stands will be reaching the management age of 65 years. Stand 5 could begin to decline in growth and yield values and begin to increase in mortality. Harvesting by seed tree method will release the stand and create openings for natural regeneration or final harvesting will allow for capturing the highest monetary value of the stand. The harvesting technique will be based on the amount of natural regeneration of desirable species available at the time of harvest. Seed tree method will be used if enough desirable hardwood species regeneration such as oak is adequate enough to fully restock the stand. Final harvest method will be used if there is not an adequate stocking of natural regeneration. If final harvest method is chosen the stands will be re-planted with desirable hardwood species to achieve full stocking.

Stands 1 and 2 are buffer strips that were left from previous harvesting on the section. These buffer stripes were left for aesthetics purposes. These stands will be managed permanently as buffer strips.

Activity Recommendations

Stand 5 is scheduled for a final harvest or seed tree harvest in 2016. If a final harvest is completed it will be reforested using multiple bottomland hardwood species seedlings planted on 12' x 12' (302 trees per acre) spacing. Stands will be managed on a 60 - 80 year rotation age. Until harvesting this strata will provide habitat for native wildlife species. After harvesting the stands will provide fresh vegetation providing new food sources and cover for native wildlife species.

Harvest

A final harvest or seed tree cut is scheduled for stand 5 in 2016.

Regeneration

Regeneration will be based on the type of harvesting method that is used. If a seed tree harvest is completed then the stand will be regenerated by natural regeneration of unharvested trees. If the stand is final harvested will be replanted on a 12' X 12' spacing (302 ac.) using mixed bottomland hardwood seedling species. The species planted will be determined by the site and soil type.

Strata 2

Strata Description

This 123 acre strata is made up of stand 3. Stand 3 is bottomland hardwood mixed reproduction forest. This strata was approximately established in 2011. Stand 3 was harvested in 2009 and 2010. Stand 3 was planted in February of 2011. Stand 3 was planted with 60% nuttall oak, 20% willow oak, and 20% swamp chestnut. Seedlings

**MISSISSIPPI FORESTRY COMMISSION
FOREST STEWARDSHIP MANAGEMENT PLAN**

were planted at a rate of 436 trees per acre at a spacing of 12' X 12'. A tree survival count was conducted in December of 2011. Stand 3 had an average of 294 trees per acres of natural regeneration and planted. Stand 3 had a 13 percent survival of planted seedlings.

Strata Recommendations

Stand 3 will be evaluated during the 10 year time frame of the plan to ensure that adequate stocking has survived. Stand 3 will be managed on a 65 - 80 year rotation age. Stand 3 will provide new food sources and cover for native wildlife species.

Strata Activities

During the time frame of the plan monitoring will be conducted periodically to ensure the stands are in good vigor condition and no major transformations have occurred that could alter the goal of reaching highest growth and yield values.

Strata 3

Strata Description

This 2.5 acre strata is made up of stand 7. This strata was approximately established in 1997 sub-merchantable forest with nuttall oak and willow oak being the dominant species. This strata has an average of 220 trees per acre and basal area of 70.

Strata Recommendations

There are no activities planned for this strata other than monitoring. This stand is on a 65 - 80 year rotation age and has not reached maturity. However during the time frame of this plan a management decision of thinning may be made if the strata shows that thinning is necessary to achieve the highest yield value.

Strata Activities

During the time frame of the plan monitoring will be conducted periodically to insure no damaging activities are occurring that could impact other stands on the section. No activities are planned for the time period of the plan.

Strata 4

Strata Description

This 424 acre strata consists of stands 4 and 6. Stands are made up of catfish ponds, large lake, Gin Bayou, and skeet range. The Leflore County School board leases this land for catfish production.

**MISSISSIPPI FORESTRY COMMISSION
FOREST STEWARDSHIP MANAGEMENT PLAN**

Strata Recommendations

Leflore county leases the section out for catfish production. The lease provides an annual income of \$20,000.

Strata Activities

During the time frame of the plan monitoring will be conducted periodically to insure no damaging activities are occurring that could impact other stands on the section. No activities are planned for the time period of the plan.

Section16-T19N-R2W

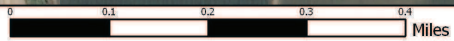


Section16-T19N-R2W

Leflore County, Mississippi
2012 to 2021
640.36 Acres




(12/27/2011)




Section16-T19N-R1W




Property

 Property (1)

Category 1: Stands


 Sawtimber (3)

Category 3: Non-Forest Stands

 Non-Forest (3)


Structures

 Barn (2)

 Work Center (1)

MFC Basemap


County Boundary

 County Boundary (1)


Quadrangle Grid

 USGS Quad (1)


PLS Townships

 PLS Townships (1)


Survey Districts

 District 2 (1)


Blockgroup (Census 2000)

 Blockgroup (Census 2000) (2)


Block (Census 2000)

 Block (Census 2000) (9)


Tract/BNA (Census 2000)

 Tract/BNA (Census 2000) (1)

County Roads

 County Roads (2)


School Sections

 School Sections (1)

Public School Districts

 LEFLORE COUNTY SCHOOL DISTRICT (1)

US Congressional District

 US Cong Dist #2 (1)

MS Senate

 24 (1)


MS House

 34 (1)

Hydrologic Units (Basins)

 UPPER YAZOO RIVER (1)

Water Bodies

 Water Bodies (1)

Historic Forest Boundary

 Bottomland Hardwood (Oak-Gum-Cottonwood-Cypress) (1)

MS Forest Habitat


 YAZOO BASIN DRYLANDS (1)

Physiographic Region

 Delta (1)

Soil Associations

 dundee-forestdale-dubbs (1)

 alligator-sharkey-forestdale (1)

Surface Geology

 ALLUVIUM (1)

MFC Districts

 MFC Districts (1)

MFC Dispatch Units

 MFC Dispatch Units (1)

MS Outline

 MS Outline (1)

Stand Activity Schedule for
Leflore County BOE
16 19N 2W

Strata	Stand	Activity	Acre	Est. Cost	Est. Revenue
2016					
1	5	Regeneration, Artificial, Plant, Hand, Misc Hardwood	77	\$9,625.00	\$0.00
1	5	Harvest, Mechanical, Final, Machine, Misc Hardwood	77	\$2,695.00	\$89,782.00
Yearly Totals			154	\$12,320.00	\$89,782.00
Grand Totals			154	\$12,320.00	\$89,782.00

Stand Activity Schedule for
Leflore County BOE
16 19N 2W

Strata	Stand	Activity	Acre	Est. Cost	Est. Revenue	
2016						
1	5	Harvest, Mechanical, Final, Machine, Misc Hardwood	77	\$2,695.00	\$89,782.00	
			Yearly Totals	77	\$2,695.00	\$89,782.00
			Grand Totals	77	\$2,695.00	\$89,782.00