Basic Ingredients of a Forest Management Plan

By: G. Stephen Burdette
American Forest Management, Inc.

Forest Management Planning

- What is a forest management plan?
  - INFORMAL:
    - Having an idea of what end result you want and how to get there based on the concept in one's own mind.
    - Less transferrable because often times these concepts are not communicated.
    - Can be effective as long as one has the ability to remember the details and carry out what is required to reach the next step.
    - Usually less effective because it is not well defined and ends when the land changes hands.

Forest Management Planning

– FORMAL:
  - Written plan of action to take your forest from its current state to a desired future condition.
  - Transferable to the next generation or landowner because they are better communicated.
  - Usually prepared by a professional.
  - Includes details and timeframes to carry out various practices required to reach the desired end result.

Forest Management Planning

- Why should we have a management plan?
  - Benjamin Franklin– “If you fail to plan, you are planning to fail.”
    - This is not always true in the practice of forestry. The land, especially in our region, tends to recover fairly quickly.
    - Sometimes that recovery results in satisfactory re-forestation.
    - More often than not, this is not the case and better results are achieved by re-planting a more desirable species than what would come back naturally.

Forest Management Planning

- Where to start?
  - Gathering the right information.
    1. Starting point
    2. Final goal

  - The forest management planner must have a clear picture of what the end result is. The landowner must define their ultimate goal.

Forest Management Planning

- Common goals for which to strive:
  - Financial return
  - Wildlife
  - Aesthetics
  - Recreation
  - Hunting
  - Preservation/promotion of certain species
  - Other
  - A combination of these

Forest Management Planning

- Components of a formal forest management plan
  - Landowner information
  - Location and directions
  - Description of property
  - Management Objectives/Goals
  - Timber type map
  - Soil Map
  - Stand level description and recommendations
  - Tract level recommendations
  - Table of 10 year management recommendations

Forest Management Planning

- Sample of Management Plan

LANDOWNER INFORMATION

Owner:

Billy Evens
12211 S. 4th Avenue
Lanett, AL 36863

Boxwood Tract

LOCATION / DESCRIPTION

The tract is located in Chambers County, AL approximately 10 miles southeast of the town of Lanett, AL. From Lanett take US Hwy 29 south to CR 123. Turn left onto CR 123 and proceed about 5 miles to the property. The property will be found on the left before intersecting Boxwood Road.

Total Acreage: 57 acres

Timberland Acres: 31 acres

MANAGEMENT OBJECTIVES

Timber production and hunting rank highest on the list of priorities for the property. Because this is a multiple resource management plan, in addition to the main goals, aesthetics and soil & water conservation will be addressed and considered for all forest management recommendations.

HISTORICAL, CULTURAL, & ARCHAEOLOGICAL SITES

There are no known significant historical or cultural sites on the property. Because such sites add a tremendous aesthetic value to property if found they should be protected against development and during silvicultural operations. If parties are inclined, further information on old gravesites and their preservation can be obtained from your local library or State Historic Preservation Office if available.

THREATENEND & ENDANGERED SPECIES

No threatened or endangered species (T&E) were noted during the initial land reconnaissance. Also, none were noted on the States Rare, Threatened & Endangered Species Inventory. T&E species should be considered a unique aspect of your property and protected for future generations to enjoy. Several T&E species may occur in your county include: the Green-Fly Orchid (native plant species), bald eagle, and gopher tortoise. For additional information on T&E species management, please contact:

US Fish and Wildlife Service AL Department of Natural Resources

Stand Level Silvicultural History and Management Recommendations

(See Forest Stand Type Map for Further Information)

Stand No. 1
Acres: 19
Timber Type: 1992 Loblolly Pine Plantation
Age: 16
Site Index 70 good
Soil Type: Sandy loam
Topography: Flat, 0-3 % slope
Understory Vegetation: Minimal
Avg. Trees Per Acre: 200
Avg. DBH: 8.5
Avg. Hgt: 50 ft
Basal Area: 70 ft. squared per acre

Stand History:
This stand was planted in the winter of 1992 and has not been thinned. The site prep used is not known but was effective and the tree genetics planted on the tract are good quality. The stand was thinned in 2008 and is growing well at this time.

Wildlife: Thinning pine plantations allows sunlight to reach the forest floor and stimulates the growth of grasses and shrubs. This dense vegetation provides cover and a food source for a variety of wildlife. Plants that colonize a stand following thinning include: blackberry, pokeberry, lespedeza, and giant cane. The plants provide berries and succulent browse that are an integral part of the diet of deer, turkey, and quail. The thick grasses provide cover and nesting habitat for bobwhite quail and turkey. Turkey use thinned stands in the spring for bugging because of the abundant insect life these areas support. Establishing a prescribe burn regime as detailed in the recommendations sections will help maintain the herbaceous layer over the life of the stand.

Recommendations: Visit annually at least to look for signs of insects or disease. Otherwise the next timber sale should not be needed until 2012 or after. When needed a second thinning should be done to keep the stand growing and healthy.

Now that the thinning is complete this stand would benefit from a control burn to help control underbrush. I would not recommend a prescribe burn in the same winter as the fertilizer application because this could lead to a loss of the fertilizer if the fertilizer has not fully leached into the soil. This prescribe burn will help control understory vegetation and also be aesthetically pleasing. The burning should continue on a three-year cycle. In approximately 8-10 years this stand will be ready for a second thinning.

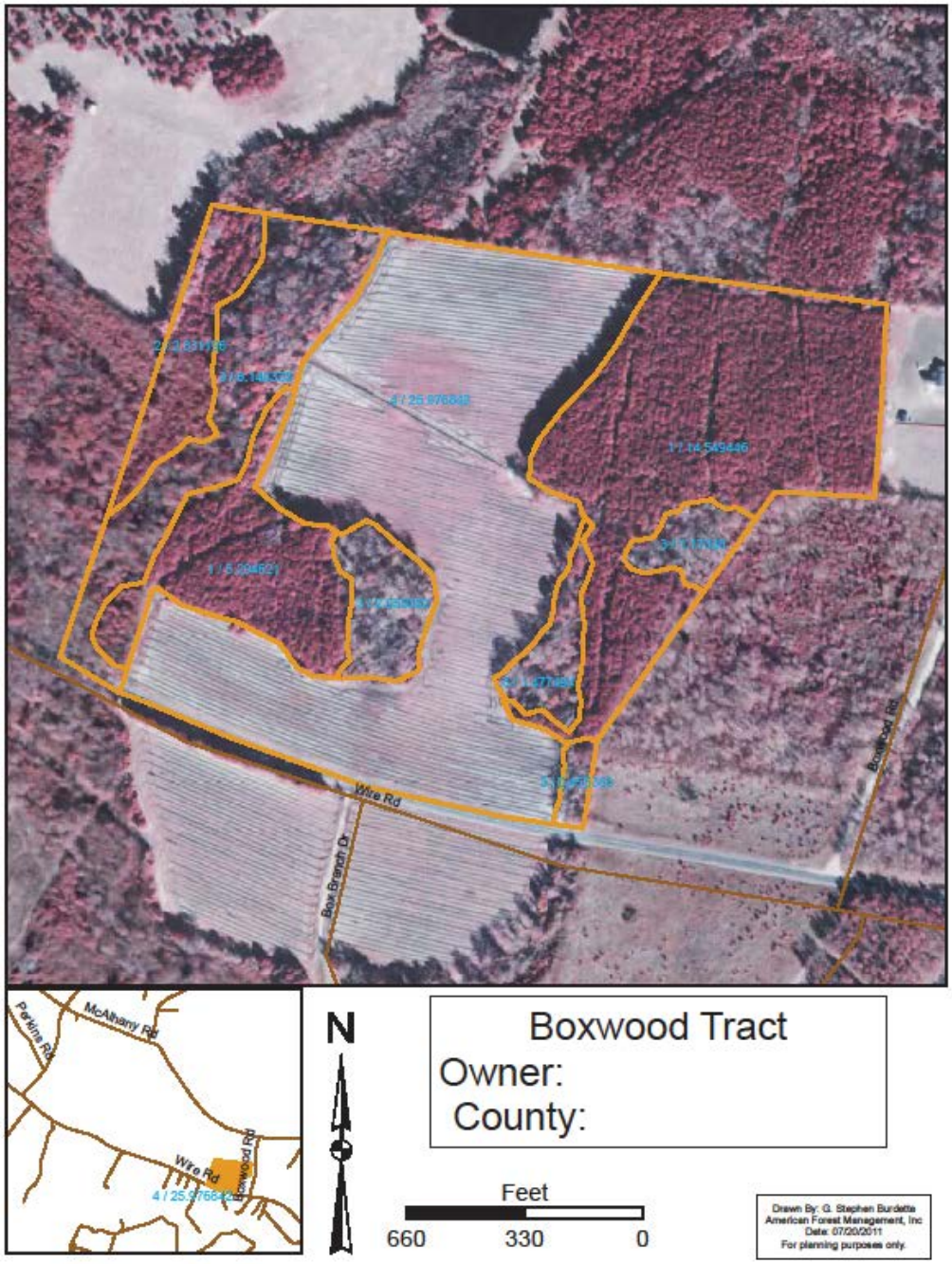
Stand No. 2
Acres: 6
Timber Type: 1985 Mixed Hardwood/Pine
Age: 22
Site Index 80 good
Soil Type: Sandy loam with heavy organic layer
Topography: 0-3% slope
Understory Vegetation: none
Avg. Trees Per Acre:500
Avg. DBH: 6
Avg. Hgt: 40
Basal Area: 80 ft. squared per acre

Stand History:
This stand serves as a buffer for the tract along a wet weather pond.

Wildlife:
This stand provides great wildlife habitat and species diversity. The adjacent stand almost completely composed of loblolly pine and agricultural field. This stand is composed of a variety of hardwood species as well as scattered mature pine. Hardwood species such as oaks, hickories, and Beech provide hard mast (nuts and acorns) that are a large component of the diet of whitetail deer, gray squirrel, and wild turkey. Maples and Ash provide soft mast (seeds) that are a large component of the diet or small mammals and song birds. This area also serves as a wildlife travel corridor evidenced by the well worn paths noted during the field work.

Recommendations:
This stand serves as a buffer for run off to the wet weather pond. This stand should remain intact for the water quality benefits it provides. This stand provides a filter to keep sediment out of the water from the adjoining stands.

The stand is too young to be considered for harvest at this time.


Wire Rd
Box Branch Dr
Boxwood Rd
McAlhany Rd
Perkins Rd
Wire Rd
Boxwood Rd
N
Boxwood Tract
Owner:
County:
Feet
660
330
0
Drawn By: G. Stephen Burdette
American Forest Management, Inc
Date: 07/20/2011
For planning purposes only.

Soil Map—Orangeburg County, South Carolina
(Sub McAlhany - Branbury Road Tract)

Map Scale: 1:7,530 if printed on A size (8.5" x 11") sheet.

Meters
0 50 100 200 300

Feet
0 250 500 1,000 1,500

Map Unit Legend

Orangeburg County, South Carolina (SC075)			
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
AlA	Albany sand, 0 to 2 percent slopes	2.1	0.7%
BoB	Bonneau sand, 0 to 4 percent slopes	31.6	11.4%
Cx	Coxville sandy loam	18.9	6.8%
GoA	Goldsboro sandy loam, 0 to 2 percent slopes	108.2	39.2%
Js	Johnston sandy loam	11.6	4.2%
Ly	Lynchburg fine sandy loam	30.3	11.0%
NoA	Noboco loamy sand, 0 to 2 percent slopes	13.4	4.9%
NoB	Noboco loamy sand, 2 to 6 percent slopes	18.5	6.7%
Ph	Pelham loamy sand	24.5	8.9%
Ra	Rains sandy loam	16.7	6.1%
Totals for Area of Interest		**275.8**	**100.0%**

Stand No. 3
Acres: 6
Timber Type: 1950 Mixed Hardwood/Pine
Age: 57
Site Index 80 good
Soil Type: Sandy loam with heavy organic layer
Topography: 0-3% slope
Understory Vegetation: none
Avg. Trees Per Acre:250
Avg. DBH: 10
Avg. Hgt: 60
Basal Area: 140 ft. squared per acre

Stand History:
This stand serves as a buffer for the tract along a wet weather pond.

Wildlife:
This stand provides great wildlife habitat and species diversity. The adjacent stand almost completely composed of loblolly pine and agricultural field. This stand is composed of a variety of hardwood species as well as scattered mature pine. Hardwood species such as oaks, hickories, and Beech provide hard mast (nuts and acorns) that are a large component of the diet of whitetail deer, gray squirrel, and wild turkey. Maples and Ash provide soft mast (seeds) that are a large component of the diet or small mammals and song birds. This area also serves as a wildlife travel corridor evidenced by the well worn paths noted during the field work.

Recommendations:
This stand serves as a buffer for run off to the wet weather pond. This stand should remain intact for the water quality benefits it provides. This stand provides a filter to keep sediment out of the water from the adjoining stands.

The stand could be considered for harvest but given the protection it offers to the water quality of the area it should be held as is. This also will be a benefit to wildlife offering diversity to the forest landscape.

Stand No. 4
Acres: 26
Timber Type: field, row crop farming
Soil Type: Sandy loam with heavy organic layer
Topography: 0-3% slope

Stand History:
This stand has been farmed for generations.

Recommendations:
This stand will be farmed for the foreseeable future. If farming should be stopped it could be planted with loblolly or longleaf pine.

Tract Level Recommendations:

Property Lines: The property lines should be re-established and kept marked with hacks or paint.

Access: The tract is accessed from the county road along the agricultural field. Any arvests would need to be scheduled so as not to destroy crops planted in the field.

Fire Lines: No fire line exists around the tract. It would be wise to consider hiring the Forestry Commission to plow breaks to protect the timber and facilitate burning of stand 1. If plowed, this line should be used for the next prescribed burn and following plowing and use should be planted in wildlife friendly vegetation. This will aid in fire prevention, and future prescribed burning as the stands age. These fire breaks also serve as wildlife corridors and can provide herbaceous material for the deer and turkey to eat, There is cost share money for this practice available through the Wildlife Habitat Incentive Program (WHIP) If the owners would like to take any of the land out of pine production and establish permanent food plots, the WHIP money will help with this practice as well. At least two log decks can be converted to food plots following the first thinning harvest. WHIP and EQUIP, can currently be applied for at any time of the year.

EQUIP & WHIP Programs

I have mentioned two conservation programs that available to the private landowner to help offset cost on different forestry practices. The Environmental Quality Incentives Program (EQUIP) is a voluntary conservation program that promotes agricultural production and environmental quality as compatible national goals. Through EQUIP, farmers and ranchers may receive financial and technical help to install or implement structural and management conservation practices on eligible agricultural land. The Wildlife Habitat Incentive Program (WHIP) is a voluntary program that encourages creation of high quality wildlife habitats that supports wildlife populations of national, state, tribal and local significance. Through WHIP, NRCS provides technical and financial assistance to landowners and others to develop upland, wetland, and riparian and aquatic habitat areas on their property. You as a non-industrial landowner can apply for these assistance programs at your local Natural Resource Conservation Office.

10 Year Management Recommendations – Boxwood Tract
Chambers County, Alabama

The timetable is just an outline of "when" & "what" season to perform each practice. . Years are subject to change according your objectives

Stand	Year	Season	Management Practice	Date Completed
1	2011	Winter	Control Burn Understory	
1	2013	Winter	Control Burn	
1	2016	Winter	Control Burn	
1	2013 – 2016	Spring ,Summer, or Fall	Consider 2nd Thinning	
All	2011 – 2021	---	Re-paint Boundary Lines as needed	

Forest Management Planning

- Where can one get a management plan?
  - Consulting Forester
  - Alabama Forestry Commission
  - Other Registered Forester

Forest Management Planning

QUESTIONS?