

# Woodland Stewards Webinar Series

## Session 1: Getting to Know Your Woodlands

Audio starts at 7PM Eastern (6PM Central)

(Please go to Tools>Audio>Audio Setup Wizard to ensure audio is correctly set)



*The Woodland Stewards Webinar Series was created by a team of Extension professionals from the following programs:*



# Getting to Know Your Woodlands

Dr. Don C. Bragg



Dr. Bill Hubbard



Mr. Derrick Phinney



Dr. Walt McPhail



South Carolina Landowner and Tree Farmer



Session 1  
Dr. Robert Bardon  
Moderator



# A Brief History of Southern Forests and Why Your Woodlands Are Important TODAY

Don C. Bragg, Ph.D.  
Project Leader and Research Forester  
USDA Forest Service  
Southern Research Station  
Monticello, Arkansas



South is blessed with 245 million acres of forest



### Native American uses of trees

- Food
- Fuel
- Fiber/clothing
- Structures
- Tools & weapons
- Ceremonial objects
- Transportation



Prehistoric village of wood and bark homes, surrounded by log palisade



Woven basket with acorns



Wood handle on tomahawk

From Harrington (1920, 1960), not to scale



Carved effigy

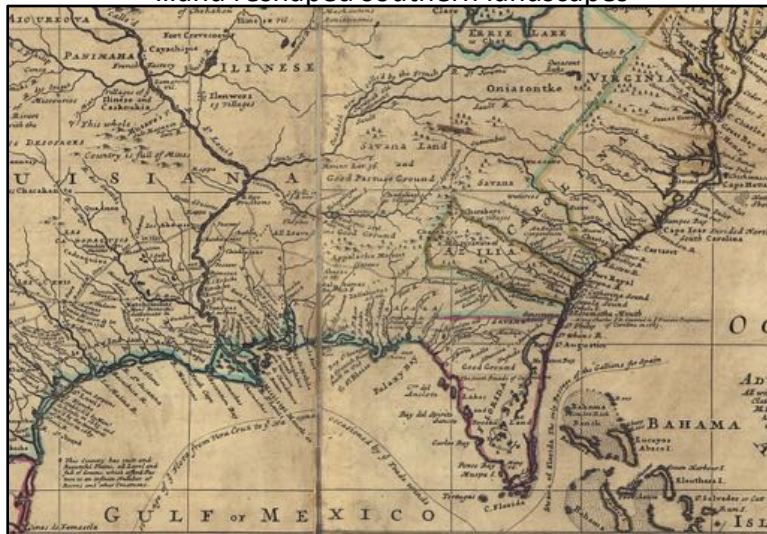


Native Americans used fire as a tool...

Painting by Charles Marion Russell



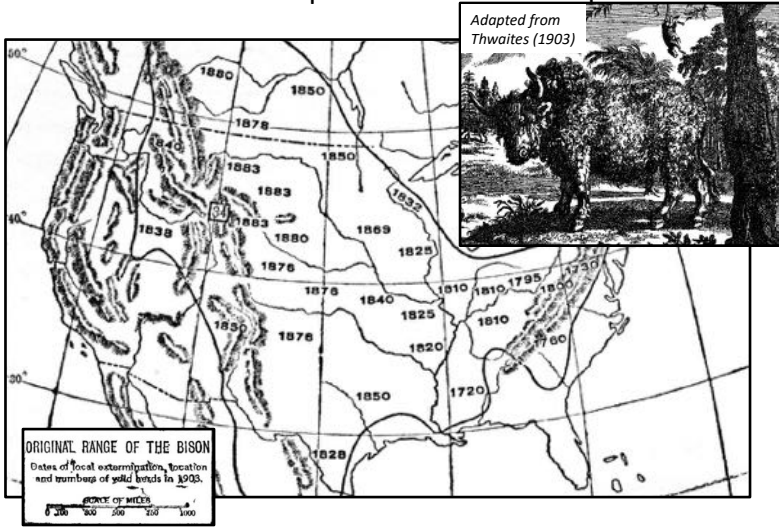
...and reshaped southern landscapes



...and reshaped southern landscapes



...and reshaped southern landscapes



Romantic visions of the past not always accurate...



*The Mountain Ford*, 1846 painting by Thomas Cole



...however, the South had some pretty huge trees!!



Senator Baldcypress in Longwood, FL circa 1935

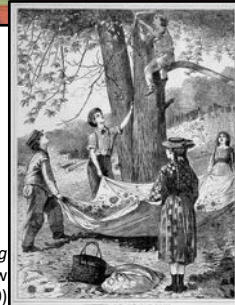




Senator Baldcypress in Longwood, FL circa 2009



Massive hardwoods such as American chestnut



*Chestnutting*  
by Winslow  
Homer (1870)



Extensive woodlands of almost pure longleaf pine...



Note the open, grassy understory



...supported high biodiversity in understory



Shortleaf and loblolly pine forests



Massive bottomland hardwoods...



...that had to tolerate frequent flooding



← Overflow mark  
(high water)

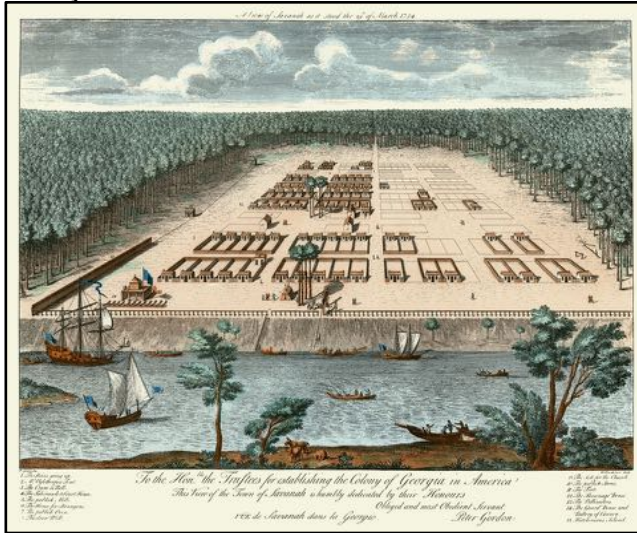


Many virgin forests dominated by scrubby trees

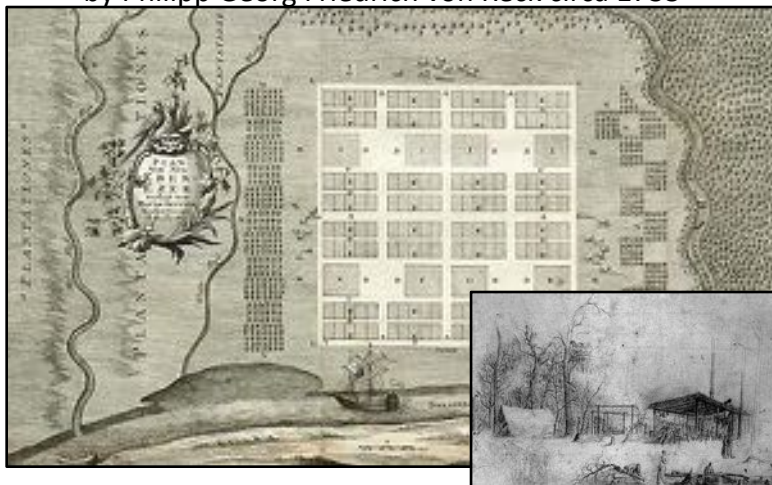


### Major cities carved out of forested wilderness

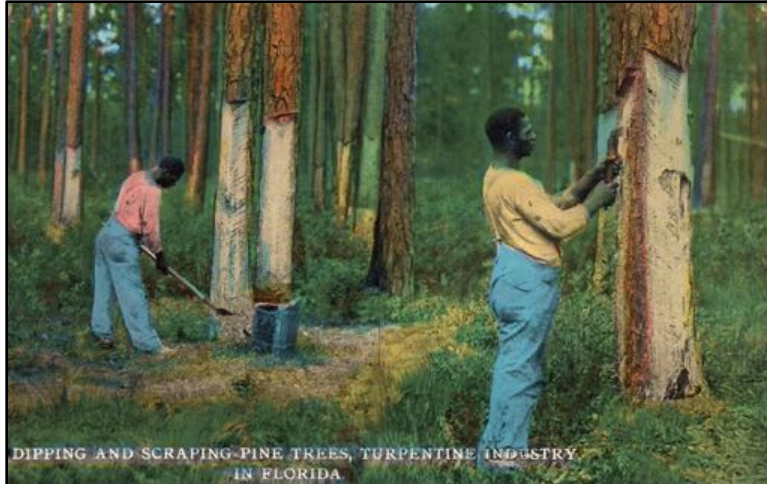
Savannah, Georgia, circa 1734



### Drawing of the New Ebenezer settlement (Georgia) by Philipp Georg Friedrich von Reck circa 1733



Earliest timber industry was often not lumber



Live oak for shipbuilding  
(dense, strong, curved wood)






Image from Norton (2013)



**Live oak for shipbuilding  
(dense, strong, curved wood)**

Guillet (1823)




1. knee in Stock beginning to be hewed.  
2. D'' hewed as a straight line, to be shaped on the crook.  
3. Timber beginning to be hewed in the Stock.

**Decay resistant cypress...**

...for shingles & siding

Process of charcoal manufacturing  
(Overman 1854)



White oaks  
for tight  
cooperage



Most  
southern  
forests  
hardly  
touched  
prior to  
1860

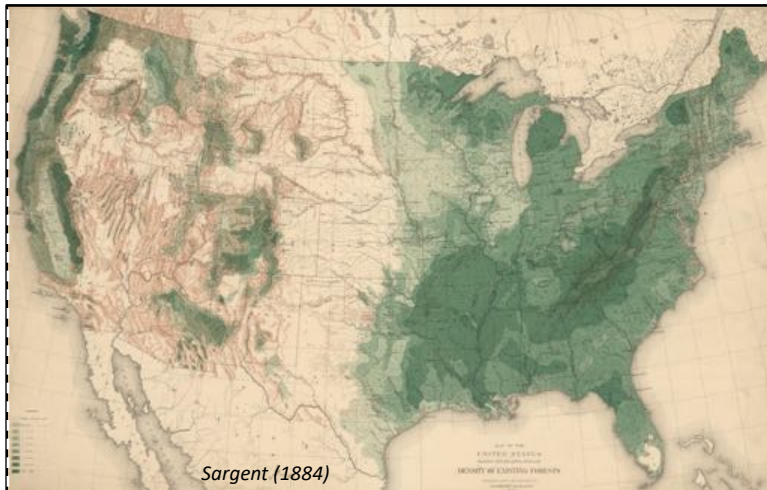




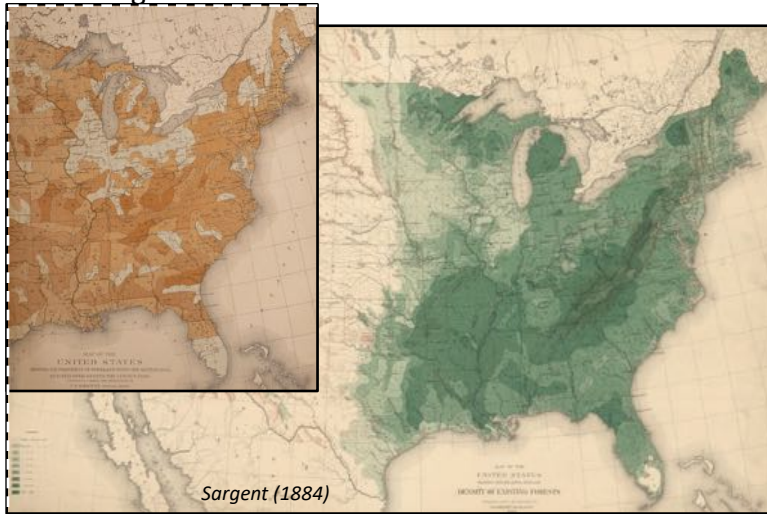
*Guerilla Warfare, Civil War 1862*  
painting by Albert Bierstadt



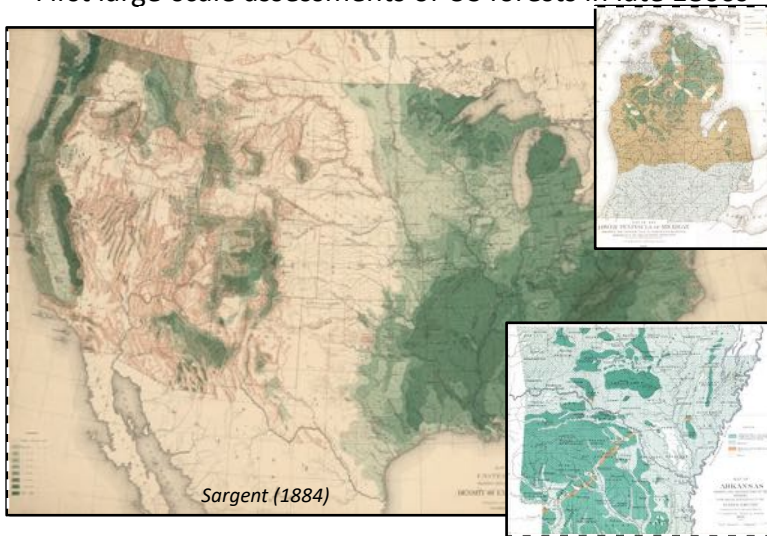
First large-scale assessments of US forests in late 1800s



First large-scale assessments of US forests in late 1800s



First large-scale assessments of US forests in late 1800s



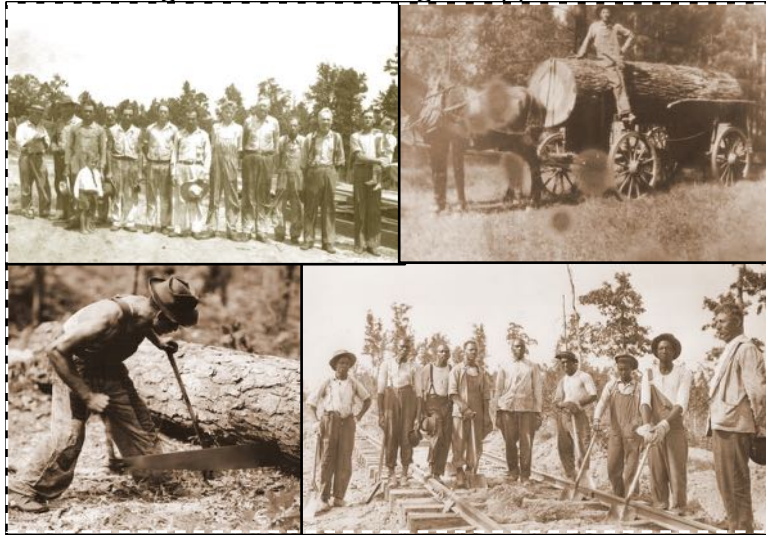
Railroads helped open South's forests for lumbering



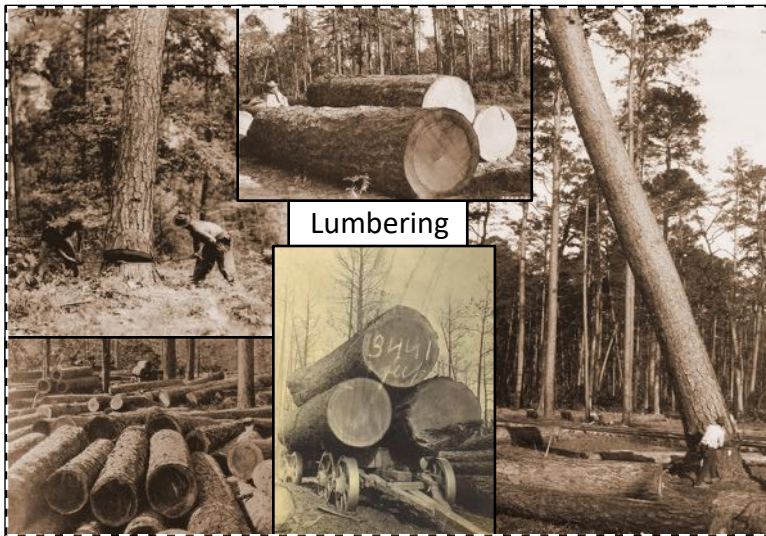
New England and Lake States cut out

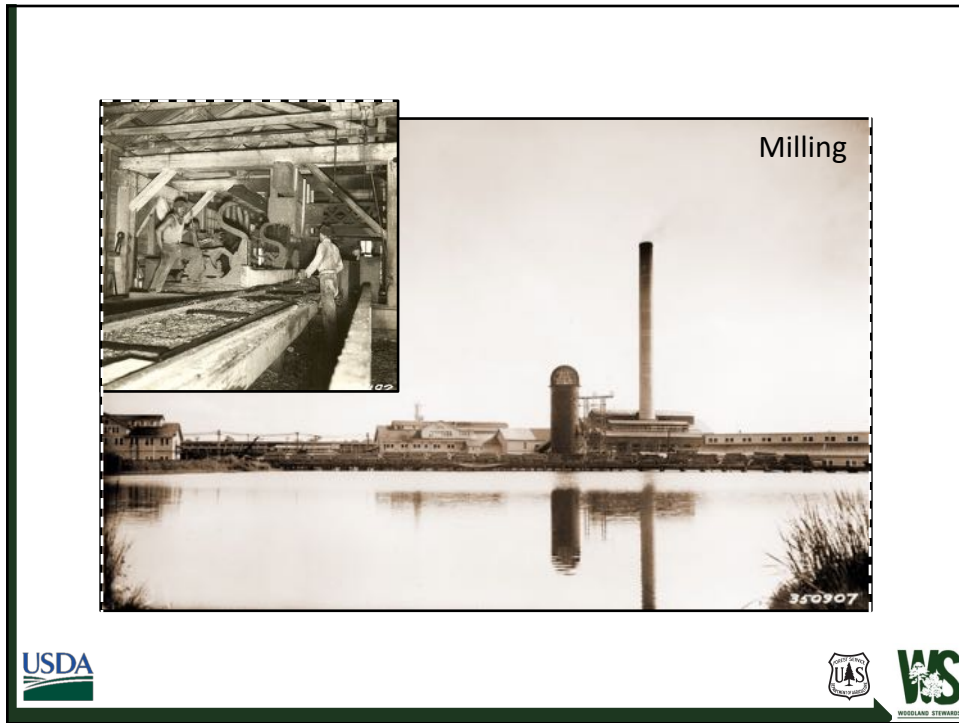


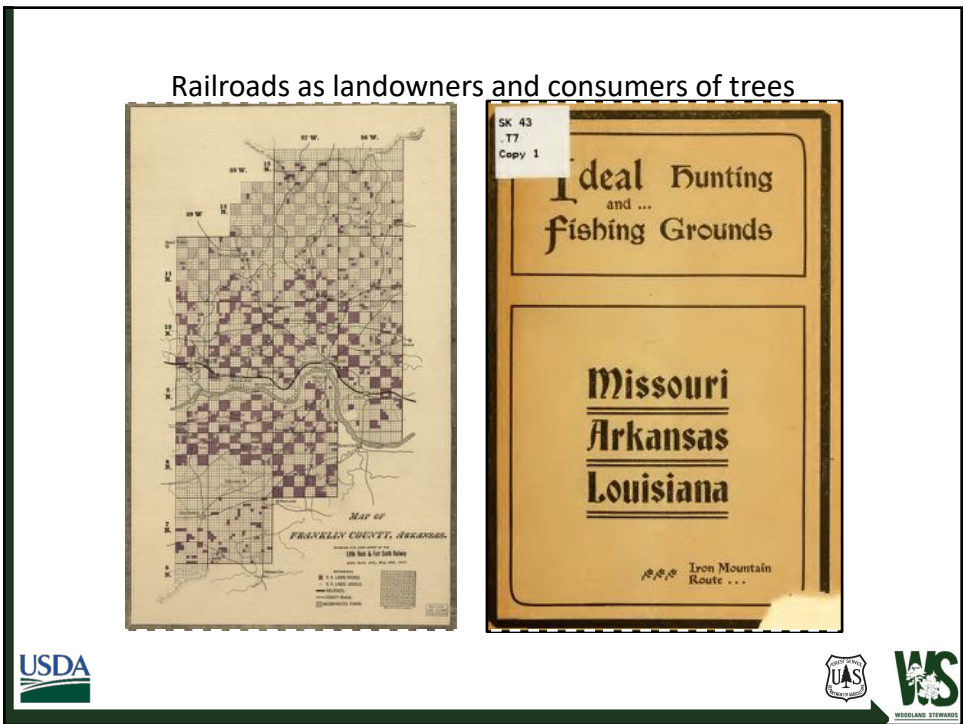
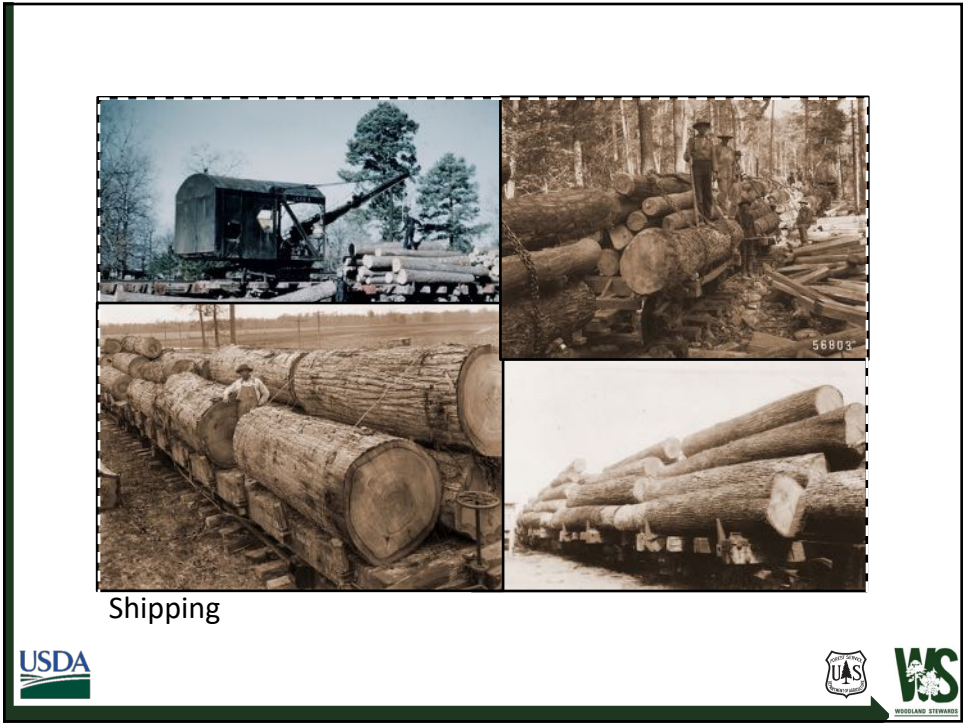
Large workforce looking for opportunities



Lumbering



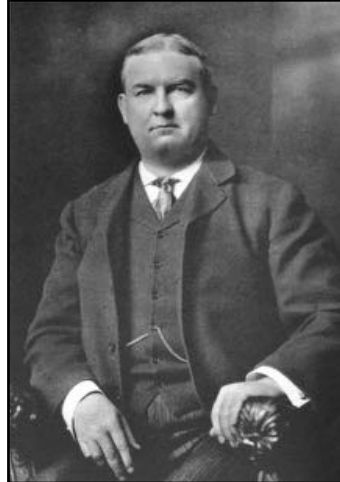




Frank H. Goodyear



Charles W. Goodyear



Lumbermen AND railroad barons...



BIRDSEYE VIEW OF GREAT SOUTHERN LUMBER CO. PLANT, NIGHT SCENE, BOCALUSA, LA.

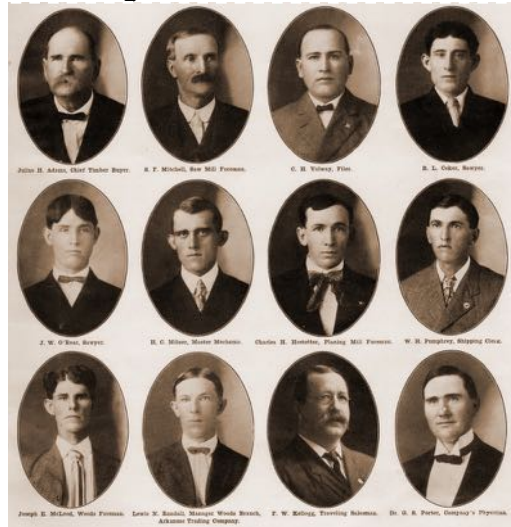
Lumbermen AND railroad barons...



Home of T.L.L. Temple



Managers and skilled millworkers



Workers that did the hard jobs...and reaped few rewards



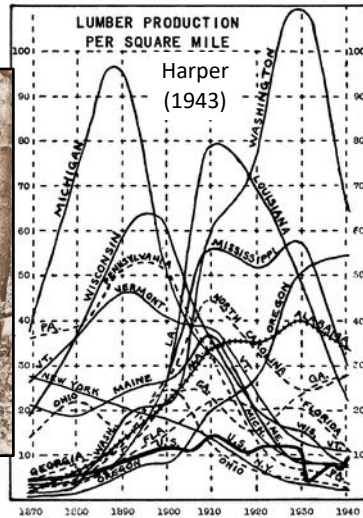
Lumber mills as communities...and overlords



Many company owned towns



1900-1930 southern lumbering dominance



What a resource!



What a resource!



Resulting “stumpscapes”



Some—but not all—cutover became cropland



Many cutover forestlands too poor for sustained cropping



Many cutover forests lacked a seed source...



...or were repeatedly burned into oblivion



Fire as a timberman's scourge...



Could forestry prove a solution?



President Teddy Roosevelt (left)  
and Gifford Pinchot (right)

*When the Gay Nineties began, the common word for our forests was "inexhaustible." To waste timber was a virtue and not a crime. There would always be plenty of timber....The lumbermen...regarded forest devastation as normal and second growth as a delusion of fools....And as for sustained yield, no such idea had ever entered their heads. The few friends the forest had were spoken of, when they were spoken of at all, as impractical theorists, fanatics, or "denudatics," more or less touched in the head. What talk there was about forest protection was no more to the average American than the buzzing of a mosquito, and just about as irritating.*

Gifford Pinchot (1947)  
*Breaking New Ground*



### Movers and shakers...and early adopters



### College-level education of foresters started early

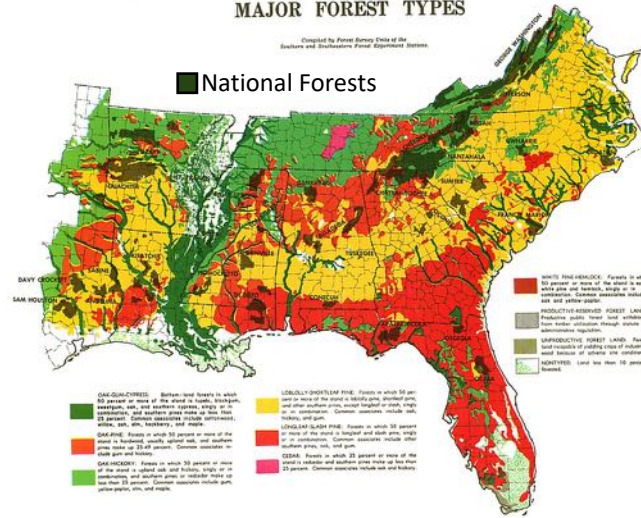


# Legislation allowed for creation of more national forests

## MAJOR FOREST TYPES

Compiled by Forest Survey, Office of the Southern and Southeastern Forest Experiment Station.

■ National Forests



# CCC and other government work programs



Fire fighting became a priority



Fire fighting became a priority



Public relations to fight fires



1920s Forest Service glass slide

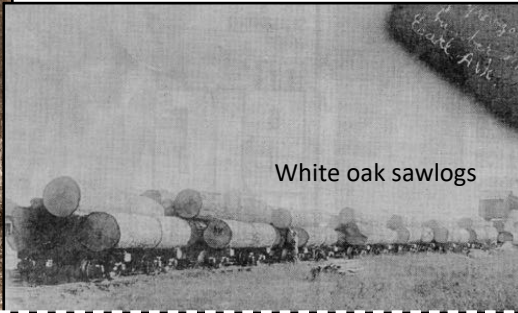
**Get the Fire-Bug!**  
*The more Forest and Brush fires –  
The less School and Road money,  
Timber, Tourists and Game.*  
**\$500<sup>00</sup> reward for conviction of  
incendiaries – U.S. Forest Service**



Public relations to fight fires



Needed to convince the timber industry...



...who were used to a much different world!



Second-growth timber inherently deficient?



Not if properly grown and tended!



Field research at experimental forests



Importance of pulp and paper industry



Importance of pulp and paper industry



Importance of pulp and paper industry



Needed to learn how to artificially regenerate forests



Forest genetics and tree improvement programs



Forest genetics and tree improvement programs



Heady days for southern forestry



Technology comes to forestry...



...and trees go to space!



...and trees go to space!



Loblolly pine "Moon Tree" in Ft. Smith, AR



Moon tree and plaque picture by Jesse Berry



For most of 20<sup>th</sup> Century, southern forestry grew...



...a few large areas of bottomland forest clear for crops...



...and this brings us to today!

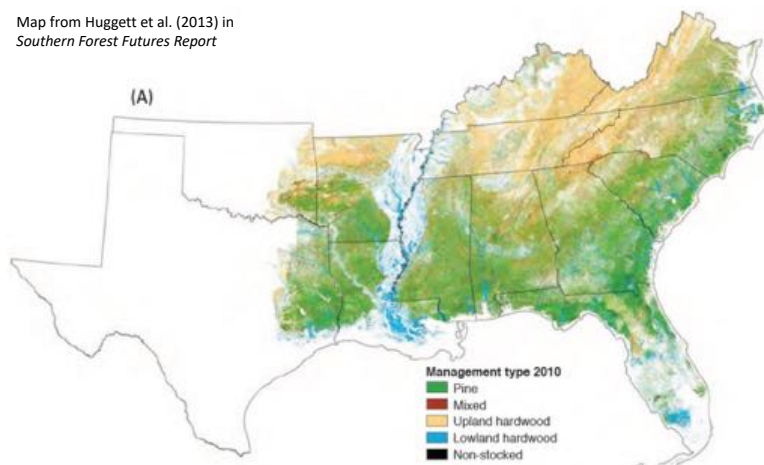


Today, most timberland loss is to urbanization



But the South has seen a net gain in forest cover!

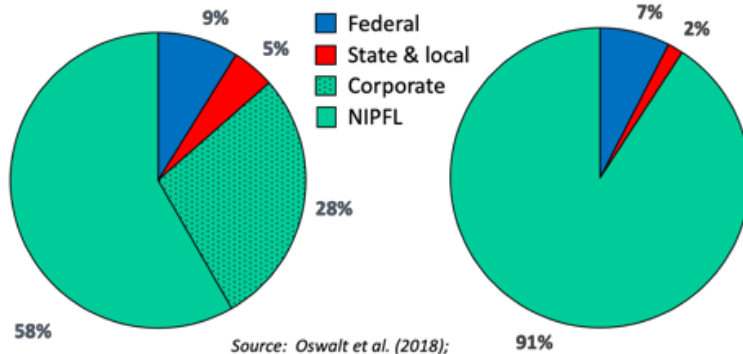
Map from Huggett et al. (2013) in  
*Southern Forest Futures Report*



### Southern forest ownership, 1977 versus 2017

2017, all forest types  
(245 million acres)

1977, timberland only  
(194 million acres)



Source: Oswald et al. (2018);  
their Table 2 for 2017,  
their Table 10 for 1977



### Forestry practices continue to intensify...



Forestry practices continue to intensify...



13-year-old test plantation in SC



...upland hardwood area largely stable...



...mixed outcomes in bottomland forests...



...longleaf area increased, in part due to more planting...



...shortleaf pine experiencing major decline...



...fewer large sawlogs being produced from natural stands...



...much higher % of pine from planted stands...



...more consistent if lower grade product...



...hardwood markets still pretty strong...



...pulp & paper industry declining, partially replaced by pellets...

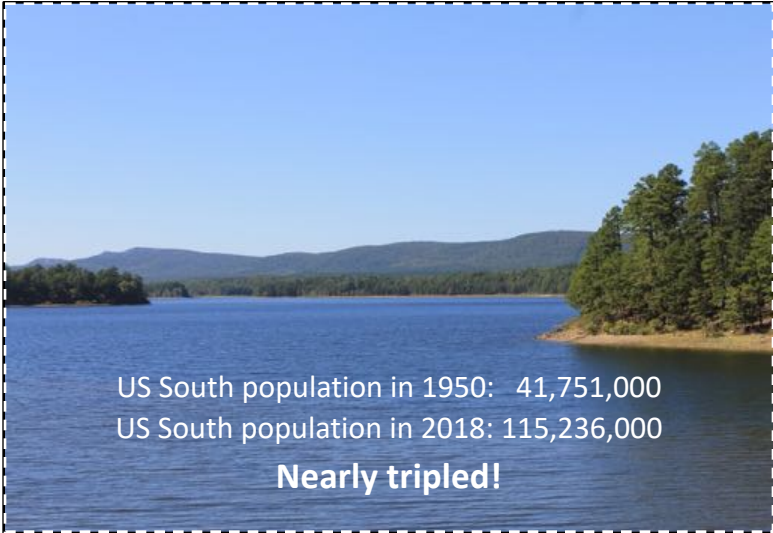


...while timber is the most obvious “ecosystem good”  
that makes your forests valuable, it is not  
the only good or service they provide!



Ecosystem goods and services...water





US South population in 1950: 41,751,000  
US South population in 2018: 115,236,000  
**Nearly tripled!**

USDA

UAS

WS  
WOODLAND STEWARDS

This slide features a landscape photograph of a large blue lake with green mountains in the background under a clear blue sky. The photo is enclosed in a dashed black border. Below the photo, population statistics for the US South are listed, followed by the text 'Nearly tripled!'. Logos for USDA, UAS, and WS (Woodland Stewards) are positioned at the bottom of the slide.

Ecosystem goods and services...hunnable wildlife



USDA

UAS

WS  
WOODLAND STEWARDS

This slide is titled 'Ecosystem goods and services...hunnable wildlife'. It contains two photographs: one of several turkeys in a field of dry leaves and one of a white-tailed deer with large antlers in a wooded area at night. The photos are enclosed in a dashed black border. Logos for USDA, UAS, and WS (Woodland Stewards) are positioned at the bottom of the slide.

Other forest goods and services

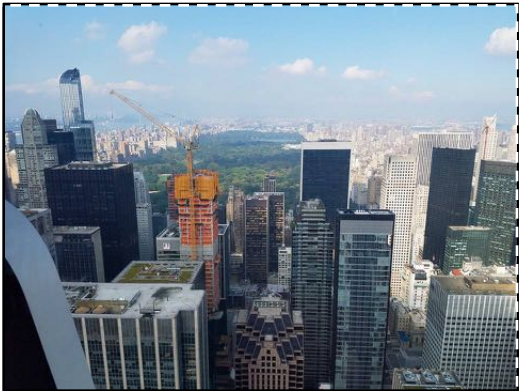


USDA

UAS

WS  
WOODLAND STEWARDS

An urban future...



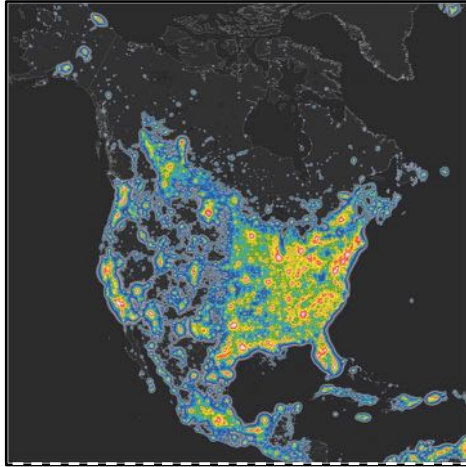
...a rural past(?)

USDA

UAS

WS  
WOODLAND STEWARDS

An urban future...



...a rural past(?)



*Finis...*

[dbragg@fs.fed.us](mailto:dbragg@fs.fed.us)



Time to take a break!



# A Landowner's Perspective

Walter McPhail – Mauldin, South Carolina





## Generation to Generation

### Estate Planning

- What is going to happen to your land when you pass on?
- Do you have a will?
- Grand daddy who passed away during the Flu epidemic did not have a will. (In 1918) leaving his wife and five children.
- The estate was settled by Walter in 1994.



## Planted 1994 Growth 1940



## Volunteer



## Loblolly Pines



- 30-35 year rotation
- 3 Thinnings
- Genetically Improved Pine
- 500 trees per acre 9' x10'
- Herbaceous Weed Control
- Hardwood Release
- Fertilization



## We grow trees to make money. We make money selling trees.

### Enjoyment, 401K, Retirement

- 1984 - Purchased Land: \$400 per acre (\$200 for land and \$200 for trees)
- 3 Thinnings – Total: \$1,800 per acre
- 2019 - Present value: \$4,400 per acre (\$2,500 per acre for land and \$1,900 for trees)
- Trees produced \$3,700 per acre or \$106 per acre per year
- Hunting lease \$15 per acre



## County Forestry Association



# Field Tour



## FOREST MANAGEMENT PLAN

### Due West Tree Farm - American Tree Farm # SC-3653.2

Owner: McPhail Tree Farms, LLC.  
2 Jenkins Court  
Mauldin, South Carolina 29662

Total Area: 106.86 acres

Location: 34.314 / -82.367 decimal degrees  
1.7 miles south of Due West, SC via Hwy 20 / 185

Plan Standards: This plan is written to comply with standards of the American Tree Farm Program, as well as the National and South Carolina standards for Forest Stewardship Plan development. The landowner can utilize this plan to assist in qualifications for **cost share programs** that may be available.

Plan Author: Nathan McClure  
SC Reg. Forester #1839, SAF Cert. Forester  
#1812

F&W Forestry Services, Inc.  
210 South Main Street  
Fountain Inn, SC 29644  
Phone: 864-230-1664



## GENERAL PROPERTY DESCRIPTION

The Due West Tree Farm includes two parcels that are "almost" adjacent and total 106.86 acres. The two adjacent parcels are Parcel # 043-00-00-101 at 69.43 acres and Parcel # 043-00-00-114 at 37.43 acres

### Topography

This predominantly forested Tree Farm is located on lands that are level to gently rolling. There are two small perennial streams within the southern and western sections of the tract. There is a topographic map of the property in Appendix A.

### Access and Security

Access to the property is good with a well-developed internal road system. Two access roads lead from highway 185 into the tract and one forest road leads from Harkness Lane. Cable gates have been installed on these roads. See the maps in Appendix A for the road locations.

The property boundaries are marked in white spray paint on trees in some locations. Records indicate that a boundary survey was completed in 2006 followed by boundary painting in various locations in 2006, 2009 and 2010.

### Land History

Much of the tract has an agricultural land use history, including row crop production. Specifics of past use can be found in the individual stand descriptions found in this Plan.



## LANDOWNER'S MANAGEMENT OBJECTIVES

**Primary objective:** Wood production

**Secondary objective:** Wildlife management for game and non-game species: diverse habitat and species

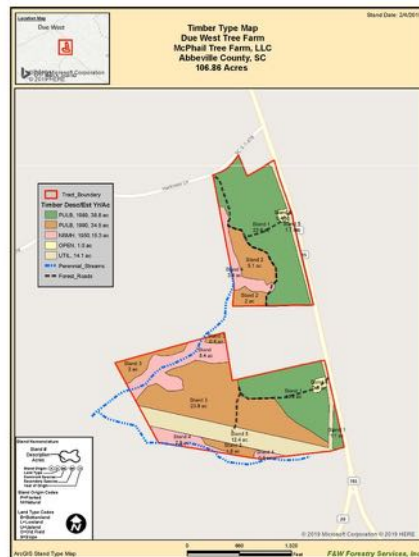
The landowner has also expressed a desire for the property to be a **revenue producing asset**, but he is also interested in using management practices that minimize impact on soil and water resources.

The landowner has indicated a preference for pine timber rotations that include three selection harvests followed by a final harvest over a 35 year rotation. He also recognizes the value of managing for higher value products, such as utility poles.

Timber should be managed in a way that maximizes revenue based on timber growth and product value.



## Maps



## STAND 1 – 38.8 acres

- This stand is composed of planted Loblolly pine that was established in 1989 on old row crop areas. Cecil sandy loam soil.
- The stand is well stocked with approximately 110 square feet of basal area per acre. The timber includes a blend of pine CNS (27 tons/ac) and pine sawtimber (62 tons/ac). Timber meeting the utility pole standard is estimated at 25-30%.
- The heights of the dominant trees in this stand are approximately 80' resulting in an exhibited site index of 73 (base age 25).
- Stand growth rate is 4.5 – 5% per year.
- The understory includes very little vegetation.



## Silvicultural Practices

### Past Silvicultural Activity:

Commercial thinning of pines occurred in 2007 and 2015; A woody release by skidder application of herbicide in 2011; additional larger hardwood control by hack and squirt applied herbicide in 2014.

### Future Harvests:

A third selection thinning of the pine plantation is recommended for 2021. The residual stocking should be 65-75 sf/ac of basal area with approximately 70-80 trees per acre. A final harvest of the stand should be conducted in 2026.



### Threatened & Endangered Species

- Description and recommended practices to meet manage without negative impact of any known rare species
- Statement that rare species are not known to exist and what resources have been searched

### Special Sites

- Description of sites of historical, archeological, or environmental significance (cemeteries, native American sites, etc.) These are especially important when heritage is a desired objective

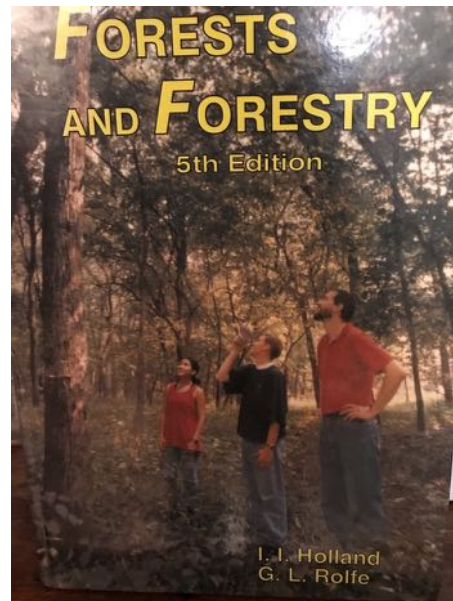
### Forest Health and Invasive Species

- Description of potential problems with insects and disease affecting forest health. Recommendation on practices to reduce risk from these pests
- Identification of specific invasive species that exist on the property and a general recommendation on how and when to control them.



## Resources

- Extension Service
- County Forestry Associations
- Forestry Commission
- American Tree Farm System
- Forest Land Owners Association
- National Woodland Owners



**I challenge you to be more involved in your forest and wildlife management.**

**Get a management plan.**

Be active in your county and state forestry associations.

Help select programs and become an officer.

If there is no local forestry association, **START ONE.**

**Be involved.**

Walter McPhail, 2 Jenkins Ct. Mauldin SC 29662

864-288-7618

[TreeVetSC@aol.com](mailto:TreeVetSC@aol.com)



# Management Plans: The Why and How

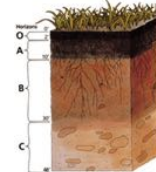
Bill Hubbard: University of Maryland Extension

Derrick Phinney: Clemson University Extension

**WS** WOODLAND STEWARDS  
A Regional Extension Program for Landowners

## Why is a Management Plan Important?

- 766 Million Acres of Forest Land in the US
- 81% is held in private ownership in the Eastern US
- 340 Million Acres in the Eastern US
- Management plan is a landowners "How to Manual"



**WS**  
WOODLAND STEWARDS

## Parts of a Management Plan

- Your Objectives
- Property Location and History
- Maps
- Stand Description and Recommendations
- Activity schedule
- Supplemental information

<p style="text-align: center;"><b>FOREST MANAGEMENT PLAN</b></p> <p style="text-align: center;">February 21, 2019</p> <p style="text-align: center;">Prepared For:</p> <p style="text-align: center;"> </p> <p style="text-align: center;"><b>The Landowner Family</b></p> <p style="text-align: center;">By:</p> <p style="text-align: center;">ABC Forestry Consultants, Inc. 123 Main Street Anytown, SC 29360 123-456-7899</p>
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## Your Objectives

- Defining Objectives is Important
- Desired Outcomes for Your Property
- Involve Family Members
- What are your Management Constraints?

<p style="text-align: center;"><b>The Landowner Family</b></p> <p style="text-align: center;">90 Acres</p> <p style="text-align: center;">Anytown, South Carolina</p> <p><b>Introduction</b></p> <p>The purpose of this stewardship management plan is to identify the resources of the Landowner Family and to make recommendations based on the landowner's objectives and goals.</p> <p>The main objective of the landowner is to actively manage timber as a source of revenue while enhancing the overall value of the property through aesthetic enhancement, wildlife habitat improvement, soil and water conservation, and recreational improvements. Timber and wildlife recommendations will be developed along with future cash flow and cost projections.</p>
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## What are your interest?



## Property Location and History

- Describe the Property
- Reference the Deed/Plat
- Location Map
- Surveys
- Soil Maps
- Stand Maps
- Aerial



### Location

The Landowner Family's property is located approximately X miles north of the Town of Reevesville, SC off of Hwy 78. The GPS coordinates of the property are xxx degrees Latitude and xxxx degrees Longitude. See attached maps for additional information.

### History

The tract contains a mix of agriculture fields and forest land. The agriculture fields have a history of crop rotation and are currently being farmed. The forest land contains upland areas mostly dominated by pine plantation and wetlands mainly in bottomland hardwood species. Harvesting has been conducted in the late 1980's and replanted in loblolly pines, but no active management has been conducted since.





### Online Tools

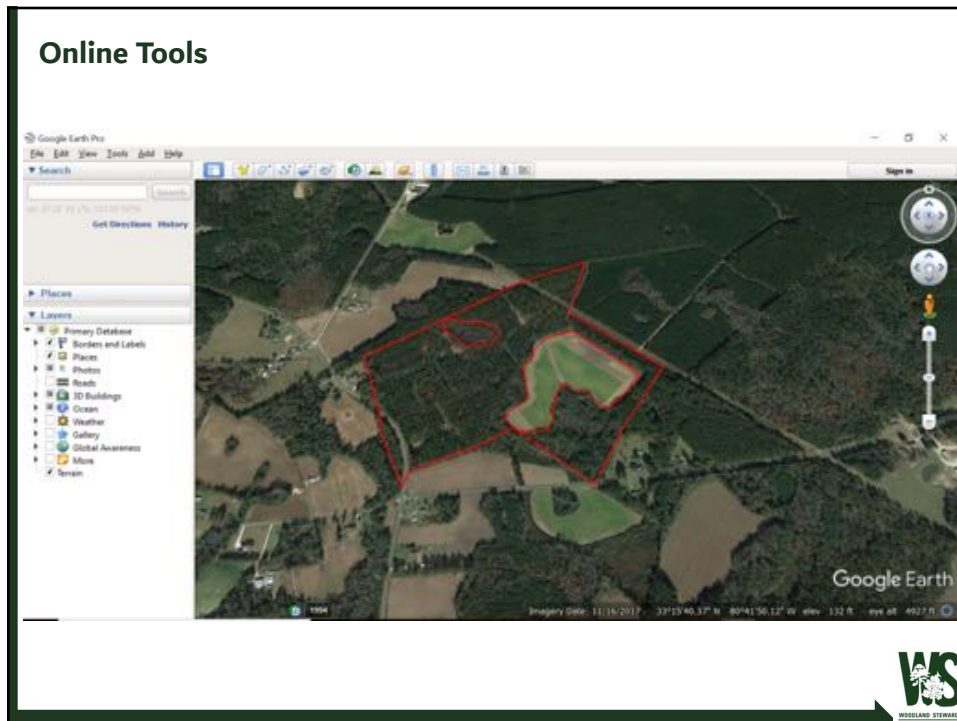
The screenshot shows the homepage of the Web Soil Survey (WSS) website. At the top, there is a banner with the USDA logo and the text "Web Soil Survey". Below the banner is a navigation menu with links for "Home", "About Soils", "Help", and "Contact Us". The main content area features a search bar with the text "Enter Keyword" and a "Go" button, and a "Browse by Subject" dropdown menu. A large green button labeled "START WSS" is prominently displayed. To the right, there is a "I Want To..." section with a list of links: "Start Web Soil Survey (WSS)", "Know Web Soil Survey Requirements", "Know Web Soil Survey operation hours", "Find what areas of the U.S. have soil data", and "Find information by topic". A "Welcome to Web Soil Survey (WSS)" section includes a small image of people working in a field and text explaining that WSS provides soil data and information produced by the National Cooperative Soil Survey, operated by the USDA Natural Resources Conservation Service (NRCS).

<https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm>

### Online Tools

The screenshot shows the homepage of the My Land Plan website. At the top, there is a header with the American Forest Foundation logo and the text "My Land Plan The woodland owner's resource". A search bar is located in the top right corner. Below the header is a navigation menu with links for "Enjoy It", "Protect It", "Make it healthy", "Profit from it", "Pass It On", "Find Help", and "Start Your Plan". The main content area features a large heading "Get More Out of the Land You Love" and a sub-heading "My Land Plan can help you explore and discover how to manage your woodlands. Easy to use tools guide you to map your land, set goals, keep a journal and connect with woodland owners and foresters." A large green button labeled "Get Started!" is prominently displayed. Below the button is a photograph of a family (a man, a woman, and two children) standing in a field, looking up at the sky.

<https://mylandplan.org/signup>



## Resource Assessment

- Descriptive information about natural resources on your property
- Stand types
- Soils
- Threatened and Endangered Species
- Historical features
- Wildlife Use
- Helps determine capability of meeting objectives

### Stand Types




### Stand Types



## Soil Profile



## Endangered Species



**U.S. Fish & Wildlife Service**

### ENDANGERED SPECIES ACT OF 1973

As Amended through the  
108th Congress

Department of the Interior  
U.S. Fish and Wildlife Service  
Washington, D.C. 20260



**U.S. Fish & Wildlife Service**

### ESA Basics

*40 Years of Conserving  
Endangered Species*

**When Congress passed the Endangered Species Act (ESA) in 1973, it recognized that our rich natural heritage is of "irreplaceable, irrevocable, and infinitely unique" value to our Nation and its people." It further expressed concern that many of our nation's native plants and animals were in danger of becoming extinct.**

**The purpose of the ESA is to protect and recover imperiled species and the ecosystems upon which they depend. The Interior Department's U.S. Fish and Wildlife Service (FWS) and the Commerce Department's National Marine Fisheries Service (NMFS) administer the ESA. The FWS has primary responsibility for terrestrial and freshwater species, while the responsibilities of NMFS are mainly marine wildlife such as whales and manatees and fish such as salmon.**

**Under the ESA, species may be listed as either endangered or threatened. "Endangered" means a species is in danger of extinction throughout all or a significant portion of its range. "Threatened" means a species is likely to become endangered within the foreseeable future. All species of plants and animals, great and small, are eligible for listing as endangered or threatened. For the purposes of the ESA, Congress defined species to include subspecies, varieties, and, for vertebrates, distinct population segments.**

**As of January 2015, the FWS has listed 1,664 species worldwide as endangered or threatened, of which 1,458 occur in the United States.**

**How are Species Listed?** Section 4 of the ESA requires species to be listed as endangered or threatened solely on the basis of their individual status and trends in their status. When evaluating a species for listing, the FWS considers five factors: (1) current or declining population; (2) range or distribution of a species; (3) reproductive success of the species for commercial, recreational, scientific, or educational purposes; (4) disease or

**At least six species exist only in Washington, Oregon, Idaho, Montana, and Nevada, the threatened but once common, and now scarce deep pool, frog for listing, associated habitat areas in landscape and air space, and nesting, close surrounded ground.**

**production; (4) inadequacy of existing protection; and (5) other natural or manmade factors that affect the continued existence of the species. When one or more of these factors supports the approval of a species, the FWS takes action to prevent it. The Fish and Wildlife Service is required to base its listing decisions on the best scientific information available.**

**Candidates for Listing** The FWS also maintains a list of "candidate" species. These are species for which the FWS has enough information to warrant preparing them for listing but is prohibited from doing so by higher listing priority. While listing priority of higher priority is favored, the FWS works with States, Tribes, private landowners, private partners, and other Federal agencies to carry out conservation actions for these species to prevent further decline and possibly eliminate the need for listing.

**Protection** The ESA protects endangered and threatened species and their habitats by prohibiting the "take" of listed animals and the interstate or international trade in listed plants and animals, including their parts and products, except under Federal permits. Such permits generally are available for conservation and scientific purposes.

**What is "Take"?** The ESA makes it unlawful for a person to take a listed animal without a permit. Take is defined as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect or attempt to engage in any such conduct." Through regulation, the term "harm" is defined as "an act which actually kills or injures wildlife, such as an act which may significantly reduce modification or degradation where it actually kills or injures wildlife by specifically impairing essential behavioral patterns, including breeding, feeding, or sheltering." Listed plants are not protected from take, although it is illegal to collect or remove them from their natural habitat. Provisions that concern trade and the effects of Federal actions do apply for plants. In addition, States may have their own laws restricting activity involving listed species.

**Recovery** The best ultimate goal is to "recover" species so they no longer need protection under the ESA. Recovery plans describe the steps needed to restore a species to biological health. FWS biologists write and implement these plans with the assistance of species experts, other Federal, State, and local agencies, Tribes, environmental organizations, scientists, and other stakeholders.

**Federal Agency Cooperation** Section 7 of the ESA requires Federal agencies to use their legal authorities to promote the conservation purposes of the ESA and to consult with the FWS and NMFS, as appropriate, to ensure that effects of actions they authorize, fund, or

<http://www.fws.gov/endangered/>

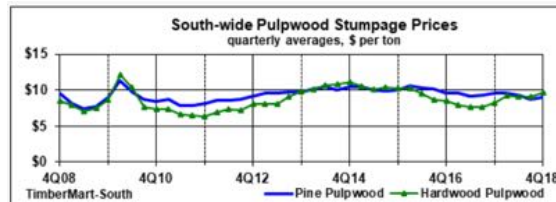
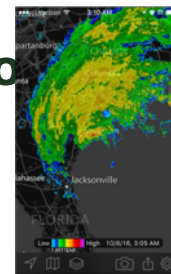


## Historical and Cultural Resources



## Management Recommendation

- Should outline a general set of treatments or operations
- Cover a 10 year block of time
- Fluid Plan and can be revised
  - Change in objectives
  - Change in markets
  - Change in weather



Source: The TMS Market News Bulletin 4Q2018



**TIMBER STANDS**

**STAND 1 - LOBLOLLY PINE (52 ACRES)**

**Description**

This stand of loblolly was bedded and then planted during the 1994-95 planting season. This stand is approximately 24 years old and contains about 550 trees per acre with an average diameter of 8 inches and an average merchantable height of 36 feet.

**Recommendations**

Stand 1 should be fifth-row thinned in 2019 to remove the diseased and suppressed trees in order to give room for the more vigorous trees to accelerate in growth. Leaving approximately 200-250 trees per acre. A prescribed burning schedule should begin the year following the thinning operation and continue at two-year to three-year intervals.

The thinning will benefit quail, deer, and turkey by opening up the stand. The sunlight will be able to penetrate the forest floor allowing herbaceous plants and small shrubs to grow in the understory, therefore increasing the forage productivity of the stand. Prescribed burning will control the understory and also create new vegetation.



**STAND 2 – MIXED HARDWOOD/PINE (14 ACRES)**

**Description**

This is a mixed aged hardwood/pine stand. Based on historical photos back to 1994, it appears this stand had some harvesting conducted prior to this date. Currently the stand is made up of low quality gums, maples, oaks and a few loblolly and pond pine. Average diameter is 9 inches. Very low volume is present, and soils are classified as Rains Loamy Sandy. This area is wet most of the year.

**Recommendations**

This area is best suited to manage for aesthetics and wildlife. Retain this area in its current condition. Several wildlife openings can be created along the edge of this stand and the agriculture field. Monitor for overall forest health.



# Activity Schedule

- List when activities will take place
- Can include projected costs and re
- Records of the activities should be
  - Dates, Times, Expenses, Incomes
  - Types of seedlings
  - Herbicides
  - Weather
  - Contractors



These records will be helpful in the future as you evaluate your successes, plan additional activities and update the management plan.

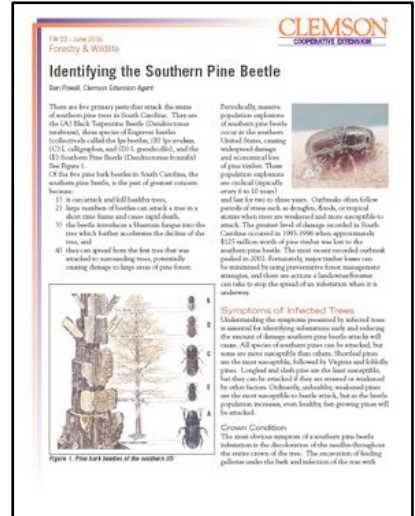


Schedule of Activities and Recommendations											
Stand #	Description	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
1	Planted Loblolly Pine	Conduct 5th row thinning	Establish fire breaks	Prescribe burn	Maintain fire breaks	Maintain fire breaks	Prescribe burn	Maintain fire breaks	Evaluate for possible harvest	Conduct harvest	Reevaluate
2	Hardwood/ Pine	Retain	Monitor for overall forest health	Evaluate for wildlife food plots	Establish food plots	Maintain food plots	Maintain food plots	Maintain food plots	Evaluate based on objectives	Retain	Retain
3	Bay/Pond	Retain this area for overall diversity	Retain this area for overall diversity	Retain this area for overall diversity	Retain this area for overall diversity	Retain this area for overall diversity	Retain this area for overall diversity	Retain this area for overall diversity	Retain this area for overall diversity	Retain this area for overall diversity	Retain this area for overall diversity
4	Non-timber / Ag Field	Maintain ag lease	Add wildlife buffers to field edges	Maintain buffers and ag lease	Maintain buffers and ag lease	Maintain buffers and ag lease	Maintain buffers and ag lease	Maintain buffers and ag lease	Maintain buffers and ag lease	Maintain buffers and ag lease	Maintain buffers and ag lease



# Supplemental Information

- Fact sheet and publications
- List of foresters, wildlife biologist, county extension agents, USDA, financial advisors, and anyone else that might be of assistance
- Supplemental and alternative sources of income
- Cost Share – Federal and State
- Glossary of Terms
- Expenses
- Liability



# Supplemental Information

## Extension Services:

- Arkansas: <https://www.uaex.edu/environment-nature/forestry/>
- Georgia: <http://extension.uga.edu/topic-areas/environment-natural-resources/forestry.html>
- Kentucky: <http://forestry.ca.uky.edu/extension-home>
- Maryland: <https://extension.umd.edu/wye/ume-extension/forestry>
- Mississippi: <http://www.cfr.msstate.edu/extension.asp>
- Missouri: <https://extension2.missouri.edu/find-your-interest/agriculture-and-environment/agricultural-systems-and-natural-resources/forestry>
- North Carolina: <https://forestry.ces.ncsu.edu/>
- South Carolina: <https://www.clemson.edu/extension/forestry/>
- Tennessee: <https://ag.tennessee.edu/fwf/Pages/UT-Extension---Forestry.aspx>
- Virginia: <https://www.ext.vsu.edu/forestry/>



## Supplemental Information

My Land Plan - <https://mylandplan.org/>

Soil Web -

<https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm>

SREF - <https://sref.info/>

Cost Share Programs -

<http://www.southernforests.org/rural/cost-share-programs>

Google Earth - <https://www.google.com/earth/versions/>



## Managed and Unmanaged Forest



## Why Do We Need to Manage Our Land?

- Our responsibility to be good stewards of the land
- Private landowners are critical to forestry
- Environmental and economic benefits
- Forestry is an investment
- Your land should be an asset and not a liability
- Leave it better than you found it

**Make sure your woodlands are providing the benefits and results you want.**



## The Landowner Is the Key to Success

- Must work together
- Most rewarding benefits
  - Productive and Healthy Forest
  - Create Present and Future Value
  - Positive Economic Impact
  - Pride In Your Work and Efforts
  - Share with Family and Future Generations
- **You Hold the Seed to Growing Our Forest, Its Success Depends On You!**



# Questions?

