

A LANDOWNER'S GUIDE TO FORESTRY IN SOUTH CAROLINA



SUSTAINABLE
FORESTRY
INITIATIVE
SOUTH CAROLINA
SFI-01143

Produced by the South Carolina SFI® Implementation Committee

This guide is provided by the Sustainable Forestry Initiative State Implementation Committee of South Carolina (SIC).

SFI is an independent, non-profit organization that works with the forest sector, brand owners, conservation groups, resource professionals, landowners, educators, local communities, Indigenous Peoples, governments, and universities to provide solutions to local and global sustainability challenges. In addition to providing forest management standards, SFI works in the areas of education, community, and conservation.

Your conscientious stewardship not only provides immediate local benefits, but also develops trust with consumers that their packaging, paper, lumber, and thousands of other forest products are responsibly grown and sourced.

Wherever you see this mark, you can be proud that your purchase is supporting the wise management of forests.



To report forest management practices that are not consistent with the Sustainable Forestry Initiative (SFI), contact:

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INTRODUCTION

South Carolina is blessed with an abundance of natural resources that sustain a thriving timber industry and make our state a beautiful place to call home. We owe you, our family forest landowners, a hearty thanks.

Your decisions have a long-term impact on the environment, economy, and quality of life for all South Carolinians. The benefits of healthy forests – clean water and air, diverse habitats, places to unwind and recharge – reach far beyond property lines.

Responsible land stewardship can be rewarding in many ways. We encourage you to ask questions and explore ways to become better stewards. We've created this guide highlighting the many resources available to assist you as we all strive toward productive and healthy forests in South Carolina.

We hope it answers questions and sheds light on new opportunities.

— *The South Carolina Sustainable Forestry Initiative (SFI)™ Implementation Committee*

FINDING THE RIGHT PERSON FOR THE JOB

Help to manage your land is available from a number of qualified natural resource professionals.

Foresters

Consulting foresters work for you to identify goals, develop a plan, and implement forestry activities.

Your state forestry agency, the South Carolina Forestry Commission, offers technical assistance by providing general management recommendations and oversight of cost-share programs.

Other foresters: Forest product companies, conservation organizations, and government agencies, like Clemson Cooperative Extension and USDA Natural Resources Conservation Service (NRCS) may employ professional foresters who can provide information or forest management assistance.





South Carolina law states that no person shall engage in the practice of professional forestry unless they are a SC Registered Forester or are working under the supervision of a SC Registered Forester. Forestry is defined as, “consultation, investigation, evaluation, planning or responsible supervision of forest management, protection, silviculture, measurements, utilization, economics, education, or other forestry activities in connection with any public or private lands.”

Wood Buyers and Wood Dealers

Wood buyers or wood dealers purchase timber from landowners and manage harvest operations.

Qualified Logging Professionals

These professionals who are trained individuals perform timber harvests and can provide information on quality, value and harvesting.

Other Natural Resource Professionals

Specialized assistance is available from a wide range of other natural resource professionals including wildlife biologists, wetland and soil scientists, road or tree planting contractors, and land conservation specialists. These specialists may be available as private consultants or through government agencies, forest product companies, conservation groups or land trusts.

THREE QUESTIONS to ask about your resource professional

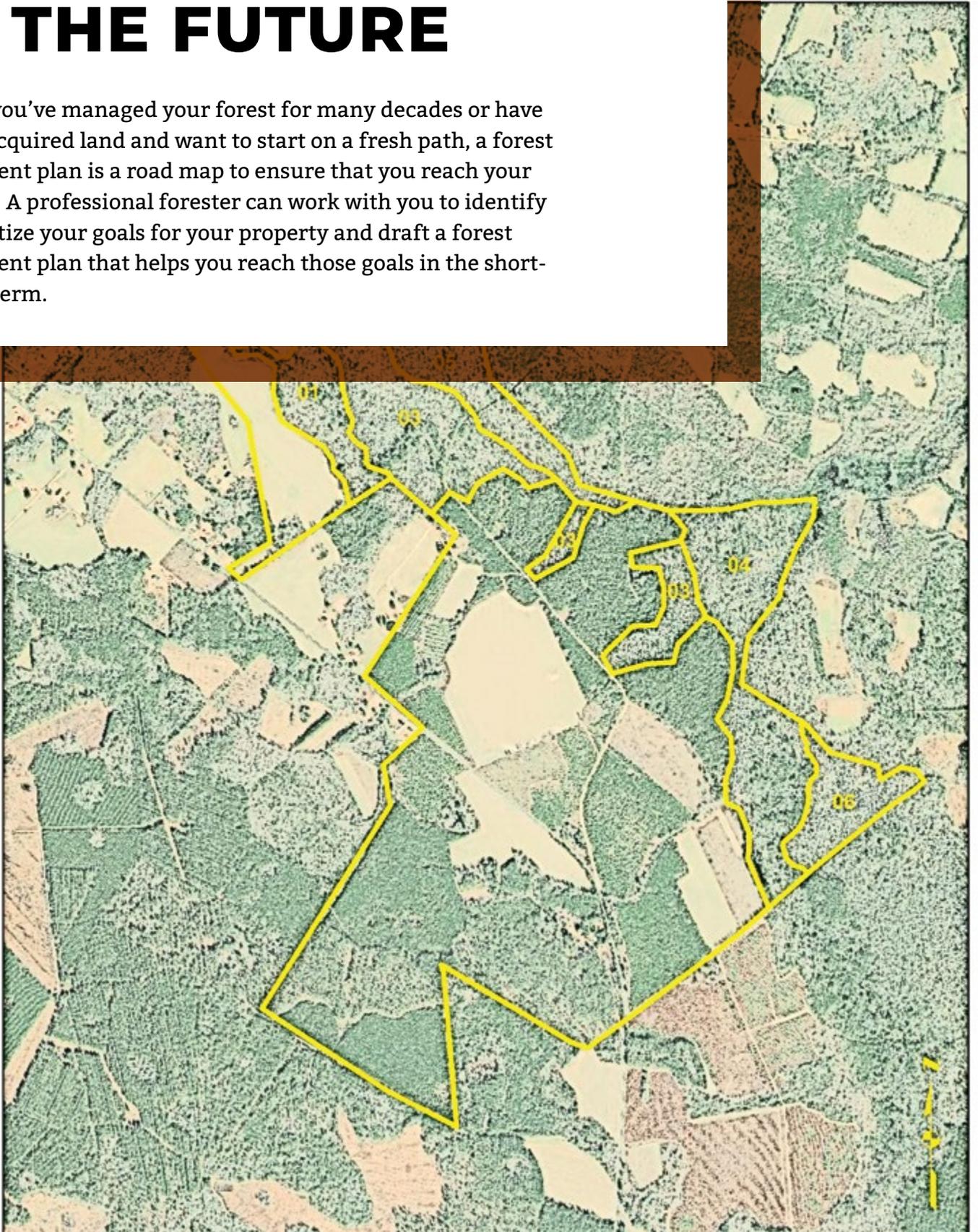
1 Can you connect me with the other landowners you are working with in the area?

2 What professional credentials do you have?

3 How are you compensated for the services you provide?

FOREST MANAGEMENT PLANS: YOUR ROAD MAP TO THE FUTURE

Whether you've managed your forest for many decades or have recently acquired land and want to start on a fresh path, a forest management plan is a road map to ensure that you reach your objectives. A professional forester can work with you to identify and prioritize your goals for your property and draft a forest management plan that helps you reach those goals in the short- and long-term.





Cost-share programs
financial assistance programs offered by state, federal, and conservation non-profits, to encourage landowners to take specific conservation measures.

Forest management plan
an active, adaptive, written document which identifies all of your objectives and recommends a series of specific activities to reach your personal goals.

Your forest may include special sites, like this tabby ruin.

A plan should include:



Forest management plans should also address other important aspects of your land such as growing timber, identifying and managing special sites (cultural and historical resources), protecting and creating wildlife habitat and biological diversity, maintaining soil and water quality, reforestation, reducing risk of damage from fire, storms, insects and disease, protecting threatened or endangered species and ecological communities, and promoting aesthetics and recreational opportunities.

THREE QUESTIONS to ask about your plan

- 1** How are you financially compensated for writing my plan?
- 2** Are there cost-share funds available to help implement my plan?
- 3** Is forest certification like, Tree Farm, a good fit for me?

HARVESTING TIMBER

A well-planned timber harvest generates income and provides an opportunity to improve forest health and wildlife habitat. Careful planning will help avoid costly mistakes that could take years to correct.



Timber Operations Professional (TOP) Program
The Timber Operations Professional program or TOP is designed to raise professional standards by improving safety, efficiency, and environmental protection.

Here are our top three tips for a successful harvest.

PLAN AHEAD:

The time to think about the next forest is before you harvest the current one. You should plan for reforestation before your timber is cut. If the plan to reforest the site calls for natural seeding from the existing timber stand, the timber must be harvested at the right time of year and some preparation of the land prior to harvest may be necessary. For planting new seedlings, a properly planned harvest that removes all merchantable trees will help reduce costs of reforestation. Have you considered how to manage harvest residues or logging slash- the unusable tops and branches? Your forester can advise if the anticipated volume of harvest residue could warrant the logger removing it from the site to provide fuel for manufacturing operations, ultimately reducing site preparation costs for you; or if you should keep the harvest residue on site to provide nutrients and soil protection for the new forest. As an additional step in planning, make sure all property boundaries are clearly marked prior to the harvest.

PICK THE RIGHT PARTNERS:

You can expect best results when the forester, logger, and you are all engaged in planning the harvest. A timber harvest should be planned with the assistance of a **qualified resource professional** familiar with forestry practices, applicable regulations, and current market prices. A **qualified logging professional** trained in the Forestry Association of South Carolina's Timber Operations Professional (TOP) program will ensure effective utilization of the trees harvested, compliance with Best Management Practices (BMPs), and protection of property and the environment. A pre-harvest conference is recommended to make sure that the harvesting contract, landowner objectives, special considerations, and expectations are fully understood by all involved. You may also wish to consult an **accountant** to help you understand the tax implications of a timber sale.

DO YOUR HOMEWORK:

You should understand the value of your timber. Considerations that can impact the value include: tree species, timber volume, the mix of products such as pulpwood, chip-n-saw, sawtimber, peeler logs, or poles for the timber, and the number of acres. Access to the site, quality of the timber, available markets, and haul distance can also impact the value of your timber. While pricing can fluctuate for a variety of reasons, general pricing information can be found at timbermart-south.com. Your qualified resource professional can help you understand the specific factors that may affect your timber's value.

THREE QUESTIONS to ask your forester

- 1** Does this harvest help me reach my forest management goals? / Is this harvest part of my plan?
- 2** Does your logger have good references for the type of harvest you would like to do and professional training such as the Forestry Association's Timber Operations Professional (TOP) program?
- 3** How do I know I'm getting the best price for my timber?



The value of timber is based on the value of the products that can be made from them. This is dictated by size (height and diameter), species, and quality of the trees.

Product classes are generally expressed in terms of diameter measured at breast height (DBH).

6-9" DBH. Pulpwood trees are chipped into small pieces, chemically treated, and made into paper. Pulpwood is measured in tons or standard cords.

This is an unofficial designation for low-quality hardwood timber that is not good enough for lumber, but can be sawed into slats for pallet-making. Palletwood is sometimes called "skrag."

This is an unofficial designation used to describe pulpwood-sized pine trees from which one 2 x 4 board could be cut. Superpulp is more valuable than regular pulpwood, but markets for this product are not always available. Another name for superpulp is "canterwood."

Qualified Resource Professional

a person who by training and experience can make forest management recommendations.

Qualified Logging Professional

a person with specialized skills in timber harvesting gained through experience and formal training who has successfully completed wood producer training programs and continuing education requirements recognized by the SFI Program.



CHIP-N-SAW

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10-13" DBH.
By using a combination of techniques, these mid-sized trees produce chips for pulpwood as well as small dimension lumber. Chip-n-Saw is measured in tons or standard cords. Value is heavily dependent on tree quality.

SAWTIMBER

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14"+ DBH.
Trees are cut into lumber. Waste material is converted into chips for fuel or paper production. Sawtimber is measured in tons or board feet. Value is heavily dependent on tree quality.

VENEER

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16"+ DBH.
By means of a large lathe, the tree is converted into continuous sheets of thin wood. This is used in the manufacture of plywood and furniture, depending on the type of tree. Veneer is measured in tons or board feet. Value is heavily dependent on tree quality.

POLES

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>8 inches DBH with no visible defects to at least 32 feet. Historically, the highest value product, poles are used as utility poles and have minimal or no defects or sweep.

** Many forest product companies buying your timber are certified to SFI standards. By following these guidelines, they know your forest was grown and harvested responsibly.*



YOUR FOREST IS BORN

Whether you're replanting after a harvest (reforestation) or transitioning an old field to forest (afforestation), your forester is the best source of information and guidance when considering your best next steps.

Pine or hardwood?

Your goals may be timber production, providing wildlife habitat, or recreational uses, but your site and soils determine if your land is best suited for hardwoods or pines, or maybe both. River bottoms, swamps, and much of the Appalachian mountain area may be best for growing hardwoods; while much of our state is best suited for loblolly and longleaf pine.

While you're at it...

You're starting with a clean canvas, so it's a good time to think about wildlife food sources, travel patterns, and recreational trails. Are there openings you'd like to maintain for food plots or edges that you've considered planting for pollinators?

Is your site ready?

Depending on your site's previous use and your intent to plant seedlings or rely on natural regeneration, your forester may recommend a variety of activities to prepare the site for planting. A former agricultural field may need treatments to address competing vegetation. A clearcut of pine and hardwood may need treatments such as chopping remaining tree debris to speed up decomposition and release nutrients. Prescribed burning and the application of certain herbicides can also help prepare a site. Hardwood reforestation is typically done by natural regeneration, requiring little upfront investment but careful planning should take place prior to harvest.

Ready, set, grow!

More than 80 million seedlings are planted in South Carolina every winter, during the dormant season. Planting is the most common method of reforesting pines. Your forester can help arrange a planting crew and perhaps reduce your costs by coordinating several properties in your area.





Reforestation
replanting after a harvest

Afforestation
transition from old field to forest

Conversion
clearing forest for another purpose such as crops, mining, or development

© Photo: Arborgen

Reforestation: a worthwhile investment

“ *Planning for the next forest is a critical part of forest management. It should be done before the harvest of an existing stand and includes selecting a method of site preparation and the appropriate seedlings to be planted. Effective site prep and seedling choice lead to a faster receipt of stumpage income and have allowed me to receive a better return on my investment.* ”

— *Landowner, Mac Rhodes*



THREE QUESTIONS to ask your forester

1 What tree species are the best to plant/allow to regenerate given my site and the goals in my forest management plan?

2 If you're planting seedlings, what is the best source for seedlings?

3 How can I learn about cost-share opportunities to help offset the cost of planting?

ENVIRONMENTAL CONSIDERATIONS:

Your forest holds the potential to protect water quality, provide important habitat for a wide range of wildlife species, and offer scenic beauty for your family and others. Your management decisions have a direct impact on your forest's potential to provide these non-timber benefits.



THE VALUE OF FOLLOWING BMPs

Following BMPs protects water quality by minimizing soil disturbance along streams, keeping waterways free of logging debris, and limiting off site impacts from forestry operations.

** To report inconsistent practices, see contact information on back cover.*

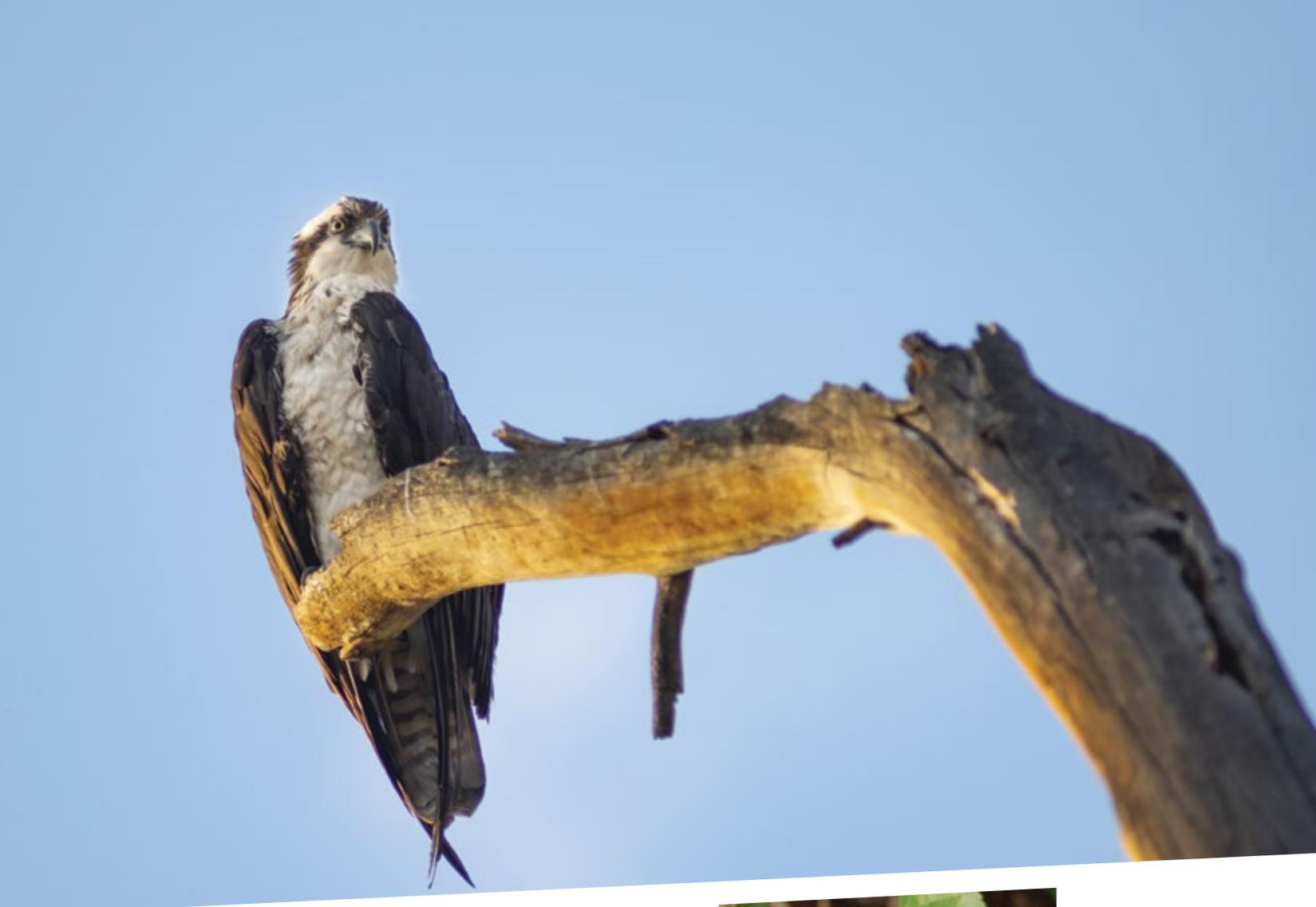
Water:

Water is the lifeblood of an ecosystem and implementing responsible forest management practices to maintain water quality is important. Our cleanest water comes from well-managed forests. Forestry experts have developed a set of guidelines, known as Best Management Practices (BMPs) for protecting water quality and minimizing erosion during the construction of forest access roads, skid trails and stream crossings; and during site preparation and timber harvesting activities.

The South Carolina Forestry Commission (SCFC) is the lead agency responsible for establishing and monitoring forestry BMPs. SCFC offers landowners a free courtesy BMP exam to identify potential environmental impacts before a forestry operation begins. A specially trained BMP forester will visit your site and provide recommendations for your forestry activities. After the operation is completed, the BMP forester will re-examine the tract to assure that the recommended BMPs were followed and to determine if there was an impact on water quality or site productivity. The agency is also responsible for publishing South Carolina's Best Management Practices for Forestry manual. Copies are available upon request and the manual can be viewed on the South Carolina Forestry Commission website.

South Carolina's BMPs are a non-regulatory approach to ensure compliance with state and federal laws like South Carolina Pollution Control Act, the US Clean Water Act and others.





Wildlife & Biodiversity:

South Carolina is home to more than 600 species of birds, mammals, reptiles and amphibians, so it's no wonder that many landowners rank "managing for wildlife" at the top of their list! Whether you enjoy a peaceful sunset in a deer stand, a cool January walk in the quail woods, or are building your birding "life list," forest management activities can be used to provide a diversity of food, water, shelter and places to raise young.

Biodiversity

refers to the variety of life from fungi and plants to birds, mammals, and humans.

Forests of Exceptional Conservation Value:

These areas contain a viable occurrence of a critically imperiled and imperiled species or ecological community. The management of these sites may vary from preservation to intensive management of the site for its unique characteristics.



Frosted Flatwoods Salamander, globally imperiled and federally threatened amphibians once common to Carolina Bays.

The South Carolina Department of Natural Resources has developed a Statewide Action Plan which includes things you can do to increase biodiversity and benefit wildlife and birds on your property.

PROVIDE A VARIETY OF TREE SPECIES AND AGE CLASSES TO MEET A WIDE RANGE OF WILDLIFE NEEDS

LEAVE MAST PRODUCING TREES AS A RICH SOURCE OF SEEDS, NUTS, AND FRUIT

PROTECT SNAGS AND DEN TREES FOR CAVITY-NESTING WILDLIFE

LEAVE WIDER BUFFERS ON STREAMS FOR IMPROVED RIPARIAN HABITAT

PLAN FOR WILDLIFE TRAVEL CORRIDORS

THIN PINE AND HARDWOOD STANDS TO ENHANCE THE GROWTH OF UNDERSTORY VEGETATION

CONSIDER SUPPLEMENTAL WILDLIFE PLANTINGS SUCH AS FOOD PLOTS OR EDGE STRIPS FOR POLLINATORS

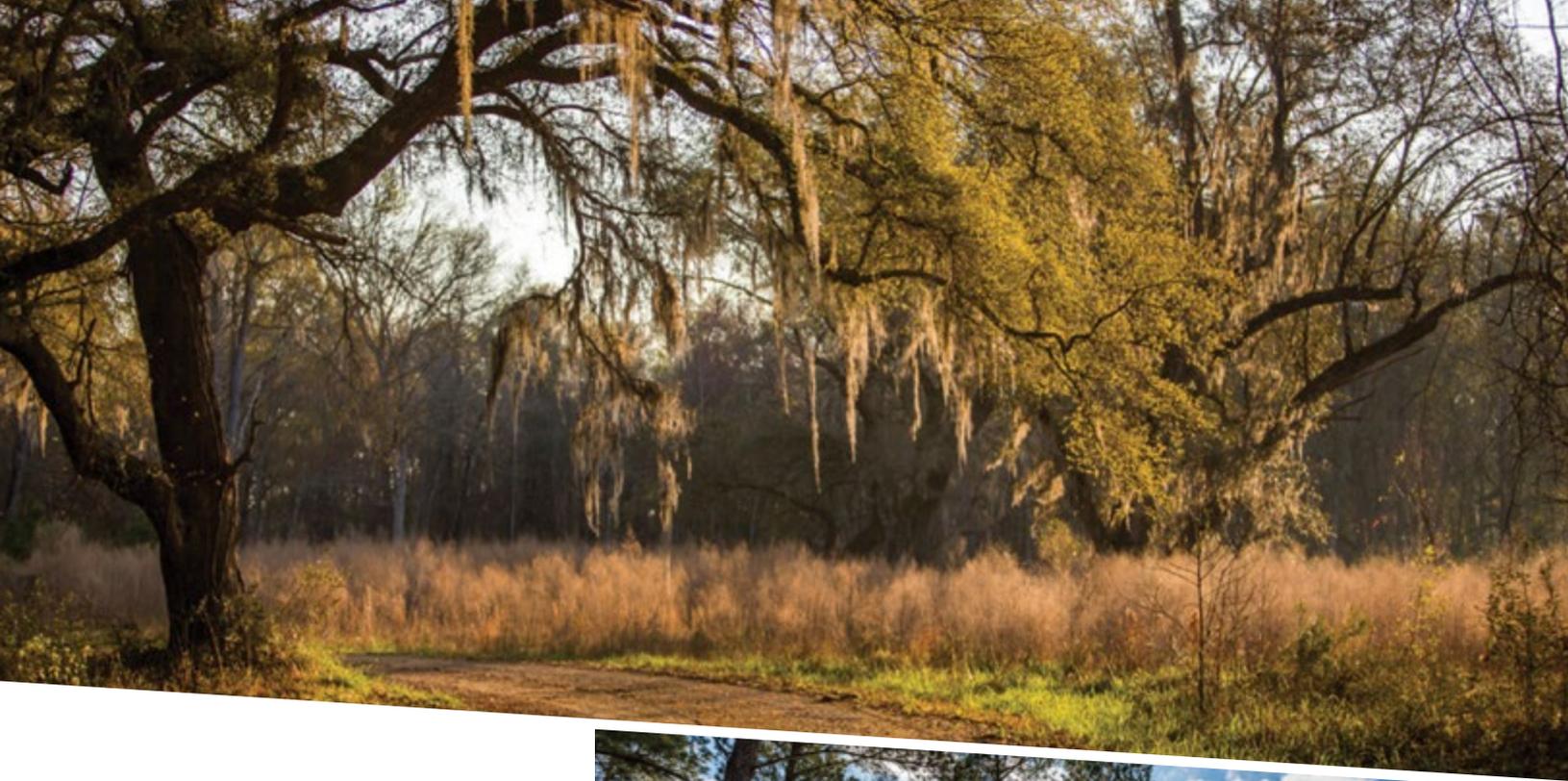
CONTACT SC DEPARTMENT OF NATURAL RESOURCES FOR QUESTIONS ABOUT THREATENED/ENDANGERED SPECIES

THREE QUESTIONS to ask your forester

1 Are there threatened or endangered species or special sites on my land? If so, how is it addressed in the plan?

2 Leasing of hunting rights may provide income to support my forest management activities. How can I learn more about leasing my land to hunters?

3 Are there cost share opportunities available to me if I implement certain wildlife management activities?



Aesthetics:

Whether you live on your property or visit on the weekends, the beauty of your forest is likely a point of pride. The aesthetics of your forestry operations aren't just important to you, they also shape the opinions of those who pass by on public roadways. Maintaining the support of the non-landowner public is critical to our ability to continue to practice forestry in South Carolina.



Here are some tips to maintain visual quality during and after forestry operations. Be sure to address this with your forester as you develop your plan.

GIVE A HOOT AND DON'T ALLOW LITTER TO BE LEFT BY CONTRACTORS, LESSEES, OR VISITORS

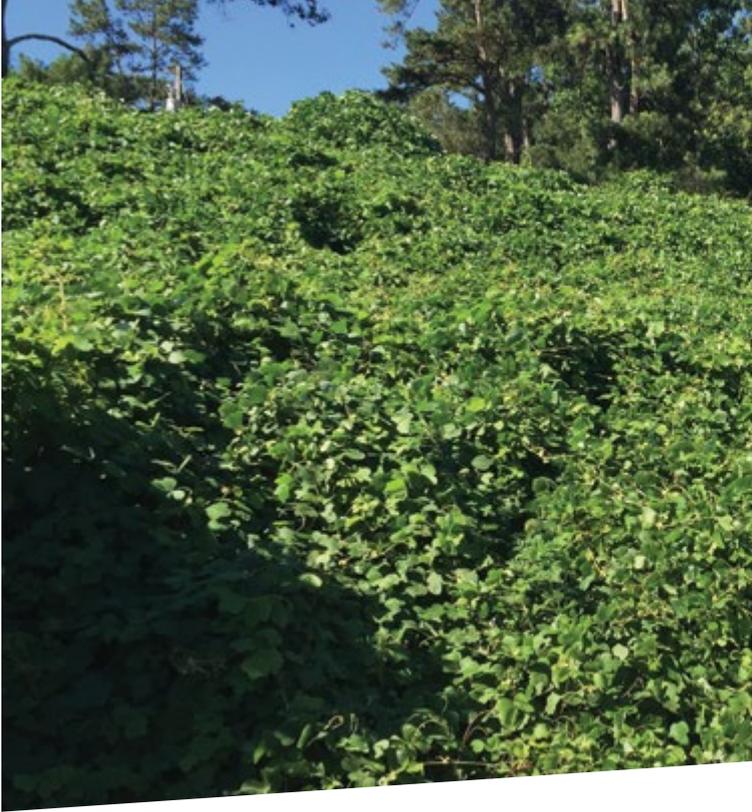
WHEN LOGGING, USE THE TREES THAT ARE HARVESTED

KEEP ENTRANCES AT ROADWAYS FREE OF MUD

LOCATE LOADING DECKS OUT OF PUBLIC VIEW, WHEN POSSIBLE, AND KEEP SLASH PILES AWAY FROM LAKES, RECREATIONAL WATERWAYS, AND PUBLIC ROADS

MINIMIZE SOIL DISTURBANCE

CONFIGURE HARVESTS WITH IRREGULAR SHAPES TO BREAK UP THE VISUAL IMPACT



© Photo: David Coyle, PhD

Invasives:

Invasive species are non-native plants, animals, insects or other organisms. They cause considerable damage to natural ecosystems by displacing or killing native species. Many invasive species are hearty and tolerant of a variety of conditions, spread rapidly, and have no natural predators or controls.

The beautiful flowers and foliage of chinaberry, nandina, Bradford pear, and privet fooled early botanists and continue to entice homeowners. Other invasives such as the emerald ash borer and the red bay ambrosia beetle hitched a free ride to the US through global trade and are causing wide-spread tree fatality.

Landowners are encouraged to be aware of invasive species and work to limit their impact and spread.

THREE QUESTIONS to ask your forester

- 1** Have you seen invasives on my property or on neighboring properties?
- 2** Where can I learn about proactively protecting my property from invasives and what to watch for?
- 3** Is cost-share money available to help me treat invasives on my property?



Fire:

Fire on natural landscape can be a landowner's best tool... or biggest fear. In a prescribed fire setting, burning can boost the productivity of your forest by reducing competing vegetation, creating beneficial wildlife habitat, and reducing the risk of wildfire.

South Carolina landowners are fortunate to have state legislation in place to reduce liability of those conducting prescribed burns, if certain requirements are met. Landowners with a desire to use prescribed fire are encouraged to speak with their forester and consider taking the Prescribed Fire Manager certification class offered through the South Carolina Forestry Commission.

Wildfire, on the other hand, is dangerous and costly. In addition to consuming homes and threatening lives, wildfire impacts 18,000 acres per year on average, in South Carolina. Nearly half of the wildfires in our state are caused by the careless burning of yard debris or trash and another third of the fires are attributed to arson. Forest landowners can reduce their chances of being impacted by wildfire by eliminating fuel on the ground through prescribed burning and maintaining fire lines.

THREE QUESTIONS to ask your forester

- 1** How can burning help me reach the goals in my forest management plan?
- 2** What steps should I take to protect my forest from wildfire?
- 3** What cost-share assistance is available for prescribed burning or wildfire prevention?

SOUTH CAROLINA PRESCRIBED FIRE ACT

“A property owner or lessee or his agent or employee conducting a prescribed fire pursuant to this chapter is not liable for damage, injury, or loss caused by fire or other consequences of the prescribed fire, except for smoke, unless negligence is proven. A property owner or lessee or his agent or employee conducting a prescribed fire pursuant to this chapter is not liable for damage, injury, or loss caused by the resulting smoke of a prescribed fire unless gross negligence or recklessness is proven.”

Requirements:

#1 MUST HAVE A WRITTEN PRESCRIBED FIRE PLAN THAT:

- A.** complies with the South Carolina Smoke Management Guidelines;
- B.** is prepared before authorization to burn is issued by the State Commission of Forestry; and
- C.** is on site and followed during the burn.

#2 MUST HAVE PRESENT AT LEAST ONE CERTIFIED PRESCRIBED FIRE MANAGER WHO MUST:

- A.** be certified by the Commission;
- B.** personally supervise the burn from ignition until the certified prescribed fire manager determines the burn to be safe;
- C.** fully consider both fire behavior and related smoke management issues during and after the burn.

Prescribed fires are planned and carefully deployed in a defined area. Wildfires are destructive, unplanned fires.





THE SOUTH CAROLINA CERTIFIED TREE FARM PROGRAM

The South Carolina Tree Farm Program supports sustainable management of family owned forest lands for wood, water, wildlife, and recreation. Membership is open to anyone interested in promoting good forestry, with or without property eligible for certification.

South Carolina Tree Farm provides you with membership in a national organization that is a leader in representing private landowners, keeps you abreast of new developments and political trends, gives you a voice in decisions affecting land management, and provides you with an opportunity to shape the future.

Certification



Tree Farm Certification that meets international, third party standards of sustainable forest management may provide greater access to markets and may help meet growing demand for certified forest products.

Events and Meetings



Make connections with other landowners, share ideas, learn from each other, connect with professional foresters, avoid problems others have had; all benefits of becoming part of a community that works together for better land management.

Tree Farm Sign



The green and white diamond shaped Tree Farm sign recognizes Tree Farmers for meeting the standards of the Tree Farm System with a written, approved management plan.



© Photo: Mac Stone