

# The Sustainable Forestry Initiative<sup>®</sup> (SFI<sup>®</sup>) Program and Standard



Louisiana Sustainable Forestry Initiative

www.laforestry.com

### The Sustainable Forestry Initiative (SFI)

### Program and Standard

Louisiana's family forest landowners own about 70 percent of the state's timberland. As such, their management decisions have an important impact on Louisiana's forests for tomorrow. Putting sustainable forestry into practice on your land will help protect your investment while conserving its valuable resources. Sustainable forestry is the practice of land stewardship that integrates reforestation, growing, nurturing and harvesting of trees while protecting soil, water quality, wildlife and plant habitat as well as aesthetics for today and the future.

The SFI program was developed in 1994 to safeguard our forests through land stewardship in such a manner that they would meet the needs of our society today without compromising the ability of future generations to meet their own needs. The program is maintained by SFI Inc.; and independent, non-profit organization.

Today the SFI program is internationally recognized and is the largest single forest standard in the world. The SFI 2015-2019 standard is designed to promote sustainable forest management in North America and responsible procurement of forest products around the world.

The SFI program at large is made up of the following components:

**The SFI 2015-2019 Forest Management Standard** promotes responsible forestry practices. Its requirements include measures to protect water quality, biodiversity, wildlife habitat, species at risk and forests with exceptional conservation value. The standard is for any organization in the United States or Canada that owns or manages forests.

**The SFI 2015-2019 Fiber Sourcing Certification** goes beyond certified forests to address the 90 percent of the world's forests that are not certified. Program Participants must show that the raw material in their supply chain comes from legal and responsible sources, whether the forests are certified or not.

The SFI 2015-2019 Chain-of-Custody Standard is an accounting system that tracks forest fiber content (certified forest content, certified sourcing and recycled content) through production and manufacturing to the end product.

**SFI On-Product Labels** are recognized globally and provide a visual cue to help customers source products from responsibly managed forests.



# The Sustainable Forestry Initiative® (SFI®) Forest Management Plans



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Developing a forest management plan is a helpful step to guide you toward accomplishing your specific forest management goals and objectives. It is a guide containing details about a long-term series of steps leading to the desired goals you have set for your forestlands. It is important to first determine the priorities that you have for your property, then set goals and shorter-term objectives to reach those goals. Once you have started putting these together, you have begun to create a Management Plan for your timberlands. For example, your plan may include some of the following:

- > Timber harvesting
- > Regeneration, including site preparation and tree planting
- > Fertilization and stand improvement
- > Competition control
- > Pre-commercial and commercial thinning
- ➤ Wildlife management including endangered and threatened species
- ➤ Aesthetic, recreational use and diversity of plants and communities
- ➤ Water quality protection and Best Management Practices (BMPs)
- ➤ Management issues concerning all applicable federal, state and local laws

An example of a forest management plan can be found at the following link:

### Sample Management Plan

There are a number of agencies and organizations who can assist landowners with management plans

1. Consulting Foresters – Contact information can be obtained



A professional forester can help you develop a forest management plan based on your specific interests and goals for your property.

for forestry consultants in your area from the Louisiana Society of American Foresters website or from the Association of Consulting Foresters website at

Society of American Foresters Association of Consulting Foresters

- 2. The American Tree Farm System (ATFS) (http://www.treefarmsystem.org/nationalplantemplate) has programs designed to assist forest owners with the development of their forest management plans. In our state the Louisiana Forestry Association (LFA) is the facilitator of the ATFS and can assist landowners in finding a Tree Farm Inspector who can help them with a plan. The LFA can be found at http://www.laforestry.com or at (318) 443-2558.
- 3. Landowner Assistance Programs: Some forest products companies have Landowner Assistance Programs that can help forestland owners with management plans Below is contact information for companies in Louisiana with Landowner Assistance Programs:

Hunt Forest Products (318)255-2245 Roy O. Martin Lumber Co. (318)483-3894 Weyerhaeuser Co. – N La (318)843-5017

### 4. State Forestry Programs:

- The Louisiana Office of Forestry administers a number of assistance programs and will help develop general forest management plans, provide advice on timber sales, make referrals and provide information on cost-share programs on ownerships of any size. http://www.ldaf.state.la.us
- ➤ The Louisiana Department of Wildlife and Fisheries (LDWF) can provide information and technical assistance related to fish, wildlife and habitats. http://www.wlf.louisiana.gov
   The LSU Agricultural Center as the Land Grant University System provides research based information and education and has area agents located throughout the state. They also provide diagnostic assistance and referrals to other sources. http://www.lsuagcenter.com

### 5. Federal Programs:

➤ The USDA Natural Resource Conservation Service (NRCS) is the technical agency of the U.S. Department of Agriculture and provides assistance in developing conservation plans that address all natural resources. They also administer federal cost-share programs for regeneration and conservation practices. They are found in most parishes. http://www.nrcs.usda.gov

The USDA Farm Service Agency (FSA) administers the Conservation Reserve Program (CRP) and also takes applica-

tions and processes payments for other financial assistance programs such as the Environmental Quality Incentives Program (EQIP). http://www.fsa.usda.gov

Other Links that may be of help:

http://www.eforester.org/lp/landowners.cfm

http://www.aces.edu/forestry/

http://extension.uga.edu/agriculture/forestry/



A well-executed forest management plan can make all the difference in the success and economic return on your property.



### The Sustainable Forestry Initiative® (SFI®) Reforestation/Afforestation Resources



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In planning for the future, you should consider both reforestation and afforestation as a means of achieving forestry management objectives.

**Reforestation** is the restocking of a forest after removal of trees through harvesting, wildfire or disease. Reforestation can occur by artificial means or through natural regeneration. Artificial regeneration is the planting of tree seedlings, either by hand planting or by machine. This method results in more uniform control of species and spacing. On the other hand, natural regeneration occurs by natural seeding or sprouting from stumps or roots.

**Afforestation** is the establishment of a forest in an area where the preceding land use was not forest (e.g., pasture, farmland). Additional information on establishing your forest is available at the following:

#### La. Dept of Agriculture and Forestry

Before reforestation or afforestation is begun, you should contact a professional forester. They can assist you in selecting the most appropriate forest planting techniques for achieving your objectives. The following resources can help you find a professional forester.

#### **Consultants**

http://lasaf.homestead.com/LA\_Foresters\_Directory\_4\_12\_10.pdf Association of Consulting Foresters

### **Landowner Assistance Programs**

Hunt Forest Products (318)255-2245 Roy O. Martin Lumber Co. (318)483-3894 Weyerhaeuser Co. – N La (318)843-5017

#### **State Forestry Programs**

http://www.ldaf.state.la.us

#### **Cost Sharing**

Because of the long term public and economic benefits associated with sound private landowner reforestation and afforestation, there exists private, state and federal cost sharing programs designed to assist small private landowners with the establishment of new forests.

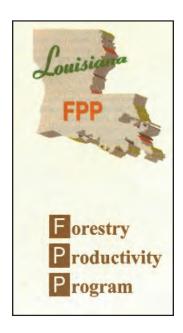
If the landowner has retained a forestry professional, he can initiate public cost share applications. You can also contact the Louisiana Department of Agriculture and Forestry (see above) or NRCS, <a href="http://www.la.nrcs.usda.gov/">http://www.la.nrcs.usda.gov/</a> for additional help.

Louisiana Forestry Association can assist with contacting private/industrial firms with cost sharing or landowner assistance programs, <a href="http://www.laforestry.com">http://www.laforestry.com</a>



Proper planning prior to reforestation can ensure a healthy and productive forest in the future.

The state Forest Productivity Program offers a 50 percent cost-share to eligible applicants.





### The Sustainable Forestry Initiative® (SFI®) Best Management Practices Overview



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What are Forestry Best Management Practices (BMPs)?

BMPs are voluntary forestry management practices designed to safeguard the water quality and soil productivity of the forests of Louisiana. Some mandatory guidelines for protecting wetlands, scenic rivers etc. are also included in the BMP Manual).

The guidelines are a private-public joint effort that included the Louisiana Forestry Association (LFA), Louisiana Department of Environmental Quality (LDEQ) and Louisiana Department of Agriculture and Forestry (LDAF).

The BMPs are organized into a practical field manual format designed to provide forest landowners, logging professionals and forest industry with water quality and soil protection guidelines for forestry management activities.

You can request a copy of the BMP manual from the LFA, LDAF or you can download the manual from the LDAF website at no charge. BMP manual

Is training available?

The Louisiana Forestry Association in partnership with the Louisiana Logger's Council sponsors specialized training designed to equip forestry professionals, landowners and logging professionals with the knowledge they need to fully implement BMPs. BMP training is a key component to logging professionals receiving a designation as "Master Logger" in Louisiana.

What should a forest owner do to insure these principles are followed in connection with forestry activities?

Specify in any contracts with forestry or logging professionals performing operations on your property that LA Forestry BMPs be implemented.

Seek the services of forestry or logging professionals who have been certified as "Master Loggers" by the LFA and LA Loggers Council.

Additional information can be found at:

http://www.aces.edu/forestry/



Culverts and road building are part of the BMP guidelines found in the Louisiana Recommended BMP manual.



Corrective actions following harvesting activities protect your land from erosion and damage from log trucks.



# The Sustainable Forestry Initiative® (SFI®) Forest Biomass and Energy



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As the demand for renewable energy sources continues to grow, forest owners should consider the benefits and costs of biomass utilization from their forestland. Work closely with your resource professional to ensure that harvesting biomass is right for your property and that the activities follow state BMPs.

http://www.fs.fed.us/woodybiomass/index.shtml/index.shtml
http://learn.forestbioenergy.net

Additional resource information on this topic is available at:

### What is Biomass?

Biomass has become a commonly used term in forestry. It probably is most often referred to in forestry as a fuel source for heat or power either in Combined Heat and Power (CHP) plants or in stand-alone power stations or heating facilities. Biomass in this context is a bioenergy feedstock, defined by SFI as:

"Bioenergy feedstock: Biomass used for the production of renewable energy. Biomass includes any organic products and byproducts derived from trees, plants and other biological organic matter, including limbs, bark and other cellulosic material, organic byproducts from wood pulping, and other biologically derived materials."

For Louisiana forest owners, most of the usual tree species in the forest are suitable for biomass production (excluding endangered or protected species, of course). Trees are versatile in this way – they may suit more than one end use. Check specifics with a resource professional.

### Why consider it?

The biomass market for timber comes into its own as it is often able to use wood that is undersized for other markets, or not straight enough for other markets. This means that a greater proportion of the growing crop can be sold. Even if the value of the biomass is low, the extra volume sold may lower the cost per unit for the harvesting operation – for instance set up costs would be spread over more tons.

The operation may also remove from the site material that would make restocking more difficult or general access across the site more difficult. Of course, it is sensible to leave sufficient material (especially leaves, needles and small branches) to recycle nutrients on the site. A resource professional will be able to advise on this.

Benefits of biomass utilization to landowners may include:

- Additional income from forest products
- Decreased site prep cost as harvested sites are left cleaner
- Opportunities for low to no-cost timber stand improvement
- Increased forest health by reducing threats and/or restoration cost from fire, disease/pest infestations, invasive species and storm damage



An in-woods chipping operation can add income from forest biomass.



These pellets were made from woody biomass that is formed into an easily transported fuel for utilities or even special home heating stoves.



# The Sustainable Forestry Initiative<sup>®</sup> (SFI<sup>®</sup>) Invasive Exotic Species



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### A Threat to Louisiana's Forests

Invasive exotic species, nonnative invasive species and other terminology is used to describe a number of plants, animals and insects that have been brought to the United States and either purposely or inadvertently released. Invasive Exotic Species (IES) have established themselves as a significant threat to native flora and fauna. They can pose a threat several ways including crowding out native species, limiting plant diversity, occupying productive forestlands and the implementation of expensive control measures. IES become established through ornamental plantings, movement of contaminated machinery, livestock forage, inadvertent and intentional releases and escaped pets or livestock. Without the presence of natural control agents, IES have rapidly spread across many regions of the country. Keeping nonnative exotic species out of your forestland has a number of benefits including improved wildlife habitat, enhanced returns from your forest management activities and limiting costs to control nonnatives.

**Risk Assessment for IES** – there are several ways to assess the risk of an invasive species:

The potential to negatively affect forest productivity and habitat diversity.

The organism's ability to spread and colonize new habitats.

The landowner's ability to control the species.

The cost to control the species.

### Louisiana Forestlands "Big Six" IES

Cogongrass – This nonnative is one of the south's worst invasive species. It is an aggressive, colony-forming dense perennial grass 1 to 5 feet tall. It grows in a range of sites, often in circular infestations which excludes most other vegetation. It aggressively invades right-of-ways, new forest plantations, open forests, old fields and pastures. It colonizes by rhizomes and spreads by wind-dispersed seeds, road maintenance activities and excavation operations. Control includes multiple treatment with herbicide and tillage. Several Best Management Practices to minimize the spread of cogongrass by machinery have been developed.

**Tallowtree** – Invades stream banks, riverbanks and wet areas like ditches as well as upland sites. Thrives in both freshwater and saline soils and is shade and flood tolerant. Most often found close to cities and towns through ornamental plantings. Spreads by bird- and water-dispersed seeds and can colonize through prolific surface root sprouts. According to recent US Forest Service Data, tallowtree is now recognized to be the 5<sup>th</sup> most common tree in Louisiana. Tallowtree can be dif-

ficult to control. Multiple herbicide applications may be necessary.

**Kudzu** – Occurs in old infestations, along right-of-ways and stream banks. Forms dense mats over ground, debris, shrubs and mature trees forming dense patches by twining around objects. Most often colonizes by vines rooting at nodes. Spreads by variety of methods. Often spread by mowing equipment and road maintenance. Kudzu can be difficult to control. Multiple herbicide applications and controlled burning are the most effective means.

**Privet** – Japanese privet and Chinese privet primarily infest fence rows and bottomland hardwood areas. They are shade tolerant and can be aggressive competitors, forming dense stands. Easily distinguished by their multi-stemmed, drooping branches, fragrant white flowers in the late spring and large clusters of blue to purple drupes (berries) in the late fall to spring. Colonizes by root sprouts and bird droppings. Herbicides are the most effective and efficient method to control.

Feral Hogs – Hogs are very intelligent, so control measures must change as hogs learn to avoid traps and hunters. They are opportunistic feeders, prolific breeders and often have more than one litter annually. The hogs' rooting behavior causes most damage. Many plant species are eaten, trampled or uprooted by foraging hogs. Native animals are also victim to the wild hog through direct consumption, destruction of habitat and competition. Wallowing and rooting contaminate streams which cause potential problems for aquatic animals. The most successful control method for hogs is trapping.

Emerald Ash Borer - In February of 2015, the Emerald Ash Borer (EAB), a severe insect pest of ash trees, was confirmed in Webster Parish making Louisiana the 25th state to be invaded by the insect. EAB is a federally regulated plant pest that almost exclusively attacks ash tress. It was first reported in the U.S. in Michigan in 2002. The beetle, which is native to Asia, most likely entered the U.S. in wooden pallets. Since that time it has spread down the East Coast as far south as North Carolina and Georgia and west to Colorado. Most recently it was found in southern Arkansas in July 2014. Since 2002, it has killed tens of millions of trees in the U.S. from forests to neighborhoods.

The EAB is bright metallic green, about 1/2" long with flattened back. It has purple abdominal segments under its wing covers. The larva of the EAB does all the harm to ash trees by tunneling under the bark and disrupting the tree's systems that transport food and water. Eventually it kills the tree. EAB adults are strong flyers, but most fly only short distances (about 1/2 mile.) Consequently they don't spread far on their own. Most new infestations are caused by people unknowingly taking infested ash (mainly firewood) to an uninfested area. It is difficult to determine if an ash tree is infested because tree decline is gradual. Early symptoms include dead branches near the top of the tree, epicormic branching, D-shaped exit holes and bark splits exposing S-shaped tunnels.

In addition, woodpecker activity might also indicate the presence of EABs. Adult beetles begin emerging in mid to late May and begin laying eggs in the tree bark about two weeks later. The eggs hatch and the larvae tunnel into trees, creating the S-shaped galleries as they feed on the inner bark. They spend the winter in the tree and drill their way out as mature beetles the following spring (the diistinct D-shaped exit hole.)

### Additional information/references:

LSU AgCenter - Cooperative Extension Service

Nonnative Invasive Plants of Southern Forests, www.invasive.org/eastern/srs/

National Invasive Species Information Center

LA Department of Wildlife and Fisheries, www.wlf.louisiana.gov/

Louisiana AgCenter http://www.lsuagcenter.com/

Emerald Ash Borer (EAB)

<u>www.invasiveinfo.gov</u>

<u>www.emeraldashborer.info</u>

<u>www.ldaf.state.la.us/news/emerald-ash-borer-detected-in-louisiana/</u>

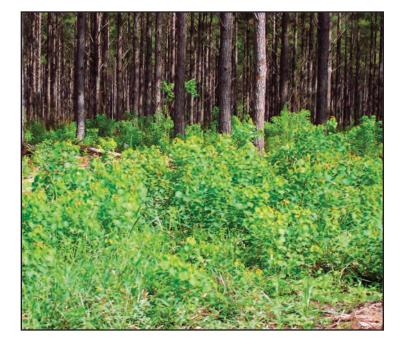


**LEFT:** Feral hogs are the most prolific wild game animal in the country. In a 2008 survey conducted in Louisiana, 80 percent of the respondents reported feral hogs on their land and 95 percent indicated problems with food plots and timber resources.

**RIGHT:** Cogongrass is a relatively new invader to Louisiana and is considered one of the world's worst weeds. It grows in clumps and spreads by its rhizomes.



**LEFT:** Tallowtree is the fifth most common tree in Louisiana, although it has no commercial value.



**BELOW:** The emerald ash borer threatens the very existence of Louisiana's ash trees.





# The Sustainable Forestry Initiative<sup>®</sup> (SFI<sup>®</sup>) Maintaining Habitat Diversity



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### Thoughtful considerations pay year-round dividends for wildlife

### Introduction

Why do you own your forestland? A source of periodic income? Hunting and recreation? Investment? Regardless of your primary objective, many landowners take great pleasure and pride in providing habitat for the variety of plants and animals that live on their land.

Managing your forest and managing for habitat diversity doesn't have to be expensive or difficult. Mostly, it takes a little attention to detail and proper instruction during forestry operations.

Below are some suggestions and instructions to conserve or increase habitat diversity on your property. For additional assistance please utilize the references found at the end of this information sheet.

### **Maintaining Habitat Diversity**

Habitat diversity comes in many forms. A forest can have different stand ages, different species and stands come in a variety of shapes and sizes. You may even want to consider what your neighbor's property provides for habitat as part of the overall wildlife needs – after all, wildlife does not pay attention to property boundaries.

No single piece of property can provide all needs for all wildlife. The key is to evaluate your lands, determine what species the property is best suited to and then develop a wildlife habitat plan that targets improvements for those species.

### **Game Wildlife Species**

SMZs – Streamside management zones along creeks are designed to protect water quality but also provide a change of habitat from adjacent harvested acres. Often, SMZs are stocked with hardwoods such as oak, hickory, dogwood and beech, which provide mast (such as acorns) as well as hollow cavities for nests and dens. Other water bodies – small streams, beaver ponds and sloughs - provide rich habitat for waterfowl, shorebirds, amphibians, turtles and possibly fish. Carefully consider and protect these minor waterways when making your forest management plan.

Thinning – Thinning your timber opens up the forest canopy, allowing sunlight to hit the forest floor which stimulates a host of species to grow. This is one of the most important ways to increase timber growth and improve wildlife habitat.

Burning – Low-intensity prescribed burning, done on a 3 to 5 year cycle, keeps brush, briars and saplings in the understory from becoming an impenetrable thicket. It also encourages grasses, forbs and legumes to germi-



Riparian areas prove to be a valuable habitat for a wide variety of game and non-game species.

nate and grow. A combination of thinning and prescribed burning keeps a forest healthy and open – as well as creating great wildlife habitat.

Food plots – Small areas, planted in grains, grasses, legumes or clovers provide nutritional supplements for deer, turkey and other wildlife. More information about food plots is provided in the web link below.

#### Nongame Wildlife

Management for nongame wildlife will provide you with yearround enjoyment and entertainment. Even during hunting season, songbirds, turtles, owls and other critters are fun to watch while sitting in the deer stand. Here are some low-cost management practices you can establish on your tree farm.

Snags – Dead trees may not look pretty unless you're a cavity nesting bird. Twenty-five to 40% of the local species of birds prefer to nest in cavities – including bluebirds, woodpeckers and wood ducks. Research has shown that dead trees and snags are tremendously important to a variety of wildlife for nesting and foraging. Leave trees and patches – When planning a harvest, consider leaving either scattered live trees across the stand or leave small patches of trees as a temporary refuge. Leave trees and patches become important perch, nesting and foraging areas while the surrounding stand is being reforested.

Brush piles – After a harvest, tops, limbs and other logging debris may look unsightly, but they become important cover and shelter for songbirds, lizards, mice and other wildlife. Larger brush piles can be used as den sites for large animals like raccoons, bobcats or black bears.

T&E Species and other rare species – Threatened, endangered and other rare species usually have very limited and specific habitat requirements. In Louisiana, many of these species are aquatic mussels, fish or crayfish and don't need much other than clean water. Following voluntary forestry Best Management Practices ensures the protection of water quality. Other protected species, such as the federally endangered red-cockaded woodpecker may require you to seek expert advice from a trained biologist. Another classification of rare species, Globally Imperiled Species, may or may not be federally protected, but landowners are encouraged to protect these species because of their rarity. Information about threatened, endangered and Globally Imperiled Species is available from the Natural Heritage Program of the Louisiana Department of Wildlife and Fisheries.

#### Links and Information

This information sheet is designed to be a starting point for landowners to incorporate some basic wildlife habitat management practices into his or her forest management plan. For more information about these practices, please utilize the following list of web links.

#### For Wildlife:

Louisiana Department of Wildlife and Fisheries - Natural Heritage Program and Landowners for Wildlife Program: www.wlf.louisiana.gov/

Louisiana Forestry Association, Louisiana Voluntary Best Management Practices for Forestry: <a href="http://www.laforestry.com/Resources">http://www.laforestry.com/Resources</a>

Cornell Lab of Ornithology:

http://www.birds.cornell.edu/Page.aspx?pid=1189

Quality Deer Management Association: www.qdma.com

National Wild Turkey Federation: www.nwtf.com

Food Plots: <a href="http://www.lsuagcenter.com">http://www.lsuagcenter.com</a>

www.qdma.com

http://aces.edu/forestry/

Further Forestry Advice:

Consulting Foresters of Louisiana: http://www.acf-foresters.org

Louisiana Department of Agriculture and Forestry: http://www.ldaf.louisiana.gov

American Tree Farm System: http://www.treefarmsystem.org/

Sustainable Forestry Initiative: <a href="http://www.sfiprogram.org/">http://www.sfiprogram.org/</a>

http://www.aces.edu/forestry/



Game species are a big consideration for landowners who want to hunt on their own land or derive the income from a lease.



The red cockaded woodpecker is a federally listed endangered species that in Louisiana is mainly found on nation forestland.



### The Sustainable Forestry Initiative® (SFI®) Forests with Exceptional Conservation Value



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What are forests with exceptional conservation value (FECV)?

Certain places in the more than 750 million acres of forestland are valuable for reasons other than their potential to give us paper, packaging and wood products in the United States.

These forests might be home to a globally rare plant, animal or rare plant or animal community. If a plant, animal or community is found to be very rare in the world and especially vulnerable to extinction, then it may be classified as imperiled or critically imperiled. Critically imperiled refers to a plant or animal or community that is globally extremely rare or, because of some factor, especially vulnerable to extinction or elimination. Imperiled refers to a plant or animal or community that is globally rare or, because of some factor, is very vulnerable to extinction or elimination.

These designations (critically imperiled and imperiled) are similar to the federal threatened and endangered designations afforded to species protected under the Endangered Species Act (ESA). It is not unusual for imperiled or critically imperiled species and communities with no protection under the ESA to be rarer than some of the species that are protected under the ESA. For example, the red-cockaded woodpecker is listed as a federally endangered species protected under the ESA, but is not classified as globally imperiled or critically imperiled. On the other hand, the Florida bog frog is globally critically imperiled, but is not protected under the ESA.

### How do I know if I have rare species inhabiting my land?

If you are interested in knowing if you have threatened or endangered species or imperiled or critically imperiled species and communities inhabiting your land contact: The Natural Heritage Program office listed for Louisiana-

The Natural Heritage Program office listed for Louisianahttp://www.wlf.la.gov/wildlife/louisiana-natural-heritage-program or visit Nature Serve at <a href="http://www.natureserve.org">http://www.natureserve.org</a> for local programs.

### What do I have to do if I have rare species inhabiting my land?

You are not required by law to do anything for imperiled or critically imperiled species and communities unless that species is listed under the U.S. Endangered Species Act and/or listed under applicable state or provincial laws requiring protection. For threatened and endangered species in Louisiana, contact the

Louisiana department of wildlife and fisheries or the United State Fish and Wildlife Service <a href="https://www.fws.gov/endangered/">www.fws.gov/endangered/</a>.

Many times, threatened and endangered species and imperiled or critically imperiled species and communities can thrive in managed forests; however, other species may require management recommendations. At a minimum, when planning a harvest or other forest management activity where imperiled or critically imperiled species and communities occur, you should consider communicating the location and protection measures associated with these sites to your logger or contractor.

### **Characteristics of Special Sites:**

Your land may hold sites that have ecological, geological, cultural or historical significance and which should be protected for future generations. Such sites may include cemeteries, waterfalls, Indian mounds, unusual plant communities or habitats. By preserving these special sites you can enhance the biodiversity of your property for all who enjoy it including humans, plants and animals while ensuring these sites will not disappear from the landscape. Your resource professionals can assist you in identifying and protecting these special sites.

Some examples of non-forested sites that you may want to consider protecting as special sites are caves, seepage slopes, rocky outcrops, riparian areas, water bodies (creeks, rivers, pools and ponds), natural openings in the forest such as prairies, glades and dry sandhills. These sensitive sites harbor many of the critically imperiled and imperiled aquatic and terrestrial species. Temporary pools that fill up with water in the spring are especially important features that contain rare, threatened and endangered species. All of these areas are important and are often very easy to work around.



Cemetery in the Woods



Your land may hold sites that have ecological, geological, cultural or historical significance and which should be protected for future generations.

As the eagle population has increased so are the number of forests that are used as nesting sites.





### The Sustainable Forestry Initiative® (SFI®) Forest Aesthetics



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There are numerous aspects of forestry aesthetics management which should be considered for all management activities. While they vary regionally and locally, the following considerations are common to most tracts and can help to prioritize efforts to improve the visual and other aesthetic impacts:

Who visits or sees this forest? Is the area residential in nature, or are there other high visitor considerations such as scenic sites, trails or other recreation areas? What type of roads pass by or through the tract, and what level of use do they receive?

Would the aesthetics be helped by doing the planned operations during a particular time of the year? Seasonal limitations may reduce the impact of harvests and reduce the cost of overall aesthetic management. Are there water resources that need special considerations? Knowing and implementing Best Management Practices (BMPs) improve the visual quality of forestry operations.

Are there non-visual considerations for this tract, such as sound limitations during harvesting or other operations, or does the stand provide a sound buffer locally? How does the property appear currently, and what will it look like during and after the management operation? Having predetermined goals, pre-planning and good communication are critical to the success of aesthetic management.

Does the planned management activity need a visual buffer, known as an Aesthetic Management Zone (AMZ) with special management considerations such as more residual trees left, or is it better to leave a cleaner condition such as is done by removing all woody debris from that area? Is the visual buffer needed only temporarily?

Do conditions call for planting or managing for different species in the AMZ? Post-management grass seeding of areas can enhance the visual quality of the operations as well.

Can natural features such as Streamside Management Zones (SMZs) or topographic features be used to enhance the aesthetics of the operation?

To avoid appearing wasteful, harvested forest products should not be visible to the public for long periods of time after harvests are complete, and all waste should be removed from all operations daily.

Can wildlife considerations such as perch trees or den

trees be used to enhance the visual aesthetics of the operations?

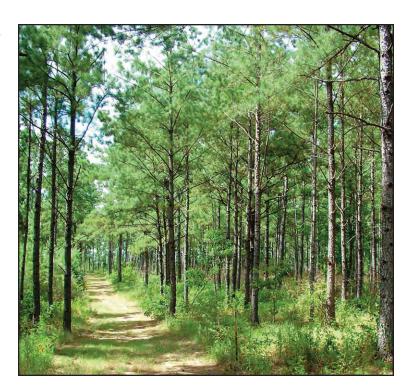
A discussion of these and any other site-specific considerations should be undertaken with your Resource Professional prior to beginning forest management activities. Other resources available through the Louisiana Forestry Association may prove helpful in the planning process, such as:

Forestry Aesthetics Guide, A Guide to the Aesthetics of Forest Operations in the South

http://www.aces.edu/natural-resources/forestry/harvesting-roads/siteprep.php

Information on the Sustainable Forestry Initiative (SFI) <a href="http://www.sfiprogram.org/">http://www.sfiprogram.org/</a>

A list of Certified Master Loggers in Louisiana, who have all had training in Forestry Aesthetics <a href="http://www.laforestry.com">http://www.laforestry.com</a>



If your property is adjacent to an aesthetically sensitive area (a church, public road, school) you may need to implement forestry practices to advance the aesthetics of your land.



# The Sustainable Forestry Initiative® (SFI®) American Tree Farm System



### Louisiana Sustainable Forestry Initiative

www.laforestry.com

The American Tree Farm System ( <a href="www.treefarmsystem.org">www.treefarmsystem.org</a> ) (ATFS) is an organization that provides information, education and assistance to family forest landowners regarding forest management practices that will sustain or enhance forest productivity, wildlife habitat, water quality and outdoor recreation.

Within the U.S., the ATFS has over 95,000 family forest owners (with approximately 1,800 tree farms in Louisiana) totaling more than 25 million acres of non-industrial private forestland certified in the program in 46 states. Participating landowners, foresters and government representatives can help you find the assistance you need to accomplish your land management goals, develop and implement a land management plan and certify your land as a Tree Farm.

When becoming a member of the ATFS, you must show that you follow BMPs when harvesting, take measures to provide wildlife habitat and protect biodiversity whenever possible. You reap not only the rewards of good management, but also the benefits of belonging to a strong and knowledgeable group that's committed to protecting the environment.

Another consideration is a growing preference among forest product customers for certified wood. In August 2008, the ATFS gained the endorsement of the Programme for the Endorsement of Forest Certification schemes (PEFC). PEFC is an international organization that evaluates and recognizes national forest certification systems.

Forest products companies such as Weyerhaeuser, Plum Creek and MeadWestvaco have announced their preference for purchasing wood from Tree Farm family forests to meet their fiber needs. In Louisiana, the Louisiana Forestry Association administers the Tree Farm program with a staff and volunteer force of dedicated Tree Farm supporters.

The SFI program has also been endorsed by PEFC. As part of the PEFC endorsement, the ATFS has a mutual recognition agreement with the SFI program, which will promote and expand the practice of sustainable forest management on small and large ownerships. Under this agreement, as an American Tree Farm System member, you will have the potential for greater access to certified wood markets both in the United States and abroad.

For more information on the American Tree Farm System, call 1-888-889-4466 or go to

http://www.laforestry.com/Programs/AmericanTreeFarmProgram.aspx You may also contact the Louisiana Forestry Association www.laforestry.com or call (318) 443-2558.



The American Tree Farm Program is the oldest certification program in existence. The Louisiana Forestry Association administers the state program. All that is required is that you have 10 or more acres of forestland, a management plan and are a member of the association.



# The Sustainable Forestry Initiative® (SFI®) Climate Change & Carbon Sequestration



### Louisiana Sustainable Forestry Initiative

www.laforestry.com

Climate change is a topic of much discussion today. Greenhouse gases, including carbon dioxide (CO<sub>2</sub>), are thought to be a significant cause of climate change. Climate change may also be caused by natural factors or processes, such as changes in the sun's intensity, changes in ocean circulation or by human activities that affect the composition of the earth's atmosphere (burning fossil fuels which release greenhouse gases, etc.). Our carbon footprint, put simply, is the amount of CO<sub>2</sub> our activities generate. To reduce your carbon footprint you must reduce both direct and indirect emissions, promote storage or sequestration and when possible, avoid emissions altogether.

Forest and forest products are a "storage sink" of carbon. As trees grow, they absorb CO<sub>2</sub> through photosynthesis. Since the amount of carbon in the world is a constant, when there is more carbon sequestered in long-term sinks, such as trees and forest products, there is less carbon entering the atmosphere.

When trees are burned for energy, die/decay or when wood products reach the end of their useful life and are disposed of, stored carbon is recycled to the environment. Since these products are not adding new carbon to the atmosphere, they are considered carbon-neutral compared to burning fossil fuel which

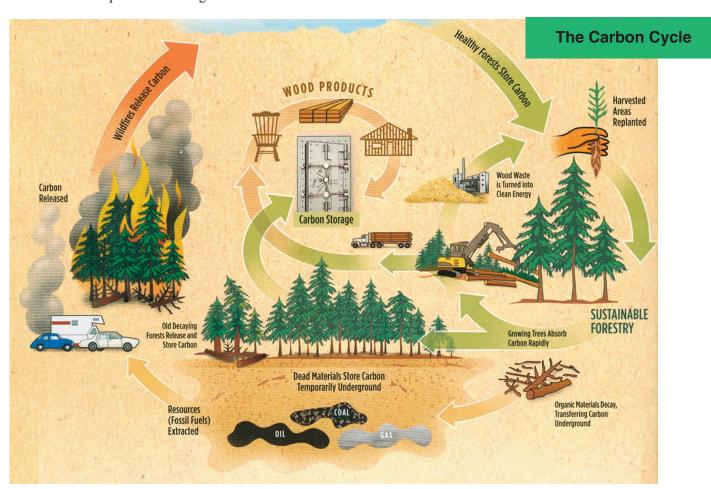
adds new carbon to the atmosphere.

Landowners are encouraged to check with the LSU Ag Center (<a href="www.LSUAgCenter.com">www.LSUAgCenter.com</a>) or their local county extension service office to learn more about the developing carbon trading markets that support sustainable forest management and recognize the role forests can play in mitigating climate change.

For more information on climate change visit:

http://en.wikipedia.org/wiki/Carbon sequestration

http://biocarbonsinks.org/





# The Sustainable Forestry Initiative<sup>®</sup> (SFI<sup>®</sup>) Protecting your Forest from Wildfire



### Louisiana Sustainable Forestry Initiative

Reducing wildfire risk for your forestland is imperative, especially when you consider that the occurrence of wildfire in Louisiana is considered "high." From 2004-2013, an annual average of 1,956 fires burned 20,989 acres of forestland each year in the state. The Louisiana Office of Forestry is the agency responsible for the detection, suppression and prevention of wildfires. But landowners have important ways they can protect their forestland:

- 1) **Prescribed burns**: Reducing hazardous fuels through prescribed burns can also reduce risk to your forestland. Check with your forester or the Louisiana Office of Forestry (225-925-4500) for scheduling a prescribed burn.
- 2) Determine the risk to your forestland: Tools found at www.southernwildfirerisk.com can help you gauge the risk for your particular property. You can also go to http://www.ldaf.state.la.us/ to check out the Daily Fire Danger map that shows current fire risk in your area.
- 3) Install firebreaks: Installing firebreaks can halt the spread of wildfires to your property. Construct firebreaks around the perimeter and add interior firebreaks to help contain fires and provide access for fire fighting equipment. Remember, fighting wildfires involves dozers, plows and two-way radios not fire trucks.
- 4) Work around the edge: Landowners should work to reduce hazardous fuels along roadways and entrances where you would likely have a problem with arson fires. Mow or brush cut the area and remove scrubby vegetation and other sources of fire fuels.
- 5) Control access to your property: You can install gates or other barriers to limit trespassers on your property. Put up signage with a phone number to contact you if anyone sees a problem on your land.
- 6) Absentee landowners need another pair of eyes: If you do not live near your forestland and do not visit it often, you should get to know adjacent landowners, your forester, or members of a hunting club that you know to alert you about any problems they see on your land.

### TO REPORT A FOREST FIRE:

Call 1-855-452-5323 available 24 hours a day, 7 days.

### www.laforestry.com



The Louisiana Office of Forestry handles wildland fires. Fires are detected by aircraft OR by calls from the public.