

A LANDOWNER'S GUIDE TO

Sustainable **Forests**

Key to Your Future!



SUSTAINABLE
FORESTRY
INITIATIVE
ALABAMA

SFI-01116



TO THE FOREST LANDOWNERS OF ALABAMA ...

Sustainable Forests, Key to Your Future, contains basic guidelines developed to help you manage your forest resource. Listed on the inside back cover are organizations and agencies you may contact for information and technical assistance as well as for referrals to practicing forestry professionals who can assist in making management decisions. Many of these organizations also have publications addressing a wide range of forestry-related topics. You are encouraged to contact them for advice and questions on forest management.

For questions regarding forest activities relative to standards of the Sustainable Forestry Initiative (SFI), please contact **sfi@alaforestry.org**. For more information regarding the SFI program, visit us online at **www.forests.org**.

**To express concerns about specific sites email:
sfi@alaforestry.org**

Alabama Sustainable Forestry Initiative Implementation Committee
Montgomery, Alabama

January 2022

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Alabama State Bird –
Northern Flicker (Yellowhammer)

Active forest management creates and maintains a diverse landscape ideal for supporting a variety of birds and other wildlife species.



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www.forests.org

Look for the state of
Alabama icon throughout
this guide for native Alabama
state symbols.

Alabama Sustainable Forestry Initiative
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The Sustainable Forestry Initiative®

Based on principles and measures, the SFI Standard promotes sustainable forest management and considers all forest values.

Growing Our Future

The following SFI Principles apply to the SFI 2022 Forest Management Standard and the SFI 2022 Fiber Sourcing Standard. SFI certified organizations commit to and promote the principles.

- Practice **sustainable forestry** to meet the needs of the present without compromising the ability of future generations to meet their own needs.
- Provide for regeneration, and to protect forest and soil productivity, to protect forests from undesirable impacts of wildfire, pests, diseases, invasive species, and other damaging agents to maintain and improve **forest productivity and health**.
- Conform with best management practices to **protect water resources** including water quality and quantity.
- Manage forests to **promote and protect biological diversity**, including animal and plant species, wildlife habitats, and ecological or cultural community types.
- Manage visual impacts of forest operations, and provide recreational opportunities for the public through **aesthetics and recreation** planning.
- Manage lands that are geologically or culturally important in a manner that accounts for their unique qualities to **protect special sites**.
- Use and promote among other forest landowners sustainable forestry practices that are scientifically credible and economically, environmentally, and socially responsible for **responsible fiber sourcing**.
- Comply with applicable federal, provincial, state, and local forestry and related environmental laws, statutes, and regulations for **legal compliance**.
- Support advances in sustainable forest management through **research**, science, and technology.
- Improve the practice of sustainable forestry through **training and education programs**.
- Broaden the practice of sustainable forestry on all lands through **community involvement, socially responsible practices, and respect of Indigenous Peoples' rights** and traditional forest-related knowledge.
- Broaden the understanding of forest certification to the SFI Standards by documenting certification audits and making findings publicly available through **transparency**.
- **Continually improve** the practice of forest management, and to monitor, measure, and report performance in achieving the commitment to sustainable forestry.

The SFI Standards are a proof point of responsible forestry in North America. The implementation of these standards protects water quality, wildlife habitat, species at risk and forests of exceptional conservation value.



Alabama State Game Bird –
Eastern Wild Turkey

Your Forests...Your Future!

You are one of more than 250,000 non-industrial, private landowners in Alabama who own approximately 80% of the state's 23 million forested acres. The forest industry and investment firms own 13% with various government agencies owning the remaining 7%.

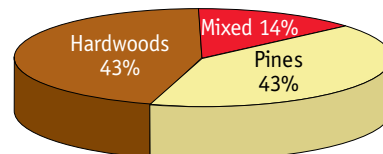
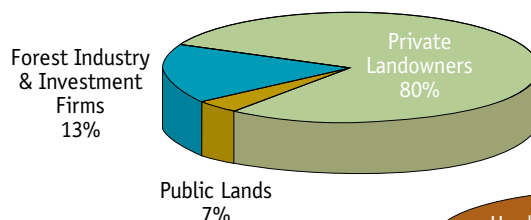
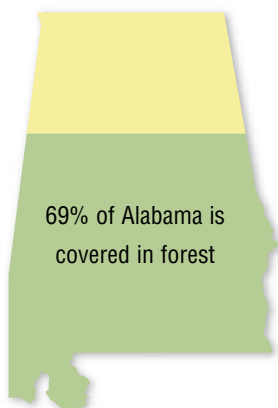
Countless people around the world depend daily on the products from

property belonging to you and other forest landowners. This resource drives Alabama's forest products industry, which has a \$27.9 billion annual economic impact on the state and produces more than 147,000 jobs directly or indirectly.

The health of Alabama's forests affects family members and friends. Landowners should be proud of their

forest, not just for the impact it has on the economy of the state but for other values as well. The public is increasingly coming to realize the value of forests for such dividends as fish and wildlife, water quality, recreation, and tranquility. Careful planning by landowners like you, who care about conserving the forest for future generations, provides numerous forest benefits.

Who Owns Alabama's Forests?



Source: Forest Inventory and Analysis Data, 2020

Forest Management Planning

Successful, and profitable, forest resource management calls for defining your objectives (e.g., will it be timber, wildlife habitat, hunting, fishing, hiking, wildflowers, scenery, etc., or a combination of several of these?) and then developing a written plan for meeting them. The basic ingredients needed for preparing a sound forest management plan follow.

Identify Specific Management Objectives and Goals

Begin by asking yourself these questions:

- Why do I own forestland?
- What do I want from my land?
- What other things should I be considering?

Forestland may be managed for multiple uses including: recreation, wildlife, timber, aesthetics, water quality, or perhaps historical values. You need to decide right away which are most important to you and your family. Which of these you choose may call for tradeoffs. For example, if recreation is to be a primary objective, you may have to be satisfied with less income from timber. While you should not attempt to manage a single acre of forestland for all objectives, it is possible to manage one or more tracts of land to meet multiple objectives.

Inventory Forest Resources and Property

In order to manage something, you must first determine what you have. An inventory is key to evaluating and adopting planning alternatives for your property.

In the inventory, identify existing forest resources and related values such as timber, wildlife habitat and streams. Also, identify invasive species which could negatively affect your timber and wildlife values. Mark on your property map forest stands and significant wildlife habitats, landform features (including roads and streams), species or communities of concern (i.e., threatened or endangered) as well as historically or culturally unique areas.

Evaluate Management Objective Alternatives and Tradeoffs

Important to your management plan's evaluation process is identification of the tradeoffs that may be required if you are attempting to achieve several management objectives concurrently. Begin by listing each objective along with its benefits, cost to implement, and how it would impact others under consideration. While it is hard to put monetary values on factors like aesthetics and biodiversity, there is no doubt they each have a value to you and society. This step will help you gain valuable insight into the preparation of your final forest management plan.



Alabama State Tree – Southern Longleaf Pine

“To waste, to destroy, our natural resources, to skin and exhaust the land instead of using it so as to increase its usefulness, will result in undermining in the days of our children the very prosperity which we ought by right to hand down to them amplified and developed.”

—Theodore Roosevelt,
Message to Congress,
December 3, 1907



The American Tree Farm System provides tools and information to help Tree Farmers and woodland owners keep forests healthy and productive. Learn more about Tree Farm, the sign of good forest stewardship, at <https://alabamaforestryfoundation.org/alabama-tree-farm>. Family forest certification is available through Alabama's State Tree Farm Committee.

Marketing Your Timber

- Decide your goals and objectives for your forestland.
- Have an active management plan including reforestation. Well-planned timber sales can reduce regeneration costs.
- Have a thorough, written contract or timber deed that identifies all the terms, agreements, payment schedules, etc. If yours is a pay-as-cut sale, require a regular schedule of receiving payments and scale tickets (such as weekly). Visit sites the buyer has harvested and is harvesting if you are not familiar with their work.
- Learn about Alabama's Best Management Practices (BMPs) that describe ways to protect the site and reduce soil erosion during logging operations. Include BMPs in your timber sale contract. Landowners are ultimately responsible for voluntary BMP compliance.
- Inform adjoining landowners of any proposed timber sales to make certain that boundary and access road locations are acceptable. Have your property lines well marked and maintained. Any interior sale line should also be clearly established.
- Use qualified resource professionals (see sources inside back cover). Under Alabama state law, only professional foresters registered with the state of Alabama or foresters under the direct supervision of registered foresters may give forest management advice, such as reforestation, cultural practices, or thinning and harvesting practices. Use loggers with current Alabama Professional Logging Manager (PLM) status, a voluntary logger education program offered in cooperation through AL Cooperative Extension System, Alabama Forestry Association, Alabama Forestry Commission, Alabama SFI, and Auburn University School of Forestry and Wildlife Sciences. Alabama PLM strives for professionalism through skill development, knowledge, and continuing education.



Download a copy of the Alabama Forestry Commission's brochure titled "Selling Your Timber" at www.forestry.alabama.gov.

Prepare Final Management Plan

You should now be ready to prepare—in writing—your final forest management plan. Be sure to include in your plan a timetable of forest management activities along with itemized expenses and income anticipated in achieving your planned objectives. Your plan should also leave room for future modifications to meet changes in objectives, financial needs or in the resource itself.

Implement the Plan

No plan can be considered complete until it is put into action. If you've properly researched your objectives and options you are now ready to take that important last step along the trail to sustainable forest management. If you wish to have your plan reviewed by a forestry professional, check the agencies listed on the inside back cover for referrals.

Note: Many government financial assistance program applications require a similar though less detailed management plan.

Threatened, Endangered or Imperiled—What Does It All Mean?

If you own or work with forestland, you have probably heard of threatened or endangered species. You may have heard of some new classifications like imperiled or critically imperiled species. These can be specific plant or animal species or whole communities that are ranked as



Alabama State Amphibian
— Red Hills salamander

imperiled nationally, regionally or locally. The common denominator for these rankings is a loss of habitat locally and/or internationally.

The more familiar threatened and endangered classifications have their origins from the Endangered Species Act (ESA). The term "endangered species" means any species which is in danger of extinction throughout all or a significant portion of its range. The term "threatened species" means any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range. Once listed, a species is afforded the full range of protections including prohibitions on killing, harming or otherwise "taking" a species. The term "take" means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.

There are also non-government organizations that have developed their own classifications for plants, wildlife and communities. NatureServe's global conservation status is one example and includes rankings of critically imperiled (G1), imperiled (G2), and vulnerable (G3).

The International Union for Conservation of Nature (IUCN) also classifies species and communities globally as vulnerable, endangered and critically endangered. The Alabama Natural

LEARN MORE

To learn more about threatened, endangered, or imperiled species and communities, visit the following websites:

- Alabama Department of Conservation and Natural Resources www.outdooralabama.com
- The U.S. Fish and Wildlife Service <http://www.fws.gov/endangered/listing/>
- NatureServe <http://www.natureserve.org/explorer/>
- Alabama Natural Heritage Program—Auburn University <http://www.alnhp.org/>
- International Union for Conservation of Nature <http://www.iucnredlist.org/>
- World Resources Institute www.wri.org
- The Nature Conservancy www.nature.org

Heritage Program is linked to the NatureServe program and classifies species and communities within Alabama. Additional information pertaining to protection and sensitivity towards these species is available in the **Maintaining Biological Diversity** section of this guide.



emerald ash borer

Non-Native Invasive Plants and Animals

Non-native invasive plants and animals are found outside their native range with potentially far reaching negative ecological, financial and social impacts. Invasive species pose a threat to the survival and reproduction of native species. They can decrease forest productivity, complicate forest management, and degrade biodiversity, wildlife habitat and the visual value of your forest. Invasive species typically thrive due to geographic and climatic conditions being similar to those of their native range and to the lack of their natural predators of animals and diseases. Effective control can be accomplished when you know what species to be on the lookout for and how to identify the species or their impacts. There are hundreds, maybe even thousands, of invasive species across the U.S.

Some of the more common ones are listed here. **Plants**—cogongrass, kudzu, Japanese climbing fern, tallow tree (popcorn tree), Chinese privet, water hyacinth. **Animals**—gypsy moth, emerald ash borer, Asian longhorned beetle, hemlock woolly adelgid, sirex woodwasp, feral hogs, red imported fire ants, armadillos. **Microorganisms**—white pine blister rust, sudden oak death, Dutch elm disease, chestnut blight.



privet in bloom



privet flowers



privet berries



kudzu



cogongrass



Invasive Species Control Measures

An integrated pest management program is the best approach to control invasive species and involves the following:

- Preventing introduction
- Detecting and responding rapidly
- Surveilling, controlling, and managing
- Rehabilitating and restoring
- Maintaining forest health and vigor
- Using resource professionals



Preventing the introduction of non-native species is by far the most effective and economical control measure. If an invasive species should get established, the second most important control measure is a rapid response to prevent spread and eradicate the unwelcome competitor. Therefore you should have an effective, ongoing surveillance program in place. Depending on the invasive species and particular circumstances, control measures can involve one or a combination of methods—mechanical

(e.g., hand-picking, traps, tillage), biological (e.g., promoting beneficial predators), chemical (e.g., pesticides, herbicides). Following these control measures, it may be beneficial to establish and/or release fast-growing native plants that can outcompete any surviving invasive plants while preventing soil erosion.

Maintaining a healthy forest through sound forest management practices will increase your forest's ability to combat invasive species. Contact a resource professional to assist you in learning more about invasive species, their identification, and control.

Reduction of Wildfire Risk

Active forest management improves forest health by not only reducing the risk associated with insects and diseases in a forest but also with minimizing wildfire risk.

Tree density, understory species composition, accumulation of dead fuels/litter layer, lack of well-established firebreaks, and arson all contribute to damaging wildfires. By utilizing prescribed burns, landowners safely apply a natural process, ensure ecosystem health, and reduce wildfire risk.

In Alabama, the Alabama Forestry Commission strives to prevent forest

fires through their firefighting efforts, advanced wildland firefighter training, education/outreach, and through partnership with the State Fire Marshal to investigate/enforce burning laws. Protecting Alabama's forested areas from wildfire is the number-one priority of the Alabama Forestry Commission. By actively managing your forestland, you promote healthy and resilient forest conditions that help reduce wildfire risks.

Forestry Aesthetics

Appearance, a significant characteristic of forests and forestry operations, may not always be aesthetically pleasing to everyone. These operations often lead to misconceptions of sustainability and leave negative opinions with many of the landowners and the forestry community. There are a few things as a landowner you can do to lessen the visual impact of these operations and improve the image of forest management.

Considerations During Harvesting

Avoid the appearance of large clearcuts that are visible from urban areas and major travel routes by using buffers, natural terrain changes, or leaving areas of unharvested trees between clearcut areas. Buffer widths can vary depending on the amount of traffic. On thinning harvests, avoid clearcut rows leading directly to travel routes lessening the visual impact of the operation. Logging slash should be placed away from visible areas. Dispose of all trash and litter properly.

Intermediate Considerations

For mechanical site preparation, follow land contours and minimize the size and number of piles and windrows. When preparing for prescribed burning, notify adjoining residents prior to the burn. Monitor weather conditions and possible smoke impacts closely before, during and after the burn utilizing times of good smoke dispersal. Also, use road signs that notify the public to be cautious of smoke hazards.

LEARN MORE

The Southern Wildfire Risk Assessment Portal, nicknamed SouthWRAP, allows users in Alabama and 12 other Southern states to identify wildfire threats based on landscape characteristics, historical fire occurrence, weather conditions, and terrain. Additional resources are available to help implement wildfire prevention practices. For more information, visit www.southernwildfirerisk.com.

For more information on invasives, visit

- **Alabama Forestry Commission**—www.forestry.state.al.us/ResourceSheets.aspx
- **Center for Invasive Species**—www.invasive.org
- **U.S. Forest Service**—www.fs.fed.us/foresthealth/management/fhm-invasives.shtml
- **Alabama Invasive Plant Council**—www.se-eppc.org/alabama



Alabama's Best Management Practices

In a cooperative effort with the Alabama Department of Environmental Management and the Alabama Forestry Commission, the Alabama forest industry has developed and endorsed Best Management Practices (BMPs), basically a set of guidelines aimed at reducing water pollution caused by forest operations.

With the exception of certain federally mandated guidelines for wetlands, BMPs are voluntary. However, the Clean Water Act of 1987 mandates that forest operations be conducted so as not to impact water quality. In other words, while neither landowner, logger nor forester can be required to follow BMPs, should a water quality violation be committed, all can be held responsible. Adhering to BMPs substantially reduces the impact of forest operations on the environment.

Protection of the forest resource (lakes, streams and other waterways) is always a concern of the responsible forest landowner. Certain harvesting and related forestry activities (e.g., stream crossings, logging roads, skid trails and logging decks) can pollute nearby streams with soil, silt and wood debris. In a properly managed forest, sediment is effectively filtered thus producing clean water.

You and your logger can make sure you protect the resources on your land by observing Alabama's best management practices.





Streamside Management Zones

A Streamside Management Zone, or SMZ, is an area adjacent to a body of water where either no harvesting takes place or a limited amount of timber is removed and disturbance to the soil and ground cover is minimized. Some landowners refer to SMZs as “buffer” or “filter” strips. SMZs play a key role in reducing sedimentation by providing natural filters which keep soil and other potential pollutants from the streams. SMZs help maintain constant water temperatures by preventing full sunlight from reaching the water’s surface. Additionally, they provide wildlife habitat corridors.



Stream Crossings

Crossing of streams by roads and skid trails constitutes, potentially, a major source of water pollution and wherever possible should be restricted. Further, stream crossings cause a break in the tree canopy and the filtration strip provided by your Streamside Management Zones. When a stream must be crossed either by bridge, culvert or fords, take care to stabilize the stream banks. To minimize travel distance from one side of the stream to the other, make sure roads and skid trails are at right angles to the stream bank.

Logging Roads

Logging roads are another potential source of water pollution. Proper road planning will minimize stream pollution, cut maintenance costs and reduce the amount of land taken out of production. Good road design will divert water from the roadway and disperse it into adjacent vegetation, thus reducing soil movement and erosion. You should build your roads at least 50 feet from any flowing stream.

Timber Harvesting

Properly planned, your timber can be harvested using methods that minimize the impact on water quality. Through planning you can ensure that road construction in the harvested area is kept



to a minimum; reasonable skid distances are maintained; and logging decks are properly located. Design your logging decks small and situate them in areas where they can't adversely impact water quality. Keep in mind also that slope is a critical factor in locating deck sites.

Skidding of trees also requires planning. Plan your skid trails so as to minimize soil displacement, compaction and rutting and to avoid disturbing natural drainage sites. Never use stream channels as skid trails. On steep slopes, at occasional breaks in the grade, construct water turnout ditches or buffers to slow the flow of water and disperse sediment.

Forest Biomass Utilization

As the demand for renewable energy sources continues to grow, landowners should weigh the benefits and costs of bioenergy production from their forestland. One such consideration is residue harvesting following a sawtimber/pulpwood harvest. With careful planning and by following BMPs, this can be accomplished using the same landing and road systems with very little impact to the site. Additionally, there should be little impact on site productivity and nutrient levels as stumps, leaves and small limbs, the high-nutrient portions of trees, will remain and the fact that harvest events are spread over time.

Benefits of biomass utilization following harvests or through other operations include:

- Reduction in dependency on fossil fuels while satisfying growing energy needs
- Creation of jobs and business opportunities
- Income for landowners from biomass sales
- Decreased site preparation costs as harvested sites are left cleaner
- Opportunities for low- to no-cost timber stand improvement
- Increased forest health by reducing threats and/or restoration costs from fire, disease/pest infestations, invasive species, and storm damage



Landowners should work closely with their resource professionals to ensure that this type of harvest is right for their property and that the activities follow BMPs.

Reforestation

Reforestation by planting must occur in such a way as to avoid displacement of forest litter and topsoil and to reduce soil compaction, erosion, and sedimentation. Mechanical site preparation techniques, such as drum chopping, bedding, disking, shearing, and windrowing, involve moving harvesting debris as a method of improving the odds of the reforestation's success. However, avoid employing these techniques on slopes greater than 25% and in Streamside Management Zones.

While chemical site preparation is an acceptable and common practice, herbicides should not be aerially or broadcast sprayed into Streamside Management Zones nor allowed to run off into water surfaces.

Federally Mandated BMPs for Wetlands

Under the Clean Water Act, all landowners are required to follow 15 of the Best Management Practices in "jurisdictional wetland areas." Wetlands are defined as "...areas that are inundated or saturated by surface or ground water at a frequency or duration suffi-



Alabama's state butterfly is the Eastern Tiger Swallowtail and state insect is the Monarch Butterfly. Encourage wildflowers and other pollinator habitat near food plots, along roads, and other forest openings.

cient to support—and under normal conditions, do support—a prevalence of vegetation typically adapted for life in saturated soil conditions."

If you are not sure whether your land meets the requirements for being classified as a wetland, contact the USDA Natural Resources Conservation Service or the U.S. Army Corps of Engineers.



Reforestation & Afforestation

In planning for the future, you should consider both reforestation and afforestation as a means to enhance the productivity of your land. Reforestation is the restocking of a forest after loss of trees through harvesting, wildfire or other means by planting or natural regeneration. Afforestation is the establishment of a forest or stand in an area where the preceding vegetation or land use was not forest (e.g., pasture, crop land, etc.). Over the years if your objectives for your land change from agriculture or other activities, think about planting these lands to improve your future income, decrease the potential for erosion, and to improve wildlife habitat and biodiversity.

All forested land should be replanted or otherwise managed to ensure the replacement of the desired species. It's that simple; however, selecting the method of reforestation can be complicated. Planning for reforestation prior to timber harvesting can help landowners identify and meet multiple management objectives.

In developing your forest management plan, study the various methods of reforestation and site preparation available, your desired tree species, wildlife and topography and how they can be manipulated or modified to meet specific objectives. Working with a professional forester at this stage proves key to successful reforestation.

Following are three sources of tree regeneration, any combination of which may be used on the same property for reforestation:

Advance natural regeneration comes from pine and/or hardwood existing as seedlings, saplings or hardwood sprouts in the forest understory prior to harvesting;

Regeneration after harvest can result from seeds in place prior to the harvest, hardwood sprouts from cut trees, and/or seeds from uncut trees remaining in the harvest area or which have blown in from nearby trees;

Artificial regeneration is the planting of pine or hardwood seedlings. Artificial regeneration can also be used to change the species of your forest to a composition more compatible with your overall management objectives.

You may use all three sources of tree regeneration if you adopt an **even-aged** management system to reforest. Using artificial regeneration for **uneven-aged** management is not generally recommended.

Uneven-Aged Management for Hardwood

Most hardwood forests can be reforested following uneven-aged management systems, which result in forests growing trees widely ranging in age and size. This type of management is compatible with tree species that can regenerate under the shade of a forest canopy such as oak and ash.

Uneven-aged management is more



Climate Smart Forestry

Climate change is consistently identified as a significant threat to the environment, business, and our collective way of life. Forests are universally cited as an essential nature-based solution because forests and forest products provide a significant opportunity to counter the impacts of climate change by sequestering and storing carbon. As forest landowners, you address climate change

impacts through sound natural resource management decisions. Forests play an important role in solving this critical global issue. Learn more about Climate Smart Forestry by visiting this link <https://youtu.be/es9LZahaDkk> or scanning the QR code.



labor intensive than even-aged and requires intensive planning. However, on the positive side, it can provide regular income without interruption for reforestation. This system also permits you to maintain a timber reserve to take advantage of increasing wood prices or as a source of quick income.

Since uneven-aged management depends on advance natural regeneration and regeneration after harvest to perpetuate your forest, harvesting operations must be conducted with care. For example, don't remove all the valuable trees leaving only the lesser quality timber to regenerate. Also, be careful not to damage the trees left in your uneven-aged forest. Retaining the services of a professional forester to select the trees to be cut will help ensure a quality harvest.

Even-Aged Hardwood and Mixed Stands Management

Clearcutting a hardwood or mixed pine-hardwood stand will result in an even-aged forest. Often, clearcutting can be beneficial particularly to correct past mismanagement or to help a forest recover from insect damage and disease. Also, clearcutting can be used to produce large plots of young forest habitat required by some wildlife.

Clearcutting small sections of your forest will protect its long-term environmental and economic values. This system of management relies on advance natural regeneration and regeneration after harvest for reforestation.

Even-Aged Natural Pine Management

In nature, pine regenerates best on bare mineral soil as is often found following significant disturbances (e.g., from clearcuts, fires, damaging storms). We imitate these disturbances through forest management activities. One such procedure is the **seed-tree cut**, an even-aged management practice that calls for

leaving quality seed-producing trees randomly spaced in the harvested area where fallout of the seeds they produce germinate to regenerate a forest.

In a few years you will find thick stands of young pine seedlings around the seed trees. And other vegetation will often spring up at the site to help restore the natural diversity of the area.

Once the seedlings are well established (from two to three years), it's

South. It is common practice to regenerate stands of southern pine through the plantation management system, which will result in an even-aged forest. Proper site preparation prior to artificial (i.e., planting seedlings) regeneration calls for reducing vegetation which competes for sunlight, moisture and nutrients and eases the task of tree planting.

Advanced planning is the key to successful reforestation after harvest.



Through prescribed fire, landowners safely apply a natural process, ensure ecosystem health, and reduce wildfire risk.

time to harvest the seed trees. Before you do, mark out trails through the seedlings for the logging equipment to follow. This will serve two purposes: First, it will ensure the survival of most of the seedlings while, second, it will allow the logging equipment to thin out the thick stand of seedlings, thus helping ensure a healthy regeneration.

Even-Aged Plantation Management

Southern pine, particularly loblolly, is the principal commercial tree in the

Keep in mind that seedlings are grown in a tree nursery and need to be ordered a year in advance of what in most cases will be a winter planting schedule. Be aware that exposure to sun and wind can kill the root systems of seedlings. Protecting your investment requires care in handling, transporting and storage prior to planting.

Advantages of the plantation management system include:

- Greater control over the number and distribution of your seedlings

- Better seedling survival
- Improved tree genetics, which enables a tree farmer to grow a bigger tree in a shorter period of time (now 15-20 years vs. 30-40 years several decades ago). Genetically improved trees are also more disease resistant.

Disadvantages of plantation management include:

- Higher initial costs of land preparation for planting
- Cost to purchase seedlings
- Actual planting expense

Before making a decision to go with the plantation management system, ask yourself, "Is it compatible with my other forest management objectives?" A professional forester can help you sort priorities and options.

Maintaining Biological Diversity

Among other benefits, maintaining biological diversity enhances wildlife habitats on your land. The SFI program defines biological diversity or biodiversity as: "The variety and abundance of life forms, processes, functions, and

structures of plants, animals and other living organisms, including the relative complexity of

species, communities, gene pools and ecosystems at spatial scales that range from local to regional to global."

While many believe that biodiversity is most effectively addressed at the watershed or larger level, there are opportunities to manage and contribute to biodiversity at all levels—stand, forest, watershed, landscape and global. Landowners influence compositional and structural diversity at the stand and forest levels through management choices. Techniques landowners can use to

ensure biodiversity involve maintaining:

- A mix of habitat and cover types—both terrestrial and aquatic
- A mix of species—both flora and fauna
- A distribution of age classes within and between stands
- Maintaining elements for wildlife, such as snags, stumps, den/nest trees, and mast trees
- Forests of Exceptional Conservation Value (FECV)
- Special sites and other unique stand features such as snags, low-value trees, seeps, etc.

All of these techniques contribute to greater diversity on the landscape level.

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, rock 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 with water in the spring are especially important features that contain rare, threatened, and endangered species. All of these areas are important and are easy to implement into a forest management plan.

Forests of Exceptional Conservation Value

Forests of Exceptional Conservation Value are defined as forests with viable occurrences of critically imperiled

and/or imperiled species and ecological communities. Critically imperiled species (often referred to as G1) are at very high risk of extinction due to extreme rarity (five or fewer occurrences or populations), very steep population declines, or other factors. Imperiled species (often referred to as G2) are at high risk of extinction due to

very restricted range, very few populations (20 or fewer occurrences), steep declines, or other factors.

As a land-owner, you serve as a steward to the trees as well as to other plants and animals on your land. Being a good steward involves having knowledge about your forests. Assessing areas for Forests of Exceptional Conservation Value and then managing these areas in a way that will not damage the value is important for the success of these forest types. If you think certain plant or animal species on your land indicate that you may have a FECV, contact a forestry professional (see agencies listed inside back cover) for further review.



gopher tortoise

Our Forests...Our Future

By adopting the Sustainable Forestry Initiative program, SFI certified companies formally committed to a forest management concept that ensures sustaining Alabama's forests from one generation to another. Now, we are inviting you, the family forest private landowner, to join us in this endeavor.

Don't be overwhelmed by the challenge of developing your first forest management plan. It is your key to success. The most effective plan will require complex management decisions. For example, in deciding when to harvest timber, you should understand the financial and biological ramifications of this inherently long investment cycle. Your plan should also contain a strategy for reforestation. Arriving at the best decision doesn't come easy even for industrial forest owners with trained forestry professionals on their staffs.

As a family forest landowner, keep in mind that your trained forestry professional is no further away than your telephone and the organizations listed on inside back cover.

As good stewards of the land and the forest, we share a common need to harvest in accordance with best management practices and plan for prompt reforestation, while we contribute to the biological diversity of the landscape and protect critically imperiled plant and animal species. In this regard, it is an objective of the Sustainable Forestry Initiative program to support conservation of working forests through voluntary market-based incentive programs, such as current use taxation, reasonable estate taxation, conservation easements, Forest Legacy, and more.

Thank you for doing your part to sustain the benefits of our forests for future generations.



Alabama State Mammal – Black Bear

The majority of wildlife habitat in Alabama is in private ownership. By practicing good stewardship now, we can work together to prevent restrictive regulations.

Looking for a good place to start?

Contact Alabama Tree Farm

334-265-8733 or

treefarm@alaforestry.org



Does this sign look familiar?

It should, because it is now recognized by customers around the world as a source of certified sustainable fiber.

Alabama Tree Farm Program

Tree Farms are family-owned forests managed by people just like you. Tree Farm families manage their lands for wildlife and watershed protection while also growing wood for our daily use.

You have worked hard on your property growing your forest and improving the wildlife. Join the American Tree Farm System.

- Get forest management help.
- Join a community of like-minded forest landowners.
- Be part of the solution to meet the global demand for sustainable fiber by growing Tree Farm-certified wood.

Show your commitment to the land: Join the American Tree Farm System and 90,000 other landowners at no cost and display your sign of sustainable forestry with pride!

To join the American Tree Farm System, contact:
Alabama Tree Farm at (334) 265-8733 or email
treefarm@alaforestry.org.



Alabama State Wildflower – Oakleaf Hydrangea

Sources of Technical Assistance & Information

Forestry & Natural Resource Organizations

Alabama Cooperative Extension System
109-D Duncan Hall
Auburn University, AL 36849
(334) 844-4444
www.aces.edu

Alabama Department of Conservation &
Natural Resources
64 North Union Street
Montgomery, AL 36310-1457
(334) 242-3465
www.outdooralabama.com

Alabama Forest Owners' Association
P.O. Box 361434
Birmingham, AL 35236
(205) 987-8811
www.afoa.org
rll@afoa.org

Alabama Forestry Association
555 Alabama Street
Montgomery, AL 36104-4395
(334) 265-8733
www.alaforestry.org

Alabama Forestry Commission
513 Madison Avenue
Montgomery, AL 36130-2550
(334) 240-9300
www.forestry.state.al.us

Alabama Invasive Plant Council
P.O. Box 1454
Auburn University, AL 36830
(334) 844-1061
www.se-eppc.org/alabama

Alabama Landowner Resource Center
555 Alabama Street
Montgomery AL 36104
(334) 265-8733
www.landownerassistance.org

Alabama Loggers Council
555 Alabama Street
Montgomery, AL 36104-4395
(334) 265-8733
www.alaforestry.org

Alabama Natural Heritage Program—Auburn University
1090 South Donahue Drive
Auburn University, AL 36849
Phone: (334) 844-5017
www.alnhp.org

Alabama State Board of Registration for Foresters
513 Madison Avenue
Montgomery, AL 36130-2551
(334) 240-9301
www.asbrf.alabama.gov

Alabama Tree Farm Program
555 Alabama Street
Montgomery, AL 36104-4395
(334) 265-8733
www.treefarmssystem.org
treefarm@alaforestry.org

Alabama Wildlife Federation
3050 Lanark Road
Millbrook, AL 36054-3616
(800) 822-9453
www.alabamawildlife.org

Association of Consulting Foresters of America, Inc.
312 Montgomery Street, Suite 208
Alexandria, Virginia 22314
(703) 548-0990
www.acf-foresters.com

Auburn University School of Forestry
& Wildlife Sciences
602 Duncan Drive
Auburn University, AL 36849
(334) 844-1007
www.sfw.s.auburn.edu

The Nature Conservancy of Alabama
2100 First Avenue North Suite 500
Birmingham, AL 35203
(205) 251-1155
www.nature.org

The Longleaf Alliance
12130 Dixon Center Road
Andalusia, AL 36420
334-427-1029
www.longleafalliance.org

NatureServe
2550 S. Clark Street Suite 930
Arlington, VA 22202
(703) 908-1800
www.natureserve.org

USDA Forest Service
National Forests in Alabama
2946 Chestnut Street
Montgomery, AL 36107-3010
(334) 832-4470
www.fs.fed.us

USDA Natural Resources
Conservation Service
P.O. Box 311
Auburn, AL 36830-0311
(334) 887-4500
www.nrcs.usda.gov

US Department of the Interior
Fish & Wildlife Service
1208B Main Street
Daphne, AL 36526
(251) 441-5181
www.fws.gov



These companies have contributed to developing and publishing *Sustainable Forests, Key to Your Future®* to show their commitment to the support of Alabama's forest landowners:

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CatchMark
Claw Forestry Services
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Forest Investment Associates
Georgia-Pacific
Green Diamond Management Company
Homan Industries
International Paper
Jasper Lumber
KyKenKee
LP Building Solutions
Manulife Investment Management
Forest Management
McShan Lumber
Molpus Woodlands Group
Packaging Corporation of America
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WestRock
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