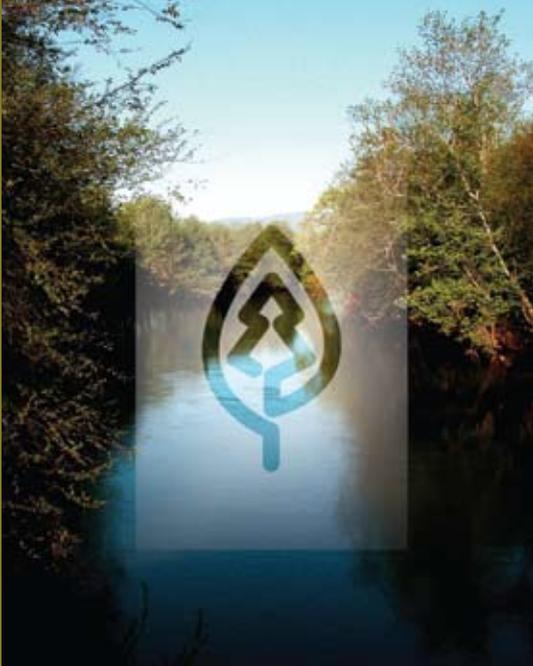


# The Sustainable Forestry Initiative® (SFI®) Program

**Information for  
Georgia Forest  
Landowners**



## Glossary of SFI® and Forestry Terms

**American Tree Farm System®:** A national program that promotes the sustainable management of forests through education and outreach to private forest landowners.

**artificial regeneration:** The establishment of a group or stand of young trees created by direct seeding or by planting seedlings or plantlets.

**best management practices (BMPs):** A practice or combination of practices for protection of water quality that is determined by a federal, provincial, state, or local government or other responsible entity.

**biological diversity, biodiversity:** The variety and abundance of life forms, processes, function, and structures of plants, animals and other living organisms in a habitat. It considers the relative complexity of species, communities, gene pools and ecosystems at spatial scales that range from local to regional to global.

**certified logging professional:** A person with specialized skills in timber harvesting gained through experience or formal training; who has successfully completed, and is a member in good standing, of a recognized logger certification program.

**certify (certification):** **1.** To attest that management of forest land meets the approved standards of a designated authority (See **chain of custody, sustainable forestry**). **2.** To attest that wood products originate from forest land certified as meeting approved standards of a designated authority.

**chain of custody:** Certification assurance provided by a seller that a certified forest product has remained identifiable from its origin in the forest to the buyer throughout its production, processing and marketing.

**conservation:** **1.** Protection of plant and animal habitat. **2.** The management of a renewable natural resource with the objective of sustaining its productivity in perpetuity while providing for human use compatible with sustainability of the resource.

**critically imperiled:** Globally extremely rare or, because of some factor(s), especially vulnerable to extinction. Typically, five or fewer occurrences of populations remain, or very few individuals (<1,000), acres (<2,000), or linear miles (<10) exist. Often referred to as G1.

**culturally important:** Having significance for or being representative of human activities or beliefs (e.g. areas such as cemeteries, sacred site, battlefields).

**forest management:** Often called silviculture, the practice of controlling the establishment, growth, composition, health and quality of forests and woodlands to meet the diverse needs and values of landowners and society on a sustainable basis.

**forests with exceptional conservation value:** Forests that contain critically imperiled and imperiled species and communities.

**habitat:** **1.** A unit area of environment. **2.** The place, natural or otherwise (including climate, food, cover, and water), where an individual or population of animals or plants naturally or normally lives and develops.

**illegal logging:** Theft of timber or logs and cutting in parks, reserves or similar areas where otherwise precluded by law.

**imperiled:** A plant or animal or community, often referred to as G2, that is globally rare or, because of some factor(s), is very vulnerable to extinction or elimination. Typically, six to 20 occurrences, or few remaining individuals (1,000 to 3,000), or acres (2,000 to 10,000), or linear miles (10 to 50) exist.

**indicator:** In the SFI Program, a specific metric that provides information about an organization's forestry and environmental performance and that is integral to assessing conformance to the SFI Standard objectives and performance measures.

**integrated pest management:** The maintenance of destructive agents, including insects at tolerable levels, by the planned use of a variety of preventive, suppressive or regulatory tactics and strategies that are ecologically and economically efficient, and socially acceptable.

**invasive exotic plants, trees and animals:** Species introduced from another country or geographic region outside their natural range; may have fewer natural population controls in the new environment and can be a pest or nuisance species.

**inventory:** **1.** A set of objective sampling methods that quantify the spatial distribution, composition, and rates of change of forest parameters within specified levels of precision for management purposes. **2.** The listing of data from such a survey.

**landscape:** **1.** A spatial mosaic of several ecosystems, landforms and plant communities across a defined area, irrespective of ownership or other artificial boundaries and repeated in similar form throughout. **2.** An area of land characterized by: Similar biogeoclimatic conditions that influence site potential; similar historical disturbance regimes that influence vegetation structure and species composition; and sufficient size to provide the range of habitat conditions for naturally occurring communities (except for a few megafauna with large spatial needs, e.g. wolves).

**long-term:** Extending over a relatively long time period. For the SFI Standard, this means the length of one forest management rotation or longer.

**natural regeneration:** The establishment of trees and forests or any plant from natural seeding, sprouting, suckering or layering.

**non-forested wetland:** A transitional area between aquatic and terrestrial ecosystems that does not support tree cover and is inundated or saturated for periods long enough to produce hydric soils and support hydrophytic vegetation.

**objective:** In the SFI Program, a fundamental goal of sustainable forest management as embodied in the SFI Standard.

**old-growth forests:** A forested ecosystem distinguished by old trees and related structural attributes, such as tree size, downed woody debris, canopy levels and species composition.

**performance measure:** In the SFI Program, a means of judging whether an objective has been fulfilled.

**principle:** In the SFI Program, the vision and direction for sustainable forest management as embodied in the Principles of the SFI Standard.

**procurement:** Acquisition of sawlogs or pulpwood and field-manufactured or primary-mill residual chips, pulp and veneer to support a forest products manufacturing facility.

**program participant:** A forest landowner, forest land manager, primary or secondary forest products producer operating in the U.S. or Canada that participates in the SFI program through a contractual agreement to abide by the SFI Standard.

**protection:** Maintenance of the status or integrity, over the long-term, of identified attributes or values including management where appropriate and giving consideration to historical disturbance patterns, fire risk and forest health when determining appropriate conservation strategies.

**public land:** Land that is owned or administratively managed by a government entity (federal, state, provincial, county, or local), excluding easements or other encumbrances held by a government entity on private land.

**purchased stumpage:** Procurement of standing timber directly from a landowner under a contractual agreement that gives the Program Participant the right and obligation to harvest the timber.

**qualified logging professional:** Denotes specialized skills in timber harvesting gained through experience or formal training. Includes successful completion of a wood producer training programs recognized by SFI Implementation Committees as meeting the spirit and intent of the SFI Standard.

**qualified resource professional:** A person who by training and experience can make forest management recommendations. Examples include foresters, soil scientists, hydrologists, forest engineers, forest ecologists, fishery and wildlife biologists or technically trained specialists in such fields.

**riparian:** Related to, living in, or located in conjunction with a wetland, on the bank of a river or stream or at the edge of a lake or tidal water.

**SFI Certification:** A systematic and documented verification process to obtain and evaluate evidence objectively to determine whether a Program Participant's SFI Program conforms to the SFI Standard.

**SFI Implementation Committee (SIC):** A state, provincial or regional committee organized by SFI Program Participants to facilitate or manage the programs and alliances that support the growth of the SFI Program and sustainable forest management.

**silviculture:** See **forest management**.

**special sites:** Sites that are ecologically, geologically, historically or culturally important.

**sustainable forestry:** To meet the needs of the present without compromising the ability of future generations to meet their own needs by practicing a land stewardship ethic that integrates reforestation and the managing, growing, nurturing, and harvesting of trees for useful products and ecosystem services with the conservation of soil, air and water quality, carbon, biological diversity, wildlife and aquatic habitat, recreation and aesthetics.

**Sustainable Forestry Initiative® Program:** The structure, responsibilities, practices, procedures, processes and time frames by which Program Participants implement, maintain, and improve sustainable forest management.

**Sustainable Forestry Initiative Standard (SFI STANDARD):** The principles, policies, objectives, performance measures and indicators that detail specific requirements for Program Participants.

**third-party certification:** An assessment of conformance to the SFI Standard conducted according to the standards of the SFI Audit, Procedures and Qualifications or ISO 19011 by a qualified audit firm.

**threatened and endangered:** A plant or animal listed under the U. S. Endangered Species Act or the Canadian Species at Risk Act and listed under applicable state or provincial laws requiring protection.

**visual quality management:** Minimization of the adverse visual effects of forest management activities.

## SFI Program Partners

American Tree Farm System  
Georgia Department of Natural Resources  
Georgia Forestry Commission  
Georgia Forestry Association  
Southeastern Wood Producers Association  
UGA Warnell School of Forestry and Natural Resources

For more articles and information about forestry:

[www.gfagrow.org/](http://www.gfagrow.org/)  
[www.forestry.uga.edu/](http://www.forestry.uga.edu/)  
[www.gfc.state.ga.us/ForestManagement/ForestManage.cfm](http://www.gfc.state.ga.us/ForestManagement/ForestManage.cfm)  
[www.srs.fs.usda.gov](http://www.srs.fs.usda.gov)



# SFI® in Georgia: Participants

Some 35 of the 226 national SFI program participants have lands or operations in Georgia. They include:

**AbitibiBowater Incorporated**  
**Beasley Forest Products**  
**Claude Howard Lumber Company, Inc.**  
**Cogent Fibre LLC**  
**Forest Investment Associates**  
**Forestar Real Estate Group**  
**Georgia-Pacific LLC**  
**Gilman Building Products**  
**Global Forest Partners LP**  
**Grant Forest Products**  
**Graphic Packaging International, Inc.**  
**Hancock Forest Management**  
**Hood Industries**  
**Huber Engineered Woods LLC**  
**Ida Cason Callaway Foundation**  
**International Paper Company**  
**Interstate Resources, Inc. & Newport Timber LLC**  
**Jordan Forest Products LLC**

**KapStone Paper and Packaging Corporation**  
**MeadWestvaco Corporation**  
**Norbord Georgia, Inc.**  
**Packaging Corporation of America**  
**Plum Creek Timber Company, Inc.**  
**Pollard Lumber Co., Inc.**  
**Rayonier**  
**Resource Management Service, LLC**  
**Simpson Lumber Co.**  
**Smurfit-Stone Container Corporation**  
**Southern Veneer Products**  
**T&S Hardwoods, Inc.**  
**Temple-Inland**  
**The Campbell Group**  
**Wells Timberland REIT**  
**Westervelt Land Company**  
**Weyerhaeuser Company**



For more information on SFI:  
[www.sfi-georgia.org](http://www.sfi-georgia.org)  
706-542-7691



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Advantages of the Sustainable Forestry Initiative® (SFI) Program



Consider the Benefits of a Professional Forester



Incentives for Forest Landowners



Mutually Dependent:  
Healthy Industry and Healthy Forests



Responsible Harvesting:  
Georgia Master Timber Harvester Program



foresters and timber buyers all benefit from participation in the Master Timber Harvester (MTH) Program. Georgia MTH is offered by the University of Georgia's Center for Forest Business, the Georgia Forestry Association and the

• **Safety** – OSHA Compliance, Transportation Safety, Loss Control  
As new technology and improved information are becoming available on an almost daily basis in forestry as in other industries, continuing education has



Renew Your Forest: Reforestation Options



Protect Your Forest: Control Invasive Species



Protect Water and Soil Quality:  
Use Best Management Practices



Consider the View:  
Minimize Visual Impact of Harvesting



Enhance Your Forest: Managing for Wildlife



Protect Biodiversity:  
Understand Your Responsibilities

## SFI® Program Partners

American Tree Farm System  
Georgia Department of Natural Resources  
Georgia Forestry Commission  
Georgia Forestry Association  
Southeastern Wood Producers Association  
UGA Warnell School of Forestry and Natural Resources

For more articles and information about forestry:

[www.gfagrow.org/](http://www.gfagrow.org/)  
[www.forestry.uga.edu/](http://www.forestry.uga.edu/)  
[www.gfc.state.ga.us/ForestManagement/ForestManage.cfm](http://www.gfc.state.ga.us/ForestManagement/ForestManage.cfm)  
[www.srs.fs.usda.gov](http://www.srs.fs.usda.gov)





# Advantages of the Sustainable Forestry Initiative® (SFI) Program

Hundreds of organizations and thousands of individuals—from forest managers to conservation groups—are saying “Yes” to the Sustainable Forestry Initiative (SFI®) program. Almost 500 organizations are meeting the program’s rigorous forest certification standard—including organizations that own forests and others that simply buy wood and fiber.



*As a Georgia forest landowner, why should you care about the SFI program?* We answer some basic questions about the SFI program and what it means for you as a consumer, a forest landowner and a Georgia citizen.

## What is SFI?

The SFI program is a forest, paper and wood certification program, whose participants manage their land in a way that combines the perpetual growing and harvesting of trees with the long-term protection of wildlife, plants, and soil and water quality. SFI Inc.—an independent, non-profit organization—is responsible for maintaining, overseeing and improving the SFI program and SFI Standard.

## Why do we have certification programs like SFI?

Voluntary third-party forest certification, including SFI, began in the 1990s in response to market concerns about forest management and illegal logging, primarily in developing countries.

## What are some of the benefits of SFI?

The SFI program, through SFI Inc. and SFI Implementation Committees like the one in Georgia, is improving sustainable forest management in North America and supporting responsible procurement globally.

- The SFI program provides a means for foresters, landowners, loggers, and wood and paper producers to satisfy the growing demand of the American people for environmentally sound forestry while still producing—at an affordable price—the forest products upon which people rely.
- For consumers, the SFI program provides the assurance that they are buying wood and paper products from well-managed forests, backed by a rigorous, third-party certification audit.
- The SFI program balances responsible environmental practices and sound business practices to benefit all stakeholders.
- The SFI program is science-based and recognizes the role of technology in sustainable forestry and sustainable development. SFI Standard performance measures and indicators also reflect current technology and regulatory systems.



## How big is the SFI program?

Today, the SFI program is internationally recognized and among the world’s largest sustainable forestry certification programs. It is the largest certification program in the U.S. and Canada with over 160 million acres independently third-party certified.



## What is unique about the SFI program?

The SFI program was developed specifically for the U.S. and Canada. It recognizes the significant role of family forest owners—who own more than 62% of the forestland the U.S.—and also complements the social conditions, and legal and regulatory frameworks found in the U.S. and Canada. The SFI Standard has the most comprehensive approach to wood procurement certification, including performance-based auditing of non-certified lands from which wood and wood fiber are procured. These requirements include training programs for loggers and monitoring the use of best management practices.

## What is the SFI Standard?

The SFI Standard is based on principles and objectives that promote sustainable forest management and considers all forest values. It includes unique fiber sourcing (wood procurement) requirements and promotes responsible forest management on all suppliers’ lands.

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# Advantages of the Sustainable Forestry Initiative® (SFI) Program

## How does the SFI program benefit you as a Georgia landowner?

Private landowners like you own more than 65% of Georgia forests. The SFI® Implementation Committee of Georgia understands and values the contributions of family forest owners and wants to provide you with the resources that will help you sustain your forests today and for the future. The SFI program has been making a positive difference in Georgia forests since 1995. The SFI Committee in Georgia has:

- Helped train thousands of loggers and foresters, providing information on sustainable forestry practices and Forestry Best Management Practices;
- Provided forestry information and support to family forest owners like you; and
- Applied SFI principles on millions of acres of SFI Program participant lands in Georgia and complied with specific SFI principles that govern wood procurement activities.

As a landowner, when you sell your timber or seek forestry advice, it should give you assurance that sustainable forestry practices will be followed when you work with a forestry or logging professional who is associated with SFI.

## What are some of the broader benefits of sustainably managed forests in Georgia?

Sustainably managed, healthy forests:

- Provide economic, environmental and social benefits indispensable to the quality of life in Georgia;
- Ensure the health and viability of Georgia's \$24 billion forest products industry;
- Provide many environmental benefits, from air and water quality to wildlife habitat and green space.
- Provide jobs for thousands of people and a tax base that supports Georgia communities; and
- Give us other benefits, including essential building and paper products, and all types of recreational opportunities.

### For More Information

Georgia SFI Implementation Committee  
Center for Forest Business  
The University of Georgia  
Athens, GA 30602-2152  
706-542-7691  
[www.sfi-georgia.org](http://www.sfi-georgia.org)



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# Consider the Benefits of a Professional Forester

It takes decades to grow a mature crop of timber, which means many landowners will only harvest timber once during their lifetime. Consequently, many landowners are not familiar with the process of selling timber and the recommended steps to maximize their harvest income. That's why landowners that are considering a timber sale should contact a professional forester before they sell their timber.

Combining the expertise from a professional forester with the skills of a Master Timber Harvester offers you the best opportunity to attain your objectives, maximize your profit and sustain your forest resource. Timber harvests can have a long-term impact on the forest, and if properly planned and implemented, can benefit all of the values of your forest—from timber production to wildlife and water quality. Studies have shown that using a professional forester can increase your income today while protecting the site's productivity and keeping more of your high-quality trees for the future. Foresters also can help you develop a forest management plan for your property and assist you with other forest management activities.

To locate a professional forester, contact your local state forestry office or visit the Society of American Foresters web site at [www.safnet.org](http://www.safnet.org). Additionally, the state of Georgia has a professional forester registration program.

## Georgia Registered Professional Foresters

How can you tell if you are working with a registered professional forester? To verify whether a forester is registered to practice forestry in Georgia, you should ask to see his registration. All Georgia Registered Professional Foresters are issued a wallet card that bears the

individual's name, registration number, expiration date and certifies that the individual is registered as a "forester."



Plans, maps, specifications and reports issued by a registrant shall be endorsed with his name and registration number during the life of the registrant's license.

## What Does Registration Mean?

To practice forestry in Georgia, a forester must be registered with the Georgia State Board of Foresters. According to Title 12: Chapter 6, Article 1, Part 2: Practice of Professional Forestry "Professional forestry" or "practice of professional forestry" means:

*"Any professional service relating to forestry, such as investigation, evaluation, development of forest management plans or responsible supervision of forest management, forest protection, silviculture, forest utilization, forest economics or other forestry activities in connection with any public or private lands, provided that forestry instructional and educational activities shall be exempted."*

The Board shall issue licenses only to those applicants who meet the requirements of the Code section, provided that no person shall be eligible for registration as a registered forester who is not of good character and reputation; provided, further, that employees of the state and federal governments assisting farmers

in agricultural programs shall be exempt from this part.

To become registered, a forester must:

- Be a graduate with a baccalaureate degree from a school, college, or department of forestry approved by the Board;
- Pass a Board-approved examination after graduation; and
- Have a record of an additional two years or more experience in forestry work of a character satisfactory to the Board, indicating that the applicant is competent to practice forestry.

Along with an application fee, the forester must submit proof of education and contact information from five references, of whom three or more shall be registered foresters having personal or professional knowledge of the applicant's forestry experience.

Foresters have been registered in Georgia since 1951 and must stay current in their profession through continuing education to retain their registration. Registered professional foresters may work as private consulting foresters, for forest products industry or government agencies, such as the Georgia Forestry Commission.

## For More Information

### On registration:

Georgia Secretary of State  
Georgia Board of Foresters  
237 Coliseum Drive  
Macon, GA 31217-3858  
(478) 207-2440  
[www.sos.georgia.gov/plb/foresters/](http://www.sos.georgia.gov/plb/foresters/)

### For a list of registered foresters:

Contact the Georgia Forestry Commission Forester for your county, the Georgia Board of Foresters or through the websites below:  
[www.gatrees.org/Resources/Directories.cfm](http://www.gatrees.org/Resources/Directories.cfm)  
[www.sos.georgia.gov/myverification/](http://www.sos.georgia.gov/myverification/)



# Incentives for Forest Landowners



Family forestland owners can obtain cost-share funds for a variety of forest management activities, including tree planting, timber stand improvement, wildlife habitat enhancement and other conservation practices. Your state forestry or wildlife agency can provide you with detailed information about these programs. A few of the more common programs are listed below:

- **Southern Pine Beetle Initiative (SPBI).** Administered by the Georgia Forestry Commission, this program helps landowners implement various silvicultural practices that will either prevent or minimize impacts of future Southern pine beetle infestations or to restore areas already impacted by these destructive insects.

- **Environmental Quality Incentive Program (EQIP).** Administered by the USDA Natural Resources Conservation Service, this Farm Bill program primarily focuses on practices on agricultural land; however, up to 50% cost share is available for approved forest management practices.

- **Conservation Reserve Program (CRP).** Administered by the USDA Farm Services Agency, this is a voluntary, incentive-based federal program that pays farmers attractive incentives for putting their least productive lands into conservation uses that benefit wildlife, improve water quality and conserve soil.



- **Wildlife Habitat Incentives Program (WHIP).** Administered by the USDA Natural Resources Conservation Service, this voluntary, incentive-based federal program helps develop and improve wildlife habitat. Up to 75% cost-share is available to establish and improve fish and wildlife habitat.

The state of Georgia can also provide long-term property tax reductions for landowners who actively manage their woodlands. A simple way is through the Conservation Use Value Assessment (CUVA), a program that provides property tax reductions for landowners who maintain their property in conservation use for a set number of years. For more information, contact the county Tax Assessor's office.



## For More Information

Contact any of the agencies below to learn more about other forest landowner incentive programs:

Georgia Forestry Commission:  
1-800-GATREES (428-7337) or  
[www.gatrees.org](http://www.gatrees.org)

Georgia Department of Natural Resources, Private Lands Program:  
770-994-7583 or  
[www.georgiawildlife.org](http://www.georgiawildlife.org)

USDA Natural Resource Conservation Service: 706-546-2115 or  
[www.ga.nrcs.usda.gov](http://www.ga.nrcs.usda.gov)

USDA Farm Services Agency State Office: 706-546-2266 or  
[www.fsa.usda.gov](http://www.fsa.usda.gov)



# Healthy Industry - Healthy Forests

Healthy forests and a healthy forest industry are inextricably linked—one cannot exist without the other.

In Georgia, the majority of forestland is privately owned. Most landowners view their forestland as an investment and therefore want to generate income from this investment. To generate income, a variety of options are available to landowners. Examples include:

- Harvesting timber
- Leasing of hunting rights
- Selling the land for development

While some development is needed, forest management is usually the better choice. Land developed is typically lost for growing trees forever—or at least for a long period of time. If every landowner were to sell their forest, we would lose all of the benefits that forests provide. These benefits include clean air, clean water and wildlife habitat along with forest products such as lumber, paper, food additives and clothing.

For a landowner, deciding to keep land as a working forest is only half the battle. In order to generate income from forestland, landowners must have local markets for their timber. A strong and profitable industry helps maintain a healthy forest base that benefits all citizens. If this industry does not exist,

many landowners may have to consider selling their land for development.

A viable forest industry also benefits publicly owned forests. Public forest managers often sell timber to not only generate income but to also enhance wildlife habitat and plant diversity. Conservation organizations, such as The Conservation Fund and The Nature Conservancy, recognize that a healthy forest industry helps to provide healthy forests. Strong, local markets for wood are vital for public land managers to achieve these goals and ultimately manage these lands for the public good.



On the other hand, family forest owners are important to the forest industry, which requires a sustainable supply of wood grown from local forestlands. Landowners who manage their forests well—considering proper stocking levels,

planting the correct tree species on a site, and conducting timely thinnings, and in some cases, prescribed fires—will be well-positioned to generate income from their forest.

Trees sustain our quality of life by providing numerous benefits to all citizens; their future depends upon active forest management and a healthy forest industry.

## For More Information

More information on the forest industry and lists of forestry professionals in Georgia are available online:

Georgia Forestry Commission:  
[www.gatrees.org](http://www.gatrees.org)

Georgia Forestry Association:  
[www.gfagrow.org](http://www.gfagrow.org)

Georgia Registered Forester List:  
[www.gatrees.org/Resources/Directories.cfm](http://www.gatrees.org/Resources/Directories.cfm)

Georgia Wood-Using Industries List:  
[www.gatrees.org/Resources/Directories/wui/index.cfm](http://www.gatrees.org/Resources/Directories/wui/index.cfm)

Georgia Master Timber Harvester Program:  
<http://ga-mth.forestry.uga.edu/db>

Association of Consulting Foresters of America, Inc.:  
<http://www.acf-foresters.org>



# Responsible Harvesting: Georgia Master Timber Harvester Program



Forestry professionals have long been concerned with protecting the environment that produces and sustains our valuable forest resource. Georgia Master Timber Harvester (MTH) is a voluntary logger education program, designed with an objective of fostering improvement in the professionalism of wood producers or loggers. The program also satisfies the logger education component specified by the Sustainable Forestry Initiative® program. Logging business owners, crew supervisors, industry procurement foresters and land managers, consulting

foresters and timber buyers all benefit from participation in the Master Timber Harvester (MTH) Program.

Georgia MTH is offered by the University of Georgia's Center for Forest Business, the Georgia Forestry Association and the Georgia SFI® Implementation Committee, in cooperation with the Georgia Forestry Commission, Georgia Department of Natural Resources, Georgia Department of Public Safety and the Southeastern Wood Producers Association.

## Program Content

The information presented in the Georgia MTH program is organized into three categories, and provides program participants with information on:

- **The Environment** – Principles of Sustainable Forestry, Forest Stewardship: Conservation and Regeneration, Wildlife and Rare Species, Forest Soils, Georgia Best Management Practices for Forestry, Harvest Planning
- **Business Management** – Business Management, Public Policy and Outreach, Federal and State Employment Laws, Employee Hiring and Retention

- **Safety** – OSHA Compliance, Transportation Safety, Loss Control

As new technology and improved information are becoming available on an almost daily basis in forestry as in other industries, continuing education has been identified as an important component of an effective logger education program. Twelve hours of continuing education are required every two years to maintain the voluntary Master Timber Harvester designation.

## For More Information

To learn more about the program or to find a Master Timber Harvester in your area, contact:

Master Timber Harvester Workshop  
Center for Forest Business  
The University of Georgia  
Athens, GA 30602-2152  
706-542-7691  
<http://ga-mth.forestry.uga.edu>





# Renew Your Forest: Reforestation Options

Reforestation, or the re-establishment of a forest that has been removed by harvesting or natural causes, is the basic building block of forest sustainability. Timber is a renewable resource, but only if harvested trees are replaced with a new crop. Some forests naturally regenerate on their own, while others are artificially regenerated by direct seeding or by planting seedlings by hand or machine. Reforestation planning should take place before a timber sale is arranged so the harvest can be designed to meet reforestation objectives.

**Natural Regeneration:** If natural regeneration is desired, it is important to determine if an adequate seed source exists for the desired species. Proper planning increases your chances of making sure that the site regenerates with the desired species for your management objectives (what you want to achieve with your forest), the appropriate species for the existing site conditions (bottomland wet site vs. upland dry site), and that the new trees are properly spaced (not too thick or too scattered) so that the area is fully stocked.

**Seed-Tree Method:** This is most commonly used for natural regeneration of loblolly pine in the Southeast. Prior to harvest, a select number of trees should be selected to be left as producers of seed for the next stand. The number of trees to be left as seed producers

depends on the seed production for the species and degree of competition. Seed trees can later be harvested when the young trees are established.



**Shelterwood Method:** This method differs from the seed tree method in that more trees per acre are left as seed sources. This method is preferred for species such as longleaf pine where adequate regeneration of new trees may require more time. By leaving more trees, the seed source is increased and the overstory serves as a shelter for the developing reproduction. The overstory should be removed as soon as adequate regeneration is established.

**Planting:** The planting of bare root seedlings grown in a nursery is the most common form of artificial regeneration for Southern pines. However, a limited amount of Southern pine regeneration, primarily longleaf pine, is planted with containerized seedlings. Proper planning and site preparation is crucial to successfully regenerating the stand. Planting is either done by hand or machine, depending on the conditions of the site. The spacing to be used when planting is dependent on several factors including tree species, expected rotation length, desired forest products, expected mortality, wildlife considerations, and federal or state cost share programs.

## Comparing Costs

The cost of properly implementing natural regeneration for pine seedlings is not necessarily cheaper than planting. Planting costs are usually offset by the cost of pre-commercial thinning for naturally regenerated stands. Other deciding factors include genetics (improved seedlings), spacing control and ease of future thinning harvest operations. Both forms

of reforestation require the same level of planning in order to ensure successful regeneration. A professional forester is your best source of information to help determine your reforestation needs. A forester can evaluate your objectives and recommend which harvest methods will lead to successful natural regeneration or if reforestation is desirable through planting or direct seeding. Forests are a long-term investment, and an improper start will lead to costly problems in the future; therefore it is essential to provide each new crop with the most favorable conditions possible.



## For More Information

Contact a professional forester or your local state forestry agency for information on renewing or re-establishing your forests:

Georgia Forestry Commission:  
1-800-GA-TREES (428-7337) or  
[www.gatrees.org/Seedlings/Reforestation.cfm](http://www.gatrees.org/Seedlings/Reforestation.cfm)

## Order Seedlings

Seedlings are available through the state-owned nursery listed below or through private nurseries:

Flint River Nursery, Byromville, GA  
229.268.7308 or [www.gatrees.org/Seedlings/FlintRiver.cfm](http://www.gatrees.org/Seedlings/FlintRiver.cfm)

For private nurseries, contact a local consulting forester.





# Protect Your Forest: Control Invasive Species

Your forestland is filled with plants, animals and insect/disease species that have, over time, adapted to this specific environment. In ideal conditions, this amazing diversity of life exists in a state of perfect harmony and equilibrium. Unfortunately, our fragile forest ecosystems are under constant threat from invasive species.

An invasive species is any species that is non-native (alien) to a given ecosystem and whose introduction causes, or is likely to cause, environmental and economic harm. Invasive species often out-compete native species for the food and space they need to survive. Because the invading species typically have no natural enemies (which control their populations in their home environment), these intruders may flourish, upsetting the delicate balance of life. Invasive species are considered one of the most significant threats to the long-term health of our forests.



**The hemlock woolly adelgid, an insect from Japan, attacks hemlock trees in their native Georgia mountain range. They can be detected from fall until spring by woolly sacs that cover their eggs on trees.**

## Identifying Invasive Species

Invasive plants are easy to identify because they are so visible. Species such as cogongrass, kudzu, Chinese privet,

honeysuckle and Japanese stilt grass grow in such thick abundance that they literally cover and smother the surrounding native vegetation—effectively creating a monoculture.



**Chinese privet, which was introduced as an ornamental throughout the South, has now invaded every ecoregion of Georgia. It prefers low-lying moist sites and dominates the understory of many bottomland hardwood stands.**

But not every invasive species is easy to detect, which is problematic since early detection is essential to combating an invasive species. In fact, invasive insect species such as the hemlock woolly adelgid, Asian longhorned beetle, emerald ash borer and siren woodwasp can infest a large area of forestland before they are discovered.

Even more difficult to spot are invasive microorganisms, which although tiny, can wreck havoc upon a healthy forest. Some of history's most notorious tree diseases have been caused by invasive microorganisms: American chestnut blight and Dutch elm disease both single-handedly wiped out nearly every living specimen. A recently introduced insect, redbay ambrosia beetle, and its associated fungal pathogen are causing similar destruction to our native redbay trees in Georgia's maritime forests.

## Prevention is the Key

Most invasive species are accidentally or intentionally introduced by people, so the most effective way of solving an invasive

species problem is to prevent its arrival in the first place. Early detection and aggressive eradication is the next best way to control an invasive species.

Once an intruder is well established, it may be impossible to entirely and permanently remove it from your land; however, you can take steps to control its spread and minimize its impact on native species:

- Take periodic walks through your forest, in every season of the year, to look for any signs of invasive species – such as unfamiliar plants or unhealthy groups of trees.
- Keep your forests healthy through sound forest management so that they can better resist the effects of invasive species.
- Control access to your property, which minimizes the chance of someone accidentally introducing an invasive species to your forest.

We all need to work together to help minimize the impact of invasive species on our forests.



**The redbay ambrosia beetle, an exotic from south-eastern Asia, introduces a fungus into native redbay trees that causes laurel wilt disease, which is killing redbays throughout most of the coastal plain.**

## For More Information

Georgia Forestry Commission:  
1-800-GA-TREES (428-7337) or  
[www.gatrees.org](http://www.gatrees.org)

Georgia Exotic Plant Pest Council:  
[www.gaepcc.org](http://www.gaepcc.org)



# Protect Water and Soil Quality: Use Best Management Practices

Georgia has 44,056 miles of perennial streams, 23,906 miles of intermittent streams, and 603 miles of canals and ditches. Many of these begin or flow through forestlands. Because 7,000 to 10,000 forestry operations are conducted on some 790,000 acres in Georgia annually, it is critical for forest landowners to follow Georgia Best Management Practices (BMPs) for Forestry when conducting forestry operations. BMPs not only protect water quality and the integrity of the land, but certain violations can result in fines and penalties. In fact, violations of state water quality standards for sediment or stream temperatures can result in fines and penalties up to \$50,000 per day.



Since 1977, the Georgia Forestry Commission (GFC) has been the lead agency—designated by the Georgia Environmental Protection Division—responsible for developing, educating, implementing and monitoring the use of BMPs for forestry operations.

BMPs are designed to minimize or prevent erosion and subsequent stream sedimentation when conducting forestry

operations, such as forest road construction, harvesting, mechanical site preparation, controlled burning and tree planting. Before conducting any forestry operation, landowners should seek the expertise and advice from a professional forester to develop a plan for that particular operation.

## Some Areas Addressed by Forestry BMPs

Specific BMP recommendations or requirements may include:

- **Streamside Management Zones (SMZs):** The SMZ areas adjacent to perennial or intermittent streams are designed to prevent erosion from reaching these waterways and to keep stream temperatures cool. SMZ widths may range from 20 to 100 feet, depending on slope and stream type. They should be marked and identified on the ground and any timber to be harvested should be marked as well. SMZs should NOT be clearcut.
- **Pond Construction:** Landowners that want to build ponds for agricultural purposes will need to obtain letters from the local Natural Resources Conservation Service. For recreational ponds, permits from the Army Corps of Engineers are required prior to clearcutting any SMZ.
- **Forest Roads:** Existing road and stream crossings should be assessed for compliance with BMPs. Improvements may be needed and associated costs for improvements will need to be negotiated before any forest practice begins.
- **Stream Crossings:** Construction of temporary or permanent stream



crossing must comply with 15 BMPs federally mandated by the U.S. Environmental Protection Agency.

- **Loading Decks and Skid Trails:** Exposed soil in critical areas such as loading decks and skid trails should be promptly stabilized.
- **Fire and Firebreaks:** Intense fire should be kept out of SMZs and firebreaks plowed by the Georgia Forestry Commission will be constructed using BMPs.
- **Chemicals:** BMPs call for prevention of aerial application of chemicals into SMZs.

## Professionals with BMP Training

The University of Georgia's Warnell School of Forestry and Natural Resources maintains a list of loggers and foresters who participate in the voluntary Master Timber Harvester (MTH) logger education program. The MTH attendees have been trained on BMPs for forestry. The Georgia Forestry Commission also maintains a list of timber buyers that have completed the MTH course.

### For More Information

Contact GFC at: 1-800-GA-TREES (428-7337) or [www.gatrees.org](http://www.gatrees.org)



# Consider the View: Minimize Visual Impact of Harvesting



People use products from the forest every day—from paper and packaging to building products. While timber harvests are required to make these products, many people find harvesting unsightly and upsetting. It is understandable: To the casual observer, the sudden removal of a lush stand of mature trees can seem like an all-out environmental assault. Concern over harvesting has grown as most of the population becomes further and further removed from the land.

Trees have been grown for useful purposes for centuries and are no different from corn, wheat and other familiar row crops, except for the amount of time required between germination and harvest. Unlike fossil fuels, trees do re-grow and are a renewable natural resource. In

fact, even if not replanted, a forestland will usually regenerate itself quickly if harvested correctly, shortening the time of unsightly appearance.

Even armed with this knowledge about society's need for forest products and the renewability of forests, freshly harvested land can be a short-term eyesore, which can be aggravated by adverse weather, difficult site conditions or poor planning.

## Strategies to Improve Visual Impact

There are several strategies that can help landowners minimize the visual impact of a forest harvest—many of these are also addressed through Georgia BMPS for Forestry. Examples include:

- Applying gravel on haul roads to minimize dirt deposited on the highway;
- Locating the log deck (landing) away from public roads;
- Installing a curve in a haul road to screen the harvest from public view;
- Seeding the landing and haul road with native grasses once the harvest is completed to create wildlife habitat and prevent erosion; and
- Installing a gate at the entrance of the haul road to reduce trespassing and prevent damage to the road.

If your property is located next to a major road or sensitive area such as a school or church, you may consider leaving a strip of woods (sometimes called a visual buffer) along the road or sensitive area to minimize public concerns.

These and many other things can be done to minimize visual impact when harvesting your land. While all require careful planning, the good news is that they frequently cost little or nothing. Close consultation with a professional logger and/or forester is essential. A little bit of forethought before your timber harvest will provide many long-term benefits.

## For More Information

Georgia Forestry Commission:  
1-800-GA-TREES (428-7337) or  
[www.gatrees.org/ForestManagement/MgtPlans.cfm](http://www.gatrees.org/ForestManagement/MgtPlans.cfm)

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# Enhance Your Forest: Manage for Wildlife

Forest management is not simply a means to harvest valuable wood products. Forests provide diverse habitats required by a multitude of wildlife species. With careful planning and active management, you can manage your forest and harvest timber without sacrificing wildlife habitat, even in areas where forestry activities should be limited due to endangered or imperiled species or rare habitats.

## What You Can Do

Here are some options for you to consider:

- **Use borders or edges of harvest sites to create unique wildlife management opportunities.** Edges are transition zones between forests and other land use types (cropland, pasture, etc.) and are used by wildlife for travel corridors, escape cover, nesting, and as a food source. Wider transition zones containing a diverse composition of shrubs, soft mast, heavy-seeded legumes and native grasses provide greater benefits to wildlife. The edges can be managed for native forage by disking, mowing, prescribed fire, herbicides or plantings along borders on a one- to three-year rotation. Additionally, timber harvests with irregular shapes

(e.g., avoiding square blocks) create additional edge, while also reducing the visual impact of the harvest.

- **Diversify your forest to attract a greater abundance and diversity of wildlife.** Consider planning for a diverse forest by maintaining a mixture of tree species, both hardwood and pine, and different aged stands—from seedlings to mature trees. Conduct periodic thinnings to keep at least 30% of the ground in direct sunlight, implement a prescribed fire program on a one- to five-year rotational matrix throughout the forest, and maintain long stand rotations to ensure quality habitat diversity. Maintaining unique features on the landscape, such as openings and wetlands, and trying to retain and release mast-producing hardwoods can significantly add to the wildlife value of your forest.
- **Create openings to encourage native vegetation.** Wildlife openings can provide early successional habitat composed of grassy and/or shrubby



vegetation recovering from recent disturbance, which serves as escape cover, brood areas, forage, nesting cover and many other benefits to wildlife. Maintain different stages of this early successional habitat by incorporating shrubby cover, fallow patches and annual disturbance to promote quality vegetation for wildlife. Manage for native forage by prescribed burning and winter disking, or by planting 30 to 50% of the openings on a one-to three-year rotation. Consider keeping 5 to 20% of the property in wildlife openings. These openings typically should be 1.5 to 3 acres each and can be abandoned agricultural fields, logging decks, power line right-of-ways, haul roads, skid trails and firebreaks.

## For More Information

Contact your state wildlife or forestry agency:

Georgia Department of Natural Resources:  
770-761-1697 or [www.georgiawildlife.org](http://www.georgiawildlife.org)  
Georgia Forestry Commission: 1-800-GA-TREES (428-7337) or [www.gatrees.org](http://www.gatrees.org)



# Protect Biodiversity: Understand Your Responsibilities



A major environmental concern today is the worldwide decline of forest habitat and the related loss of biodiversity. A thorough knowledge and awareness of the plant and animal species found on a property and their related habitat needs is essential for good land stewardship.

Landowners need to be particularly aware of forests of exceptional conservation value, which include those species

and ecological communities that are designated imperiled, critically imperiled, rare, threatened, or endangered, and must understand how forest management activities may impact these species.

## Degrees of Protection

Critically imperiled (G1) or imperiled (G2) species are defined as very high risk of extinction due to extreme rarity, restricted ranges, steep declines or other factors making them especially vulnerable to extinction. They are designated by non-government organizations such as NatureServe or The World Conservation Organization.

Threatened and endangered species are listed by the U.S. Fish and Wildlife Service under the federal Endangered Species Act. Additionally, rare species

may be listed under state laws. Rare species are not presently endangered or threatened but protected because of their scarcity. Threatened species are likely to become an endangered species within the foreseeable future throughout their habitat range. Endangered species are in danger of extinction throughout their habitat range.



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# Protect Biodiversity: Understand Your Responsibilities

All of these species, rare to critically imperiled, require full protection in accordance with Georgia law.

## Other Special Sites: Rare and Declining Habitats

Effective conservation programs emphasize protection of a suite of viable sites for species at risk. To best conserve the biodiversity of our forests, protection should be applied not just to the specific plants and animals at risk, but also to the rare and declining habitats that these plants and animals depend on now and in the future. Because of their significance and sensitivity, rare habitats are often managed solely for their unique features.

If you have one of these rare ecological communities, you may be able to reduce your tax burden through conserva-

tion easements or receive incentive and cost-share assistance for conservation practices to protect these. Be sure you understand your rights, obligations and the implications for future forest management before entering into any agreement.

### For More Information

#### For species and communities of concern in your area:

Georgia Nongame Conservation Section:  
770-918-6411 or [www.georgiawildlife.com](http://www.georgiawildlife.com)  
(click on "Conservation")

NatureServe: [www.natureserve.org](http://www.natureserve.org)

#### For conservation easements, land donations, or conservation incentive programs:

Georgia Department of Natural Resources, Nongame Conservation Office:  
478-994-1438 or 770-918-6411.

