

# An Introduction to Forest Certification in the South

January. 2010 SREF-FM-015

A Regional Peer Reviewed Technology Bulletin By

Alan J. Long, Extension Specialist, University of Florida

Susan E. Moore, Extension Specialist, North Carolina State University

Jennifer Hart, Biologist, Florida Division of Forestry

#### 1. What is Forest Certification?

Southern forests provide aesthetic, ecological, economic, recreational, and spiritual values to society. Forest owners and the general public are interested in management practices that sustain these benefits for the long term. When people see trees harvested, they may need assurance that the harvest is not "destroying" the forest. Forest certification provides that reassurance through a third-party evaluation of the management of a particular forest relative to important forest values such as clean air and water, wildlife and plant habitat, soil protection, recreation and reforestation. By mid-2009, over 300 million acres of North American forests were certified.

Forest certification identifies forests and woods that are managed with sustainability as a primary goal. In general, sustainable forest management implies that ecological, economic, social and cultural benefits will derive from a forest for present as well as future generations. Certification is currently a voluntary process of evaluating and validating forest management practices using a predetermined set of standards. These standards cover issues such as management plans, protection of resource values, harvesting and management practices, social/economic issues and monitoring. The evaluation is often conducted by a third party and, if successful, will result in a "certificate" of compliance to the particular standards. Certificates, along with the accompanying labels or signs, help demonstrate to neighbors, public agencies and consumers that landowners practice sustainable forest management. Certification may also influence marketing opportunities for those landowners.

Only about seven percent of the world's forests are certified, but about 17 percent of the forests in the U.S. South are certified. However, each year the number of certified forest acres is increasing throughout the world and because of its growing impact on forest management, ownership, and market opportunities, all landowners should learn about forest certification.

The concept of public recognition of sustainably managed forests began with the American Tree Farm System (ATFS) in the 1940s. Not until 1992, following the United Nations' Earth Summit in Rio de Janeiro, Brazil, did certification programs evolve as a much stronger process for recognizing forest sustainability. At that time, forest certification was proposed as a means to protect tropical timber from exploitative harvesting. By certifying the management of certain tropical forests, wood products made from that timber could be labeled as "certified" to allay consumer concern. Forest certification has since spread to virtually all timber-producing nations. Worldwide there are about 760 million acres of forestland certified, with about 136 million acres in the United States.

## 2. Why Certify?

Landowners should clearly understand the potential benefits and costs of certification before they initiate the voluntary process. The most commonly cited benefits are: market opportunities, credibility, and sound forest management.

A key assumption for market benefits is that consumers will show a preference for products from certified forests and in turn, certified wood will gain a price premium in



the marketplace. So far, however, demand for certified products has not been as evident in North America as in Western Europe. Some specialty products such as flooring, cabinetry, and guitars have cited small premiums due to the marketing of their products as certified. Yet, this is not a general trend for the major stumpage or finished product markets in the United States, nor is there evidence that the small premiums enjoyed by some finished products actually make it back to the landowner in stumpage prices (Howe et al. 2004).

On a more positive note, as a response to growing consumer interest in forest practices, retail companies and major businesses are increasingly implementing purchasing policies that require at least partial sourcing or selling of certified wood and paper products. To meet this demand, mills will need to purchase larger portions of certified wood in the future and landowners that have certified forest lands will be given preference over uncertified forests (Cubbage 2007). A more striking example of market options is that as carbon credit markets expand they will most likely require certification in order to sell credits, and a similar requirement may occur for recognition of other environmental services provided by forest lands in the future. However, at the present time certification is still not, and may never be, necessary to sell wood, but the marketing options for sales may be reduced without certification.

A second potential benefit from certification is credibility and assurance (Rickenbach 2002). A third-party audit provides a system for validating sustainable management claims. This may assure the forest landowner, public agencies, as well as the general public that the land-



Image 1. Landmanagers meeting with Smartwood auditors during the field portion of an audit.

owner is engaged in long-term, environmentally sound forest management. Although not a widespread practice at this time, various local ordinances or land development regulations in the U.S. South have proposed that landowner participation in a certification program be a qualification for particular land uses and exemptions.

As another benefit, certification brings about the need to seek professional expertise in disciplines such as wildlife and watershed management. Such assistance in developing, implementing and monitoring plans will ultimately lead to better forest management practices and improved forest health. Increased participation in outreach activities can also improve the quality of management. For example, ATFS and Forest Stewardship Program (FSP) participants may utilize educational opportunities such as websites, newsletters, workshops, conferences and other events organized by state ATFS or FSP committees. Third party assessment may also help landowners detect and correct problems and potential hazards that may improve the overall management system of the forest, with additional benefits such as:

- · a healthier forest,
- better environmental practices,
- better long-term management planning,
- better utilization of products,
- personal and community pride in knowing the forest is well-managed,
- a path for the continuous improvement of forest management, and
- access to emerging carbon-credit and other ecosystem services markets.

Despite the many benefits, forest certification can be costly to a landowner. Direct costs include payments for a management plan and the certification assessment. Assessment costs vary depending on the size of the acreage and a number of other factors. They also vary greatly among the systems. For example, ATFS and FSP provide free assessment audits while the Forest Stewardship Council (FSC) and Sustainable Forestry Initiative (SFI) audits require auditor fees and expenses. ATFS relies on volunteer foresters and FSP relies on state forestry and wildlife agencies for the certification process. Direct costs per acre will generally increase as

ownership size decreases and may vary from no cost to many dollars per acre. In addition, a landowner may be required to pay to join the certifying organization in order to participate. There will also be future costs associated with monitoring programs and recertification audits.

Although it may not be measurable in dollars per acre, landowners also bear the cost of their time that is spent preparing management plans and other documentation that is necessary to meet the standards and maintaining necessary records and documentation for future recertification. All systems require verification that activities outlined in the plan have been carried out to some degree before issuing or renewing a certificate.

# 3. Certification Systems

Forest Management certification is the most common type of certification. Forest management certification evaluates the management of a specific piece of forestland against an acceptable standard.

An alternative to traditional forest management certification is Group Certification. Group certification is designed to reduce the cost of certification to each owner by combining individual forest management applications under one certificate holder. Certified groups include forest landowners that have a common forest manager or management team who does not hold title or have any legal or management right to the property. The group manager is someone contracted by the landowners based on some commonality for example proximity, family ties, or a single forestry consultant.

Three common forest certification systems are currently available in the South. In addition, a fourth program, the Forest Stewardship Program is a recognition program with some of the features of a certification program:

- American Tree Farm System (ATFS),
- Forest Stewardship Council (FSC),
- Sustainable Forestry Initiative (SFI), and
- Forest Stewardship Program (FSP).









ATFS is supported by the American Forest Foundation (AFF) and is marketed toward small landowners (10 to 10,000 acres). It is the oldest of the certification programs and was originally applied to industry and other private forests in the 1940's to promote regeneration of forests after harvesting and long-term forest management. ATFS certification is provided free of charge for qualifying landowners. ATFS requires:

- An approved written management plan that protects water quality, wildlife habitat, and soil conservation; produces forest products; and prevents fire, insects, disease and destructive grazing within the forest.
- Inspection of the property by an ATFS volunteer forestry professional. If the property meets the AFF Standards of Sustainability for Forest Certification, the landowner receives a certificate and the recognizable diamond shaped Tree Farm sign.
- Reinspection of the property approximately every five years to maintain Tree Farm certification status.

Although participation in the ATFS program as individuals is free, the group ATFS certification program does have fees associated with it, and depending on the group organization, fees may or may not be passed through to the landowners. The ATFS program recently received international endorsement through the Programme for the Endorsement of Forest Certification (PEFC) schemes, the world's largest umbrella organization for forest certification. Through this endorsement, timber coming from ATFS landowners now meets the certification requirements for SFI mills and supply chains as well as international markets that recognize the PEFC endorsement.

The Forest Stewardship Council (FSC) was founded in 1993 by loggers, foresters, economists, environmentalists, and sociologists to promote environmentally appropriate, socially beneficial, and economically viable management of the world's forests. FSC seeks to ensure that forest management is conducted sustainably in a way that maintains the forest's biodiversity, productivity, and ecology. The FSC standard includes a social component that acknowledges the sustainable forest management benefits to local communities and society. The FSC advocates balancing economic

objectives with ecosystem objectives and the well being of the local community. Forest management certification under FSC is a complex and rigorous process. The fees for certification under FSC vary with the size and complexity of the ownership. The FSC Family Forest program is tailored to small non-industrial forestland ownerships. The Family Forests program is offered in the U.S. for forests or a group of forests less than 2,470 acres (1000 hectares) in size, or low intensity managed forests where less than 20 percent of the average annual growth is harvested. The Family Forest program greatly streamlines the certification process while maintaining the integrity of the FSC standard with the goal of making FSC certification more accessible to small, private landowners.

The FSC Group Certification program, which was started in 1995, certifies a group's forest management model and philosophy. The enrolled group properties must be managed to either the full FSC standard or the abbreviated Family Forests certification standard. Group Certification allows small landowners to participate in FSC certification at a vastly reduced cost. This model provides for certification of consulting foresters, resource managers, landowner associations, cooperatives, land trusts and other woodland owner or management groups. The group manager must meet all the technical and procedural requirements of an FSC forest management certification.

The Sustainable Forestry Initiative (SFI) was adopted in 1994 by the American Forest & Paper Association (AF&PA) as a means to improve the health and sustainability of industrial forestland in the United States. SFI covers nearly all the forest industry land in the United States and is also well represented in Canada. The complexity of the SFI standard and auditing process does not lend itself to the management of family forests. Family forest owners wishing to have their timber sold under the SFI designation may be certified under ATFS.

The FSP is a federal and state-sponsored system, while private groups support the other three. While not technically a certification program, the FSP was initiated through the 1990 Farm Bill to encourage non-industrial forest landowners to develop multiple-objective management plans and practices. Through the cooperative effort of public agencies, landowners

receive technical assistance in developing a stewardship management plan, which also requires an on-site examination. Landowners are required to:

- 1. participate in the development of the plan
- 2. implement the agreed-upon plan
- 3. improve, protect or enhance the resource areas of their choice (wildlife, soil and water, timber, recreation and aesthetics), and
- 4. abide by state and federal laws and regulations that affect forestry activities.

Several states are adapting their FSP to ATFS standards and others may do so in the future. A comparison of systems can be found in the Appendix.

## 4. Requirements and Process

All certification systems require that participants describe their management strategy for wildlife, water quality, aesthetics, timber, recreation and social/economic impacts in a written, up-to-date management plan. Already existing forest management plans may need significant rewriting in order to address each of a series of standards, criteria/performance measures, and indicators dictated by the certification system. The tiered system of standards, performance measures and indicators (Figure 1) provides the framework for the audit and assessment process.

Figure 1. Sample of a standard, performance measure and indicators from the American Tree Farm System 2010-2015 Standards

Standard: Air, Water and Soil Protection

**Performance Measure:** Forest owner must consider integrated pest management to control pests, pathogens, and unwanted vegetation.

#### Indicators:

- Forest owner should evaluate alternatives to manage pest, pathogens, and unwanted vegetation to achieve specific management objectives.
- 2. Pesticides used must be EPA-approved
- Pesticides must be applied, stored, and disposed of in accordance with EPA approved labels and by persons appropriately trained, licensed, and supervised

A standard describes a general principle related to sustainable forest management (e.g., air, water and soil protection in Figure 1). The criteria (or performance measures) for a particular standard must be met for the forest to be certified. These criteria include documentation (plans and records) as well as actions in the forest such as installing stream buffers, managing road layout, and protecting soil conditions. Indicators are used to determine if the criteria are being met; and verifiers are the evidence supporting the indicators. Independent assessors compare indicators to the management records and the performance in the forest, looking for verifiers (evidence) that meet the criteria. Forests that don't meet the criteria may be given time to implement changes so that they can be certified. The number and complexity of standards and indicators varies by system. ATFS and FSP are the least detailed. FSP indicator requirements will vary depending on the objectives chosen by the landowner. FSC and SFI are the most in-depth systems, with over 100 indicators each. The indicators address both management practices and the landowner's system of developing, implementing and monitoring those management practices. They contain standards related to both process and performance. Process-based criteria examine the systems in place that would "catch" activities that violate laws, policies or procedures. Performance-based criteria compare what is actually applied on the ground with the standard.

In general, a landowner interested in forest certification will first need to examine the philosophies, requirements and costs of the four available certification systems. Only then can a landowner choose the most appropriate certification system. The next key step is to contact the certifying organizations or audit agencies responsible for each program. These contacts will provide detailed information on the standards that must be met and the process to be followed. Websites for each of the organizations are listed at the end of this publication; they provide information on their particular standards as well as contact information for their certifiers. Landowners should choose the system that most closely aligns with their management goals and objectives, both short and long term.

The third key step is to be certain that the landowner's management plan and other necessary documentation are ready for close scrutiny. A forestry consultant or the certifying agencies can help determine if a landowner is ready to proceed with a field verification by reviewing the landowner's application and management plan and through interviews with a landowner or the landowner's consultant. If the certifying agency determines that the landowner is not yet ready for a certification audit, the agency may provide a document outlining the necessary steps to bring the operation, management plan and documentation to the appropriate level.

If the certifying agency determines that the landowner is ready for a field audit, all parties will develop a plan for: completing any other necessary pre-audit documentation; conducting the audit; and a schedule for post-audit reports. At this time, all costs associated with the auditor's time should be determined.

A third party audit gives credibility and is required for a landowner to become certified under any of the standards. The audit process is similar for all the systems. Certifiers who have been approved by the governing organizations of the respective systems review the landowner's operation and management plan. However, FSC and SFI audits are much more detailed and comprehensive than for ATFS or FSP. A team of 1-3 auditors will visit the forest to discuss and review the landowner's forest management system. Audit teams generally include a forester, a wildlife biologist, and a representative from one other discipline. A field audit of a large property for FSC and SFI may last 2-3 days, depending upon the size of the property. Audits may be shorter, with fewer people, for the FSC Family Forest or Group Certifications. For FSP and ATFS, the audit may only require part of one day. Conformance with the standard is based on auditor verification that all applicable indicators are present and that the standard has been met, both on paper and in the field. Upon completion of the field audit, the auditors will issue a report to the landowner. If no major issues or problems exist, the landowner will receive certification. Landowners can increase the chances of a successful audit by communicating with the auditing agency and choosing the system that best complements their management goals. Successful certifications may be good for one to five years, requiring a recertification audit on a periodic basis. If a landowner fails the initial certification audit, all systems allow time to correct deficiencies, implement required changes and then schedule a follow-up audit. Upon successful certification, all systems provide some sort of sign and/or public announcement. FSC and SFI also provide on-product labeling.

#### 5. Conclusions

Forest certification continues to grow in application worldwide, particularly on large or industrial properties seeking access to foreign or high-priced markets. In the U.S., certification is one tool available to private landowners that may be used to enhance the technical quality and credibility of their forest management. It is a voluntary process, and although presently there are no discernible stumpage premiums, enrolling in a forest certification program may ease access to future markets and position participants to easily meet future ordinances and local guidelines for forest management. The four systems that are most commonly applied in the U.S. South are similar in the general standards they support, but widely divergent in the criteria and audit processes for determining conformance with those standards. The systems are developing opportunities to become more affordable and accessible to small landholdings. The American Tree Farm and Forest Stewardship Programs have been the most accommodating systems for non-industrial private forest (NIPF) owners so far. The detail required by FSC and SFI may be difficult to attain for many private landowners, but both systems now recognize NIPF lands through certification of groups of landowners (e.g., consulting companies, landowner associations, cooperatives) and SFI recognition of ATFS certification.

Forest certification is gradually becoming the way of doing business. Landowners should sort through the confusion by evaluating the benefits, potential costs, and then weigh these against their ownership objectives. Doing so will better position their forests and families for the future. They should also seek professional advice in the process.

### 6. Additional Resources

AMERICAN TREE FARM SYSTEM Phone: 202.463.2462 www.treefarmsystem.org

FOREST STEWARDSHIP PROGRAM http://www.fs.fed.us/spf/coop/programs/loa/fsp.shtml contact your State Forester's office

DOVETAIL PARTNERS, INC. Phone: 612-333-0430 www.dovetailinc.org

PINCHOT INSTITUTE FOR CONSERVATION Phone: 202-797-6580 www.pinchot.org

SOUTHERN CENTER FOR SUSTAINABLE FORESTS http://scsf.env.duke.edu/

FOREST STEWARDSHIP COUNCIL Phone: 202.463.2462 www.fscus.org

SUSTAINABLE FORESTRY INITIATIVE Phone: 703-875-9500 www.sfiprogram.org

METAFORE Phone: 503-224-2205 www.metafore.org

SOUTHERN FORESTS NETWORK
Phone: 828-277-9008
http://www.southernsustainableforests.org/

SUSTAINABLE FORESTS PARTNERSHIP

Email: sfpinfo@psu.edu http://sfp.cas.psu.edu/

#### 7. References

- American Tree Farm System. http://www.treefarm-system.org. Accessed January 2007.
- Cubbage, Frederick. North Carolina State University. Personal communication. March 2007.
- Cubbage, F. 2007. Forest certification and private forest landowners. Virginia Forests (Winter):4-9.
- Fernholz, Kathryn. 2007. Forest Certification Update: The Sustainable Forestry Initiative (SFI). Dovetail Reports, Dovetail Partners, Inc. Minneapolis, MN. http://dovetailinc.org/reportsview/2007/sustainable-forestry/pkathryn-fernholzp/forest-certification-update-sustainable-for.
- Forest Stewardship Council. www.fscus.org. Accessed March 2007.
- Hansen, E., R. Fletcher, B. Cashore, C. McDermott. Forest Certification in North America. Oregon State University Extension Service. EC 1518. Revised February 2006.
- Howe, J., K. Fernholz, P. Guillery and J. Bowyer. 2004. A land manager's guide to FSC and SFI. Dovetail Partners, Inc. White Bear Lake, MN. 12 p.
- Moorman, C., R. Hamilton. and M. Megalos. Enrolling in North Carolina's Forest Stewardship Program. North Carolina Cooperative Extension Service. WON-23. 3/2000.
- Ozanne, L.K. and R.P. Vlosky. 1997. Willingness to pay for environmentally certified wood products: A consumer perspective. Forest Products J. 47(6):39-48.
- Rana, N., W. Price, and N. Block. "Forest Management Certification on Private Forestlands in the U.S." Pinchot Institute for Conservation, Washington, D.C. August 2003.
- Rickenbach, M.G. 2002. Forest certification of small ownerships: Some practical challenges. J. Forestry 100(6):43-47.

- Sandler, Liz. American Tree Farm System. Personal communication. January 2007.
- Sustainable Forestry Inititative. http://www.sfiprogram. org. Accessed March 2007.
- Tomlin, Steve. "How to prepare for a third-party audit." Journal of Forestry. December 2003. v. 101(8).

# Appendix

# **Comparison of Certification Systems**

Certification System	American Tree Farm System (ATFS)	Forest Stewardship Council (FSC)	Forest Stewardship Program (FSP)	Sustainable Forestry Initiative (SFI)
Sponsor	American Forest Foundation (AFF)	Forest Stewardship Council	USDA Forest Service	SFI, Inc.
Year Established	1941	1993	1991	1995
Primary Scope	US; Non-industrial private landowners with 10,000 acres of less	Worldwide; All forest ownership types	US: Non-industrial private landowners	US and Canada; Industrial Forests
Fee	No fee for individual landowner certification; Fee for group certification	Yes	No	Yes
Basis For Participation	Voluntary	Voluntary	Voluntary	Required for AF&PA members; voluntary for others
Governance	Self-governing	Board of Directors and membership	State Forestry Agency	Sustainable Forestry Board
Standard Development	Independent, multi- stakeholder panel; approved by the AFF Board of Trustees	Committees of stake- holders with public input	USDA Forest Service in cooperation with other public agencies	Sustainable Forestry Board with public input
Issues Covered by Standard	Environmental and silvicultural	Environmental, silvi- cultural, economic and social	Environmental, silvi- cultural	Environmental, silvicul- tural, economic and social
Verification Options	2nd or 3rd party	3rd party required	1st or 2nd party	3rd party
Eco-Label Imple- mented	No	Yes	No	Yes
Chain of Custody System Implemented	No	Yes	No	Yes
Certified Acres in United States	24 million	31 million	31 million	56 million