

EC 1518 • July 2000 \$1.50

An introduction to Forest Certification

M. Rickenbach, R. Fletcher, and E. Hansen

forest certification, or green certification, is an attempt to identify forestland that is well managed toward a goal of *sustainability*. Sustainability includes the ecological, economic, and social aspects of managing forests.

Certification of public and private forests is an issue that goes beyond our local forests and even beyond the confines of the United States. It's a major topic of discussion worldwide, and everyone has his or her own perspective on it. Environmental groups see it as a way to verify a landowner's or firm's commitment to sustainable forestry. Industrial forest companies and some government agencies hope to use their certification to get credit with the public for conservation efforts. Wood products companies hope to capture new markets and gain market advantage by showing *eco-labels* to their customers as proof of good environmental performance.

New certification systems are developing, and older ones are changing. Companies, landowner groups, and others are lining up behind their favorite systems. Only time will tell which systems survive and what form they will take. Certification of some sort, however, will be with us for some time to come.

Worldwide growth and evolution

Certifying a forest as well managed has been practiced in the United States since 1941 when the American Tree Farm System was created. Tree Farm, now sponsored by the American Forest Foundation (AFF), was not created in response to market pressures—as some current systems have been. Membership has always been limited to properties that have passed inspection by a tree farm inspector appointed by AFF.

Since the early 1990s, new certification systems have appeared. The Worldwide Fund for Nature and other environmental groups created the Forest Stewardship Council

Authors

Mark Rickenbach, former OSU Extension forestry research associate and current Extension forestry specialist at University of Wisconsin-Madison; Rick Fletcher, Extension forestry agent, Benton County, and associate director, The Sustainable Forestry Partnership, and Eric Hansen, Extension forest products marketing; both of Oregon State University.



OREGON STATE UNIVERSITY
EXTENSION SERVICE



*Chain of custody
Ability to track
wood from the
time it leaves the
forest through the
processing and
marketing
channels to the
final consumer,
in order to ensure
that what ends up
labeled as a
certified product
can be traced
back to a
certified source.*

(FSC) with its international certification system in 1993. The intent was to protect tropical forests and to help tropical timber producers avoid boycotts of their products in Europe's environmentally sensitive wood products markets.

The United-States-based American Forest & Paper Association (AF&PA), an industry trade group, has developed a system called the Sustainable Forestry Initiative (SFI). Although directed primarily at its member companies, the system is expanding to include other private and public ownerships.

Nonindustrial private forest owners in the United States have additional options. A few are opting for the FSC system. Most, however, remain undecided. Tree Farm was reworked to more closely reflect a modern forest certification system. The National Forestry Association (NFA) has developed a new system, called Green Tag, for woodland owners.

Trends outside forestry also have encouraged the creation of certification systems. Large corporations' move to standardize management systems in Europe and North America led to the adoption, in 1994, of the International Organization for Standardization (ISO) 14001 Environmental Management Standard. While not specific to forestry, forestry operations can use its environmental management system framework.

Outside the United States, many local and country-based systems have been proposed or developed. In the South Pacific, for example, Indonesia has its own certification system, while Australia and New Zealand are devising ones.

Forest owners in Europe have created an alternative to the FSC. This system, Pan European Forest Certification (PEFC), currently has efforts in 17 European countries and hopes to have 25,000,000 acres certified by the end of 2000. This system includes *chain of custody* and an eco-label. Some woodland and landowner organizations in the United States are actively discussing aligning with the PEFC system.

+ two approaches to certification

Certification systems typically are either systems based or performance based. The difference is important: it reflects who sets the criteria for a well-managed forest.

Under a systems-based approach, the landowner is responsible for setting up a system to track environmental performance. Landowners can tailor the system to their own objectives and situation. Under SFI, the certifier identifies the broad system components; ISO 14001 requires the landowner to design an entire environmental management system. Though setting one's own standard may be attractive from a property rights perspective, it is not as strong a statement in the marketplace as performance-based certification, which requires landowners to meet standards that are independently set.

In performance-based systems, the certification system outlines the requirements. The system may specify certain actions or practices that are acceptable or unacceptable. For example, there may be limits on the use of herbicides or on the size of clearcuts permitted. The FSC, Green Tag Forestry, and Tree Farm systems are performance-based systems.

Performance-based systems range widely in the degree of performance required and in the types of criteria. Tree Farm has 10 broad-based performance measures, while FSC and Green Tag require verified conformance with 50 or more indicators.

Hybrid programs such as SFI include elements of both systems- and performance-based plans. For example, SFI allows companies to set many of the targets within their own management systems but requires conformance to others that SFI sets, such as reforestation after harvest.

Those familiar with certification systems view FSC as supported by the major international environmental organizations. Tree Farm, Green Tag, and SFI are considered more aligned with landowners and the forestry industry. ISO is seen as originating outside this traditional split yet closely aligned with corporate accounting strategies—in this case, environmental accounting.

Forest certification standards development

Standards are set very differently. The SFI, Green Tag, and Tree Farm standards are set internally by committees empowered by the certifying organization. FSC employs regional rules committees that include input from many outside stakeholders, which can include environmentalists, landowners, industry, civic groups, state and federal agencies, and other interested individuals. ISO also has a public input process.

Each system takes on the flavor of the rule-making process. Most notably, SFI, Green Tag, and Tree Farm generally focus more on the traditional-forestry aspect of management, and FSC provides greater details on the ecological and social aspects.

Verification process oversight

Verification (sometimes referred to as *assessment*) is the actual comparison of a forestry operation to the certification system's standard. In the FSC and Green Tag systems, auditors accredited by the sponsors are responsible for conducting verifications. FSC and Green Tag play the role of systemwide police by ensuring the consistent application of their systems. In the Tree Farm system, the certifying organization directly oversees verifications. SFI and ISO allow for both internal and independent verifications.

Verification process

Exact steps of verification differ by system, but the process generally has four stages:

- Preliminary discussions
- Field verification
- Verification report
- Follow-up audits

The more complex the system, the more time each step takes. A Tree Farm verification generally takes a day or less, but an ISO verification may take a week. The goal of verification is to see whether the candidate's operation conforms to the certification system. At first glance it may appear that verification is a yes/no decision, but in practice it is more a negotiated agreement.

*Eco-label
Proprietary
symbol used to
identify a
product that has
been produced
according to
a given
environmental
standard.*



Certification system

A system of standards used to identify a well-managed forest. There are three types of certification systems: first-party, second-party, and third-party. Rules and processes are defined in a first-party system by the individual or firm seeking certification; in a second-party system by a customer or trade association; and in a third-party system by an independent organization that includes a clear, documented stakeholder or public involvement process.

For example, a certification may be awarded with a condition that the landowner will

adopt a new practice, such as designated skid trails during harvest operations.

forest certification in perspective

Certification offers certain opportunities—and currently faces several limitations. A landowner moving toward one or more systems needs to consider both sides of the equation.

Opportunities

Image Certification may enhance how environmental groups and the public view management activities.

Credibility Certification may provide additional credibility to claims of good management.

Premiums Certification may yield price premiums from buyers.

Market access Certification may maintain or create access to markets (e.g., upscale architectural uses or some European markets) that favor certified products.

Limitations

Limited demand At this point, the certified products market is a minor, but growing, part of the overall wood products market.

Chain of custody To reap the returns of potential premiums or market access, chain of custody must be maintained from the forest to the consumer. This may be difficult for some products such as paper and other composite materials, which come from many different sources.

Changing standards Certification systems continue to evolve and change. As of yet, no clear leaders are apparent. So, the “right” system (i.e., the one that best meets your needs) today may not provide the same benefit in the future.

Costs

Direct costs of certification vary widely. An FSC field assessment or ISO audit can cost from \$3,000 to \$7,000 for a 200-acre parcel; a Tree Farm inspection is free to the landowner.

Overall, the more detailed the system, the more certification will cost.

In addition, the landowner must consider the indirect costs of establishing and maintaining certification. They might include inventory or monitoring requirements and forestland set-asides for nontimber uses. Indirect costs may surpass the direct costs of the initial verification.



Certification in the near future

Systems

While each organization has an interest in promoting its own system, these interests may change over time. Four forces are likely at work: proliferation, competition, evolution, and convergence and harmonization.

Proliferation As the market for certified products develops, various groups will likely design new certification systems to either capitalize on market demand or avoid being left out of the marketplace. In the short term, there will likely be more systems before the weaker ones fall aside.

Competition There is strong competition among the systems. In the mid-1990s, FSC and SFI were aggressively attacking each other's system. Recently, this heavy competition has decreased, and leaders of the systems have met to discuss the future of certification. However, competition remains heated both to attract landowners that want to become certified and to establish "brand" awareness in the marketplace for certified products.

Evolution Competition and the need to develop the marketplace clearly have resulted in an evolution of systems over time. At first, FSC did not allow its eco-label to be used on products such as particleboard or furniture

that contained both certified and non-certified materials. Marketplace realities soon changed this, and FSC developed a policy to allow percentage-based claims.

Similarly, SFI originally did not allow a third-party verification option. However, as time passed, some members clearly needed to have that option to validate their performance claims more objectively. AF&PA companies now can choose to have their lands independently verified for compli-

ance with the SFI system. In addition, AF&PA has begun exploring its options for an eco-label.

Tree Farm recently adopted mandatory performance measures for new and continuing membership. Green Tag, the newest system, has undergone rapid changes in scope and depth to remain competitive with other systems.

Convergence and harmonization Competition in the certification marketplace is making the systems more similar over time. As this continues, pressure from the marketplace is likely to eliminate confusion resulting from multiple eco-labels. This pressure eventually will foster harmonization among the systems. In practice, this could mean that a forest certified through the FSC system would carry an SFI product label, or vice versa, depending on how the market develops.

Markets

The marketplace's overall acceptance is a critical factor in the future of certification. To date, consumers have not truly affected the development of certification. However, as certified products become more visible, consumers may begin to recognize eco-labels and to seek out products that carry them.

Demand for certified products in today's marketplace comes from large corporations that wish to avoid the risk of damaging their brand image. That brand image can be

*Verification (assessment)
The comparison of the landowner's forest management practices, plans, and other documentation against a certification system's standards. Verification can be first-, second-, or third-party. A first-party verification is conducted and decided by the individual landowner or firm itself; a second-party verification by a customer or trade association; and a third-party verification by an independent organization.*

damaged if the company is buying products that do not meet with the approval of powerful environmental groups. The Home Depot, a national chain of home improvement stores, recently committed to purchasing certified forest products. Much of the pressure that led to this decision was from the Rainforest Action Network (RAN), which led a multiyear campaign against the company. Seeing the lesson of The Home Depot, other major retailers in the United States have since made similar commitments to avoid protests from environmental groups.

RAN shifted its focus to the home-building industry with a similar campaign against the largest homebuilders in the country, Centex Homes and Kaufman & Broad. The mere threat of protest caused these companies to develop policies favoring certified products.

Another important factor in the demand for certified products in the United States is

the current growth of the Certified Forest Products Council (CFPC). CFPC is a membership organization designed to increase the demand for certified products. Companies that join CFPC commit to work toward purchasing certified wood products whenever possible. Members such as The Home Depot have been key in driving interest in certification among wood products producers.

Considering all the factors in the current marketplace, there is considerable potential for huge growth in the demand for certified products. Still, as a share of the market, certified production is still probably less than 1 percent of the overall forest products market in the United States, and it is difficult to predict when and to what extent forest and wood products certification will become mainstream.



Comparison of Forest Certification Systems of Interest to U.S. Forest Owners

| | Family Forests | | Industrial or Corporate Forests | | |
|---|--|---------------------------|---------------------------------|--|--|
| | Green Tag Forestry | American Tree Farm System | Forest Stewardship Council | Sustainable Forestry Initiative | International Organization for Standardization |
| General Features | | | | | |
| Sponsor or auditors | NFA | AFF | SCS, SmartWood | AF&PA | ISO |
| Scope | national | national | international | national | international |
| Year established | 1998 | 1941 | 1993 | 1995 | 1994 |
| Type of certification system | performance | performance | performance | combination | systems |
| System development | 2 nd party | 2 nd party | 3 rd party | 2 nd party | 3 rd party |
| Verification options | 3 rd party | 3 rd party | 3 rd party | 1 st , 2 nd , or 3 rd | 1 st or 3 rd |
| Direct costs for 3 rd -party verification | moderate | minimal | expensive | expensive | expensive |
| Region-specific rules | in some areas | in some areas | in some areas | no | no |
| Chain of custody & eco-label | √* | | √ | | |
| General Expectations | | | | | |
| Compliance with existing laws | √ | √ | √ | √ | √ |
| Requires written forest plan | √ | √ | √ | | |
| Documentation & monitoring | √ | | √ | √ | √ |
| Continuous improvement | √ | | √ | √ | √ |
| Verification report available to public | √ | | √ | | √ |
| Forestry-specific Expectations (that exceed applicable laws)** | | | | | |
| Planning & Management | Biodiversity (incl. endangered species) | √ | √ | √ | √ |
| | Chemical pesticide & herbicide use | | | √ | |
| | Forest aesthetics | √ | √ | | √ |
| | Forest health | √ | √ | √ | √ |
| | Landscape consideration | √ | | √ | |
| | Nontimber products | √ | | √ | |
| | Protect, enhance fish & wildlife habitat | √ | √ | √ | √ |
| | Protection of "special" sites | √ | √ | √ | √ |
| | Reforestation | √ | √ | √ | √ |
| | Silvicultural treatments | √ | | √ | √ |
| | Stream protection & water quality | √ | | √ | √ |
| Operations | Sustained yield | √ | √ | √ | √ |
| | Road design, building, & maintenance | √ | | √ | |
| | Skidding & yarding | √ | | √ | |
| | Slash disposal & product utilization | √ | √ | √ | √ |
| Social & Economic | Tree felling | √ | | √ | |
| | Community relations | √ | | √ | √ |
| | Contractor relations | √ | √ | √ | √ |
| | Indigenous rights | | | √ | |
| | Landowner tenure, rights, responsibilities | √ | | √ | √ |
| | Long-term economic viability | √ | | √ | √ |
| Recreation | √ | √ | √ | √ | √ |
| | Green Tag | Tree Farm | SCS | SFI | ISO |

ISO is a systems-based approach that does not restrict specific practices beyond compliance with applicable laws. Performance expectations are documented in an Environmental Management System.

√ indicates specific reference to a particular criterion. It does not evaluate the cumulative effects of several criteria together nor does it imply an equal standard of rigor. Before considering the merits of individual systems, review the actual program materials available from the certification system developers or certifiers.

*Green Tag Forestry does have a chain-of-custody option, but it had yet to be applied at the time of this printing.

**These and other expectations may be addressed through a participant's management plan but are not expressly required.



Partial support for this publication was provided by the MacArthur Foundation through a grant to The Sustainable Forestry Partnership, a growing network of universities and other organizations that wish to document innovations in sustainable forestry and see them integrated broadly into practice.

for more information

For more information on sustainability and forest certification in general, contact the following individuals and organizations.

University of Wisconsin-Madison

Mark Rickenbach 608-262-0134

OSU College of Forestry

Eric Hansen 541-737-4240 or
Rick Fletcher 541-737-8304

The Sustainable Forestry Partnership

<http://sfp.cas.psu.edu>

- Oregon State University 541-737-4991
- Auburn University 334-844-1037
- Penn State University 814-865-7932
- National office, in Washington, DC 877-737-4937

For information on specific certification systems:

American Forest & Paper Association

Washington, DC
202-463-2700
www.afandpa.org/index.html

American Tree Farm System

Washington, DC
888-889-4466
www.affoundation.org

Green Tag Forestry (contact: Keith Argow)

Washington, DC
888-503-6737

Forest Stewardship Council

Washington, DC
877-372-5646
www.fscus.org

U.S.-based FSC verifiers

- Scientific Certification Systems (SCS)
Oakland, CA
510-832-1415
www.scs1.com/forest.html
- SmartWood/Rainforest Alliance
Richmond, VT
802-434-5491
www.smartwood.org

© 2000 Oregon State University. Produced and distributed in furtherance of the Acts of Congress of May 8 and June 30, 1914. Extension work is a cooperative program of Oregon State University, the U.S. Department of Agriculture, and Oregon counties. Oregon State University Extension Service offers educational programs, activities, and materials—without discrimination based on race, color, religion, sex, sexual orientation, national origin, age, marital status, disability, and disabled veteran or Vietnam-era veteran status. Oregon State University Extension Service is an Equal Opportunity Employer.

Photos on pages 1, 2, 3, and 6 by Rick Fletcher, OSU Extension Service; page 5, Forestry Media Center, College of Forestry, Oregon State University; page 8, Starker Forests.

Published July 2000.