

DEVELOPING MARKETS FOR CERTIFIED
FOREST PRODUCTS: A TEACHING CASE
STUDY OF COLLINS PINE COMPANY WITH
BACKGROUND NOTES

by

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TABLE OF CONTENTS

6	<i>Company History and Forest Management Philosophy</i>
6	<i>Production Capacity</i>
7	<i>Collins Pine and Almanor Forest</i>
7	<i>Kane Hardwoods</i>
7	<i>Fremont Sawmill</i>
8	<i>Collins Products</i>
8	<i>Marketing Strategy</i>
8	<i>Quality</i>
8	<i>Shorter Distribution Channels</i>
8	<i>Company Image</i>
9	<i>Encouraging Competition</i>
9	<i>Certification of Collins Pine</i>
10	<i>Certified Products Marketing Experiences</i>
10	<i>1. Pine Shelving</i>
11	<i>2. White Fir Furniture Stock</i>
11	<i>3. Veneer Logs</i>
11	<i>4. White Fir Construction Lumber</i>
12	<i>5. Hardwood Flooring</i>
12	<i>Lessons Learned from Certification</i>
12	<i>1. Limited Market Demand</i>
12	<i>2. Unfavorable Consumer Perceptions</i>
13	<i>3. Limited Distribution Channels</i>
13	<i>4. Difficulties in Meeting Specific Market Demands</i>
13	<i>5. Limited Product Availability</i>
13	<i>Wade Mosby's Task</i>
14	<i>Case Assignment</i>
15	<i>Background on Forest Certification</i>
15	<i>Limited Demand</i>
16	<i>Cost of Certification</i>
16	<i>Chain-of-Custody Requirements</i>
16	<i>Environmental Group Support</i>
16	<i>Initiatives</i>
17	<i>Sustainable Forestry Initiative (SFI)</i>
17	<i>The Canadian Standards Association's (CSA) Sustainable Forest Management Standards</i>
17	<i>Forest Stewardship Council (FSC)</i>
18	<i>Public Land Certification in the United States</i>
18	<i>Influence of Buyer's Groups</i>
19	<i>Certification in Scandinavia</i>
21	<i>Literature Cited</i>

DEVELOPING MARKETS FOR CERTIFIED FOREST PRODUCTS: A TEACHING CASE STUDY OF COLLINS PINE COMPANY WITH BACKGROUND NOTES¹

by

Eric Hansen
John Punches

Although forest products marketing courses are common in forestry curricula, the set of teaching materials available to support instructors is very limited. For those wishing to use the case method, very few up-to-date marketing case studies are specific to the forest products industry. This publication provides an example of one based on Collins Pine Company of Portland, Oregon. In the early 1990s, the company committed itself to third-party certification of its forests and began marketing certified forest products. The case examines the company and its efforts in developing markets for certified products, and asks students to formulate their own plan for enhanced market development for the company. A set of teaching notes to facilitate the use of the case is available from the senior author (hansenen@frl.orst.edu).

In 1997, Wade Mosby, Vice President of Marketing for Collins Pine Company, was faced with the difficult task of outlining a market development strategy for the company's third-party certified products. He and others in the company had been working for over 3 yr to develop markets, yet only about 5% of the products processed from the company's certified logs were being sold as certified. As one of the first companies in the US to offer certified products, the company was finding market development to be a significant challenge. This type of challenge is typically faced by companies that pioneer a new marketplace or market concept.

The idea of becoming certified had originated with Wade. After observing changes in the European industry and watching a number of trends domestically, he believed the company could gain a competitive advantage from forest certification and moved in that direction in the early 1990s. Third-party certification involved having an outside company, Scientific Certification Systems (SCS), make an on-site evaluation of company management in three categories: timber resource sustainability, forest ecosystem maintenance, and socio-economic benefits. Certification enabled the company to

¹This case study is framed around a company's experiences with forest certification prior to 1997, when staff of Collins Pine Company were interviewed. The background material on forest certification is not intended to serve as a source of current information on this rapidly changing field.

use an ecolabel on their products and claim that their forests are well managed.

Since the company had committed to becoming certified, management of the world's forests had become an increasingly important issue among governments, nongovernmental organizations, industry, and even consumers. Increasing pressures were being placed on businesses that use wood or wood-based products to take a critical look at where their raw materials originated. Consequently, there had been a worldwide movement towards forest certification. Large industrial suppliers of wood and paper products in Sweden and Finland were aggressively positioning themselves to provide certified products to central European customers. The European marketplace for certified products, though new, was better developed than in the US. Still, interest in US markets was increasing.

COMPANY HISTORY AND FOREST MANAGEMENT PHILOSOPHY

Collins Pine was experienced with the concept of sustainable forestry. For over 50 yr, the company had used conservative forest harvesting practices. Privately held, the company operated under the philosophy that its forest resource should never be depleted. Its forest managers based harvest levels on growth rates, rather than mill demands, and worked hard to maintain wildlife habitat, water quality, and a host of other nontimber values.

Despite its name, Collins Pine started out as a hardwood producer. In 1855, Truman D. Collins made the first purchases of land and timber in Pennsylvania's Allegheny Plateau. Over the years, he and succeeding family members bought and sold land in Washington, Oregon, and California. The company's prized Almanor Forest, near

Chester, California, was purchased in 1902, and Everell S. Collins established the company's headquarters in Portland, Oregon, in 1918.

Truman W. Collins, grandson of the company's founder, was the progenitor of its current management philosophy. After completing a degree at the Harvard Business School, he returned to the family business armed with new ideas. He implemented a sustained-yield forest management system at the company's Chester operation, emphasizing uneven-aged management and single-tree selection. The system was based on USDA Forest Service models being researched at the time. While the Forest Service and most of the forest industry ultimately opted for even-aged management models, Collins Pine maintained and improved upon the uneven-aged system in its Almanor Forest.

Today, the company manages forest lands in Lakeview, Oregon; Chester, California; and Kane, Pennsylvania. Its eastern and western forests differ greatly in climate and species, requiring significantly different management. While its western forests respond well to the Truman W. Collins style of uneven-aged management, the forests of the Allegheny Plateau do not. Here, even-aged silvicultural systems are used to ensure regeneration of desired tree species. Across all of its forests, however, the company applies its conservative philosophy—harvesting less than is grown and protecting nontimber forest values.

PRODUCTION CAPACITY

Today, Collins Pine operates sawmills in conjunction with its forest holdings in Chester, California, and Kane, Pennsylvania, and through its affiliate Ostrander Resources in Lakeview, Oregon. The company

produces plywood, hardboard, and particle-board at its Klamath Falls, Oregon, operations that are known as Collins Products. Collins Resources International Ltd. markets Collins Pine's and other's products internationally from the Portland headquarters.

COLLINS PINE AND ALMANOR FOREST

Collins Pine manages over 95,000 ac of forest lands in the Chester-Almanor region of the Sierra Nevada mountains in California. The land was purchased in 1902, but lumber milling did not begin until 1943. Primary species at this site include ponderosa pine, Jeffrey pine, white fir, sugar pine, Douglas-fir, and incense-cedar. Production emphasizes ponderosa and Jeffrey pine, which have nearly identical wood characteristics. White fir is present in large quantities, much of it in small diameters, and the company must aggressively harvest this species to facilitate regeneration of ponderosa and Jeffrey pine. The location supports an annual allowable cut of approximately 30 million board feet (MMBF) of logs—sufficient (due to overrun from sawing efficiency) to provide roughly half of the mill's raw material needs. The location's sawmill, operating a band headrig, has a 75-MMBF annual capacity. The site includes dry kilns, a planing mill, a remanufacturing plant for cut-stock and specialty products, a short-line railroad, and electric power cogeneration.

KANE HARDWOODS

Kane Hardwoods owns and manages approximately 122,000 ac of hardwood forests in the Allegheny region of northwestern Pennsylvania. Forest lands are stocked primarily with black cherry, red oak, white oak, white ash, hard maple, soft maple, and beech. Foresters here dictate a conservative annual

allowable cut of approximately 7 MMBF of logs, much of which is cherry. The location's modern band-mill has an annual capacity of approximately 20 MMBF. In addition, the company operates a dimension plant with a capacity of 4 MMBF and has a dry kiln capacity of 14 MMBF. Lumber is sold either dry or green, depending on market demand. Domestic and export lumber, dimension blanks and squares, glued panels, flooring, and mouldings are all produced at this location. Export logs are sold on the open market, and certified veneer logs are sold by cooperative agreement to an out-of-state veneer-slicing operation. Low-grade material is used by the plant's dimension facility or sold as pallet stock. Bark from the plant's operations is sold as a lawn product or mushroom bedding. Small logs may be sold as pulpwood, and wood residue is burned to heat the manufacturing facilities or sold to nearby pulp facilities.

FREMONT SAWMILL

An affiliated company, Ostrander Resources, has operated Fremont Sawmill, a softwood lumber mill in Lakeview, Oregon, since 1945. Nearly 80,000 ac of timberland in southeastern Oregon and northern California are managed in conjunction with this mill. Annual allowable cut is roughly 10 MMBF of logs. Production is approximately 35% white fir, 55% ponderosa pine and Jeffrey pine, and 10% lodgepole pine and incense-cedar. The slow growth characteristic of trees in this region result in high-quality wood.

Fremont Sawmill has a capacity of approximately 40 MMBF annually and produces primarily industrial and framing lumber. The operation also includes dry kilns and planer capacity. Small-diameter white fir is currently sold on the chip market to facilitate forest management activities in stands overstocked with this species.

COLLINS PRODUCTS

Plywood, particleboard, and hardboard are all produced at the Collins Products facilities in Klamath Falls, Oregon. The plywood facility has an annual capacity of 160 million ft² (3/8-in. basis). Products include structural underlayment, sheathing, sanded plywood, and tongue and groove plywood. The particleboard mill operates with an annual capacity of 120 million ft² (3/4-in. basis). Thicknesses range from 1/2 to 1-1/4 in. The hardboard facility has an annual capacity of 130 million ft² (7/16-in. basis). It produces hardboard siding in 1/2- and 7/16-in. thicknesses.

No forest lands are owned in conjunction with the Collins Products mills. It obtains its wood raw materials from a variety of public and private forest owners, and uses wood residue from Collins Pine's Chester and Lakeview operations.

MARKETING STRATEGY

Collins Pine has been serving commodity markets, mostly industrial and construction lumber, for a long time. Most sales functions are centralized at its Portland office. Collins Resources International Ltd., which operates out of the company's Portland headquarters, provides a wholesaling function and acts as an international sales force. It also purchases wood from outside sources for export. Traditionally, Collins Resources International Ltd.'s marketing efforts concentrated on western Europe, but the Pacific Rim was recently identified as an area for expansion.

Certification had only recently become a component of company strategy, complementing and to some extent altering other more established strategies. Wade Mosby characterized these strategies as described in the following sections.

QUALITY

Product quality is the company's single most important competitive advantage. The company's forest management strategy promotes longer rotation ages and yields larger, higher quality logs; manufacturing operations strive to maintain high levels of technical quality.

The company pays close attention to customer concerns. Customers are regularly brought to the mills and asked to evaluate the company's effectiveness in supplying quality products. They are encouraged to examine lumber piece by piece and share their likes and dislikes. Wade feels this gives the company a much better understanding of customer needs and leads to a higher quality product.

SHORTER DISTRIBUTION CHANNELS

Wade led recent efforts to shift the company's efforts away from commodity marketing and toward specialty segments more likely to compensate the company for its high-quality products. Added emphasis has been placed on industrial and specialty markets. Distribution channels have been shortened, with the company concentrating on selling direct rather than through brokers or wholesalers. Shorter channels allow the company to deal more effectively with higher value markets and to some extent offset the added costs of dealing in smaller volumes. Shorter channels also enhance the company's ability to communicate with the customer and educate them on the characteristics and benefits of products, both certified and noncertified.

COMPANY IMAGE

Collins Pine works diligently to maintain a respected company image. The company goes to great lengths to facilitate anyone inter-

ested in its story by providing tours, giving talks, and being interviewed. Many of the foresters have become expert public relations people—and much of their job involves communicating with the public and giving forest tours.

Certification has been a boon to company image, as demonstrated by the many positive newspaper and magazine articles covering the event. Articles have appeared in everything from forest industry sources to environmental organization publications. In addition, the company has gained credibility from certification, which has played a large part in its ability to actively work with local and international environmental organizations. The company was even recognized for its efforts by the President's Council on Sustainable Development, which awarded Collins Pine the President's Sustainable Development Award in 1996.

"CollinsWood®", the company's brand name, is beginning to gain recognition, and customers are starting to recognize CollinsWood® even though they do not necessarily recognize the company's name.

ENCOURAGING COMPETITION

Defying conventional corporate logic, Collins Pine actively encourages other forest products companies to seek certification and begin offering certified products. Wade and others in the company were convinced that limited supply and poorly developed distribution channels inhibited market development for certified products. One executive estimated that only 0.5% of US forest products consumption was certified in 1996, but approximately 10% would be necessary to make the system work efficiently. Thus, the company actively encourages and assists other companies interested in seeking certification.

CERTIFICATION OF COLLINS PINE

Wade Mosby envisioned certification as a way to validate and publicize the company's already conservative forest harvesting practices. He had done his homework on certification and convinced managers to pursue third-party certification. Wade knew that in order to gain any sort of market advantage from certification, the certifier itself would need to be credible.

While several organizations could assess the operations, only two had a track record in certification. The SmartWood program, sponsored by the environmental organization Rainforest Alliance, was taking shape and looked as though it might be well positioned to garner support from the environmental community. In the end, however, Wade chose Scientific Certification Systems (SCS) to conduct the assessment.

At the time, SCS had little experience in forest certification. However, it had a well-established record of certifying organic farming operations, conducting life-cycle analysis, and validating recycled content claims. Its "Green Cross" ecolabel was becoming recognized in the marketplace, and Collins Pine would be able to incorporate the label into its own promotional materials if successfully certified.

Collins Pine commissioned SCS to assemble a team of experts, conduct a site visit and preaudit, and return for an extensive audit of its forest management operations. SCS would assess performance under three broad areas: timber resource sustainability, forest ecosystem maintenance, and socioeconomic benefits. Ultimately, it would assign a score to forest management and issue a comprehensive report. SCS would also evaluate the company's ability to track raw material from source to consumer, a process referred to as "chain-of-custody" tracking.

The first holding that SCS evaluated was the Almanor Forest, which gained SCS's "State-of-the-Art, Well-Managed Forest" designation in 1993. Wade then set his sights on certifying Kane Hardwoods, which included the company's oldest land holdings. Kane Hardwoods was evaluated by SCS and granted the "Well-Managed Forest" designation in 1994.

Wade expected to see all company forests and manufacturing operations certified. He recognized that certification of Collins Products would be difficult, as the company used raw material from many different sources. Only a small proportion originated from its own certified forests, and even this material was often "contaminated" with noncertified material before it left the sawmill. Obtaining certification for Collins Products would mean convincing the Forest Stewardship Council (the certification "rule-maker") that Collins should be able to promote the certified content of its products as a percentage, rather than being able to trace any particular fiber back to its source. Wade anticipated, too, that certification of the Lakeview forests might present difficulties. Much of the forest land associated with the Fremont mill had been recently purchased and came with a legacy of overharvesting or undermanagement. Getting this land certified would depend upon how well forest managers could document growth potential and show how they would bring the forest up to acceptable standards.

Once a forest was certified, extra costs were incurred, and these initial direct costs were only part of the equation. The biggest certification costs came in response to suggestions in the certifier reports. The suggestions resulted in increased road maintenance, more detailed forest inventory data and the systems to manage that information, and even the addition of another employee in the Kane forest management team to deal with the

increased workload. In the mills, chain-of-custody requirements meant increased labor costs for sorting and segmenting certified logs, lumber, and other products throughout the manufacturing process. Chain-of-custody costs continued into the company's sales and distribution functions, as the certified material had to be treated as a separate product. Even with these changes, it was estimated that certification cost less than 1% of sales in the early years, and this was expected to decrease over time.

While it was easy to think of the changes as "costs" of certification, managers recognized that the changes had been good investments. Product tracking had improved, and managers were better able to tailor mill runs to the raw material source. Certification had actually encouraged them to increase harvest rates of white fir in their western forests, which would in turn favor growth of the more valuable pine species in the future. Perhaps most significantly, the more detailed forest inventory data at the Kane location strongly suggested that harvests could be significantly increased (perhaps even doubled) without reducing forest productivity. The one thing lacking was a distinct competitive advantage resulting from offering certified products.

CERTIFIED PRODUCT MARKETING EXPERIENCES

Wade pondered the five significant certified product initiatives he had fostered over the past several years. Each had some level of success, but unfortunately the most profitable ones had also been short lived.

1. PINE SHELVING

Pine shelving was developed for and sold to The Home Depot (the largest building

supply home center in the US). The product had been carried in six stores in the San Francisco Bay area of California. By eliminating intermediaries in the distribution process, Collins Pine was able to obtain 15% more for the product than would have been obtained through normal channels. The material was sold as CollinsWood® appearance grade, a proprietary grade designed to meet customer preferences while optimizing the recovery of raw material value.

The pine shelving product sold well, and store managers liked it; however, the product was dropped by The Home Depot in late 1996. The specific reason for this action was unclear, but Wade suspected that problems associated with warehousing the product and the limited supply contributed to the decision. The Home Depot warehouse in Stockton, California, stored the product separately (due to chain-of-custody requirements), and Collins Pine was unable to supply sufficient volumes to meet demand generated by more than a few of The Home Depot's many stores.

2. WHITE FIR FURNITURE STOCK

White fir lumber had been sold to Lexington Furniture and was a great success from Collins Pine's perspective. The company received a 40% price increase over what the same material would have been worth as construction lumber.

Lexington's "Keep America Beautiful" furniture line had been designed by Bob Timberlake. Promotional efforts focused on the "environmentally friendly" construction (certified wood, hardware made from recycled materials, and water-based finishes), and it was hailed as a significant development in the furniture industry. Cable television's "The Furniture Show" featured the line and included footage of the mill in Chester along with interviews with the chief

forester and general manager. The furniture line was also covered in the December 1994 issue of *Furniture Design & Manufacturing*.

Although the line sold over \$5 million during its first year and might have been considered successful by a smaller company, the cash flow was insufficient for Lexington Furniture to justify its maintenance. It was discontinued after only a year of production.

A number of factors limited the line's success. The furniture was large and bulky, overpowering rooms in an average single-family home. Individual pieces were priced fairly high and, although over 100 different pieces were available, no suite prices were offered. Moreover, white fir was not well received by many consumers, who were more accustomed to hardwood furniture. Finally, pieces were often damaged during shipping; at times they were dropped and the brittle white fir had a tendency to split, requiring packaging to be redesigned and causing general frustration within Lexington Furniture.

3. VENEER LOGS

High-grade veneer logs were sold under an exclusive agreement to The Freeman Corporation, which operated a veneer-slicing operation in Kentucky and marketed the veneer as certified. Their cooperative agreement included a formula for profit sharing that would be triggered when The Freeman Corporation recognized consistent premiums for certified veneer. While profit sharing had yet to reach significant levels, a stable buying arrangement and alliance with a company that helped promote certification was beneficial.

4. WHITE FIR CONSTRUCTION LUMBER

White fir dimension lumber was being sold in Austin, Texas, to take advantage of

the Austin Green Builder Program, which encouraged the use of “sustainable” building materials. Wade found that white fir could compete with southern pine in this market and had some value advantage over southern pine in the larger dimensions (e.g., 2×8 and 2×10). No consistent premiums had yet been attained for this product, and prices were basically driven by the price of southern pine. Since builders in the area were accustomed to southern pine, Wade was fairly certain that this market would have been unavailable without the ability to offer a certified product.

5. HARDWOOD FLOORING

On one bright note, Kane Hardwoods found a profitable market for its low-grade cherry lumber. Traditionally sold as pallet stock, it was now going to a company that used it to produce rustic flooring for a price about twice that for pallet stock. Unfortunately, only about one truckload of this material was produced per month. Demand exceeded supply, but the company could not realistically produce more without reducing yields of the more valuable high-grade cherry lumber.

LESSONS LEARNED FROM CERTIFICATION

As Wade pondered past marketing efforts, he was hard-pressed to identify specific keys to success. However, past efforts were broad ranging, and much had been learned.

Company personnel had identified a number of geographic and demographic market segments receptive to certified products. They knew that receptive consumers tend to be highly educated and possess significant levels of disposable income. Geographic markets include Austin, Texas; Santa Fe, New

Mexico; San Francisco Bay Area, California; Vail and Aspen, Colorado; and the UK in Europe. In the US, the company noted that areas with harsher climates often harbor more “green” consumers.

The sales force often fielded calls from persons interested in purchasing certified forest products, but usually the company could provide only the raw material, not the specific product. Salespeople at corporate headquarters also fielded calls from people interested in certified products. It appeared that the company was becoming a source of information for citizens trying to obtain certified products.

Collins Pine encountered a number of barriers to marketing certified products. These barriers fell into five general categories.

1. LIMITED MARKET DEMAND

Current market demand for certified or otherwise sustainably produced forest products proved to be limited and segmented in nature. As one of the market pioneers, Collins Pine was still struggling to efficiently identify and serve these small niche markets. When demand was present, other factors often precluded the sale of certified product (see #4, below).

2. UNFAVORABLE CONSUMER PERCEPTIONS

Sales and marketing personnel discovered that industrial and retail customers often had the misconception that certified wood was of inferior quality to wood produced through “standard” industry practices. These individuals believed that companies sacrificed quality to reduce environmental impacts, and this belief was even shared by another environmentally oriented retail firm. In reality, trees managed by Collins Pine were allowed

to reach older ages than on comparable industry sites, and those harvested tended to have a higher proportion of clear, defect-free wood from which the company's products were produced. Collins Pine personnel had to educate their potential certified product customers by demonstrating the relationship between their forest management practices and the quality of their products.

3. LIMITED DISTRIBUTION CHANNELS

Company personnel found only a few existing forest products distribution channels willing to carry certified forest products. The products required strict chain-of-custody tracking, meaning that certified products must be segregated during storage and transport, and must have a paper trail to document that they came from a certified forest. Thus, certification added complexity and cost to the distribution process. Only a few wholesalers who had embraced certification had been identified, and they were all very small.

4. DIFFICULTIES IN MEETING SPECIFIC MARKET DEMANDS

Some specific markets, such as in the UK, clearly held potential for significant demand of certified products. Collins Resources International Ltd. received daily calls from companies interested in certified products, but the requests were very specific (e.g., the highest grade lumber of a specific species and thickness). Often, the request exceeded what the company could produce or obtain from other sources.

5. LIMITED PRODUCT AVAILABILITY

Regardless of market specificity, certified forest products were available only in limited volumes. Most forest products compa-

nies had neither sought nor obtained certification, and this made distributors hesitant to carry the certified products that were available. Distributors simply could not obtain enough product volume to justify allocating floor space, storage, and other distribution resources to certified products. Lacking readily available sources of certified materials, product specifiers such as architects and engineers had not been eager to emphasize these materials in their designs.

Wade was convinced that distribution channels would not develop unless certified products became available in sufficient quantity and consumer demand was present. Consumer demand appeared to be stifled by a lack of product availability. Wade had yet to identify which component of the market must be developed first. The result was that consumers who desired certified forest products were often unable to procure them despite availability of the certified raw material from the few existing sources.

WADE MOSBY'S TASK

Collins Pine was a pioneer in the development of markets for certified products. While the company benefited in a number of ways, it had seen limited success in generating demand for certified products. Wade Mosby continued to ponder the strategy that might bring success to the company's certified market development efforts. He realized that he had invested very little in promotion and wondered if increased investment in this area might pay off. On the other hand, he wondered if marketing research might be the answer to some of the market development problems.

Other company personnel suggested ideas for market development. One suggestion developed at the Chester operation was to create an alliance among several suppliers of certified products to provide many of the

products necessary to build a home. A package of certified products could be marketed to the professional builder or final consumer building a home. A concept from the Kane operation entailed allying with an industrial customer to produce a final product. Since demand for the final product was needed, allying with a producer of consumer goods could help educate the final consumer and build a market for certified products. A similar strategy appeared to be working for another certified landowner.

While these seemed like reasonable ideas, no one had convinced Wade that they were the right choice. He knew the company had many opportunities for product differentiation and an increased bottom line, but so far he had not constructed the formula for large-scale success. The company was very committed to the concept of certification, and Wade knew that a week later he must deliver a hard-hitting strategy to the company's president and convince him that it would bring success.

CASE ASSIGNMENT

Given past market development efforts and the wide range of alternatives available to Collins Pine, develop a well-justified plan for the company to create a strong portfolio of certified products that will succeed in the marketplace.

BACKGROUND ON FOREST CERTIFICATION

Credibility is key to successfully implementing an environmental marketing strategy. Consumers may want to know that forests are being cared for in a sustainable manner, yet companies with low credibility would be hard pressed to effectively differentiate themselves through environmental marketing strategies. One of several ways to build credibility is forest certification, which can take three basic forms: first-party certification is an internal assessment by an organization of its own systems and practices, second-party certification is an assessment by a customer or trade association, and third-party certification involves an assessment by a neutral third party based on a set of accepted standards (Barrett 1993; Ervin et al. 1996).

Many governments and companies around the world are quick to give first-party certification of their forests and forest products. The inherent conflicts of interest give little credibility to this kind of certification. Second-party certification may reduce some conflict of interest. Perhaps the most noted example of second-party certification is the Sustainable Forestry Initiative from the American Forest & Paper Association (AF&PA), discussed later. Third-party certification is an on-the-ground evaluation of forest management conducted by an independent certifying organization. Most third-party certification organizations have an ecolabel that can be used on certified forest products to indicate that they are from a well-managed forest (Figure 1).

Although third-party certification is comparable to the independent accounting audit all public corporations must undergo each year, it is very con-

troversial. Industry in the US seems especially resistant to third-party certification of forests, perhaps because of general human resistance to change and the influence of corporate cultures that do not want an outside party influencing their management decisions. There are, however, important factors that influence how industry views certification and its potential in marketing strategy.

LIMITED DEMAND

Despite public interest in forest management, there is limited evidence to suggest mass market demand for “responsibly sourced” forest products. The Home Depot and Collins Pine in the US and J Sainsbury plc in the UK have not seen significant customer demand for certified products. This is partly because few consumers understand forest management issues, and without education they are unlikely to recognize the value of a certification ecolabel or even believe it has any meaning.

Some feel that demand will materialize as supply becomes available. Others feel that demand exists and that consumers just need to be educated. For example, Mark Eisen, Environmental Marketing Manager of The Home Depot (1996, personal communication), feels that if environmental organizations encouraged consumers to buy certified products to ensure their purchases are not harming the forest, those consumers would go to retailers such as The Home Depot and ask for certified products.

Many studies have attempted to document a “green” premium for third-party certified forest products while others investigated consumer “willingness-to-pay”. However, an ex-



Figure 1. Forest Stewardship Council ecolabel (reprinted with permission).

pressed “willingness-to-pay” is not necessarily an accurate predictor of consumer behavior. In addition, companies such as Collins Pine have had difficulty developing niche markets for certified products, an indication that demand may be lacking. Large forest products companies move huge volumes of commodity products and necessarily use mass marketing strategies. These companies may be too large to effectively capitalize on tiny niche markets for certified wood. A company pursuing an environmental marketing strategy might seek to drive demand for certified products rather than wait for it to develop. However, without apparent mass market demand, most producers fail to see any advantage in investing in third-party certification.

COST OF CERTIFICATION

Certification costs have been estimated at about \$0.40 per ha for the initial process and \$0.15 per ha for annual audits (Upton and Bass 1996). At Collins Pine, one of the first companies in North America to become certified, the cost of certification did not significantly affect their bottom line. However, companies certified thus far have not needed to make dramatic changes in their management practices. If a company must significantly alter its forest management practices, increased costs or revenues forgone may be high enough to prevent companies from certifying.

The inherent costs and economies of scale associated with certification make it potentially very expensive for small landowners. However, methods have been developed to effectively minimize costs to smaller landowners. Existing programs essentially certify a consulting forester or resource manager. To become certified, a sample of the ownerships managed by that individual is inspected. If the individual is successfully certified, all the lands managed by that person are con-

sidered certified. Thus, costs of certification are spread over a larger land base, and costs to small landowners are minimized.

CHAIN-OF-CUSTODY REQUIREMENTS

For products to be sold with an ecolabel indicating third-party certification, there has to be strict chain-of-custody compliance. A claim made about a product must be traceable back to the certified forest of origin. This can be a major problem for many industry sectors that access raw materials from hundreds of sources and cannot afford to segregate them. A paper mill without much of its own forest land is a good example. In the US as well as many other countries, a large proportion of supply comes from small landowners, thus complicating any attempt to document fiber sources. This aspect of certification is controversial in industrial circles. Some companies claim that documenting each source is impossible, while others are doing it, despite the monumental difficulties, because they see potential for competitive advantage.

ENVIRONMENTAL GROUP SUPPORT

Third-party certification of forests is widely supported by environmental groups. In fact, the World Wide Fund for Nature (WWF) helped form the Forest Stewardship Council (an organization designed to accredit certifiers) and has a number of goals with respect to certification worldwide. Many companies in the UK have allied themselves with the WWF in dealing with forestry issues, but US forest products companies have been more reticent to ally themselves directly with environmental groups.

INITIATIVES

Two major North American forest certification initiatives are underway, the Sus-

tainable Forestry Initiative (SFI) from AF&PA and the Sustainable Forestry Management Standards from the Canadian Standards Association (CSA). One significant global third-party certification initiative is organized by the Forest Stewardship Council. Other initiatives are also being developed in other countries and regions. Because the initiatives are new, some companies are taking a wait-and-see approach in hopes that one initiative will prevail that is both accepted in the marketplace and cost effective.

Sustainable Forestry Initiative (SFI)

SFI, sponsored by AF&PA, is an example of a second-party certification system. AF&PA members account for approximately 90% of industrial forest land in the US. The major goal of SFI is to make sure future Americans will enjoy the same forests we have today. The initiative is made up of a series of implementation guidelines, objectives, and performance measures. As of January 1, 1996, continued membership in AF&PA became contingent upon compliance with SFI, resulting in the loss of a number of members. The Second Annual Progress Report on SFI (AF&PA 1997b) outlines the commitment and progress made by member companies. A panel of experts in academic, government, and nongovernmental organizations reviewed the guidelines and provided comment.

The Canadian Standards Association's (CSA) Sustainable Forest Management Standards

Canada has taken the lead in developing a systems-based, rather than performance-based, approach to sustainable forest management. In a systems-based approach, companies have management systems in place that are designed to ensure environmental performance, but they set their own environmental performance levels. This is very different from

a performance-based approach, in which certified companies meet a prespecified level of environmental performance.

In 1993, some of Canada's forest industry formed the Sustainable Forestry Certification Coalition (SFCC). This coalition asked the CSA to develop sustainable forest management system standards for Canada. Two voluntary consensus standards were introduced in October 1996 (CAN/CSA-Z808-96 and CAN/CSA-Z809-96) and have been approved as national standards for Canada (CSA 1996a, 1996b). Standard Z808 explains the design and implementation of a forest management system that provides environmental, economic, and social and cultural opportunities for present and future generations, while standard Z809 outlines auditing requirements for the program.

CSA and others hoped that the work done in Canada would be used to develop sustainable forest management system standards through the International Organization for Standardization (ISO). ISO is an international standards body that has developed numerous standards and is probably best recognized in the US for the ISO 9000 quality management series. Recently, ISO developed the 14000 series on environmental management systems. There have been movements to incorporate forest policy, management, and performance objectives in the ISO 14001 standard. It is unclear how this will develop and when it could become operational.

Forest Stewardship Council (FSC)

First proposed in 1990, the FSC was founded in 1993 in Toronto, Canada, and operates out of Oaxaca, Mexico. FSC strives to support environmentally appropriate, socially beneficial, and economically viable management of forests by accrediting certifiers and helping to develop regional forest management standards.

The Board of Directors of FSC is from three distinct fields of interest: economic, social, and ecological. Each field is equally represented, and both the northern and southern hemispheres are represented. As of 1997, FSC had accredited two certifiers from the US (Scientific Certification Systems and SmartWood), two from the UK (SGS Forestry and The Soil Association), and one from the Netherlands (SKAL).

The method of communicating to consumers that conformance to standards has been met is through an ecolabel (Figure 1) placed directly on certified products. The goal is for the label to become recognized as an indicator of “acceptable” wood and wood-based products.

Although the 10 principles and criteria for forest management outlined by FSC are designed to assure that consistent performance-based standards are used to evaluate forest management practices by accredited certifiers, they are controversial. Many forest products companies consider them overly prescriptive. Environmental organizations tend to see them as not going far enough. The principles and criteria are intended to serve as an umbrella for the development of regional standards that reflect the specific ecological and economic conditions of an area. Regional standards are currently being developed in a variety of regions around the world and the first standard was recently approved by the FSC for Sweden. Another controversy is that, until a regional standard is approved, individual certifying organizations create their own standards based on the FSC principles and criteria.

The FSC recently began allowing limited percentage-based claims, which allow companies to market products as certified even though only a portion of the wood fiber used in the products is from a certified source. Industry favors this concept since it makes the production of certified products more

feasible. It is also perceived as an incentive for continual improvement through steadily increasing certified content. Some are concerned that percentage claims may reduce label impact and confuse consumers. As it now stands, the policy on percentage-based claims allows a certified product to have 70% certified fiber and 30% noncertified fiber by volume for assembled products and by weight for pulp and paper. Certified products can also have various combinations of recycled fiber, certified fiber, and noncertified fiber.

PUBLIC LAND CERTIFICATION IN THE UNITED STATES

Recently, two states have undergone pilot third-party certification of their public lands. Pennsylvania and Minnesota tested the concept of certification on a total of over 1.8 million ac of forest land. Other states were seriously considering the option, but a directive from Washington, DC, told USDA Forest Service managers to postpone considering certification on Forest Service land until further study could be conducted at headquarters. However, many groups around the country are pushing the Forest Service towards certification. Some consider certification to be a method for opening up public lands for increased harvesting, which several large environmental groups oppose.

INFLUENCE OF BUYERS' GROUPS

Certification is developing more quickly in Europe than North America, partially due to the influence of buyers' groups, which are companies committed to the same buying practices. Most buying groups are organized by the WWF with the intent of improving forest management through evaluating and documenting supply sources and eventually insisting on buying certified forest products. Participation has been driven by a variety of factors, including risk aversion, a corporate

ethic of “doing the right thing”, accessing expertise in dealing with forestry issues, and perceived competitive advantage.

The best developed buyers’ group, the WWF 1995+ Group in the UK, has 84 members. It was formed in 1991 to bring together companies committed to purchasing wood and wood-based products from “well-managed” sources. Current membership includes the largest grocery retailers in the country as well as the largest home centers. Prominent companies in the group include J Sainsbury plc, B&Q plc, Boots The Chemists, WH Smith Retail Ltd, and Tesco plc. Their general goal is for 100% certification of the products they sell under the auspices of the FSC or equivalent organizations by December 31, 1999.

There are five main requirements for membership in the group: 1) supporting international, independent systems of forest certification; 2) phasing in the purchase of forest products from well-managed forests as verified by independent certifiers; 3) purchasing a substantial and increasing volume of wood fiber from certified sources; 4) identifying a senior manager who is responsible for implementing the first three requirements; and 5) demonstrating progress and reporting to WWF every 6 months (WWF 1996).

Group members have varied methods of meeting these requirements. The first step has been to document sources of supply for all wood and wood-based products. For example, J Sainsbury plc uses a computer database, TimberTracker, in combination with comprehensive surveying of suppliers to monitor “forest of origin” for all wood-based products sold by Sainsbury’s companies in the UK. Their tracking system assigns suppliers a grade depending on their status, the best being certified. Although Sainsbury’s has delisted suppliers for refusing to participate or for poor performance, their tendency is to stick with the stated philosophy of the 1995+ Group,

which is to move suppliers towards increasing levels of sustainable practices.

The 1995+ Group is significant to certification in a number of ways. First is the choice by WWF to work so closely with industry. Many environmental groups choose such methods as boycotting, which caused some tropical species to be banned in Europe yet did little to encourage better management of tropical forests. Of equal importance is the impact that success by the 1995+ Group may have on the global forest products industry. Success would mean significant volumes of certified product flowing into the UK market and improved availability elsewhere. It would also increase the influence of other buyers’ groups around the world. A total of 14 buyers’ groups have formed or are being formed around the world in the following places: UK, Belgium, Netherlands, Austria, Germany, Denmark, Switzerland, Ireland, France, Australia, Greece, Spain, Japan, and North America (WWF 1997). The North American group is called the Certified Forest Products Council and operates out of Beaverton, Oregon.

CERTIFICATION IN SCANDINAVIA

Through the influence of German publishers, buying groups, and environmental groups, Sweden and Finland have developed an active interest in forest certification. Each country is actively designing systems for certification, but they want each system to have similar status in the market and be applied similarly in the forest. Therefore, the Nordic Forest Certification Project was created to assure that the standards of sustainable forestry are harmonized among the countries (Nordic Certification Project 1996).

In Sweden, the effort towards certification standards was coordinated through an FSC working group. Pilot certification work

was performed on industrial forest land to assist in standard development (Nordic Certification Project 1996). The original group working on standards was very diverse, ranging from the industry to environmental groups and even the Sami people in northern Sweden. In April 1997, the small woodland owner associations withdrew from the standard development process. In spite of this setback, the remaining members of the group came to consensus on a draft standard. This standard was approved in January 1998, and certification on industrial lands in Sweden is progressing at a fast pace.

Finland went through a similar process, though it was not affiliated with the FSC. A broad representation of interests participated in a consensus fashion to generate a draft national standard for the country. Although WWF Finland was a signatory, there was conflict between the local chapter and WWF International. Greenpeace chose not to support the draft standard. The country has completed three pilot certification projects to test

the standard, and now work to improve the standard based on test results is beginning. Though the standard appears largely compatible with the FSC principles and criteria, it is unclear if Finland will seek to obtain FSC approval for the standard.

Small woodland owners in Scandinavia and across Europe have become quite active in their opposition to FSC certification. Some 500 owners gathered in Germany in November 1997 to demonstrate their opposition in front of the headquarters of a publisher that supports FSC certification (AF&PA 1997a). Still, with the support of environmental groups and many large companies, the process moves forward, and large volumes of certified product flowing from Scandinavia to the rest of Europe will have an undeniable impact on the global forest products industry. While few US companies have embraced third-party certification, competitive global forces may push them that direction in the future.

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