

# From Forest to Furniture

The finished certified wood product industry is growing. More forests are becoming certified every year and, as a result, more certified wood is becoming available as a source for finished products. This growth, however, brings with it a dilemma — more wood has not necessarily meant more products sold. As more producers of certified wood products emerge they are greeted by a public slow to appreciate or simply understand exactly how certified wood is more beneficial to their environment. Cost, public awareness, and wood supply are all factors manufacturers must contend with in order to successfully market their finished products.

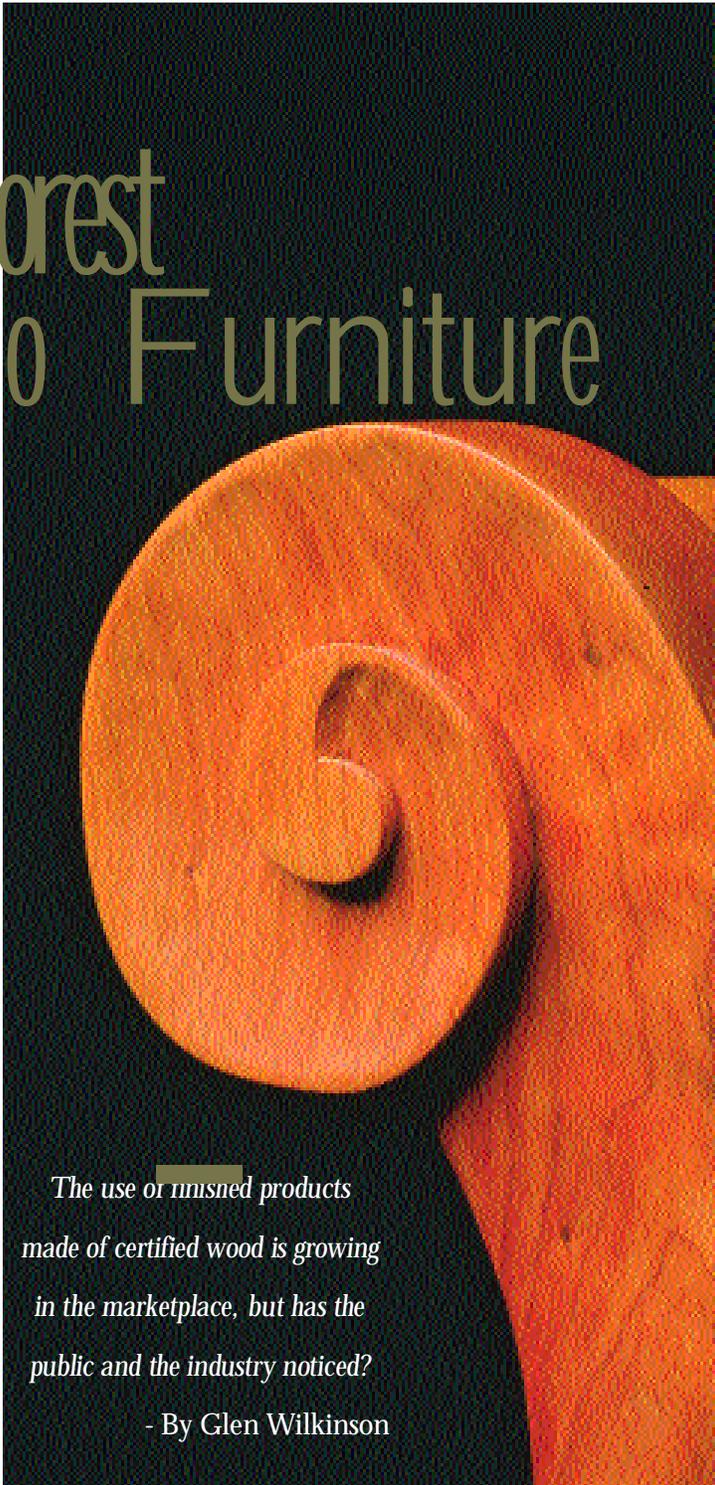
## More Environmental Trees

“As a designer, I am not using finished certified wood because of the market value, I am doing it because I have a great appreciation for the natural environment and to design products that are sustainable for future generations rather than thinking only of myself and today,” says Bill Callahan, Owner of Tamalpais TimberWorks and Master Designer.

Finished certified wood, simply put, is a more environmental wood product that comes from forests established as “well-managed” by a certification body. Manufacturers can use the certified wood to produce finished products that environmentally conscientious consumers can feel good about purchasing. A forest can become certified by demonstrating acceptable forest management to a certification entity such as the Forest Stewardship Council (FSC).

FSC defines forest stewardship in a set of global “Principles and Criteria,” which apply to all forests worldwide. FSC-endorsed forests are managed in an ecologically sound, socially responsible and economically viable manner and reflect a balance between the latest science, best known forest management practices, and current public values.

The FSC’s Principles and Criteria cover broad issues such as land tenure, the reduction of environmental impacts, optimal



*The use of finished products  
made of certified wood is growing  
in the marketplace, but has the  
public and the industry noticed?*

- By Glen Wilkinson

Photo courtesy of Charles Shackleton Furniture.

utilization of forest products, and written management plans. The Principles and Criteria are intended to be used as a guiding framework for developing standards that are appropriate to social, ecological and economic conditions at regional levels. There are 11 regions in the U.S. developing FSC standards. The boundaries of these regions are determined by a mix of forest eco-regions and socio-political factors. Although a forest’s management planning is a large part, the criteria also includes how the forest deals with the local environment and even the local community. The forests are rated and must

have a 70% grade or higher to be deemed certified well-managed forest. A yearly review process is mandatory and every five years a forest must be recertified. "The major benefit of buying or producing certified wood products," says Lee Jimerson, Product Manager of CollinsWood, "is that you are ensured the wood is coming from a forest that is being maintained as a forest ecosystem and is being managed for purposes including water quality, bio-diversity, wildlife, timber, and general forest health, not just timber production."

"The way we manage our forests is that we cut out the diseased and deformed trees so they stay out of the forest 'gene pool.' We also watch for indicators that a tree is reaching maturity, slowing down in growth, or getting ready to die — those are the trees we harvest."

This harvesting method allows CollinsWood to leave the vibrant middle-aged trees uncut. Over time, such practices create a higher quality forest and gives a CollinsWood forest the ability to generate steady income for today as well as a hundred years from now.

The benefits of using certified wood is a second order abstraction because the benefits are almost entirely off-site and frequently distant from the project which brings a more total commitment to environmental issues.

"The off-site consequences of buying certified wood products are better in terms of energy, site utilization, or efficiency of recycled material," says Paul Fuge, President, Plaza Hardwood, Inc. "This does not occur in every single case because there are also good sources of wood that haven't gone through the process of being FSC certified. But if you have a source of wood that is certified then there is an extremely high probability that you have good off-site consequences of your buying decisions."

Third-party certification is also available from companies such as SmartWood Certified Forestry and Scientific Certification Systems. Each company, including the FSC, allow foresters to use their seal or logo to signify that the wood they produce is certified.

Forests, such as the one owned by the Menominee Indian Tribe of Wisconsin or the Collins Almanor Forest in California or many others throughout the world, can use the "well-managed"

labels to increase their visibility in the marketplace as well as insure their customers of a quality product.

"The nice thing about certified wood products is that the product is no different, in essence, than a non-certified wood product," says Jula Sampson, Vice-President, A.E. Sampson & Son, Ltd., makers of certified FSC hardwood flooring and exterior and interior doors. "We are still using wood, but the resource is guaranteed to come from a well-managed forest. So, unlike some other green products on the market which are new or a little bit different, certified wood is not — it's the same old thing. Builders can tell their customers that they are purchasing wood products from a well managed forest, and I think that would be a huge selling point."

A.E. Sampson & Son, Ltd. uses ash, birch, maple and cherry for its certified hardwood floors and doors. The material used depends on which certified forest company has wood available, but generally the ash, maple and birch come from Seven Island Land Co. and the cherry comes from Kane Hardwood.

#### Caught in Between

Wood suppliers are caught between public demand and supply. On one hand, many suppliers are interested in producing more certifiable wood into finished products manufacturers can use. On the other hand, there is not enough demand to justify the transformation to certified wood-only operations. States Industries, Inc. manufactures hardwood and plywood panels which are used in store fixture manufacturing, cabinets, furniture and some architectural designs. Certified wood represents about 1% of the company's total manufacturing of wood products. Although States Industries has the capability to convert their entire production over to certified wood, there is simply too little demand to make the switch profitable.

"There is not enough support at the consumer level for certified wood products to create a demand and manufacturing stream that allows us to supply the materials at the same prices as conventional products," says Bill Powell, Marketing Manager for States Industries, Inc., "At this point there are some premi-



Photo by Mark Luthiger Photography.

**Gap Inc. uses finished certified wood flooring throughout one of its office buildings in Northern California.**

ums for most certified wood products, if there was enough demand, the premiums might go away. But, as of now, certified wood is a niche of the general wood market and is therefore handled as a separate stream of materials in the manufacturing process — and that separate handling adds to the cost of certified wood. If there was enough demand out there so that the volume of certified wood that we sell was great enough, then we could try to reduce the premiums."

Powell also said that the majority of requests his company gets for certified wood are for modest projects that require only a small quantity of wood. Single orders of 40-50 pieces is not large enough to sustain most manufacturers who must sell certified wood by the truckload to make the product profitable.

"There can be huge mismatches between what people want and what people can get, and what people have and wish they can sell," says Paul Fuge, President, Plaza Hardwood, Inc. "The nature of the business is such that you have to be flexible about how you get things to happen because sometimes certain links in the chain of custody may be missing. But clearly, in the last year, the general environmental consciousness that comes along with economic well-being has translated into more specifiers that are requesting certified wood."

Opportunities to sell more wood are entirely dependent on the demand. For example, if a kitchen cabinet manufacturer converted its entire line to certified, as has happened in some instances, then the volume of needed certified wood will increase and manufacturers can begin to build a larger supply structure.

"I think there is a demand for certified wood products out there," says Powell,

“but we have to remove the premiums. If certified products cost the same as non-certified products then there is a clear preference for certified. But there is not a large enough demand for certified products to pay an increased price.”

### The Wood Supply

Manufacturers of finished certified wood products believe there are a lot of consumers who want to strike a balance between feeling comfortable about buying an environmentally sustainable product but do not want to pay a heavy premium. Research has found that people would pay 50 cents to a dollar more for a sheet of plywood if it comes from a certified source. Likewise, consumers would pay more for finished certified wood products as long as the premium is not too steeply priced.

The debate on how to reduce the cost of producing certified wood products has several viewpoints. Manufacturers of finished products want their suppliers to provide more “serviceable” certified wood that can be used for lesser roles such as substrates. Wood producers say that an

increase in the amount of certified wood producers and primary and secondary manufacturers will increase competition and public demand for environmentally sustainable wood products.

“A lot of the time,” says Neil Kelly Cabinets General Manager Kathleen Donohue, CKD & CBD, “the material that is available, like certified wood, is more than what we really need and by their very nature are more expensive. It seems to me that the certified veneers and woods that have been made available have gone to the most high-end applications where they expect the choice grade veneer and wood. We are looking for the more serviceable, less expensive materials. With that, we can make a more affordable product that will grow in popularity.”

Manufacturers of finished products face the problem of, though there is an adequate supply of raw materials, there is still not quite enough primary and secondary manufacturers that can get the wood through the chain of custody from the forest floor to the shelves. There might be enough wood in certain pockets



**The Aspen Mountain™ table from Tamalpais™ TimberWorks uses Smart-Wood certified Honduras Mahogany for the table apron and recycled Honduras Redwood for table legs.**

of the U.S., primarily the Pacific Northwest and upper Midwest, but retailers in locations such as Florida will have a difficult time to get the wood materials because their suppliers may not even carry certified wood.

One way to increase the supply of well-managed wood to more producers is to increase the amount of well-managed material in the wood. CollinsWood is trying to promote a material they call “character wood.” This wood is comprised of less valuable material left over from the sawmill. Typically most designers want a high-grade material for their projects. Generally 5% of the trees that come out of a CollinsWood forest make a veneer

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**Kitchen layout of the certified wood Naturals Collection cabinetry from Neil Kelly.**

quality log. Out of the other 95% of the log material only about 15% would make a high-grade lumber; the rest of the material is to be used in lower valued applications. From the remaining 80% material CollinsWood is making a reasonably priced character-grade flooring that may contain knots, swirls, sap or gum but uses the whole tree more efficiently. The lower grade material is useful in applications such as furniture framing or for shorter length appearance-grade material.

#### **More Certified Manufacturers**

Despite a current shortage, industry professionals are seeing an expansion in the number of finished product manufacturers

and secondary manufacturers. This trend will help to increase the amount of certified products entering the marketplace, which will also improve public awareness.

"There is definitely a trend for secondary manufacturers to get certified so they can buy certified wood and turn it into something else and resell it. We are seeing certified plywood coming out, and we see more and more companies that manufacture products, ranging from furniture to flooring, trying to get certified," says Jason Grant, Marketing Manager, EcoTimber International, Inc., a distributor of ecological forest products based on specializing in certified wood products.

One large deterrent to more manufacturers entering the certified industry is cost. Managing sustainable forests and doing selective cutting and harvesting costs more simply due to the extra care and handling each certified piece demands. Certification also costs money as the forest owners have to pay certification companies to inspect their forests every few years. These added costs, which typically add a premium of 10-15% to the

final product, may sway a forester or wood manufacturer from converting to certified wood because the costs would have to be deferred to the end-user — the customer.

"Clearly anyone who has anything that is distinguished from anything else wants to get more for it," says Fuge, "I think the same mindset is apparent in the certified wood industry. Unfortunately, buying certified wood doesn't necessarily have the same 'sizzle' as buying a marquee automobile or designers jeans. It is not like installing compact fluorescent lights, where, if you are in the building long enough, you will save money through a payback of energy reduction. So, those facts may discourage some suppliers and manufacturers of getting involved."

#### **Misconceptions**

The construction industry's and the consumer's lack of awareness that certified wood products even exist is hindering the growth of the certified wood industry. Just as damaging is the misconception that using wood is detrimental for the environment.

"There are a lot of people out there who basically think that using wood is environmentally bad and are switching to plastic, steel or other potential substitutes," says Grant, "On the other hand there are a lot of people who are complacent and don't believe there is a deforestation problem. Both of those viewpoints roughly represent the two poles of public opinion but are unfounded in fact. Wood is a viable environmental product, and deforestation is a real problem."

Grant also feels that the public does not necessarily understand the forest issues facing the wood industry today. For example, people can be "species-specific." Consumers may feel justified about using western red cedar but guilty about using redwood, maple or mahogany simply due a perceived impression that purchasing "endangered" wood species is inherently wrong. The fact is that there are maple forests that are horribly handled and mahogany forests that are handled responsibly.

"From our perspective," says Grant, "what forestry is about is shifting focus from the individual species to actual forest practices. The bottom line is that there is no such thing as the truly best wood, there is only the truly best forestry."

Public demand affects another problem facing the relative lack of finished certified

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wood products in the marketplace — quality. In general, the public expects a finished wood product to be uniform in color and, for most high-end applications, that is the case, but such quality comes at premium. Some consumers may be willing to pay a premium for certified wood products, but if the product does not conform to their perception of color, then the point is moot. Yet as wood becomes more and more scarce manufacturers will be forced to use more of the whole tree, and that can lead to a product with several colors in the finished product. The public must realize this as the wood industry moves into the next century.

“As we approach the new millennium,” begins Callahan, “I see people wanting products that are more enduring while preserving our natural resources. Along with being enduring, consumers also appear to want their furniture and accessories to be more decorative and to be a reflection of whom they are and what interests them. We believe that our furniture, called Arts & Culture, is a product that is well suited

for the new millennium and an emerging sustainable lifestyle.”

Manufacturers such as A.E. Sampson & Son, Ltd. try to promote not only certified wood products but ones that include more of the whole tree. They want people to buy certified wood products, but they also want to educate consumers that a better purchase of a wood product is one that has a lot of color. For example, a cherry tree is not a wholly red tree, there is also white colored wood, and this white wood may appear in the final product. This color variance is a sign that more of the tree appears in the final product and not on the shop floor.

“The big thing for us isn’t so much cost, but what people have to get used to is an availability issue,” says Jula Sampson, Vice President, A.E. Sampson & Son, Ltd., “The lumber isn’t as readily available as it used to be, and the quality of the lumber is not as good as it once was. Consumer demand for only top-quality lumber may have to change in order to use certified lumber. The appearance of the wood product may

Photo courtesy of Charles Shackleton Furniture.



End users are beginning to learn of the environmental benefits of certified wood.

suffer as companies began to utilize more of the tree.”

#### The Plight of One Producer

Manufacturers of finished certified wood products are gaining in number and so is the number of products they offer. Products such as rocking chairs, kitchen cabinets, doors, and even benches are all available on the marketplace. These producers are a vital ingredient in furthering the acceptance and profitability of finished certified wood products.

Neil Kelly Cabinets has developed and is now producing what may be the first line



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## Other Resources on Environmental Wood Products

### Handbook on Efficient Wood Use in Residential Construction

By the Natural Resources Defense Council

This in-depth guide by the Natural Resources Defense Council (NRDC) provides information on numerous proven "wood-efficient" approaches to design, material selection and construction to help enable building professionals to save on construction costs, preserving forests and producing more green houses. The book, the *Handbook on Efficient Wood Use in Residential Construction*, is based upon industry case studies and actual experiences of builders in the field and provides information on dollar savings and practical consideration for adopting these efficient methods. The Handbook was produced with technical contributions from the industry's leading professionals.

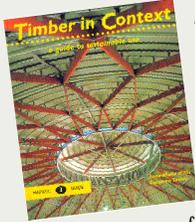
"NRDC's Handbook will be an invaluable tool for industry professionals who want to incorporate these wood-saving techniques in their construction practices," says Ian Campbell, Director of Sustainability with Turner Construction Co., "It clearly demonstrates what we have learned from our own experiences: efficiency is profitable."

Copies of the Handbook can be obtained by sending \$7.50 plus \$1.45 for shipping to: NRDC Publications Department, 40 W. 20th St., New York, NY 10011-4211.

### Timber in Context: A Guide to Sustainable Use

By Anne-Marie Willis, Assistant Director of the EcoDesign Foundation  
Cameron Tonkin, Educator and Researcher at the EcoDesign Foundation

*Timber in Context: A Guide to Sustainable Use* sets out to demystify the debate about the harvesting of timber and its use for construction. The book discusses the use of timber in relation to forest ecology, political and economic contexts, understanding of environmental impacts, and technical and constructional factors. Although these factors are considered in a global context, the focus is on the timbers and timber products most commonly used in Australia.



*Timber in Context* guides the making of informed decisions about the selection and use of timber based on the application, the anticipated life span and the nature of the project for which it is to be used, and gives guidance on preferred timbers for particular applications. Also, the properties of more than 50 species are tabulated and commented on.

The book is the outcome of research by the EcoDesign Foundation, a non-profit organization founded in 1991 with the aim of developing sustainability by design.

### Certified Online

The FSC website, [www.fsc.org](http://www.fsc.org), has all of the products that are currently available as certified in the U.S. The organization also has a web catalog online, [www.certifiedproducts.org](http://www.certifiedproducts.org), for consumers that specifically deals with finished products.

### Ending Clear-Cut Logging

The Greenpeace campaign to cease clear-cut logging in the temperate rainforest of Western Canada has received new support from MacMillan Bloedel (MacBlo) and the international scientific community.

MacBlo, the largest logging company in British Columbia, surprised the industry when it withdrew from the pro-logging BC Forest Alliance. Justifying its decision, MacBlo's Alan Stubbs stated, "We feel that what we are doing is so much different than anything else the industry is doing that we want to manage the issues ourselves."

MacBlo is working to end clearcutting and, in the longer term, to seek eco-certification from the Greenpeace-approved Forest Stewardship Council. If MacBlo can become the first logging company in Western Canada to become FSC certified, it will improve its access to new markets and improve its world-wide competitiveness.

Logging analysts believe MacBlo's defection from the Forest Alliance, established in 1991 to counter environmental activism in Clayoquot Sound, is bound to hurt the Alliance's finances and diminish the unified voice of the industry.

of environmentally compatible cabinets using certified woods in the U.S. The new Naturals Collections line uses certified maple, cherry and red oak (solid and veneer), madrona, alder and red birch, and bamboo, a grass grown and harvested in a sustainable manner. The line was developed in conjunction with Environmental Building Supplies, an environmental building materials supplier, and Endura Wood Products, a distributor of certified woods and veneers. The SmartWood Program certifies the woods used in the Naturals Collection and suppliers have been carefully chosen to guarantee an unbroken chain of custody certification.

According to Donohue, Neil Kelly's line was developed to satisfy the market's need for well-designed, quality-built cabinets with environmental features. "Our goal was to offer talented professional designers a cabinet that is more environmentally friendly without being a lot more expensive," Donohue said.

Case materials, however, pose the biggest problem in creating a cabinet that is completely constructed of certified woods. Neil Kelly wanted to originally make a 100% certified wood cabinet that would be priced along with its regular cabinet line, but the cost would be too high for the consumer. At this time, for the Naturals Collection, the company is using maple plywood with a UV-cured clear finish as standard. Even with the maple plywood cabinets, the Naturals Collection still ranges from 10-15% more expensive than its standard cabinet line.

Neil Kelly does offer the Naturals Collection with certified particleboard or formaldehyde-free medium density fiberboard (MDF) for case materials at about a 10% upgrade for the particleboard and slightly more for the MDF. The cost increase, according to Donohue, partially stems from the difficulty in obtaining true formaldehyde-free certified wood.

"The problem with the certified products, that I have seen," says Donohue, "is that some manufacturers are offering certified woods and plywoods, but they are using the urea-formaldehyde glues. If we could get the exterior grade glues which have less off-gassing, that would make the product a lot more popular."

One product that Neil Kelly is seriously looking at as a substrate is wheat board. The wheat board would be covered with a certified veneer and a UV coating to

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produce a relatively formaldehyde-free, non-wood core product that would make certification a moot point, except for the veneer. The wheat board would be beneficial in bringing the price of the Naturals Collection down to a level equal with the company's regular line of cabinets.

### A Growing Industry

Certification has captured the interest of the industry and green groups alike. Manufacturers have recognized this and are moving toward ensuring that they tap into the green market.

"The more progressive wood product manufacturers are utilizing third-party certification as a viable solution to bridge the gap between the forest products industry and the green building movement," says Paul Davis, Market Analyst of Columbia Forest Products.

Public awareness and product knowledge, however, are the keys to the continued growth of the industry. When the public begins buying more finished certified wood products, the manufacturers of those products will begin to ask for more certified wood from their suppliers, and, in turn, the suppliers will ask for more certified wood from the foresters, and, to keep up with demand, more forest will have to become certified.

Public demand will play a large part in furthering the proliferation of certified wood products. Public awareness, however, must be improved before demand rises.

"I think there is a lack of the average Joe knowing that he can ask for certified wood products," says Sampson, "I think if they knew that certified products were available they would ask for them. But most people have no idea what certified wood is, let alone that it even exists."

The manufacturers take on a major role in educating the public, but the certifiers play a part as well, though not to as great an extent. "An increase in public awareness is happening," says Fuge, "and some of the certifying companies are helping. Some certifiers make efforts to create public awareness, although that is difficult for them due to financing and because it is really not their job anyway. They are in the business of selling the service of certifying forests, so putting the additional burden of selling people on the idea of certified wood products is hard. I think that is one of the reasons why the Certified Forest Products Council is in existence because there

needs to be an entity that is actually promoting the message in general."

The more manufacturers there are and the more certified wood products are on the market, the more the public will learn that they have a choice when purchasing wood products. Also, if larger North American corporations begin to prefer certified wood for their projects, certification will grow to become a force in the industry.

"I think that there is increased interest in products from well managed forests, more so on the architectural side, but the consumer interest is also growing," Peter Nowack, Director of Marketing & Communications of Certified Forest Products Council. "There are, however, several problems that the finished products industry is facing. The first is that manufacturers are concerned that they will have a dwindling supply and will therefore not be able to provide all the wood needed. Another problem is that forest landowners are not going to push to be certified until they see a demand for more certified wood."

There have been several dozen higher-profile projects done with finished certified wood products including flooring for a major clothing chain and a professional basketball court that has helped to raise public awareness. But the success of the finished certified wood industry may rest on the ability of manufacturers to effectively market their lower-ticket items. Though prefinished flooring and other building materials may bring the most profit, smaller store-bought products may be the boost the industry needs.

"I think the growth in certified products is about to take off," says Jamison Ervin, Executive Director for Forest Steward Council U.S. "Depending on how you define certified products, the big market will be in the products people can buy. Items like rocking chairs, clipboards, cutting boards and other items where the raw materials are not the major expense but people can still feel good about spending 2% more for an environmentally responsible product."

The certified wood industry is gaining in strength and numbers. As a relatively uninformed public and, to a lesser degree, the wood industry begins to take notice of a sustainable choice in wood products and materials, those numbers will grow even larger. Foresters, manufacturers, suppliers, and producers of finished certified wood or

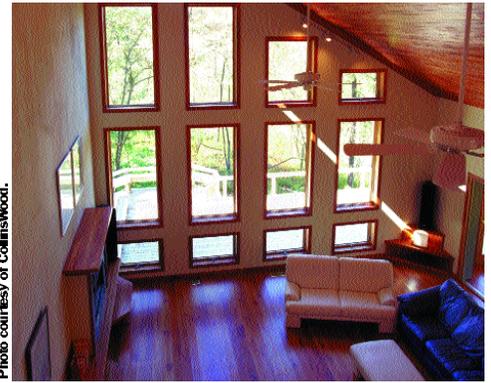


Photo courtesy of CollinsWood.

**The end use of certified wood is on the increase.**

products unanimously agree that there will be an increase in demand for certified wood. Time and public demand may be the ultimate factors, but the industry can certainly help. Primary and secondary manufacturers must not let themselves be buffered from the environmental issues, and forest managers and retailers, who are more directly faced with criticism by consumers, can dispel misconceptions. The certified industry believes, however, that there will come a time when the consumer will choose, not between more costly certified wood and a less expensive conventional wood, but only the right wood for the environment.



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