

Final Report

Western Juniper Furniture Market Research and Design Project

June 30, 1998

Technical Coordinator and Report Author

Larry Swan, U.S. Forest Service

Background Reports and Publications

Western Juniper Furniture Market Research and Prototype Design Project

Mark C. Hanson, Hanson Studio

Western Juniper Proprietary Grade Rules (First Edition, 1998)

Bill Breedlove, Western Juniper Industry Facilitator,
and the Western Juniper Commercialization Steering Committee

Background Report - Lumber Grading Rules for Western Juniper

Don Prielipp, Wood Products Industry Private Consultant

Project Administration

Klamath County Economic Development Association

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Regional Strategy Board Project Sponsors

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North-Central Region

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June 30, 1997

The purpose of this project was to identify a promising market niche for western juniper furniture, and develop a product line targeted at this niche with at least three manufacturers working together in a flexible manufacturing network. Over 30 different manufacturers were visited or consulted during the course of this project, as well as at least 20 retail stores or buyers for catalog or retail operations.

"Gifts and accessories" was identified as the most promising market niche for juniper products, based on an assessment of the capabilities of interested manufacturers and preliminary market research. Prototypes were fabricated, market feedback obtained, and sales leads developed.

It became evident early in the "gifts and accessories" market feedback and sales lead development process that the best business prospects for the prototypes fabricated were larger retailers and catalog operations. Unfortunately, product development and supplier requirements were far beyond what previously identified small manufacturers could provide. For example, very few of the manufacturers interested in producing juniper products can afford the time and resources necessary to develop a full "gifts and accessories" product line,

respond to high volume orders in a timely manner, and carry inventory and production costs for three months or more. The project then refocused efforts on smaller "gifts and accessories" buyers, such as stand-alone retail outlets.

The most productive value-added niche market identified and confirmed during this project began as a "gifts and accessories" sales call, but ended-up as an order for "store displays". There is now a full juniper store display product line (21 total items) in 37 Pendleton Woolen Mill retail stores across the U.S. Additional display products are under development. There are six companies involved in the flexible manufacturing network formed to service this account. It is expected other companies will be added to the flexible network as the display product line expands.

A draft set of log sort evaluation criteria and lumber grading rules were developed as part of this project. These draft criteria and rules were later modified and published as "Proprietary Log Sort and Grade" standards by the Western Juniper Commercialization Steering Committee (available from Bill Breedlove, 541/850-4317; \$10 for color pocket-size and regular formats or on-line at www.westernjuniper.org/graderules.pdf).

Recommendations were made about how to help develop a juniper value-added industry segment:

- Compensate for lack of industry infrastructure by maintaining an Industry Facilitator or similar process, at least for the foreseeable future;
- Continue support for facilitated flexible networks to assist in marketing and distribution, and reduce costs associated with more formal networks, such as associations and cooperatives;
- Appoint a single administrator for juniper revolving loan fund applications to improve awareness about loan fund availability, increase administrator knowledge about the juniper industry as a whole, encourage consistency, and provide oversight for the economic development boards who want to contribute (Recommendation is similar to the structure and administration of the multi-Region Regional Strategies forest products marketing program.);
- Identify and encourage participation in key trade shows by cooperatively funding (public and private) preparation and participation;
- Maintain an inventory of raw material (about 250,000 board feet) to give manufacturers the flexibility and confidence to solicit and accept larger orders, and increase buyer confidence in the ability of the industry to fill larger orders;
- Pursue sales leads generated and documented by Mark Hanson, the prime subcontractor for this project ([Hanson's report](#) is included in its entirety as an appendix);
- Promote the use of unique and special design elements to help build juniper "brand awareness", such as a woven accent used by Mark Hanson in one of the prototypes he designed and fabricated for this project;
- Develop new funding sources for the publication and distribution of the *Western Juniper Newsletter*, because of its success in integrating and connecting the interests of landowners and land managers, harvesters, manufacturers, and retail/wholesale buyers.

Thank you to all those who assisted and participated in this project. None of this could have happened without so many willing and knowledgeable cooperators.

Sincerely,

LARRY SWAN
U.S. Forest Service
Co-Chair, Western Juniper Commercialization Steering Committee

Abstract

Project Purpose and Need

The purpose of this project was to identify a promising market niche for western juniper (*Juniperus occidentalis*) furniture, and develop a product line targeted at this niche in cooperation with at least three manufacturers working together in a flexible manufacturing network. (For this project, a "flexible network" consists of three or more companies cooperating to achieve a mutual goal. The emphasis here is on manufacturing, but flexible networks could just as well involve marketing, distribution, workers compensation, or any other area of mutual interest and benefit.)

Western juniper is the most under-utilized wood fiber resource in Oregon. Factors contributing to this situation include harvest costs, taper, numerous and large limbs, lack of industry infrastructure specific to juniper, and market acceptance. Markets and product lines are needed which add sufficient value to make harvest, manufacturing, and distribution economically feasible, and take advantage of the unique characteristics of juniper lumber.

Project Work Plan

This project consisted of six overlapping and interactive phases: 1) Preliminary market research; 2) Identifying interested manufacturers and evaluating capabilities; 3) Design and fabrication of prototypes, based on preliminary market research and manufacturer capabilities; 4) Prototype test marketing; 5) Niche market confirmation and sales leads follow-up; and 6) Drafting basic log evaluation criteria and lumber grade rules to expedite raw material procurement and processing.

Results Summary

Preliminary market research performed for this project indicated that efforts should focus on specialty value-added markets which take advantage of the unique characteristics of juniper, rather than try to compete with traditional Pacific Northwest commercial species in large markets. Among the unique and special characteristics identified were appearance, fragrance, and "finishability". Drawbacks to using juniper were also identified. These included inconsistent supply, the need to use shorter lengths, and weak longitudinal grain structure. Potential specialty markets identified included "gifts and accessories" and "store displays".

Over 30 different manufacturers were visited or consulted during the course of this project about their interest in developing value-added juniper product lines, as well as their capabilities (such as manufacturing equipment and experience, financial resources, and business experience). Although interest was high, capabilities and experience varied widely.

The "gifts and accessories" specialty market was chosen as the primary focus of the prototypes designed and produced for this project, based on a rough assessment of interested manufacturers and preliminary market research. Prototypes were purposefully designed so they could be manufactured with basic woodworking equipment.

Ten large and small "gifts and accessories" retailers were visited and shown the prototypes. Retailers were asked questions concerning current and future product lines and needs, and their reactions to the prototypes developed for this project. Feedback was excellent and several leads were developed. However, there was a large discrepancy between the best business prospects, who happened to be large retailers and catalog companies, and the small manufacturers who were most interested in this type of market. At this point, very few juniper manufacturers can afford the time and resources necessary to develop a full "gifts and accessories" product line, respond to high volume orders in a timely manner, and carry inventory and production costs for three months or more.

Efforts were then made to find smaller markets. Based on market research performed for this project, several leads were followed-up and orders obtained from buyers ranging from remanufacturers, such as Burnich Frame

and Moulding (Missoula, MT.), to small, independent retailers, such as the Capital Gift Shop (Salem). Total value of orders placed to-date (June, 1998) is about \$6,000. The manufacturing flexible network for the various markets involved is coordinated by Bill Breedlove, Western Juniper Industry Facilitator. It currently consists of six companies, only one of which has more than two employees.

The most productive niche market identified and confirmed was for "store displays". There is now a full line of juniper store display products (21 total items) in 37 Pendleton Woolen Mill retail stores across the U.S. Additional products are under development. Over \$19,000 in sales has been generated from eight separate orders.

The Western Juniper Facilitator (Bill Breedlove) performs a key role in coordinating the manufacturing flexible network which supplies store display products for Pendleton. There are five companies currently involved; more are expected to be added as the Pendleton display product line expands.

A draft set of log sort evaluation criteria and lumber grading rules were developed as part of this project. The draft criteria and rules were later modified and published as "Proprietary Log Sort and Grade" standards by the Western Juniper Commercialization Steering Committee (available from Bill Breedlove, 541/850-4317; \$10 for color pocket-size and regular formats, or on-line at www.westernjuniper.org/graderules.pdf).

Recommendations

Recommendations are offered about how to help develop a juniper value-added industry:

Compensate for Lack of Industry Infrastructure - A process or person(s) is needed to expedite and facilitate marketing and filling orders due to lack of juniper industry infrastructure. For example, before an order can be filled, landowners have to be connected to harvesters, harvesters to primary processors, primary processors to dry kiln facilities, kiln-dried lumber delivered to secondary processors, and final products shipped to end-users. The Western Juniper Industry Facilitator (Bill Breedlove), funded by the State of Oregon through its Regional Strategies Program, currently manages this process.

Continue Support for Facilitated Flexible Networks - A major issue facing most small, rural manufacturers is marketing, which includes everything from product line development to distribution and sales. One way to deal with this issue is to form informal cooperative networks. An Industry Facilitator can assist independent and isolated small manufacturers without getting into the political and administrative costs necessary for a more formal network, such as a cooperative or association.

Appoint a Single Administrator for Juniper Revolving Loan Fund Applications - Another major issue facing most small, rural manufacturers, especially those interested in juniper, is access to working capital. Currently, the lender of last resort for juniper manufacturers in Eastern Oregon are various regional revolving loan funds administered by local service providers. These service providers have a wide-range of wood products business expertise and exposure to the juniper industry. A single lead service provider and advisory group, similar to what was done for the special Oregon Regional Strategies-funded forest products marketing program, will increase expertise, encourage consistency, and provide oversight for the various economic development boards who want to contribute.

Identify and Cooperatively Participate in Key Trade Shows - Another way to assist small and medium manufacturers is to help them target specific trade shows, and cooperatively fund participation and trade show booth development. For example, 10 western juniper manufacturers recently participated in well-attended log and timber frame home shows in Portland and Tacoma. Coordination was provided by the Industry Facilitator and costs were shared through a special Oregon Regional Strategies-funded forest products marketing program.

Maintain Lumber Inventory - Manufacturers currently hesitate to solicit or accept orders which require large quantities (more than 5,000 board feet) of high quality raw material, due in part to working capital needs and

inventory costs. It is estimated that about 250,000 board feet of inventory is needed on a state-wide basis to give manufacturers the flexibility and confidence to solicit and accept larger orders, and increase buyer confidence in the ability of the industry to fill larger orders.

Pursue Untapped Sales Leads - [Mark Hanson's report](#) (included in its entirety as an appendix) provides sales leads for the "gifts and accessories" market as well as a list of key trade shows. It is important to note that there has been a two-year time lag between when Hanson initially made contact with the people listed and this report.

Highlight Unique and Special Characteristics - Hanson makes recommendations about how to incorporate some of the unique and special characteristics of juniper into attractive design elements. For example, he suggests that a small woven accent could become a well-recognized "trademark" of western juniper products. Retailer response to his woven accent design on one of the prototypes was universally positive.

Continue Publication of the Western Juniper Newsletter - Continuation of the [Western Juniper Newsletter](#) is considered critical to expedite communication between the diverse individuals and groups who are interested in the management and commercialization of western juniper. Circulation has increased over 300% since the first issue (the mailing list is now over 800) and many people report loaning their copies to other interested individuals and groups. The first four issues of the newsletter were partially subsidized through the Oregon Regional Strategies Program. Other funding sources must be developed.

Project Purpose

The purpose of this project was to identify a promising market niche for western juniper (*Juniperus occidentalis*) furniture, and develop a product line targeted at this niche in cooperation with at least three manufacturers working together in a flexible manufacturing network.⁽¹⁾

Project Work Plan

The project consisted of the following overlapping and interactive phases:

- Preliminary Market Research - Market research was performed to identify potential niche markets for value-added products made from juniper lumber.
- Potential Manufacturer Interest and Capabilities - Potential manufacturers were identified and visited to informally evaluate interest and capabilities (such as manufacturing equipment and experience, financial resources, and business experience).
- Prototype Value-Added Product Line - A value-added prototype product line was designed and fabricated for a specific market segment, based on market research and interested manufacturer capabilities.
- Test Marketing - The value-added prototype product line was test marketed in the niches previously identified.
- Niche Market Confirmation and Follow-Up - Refined versions of the prototypes and other products specified by buyers were developed, in cooperation with interested manufacturers, as well as pricing structure and distribution channels.
- [Grading Rules and Standards](#) - Evaluation criteria and grading rules were developed for standing trees and lumber.

Mark Hanson, Hanson Studio (Portland), was the primary subcontractor for the market research, prototype product line design and fabrication, and test marketing phases. Hanson's activities, results, and recommendations are documented in Appendix A, [Western Juniper Furniture Market Research and Prototype](#)

Design Report.

Bill Breedlove, Western Juniper Industry Facilitator, Don Prielipp, a wood products industry private consultant, and members of the ad hoc Western Juniper Commercialization Industry Steering Committee compiled the [juniper lumber grading rules](#). Larry Swan, U.S. Forest Service, compiled the juniper log sort evaluation criteria based on discussions with saw mill operators and personal observations (McGee personal communication; Peterson personal communication) (see Appendix B[1], *Western Juniper Proprietary Grade [First Edition, 1998]*, and Appendix B[2], *Background Report - Lumber Grading Rules for Western Juniper*).

Project Background

Western juniper is the most under-utilized wood fiber resource in Oregon. Factors contributing to this situation include harvest costs, taper, numerous and large limbs, lack of industry infrastructure specific to juniper, and market acceptance. Markets and product lines are needed which add sufficient value to make harvest, manufacturing, and distribution economically feasible, and take advantage of the unique characteristics of juniper lumber.

This project was formulated and guided by members of the ad hoc Western Juniper Commercialization Steering Committee, a loosely-organized cooperative venture of the U.S. Forest Service, Northwest Wood Products Association (formerly the Wood Products Competitiveness Corporation), and Oregon State University Extension. Steering Committee membership is composed of wood products industry representatives (small, medium, and large companies), government agencies, private landowners, and non-profit economic development and environmental organizations.

Environmental and Social Setting

There are approximately 3.8 million acres of western juniper woodlands (defined as having at least 10% juniper canopy cover) within the primary range of the species in Eastern Oregon, Northeastern California, and Southwestern Idaho. About 58% of this acreage is on public lands and about 42% is privately owned. These figures do not include literally millions more acres of scattered juniper and areas in which young juniper are just now becoming apparent on standard resolution aerial photography (Bolsinger 1989; Gedney personal communication; Chojnacky 1991; Woudenberg personal communication in Swan 1997).

Western juniper is the least-utilized wood fiber resource in this region. Total woodland volume is estimated to be at least 691 million cubic feet, of which about 39% is on private lands and 61% is on public lands. These totals include estimates for western juniper volume on commercial forest lands or other forested lands (Bolsinger 1989; Gedney personal communication; Chojnacky 1991; Woudenberg personal communication in Swan 1997).

The area dominated by western juniper represents a three- to ten-fold increase since the late 1800s. Reasons for this expansion are complex, but generally involve absence of fire, domestic livestock grazing, and short-term changes in climatic patterns. Richard Miller, Oregon State University, states that western juniper stands appear denser today than at any time during the past 5,000 years (personal communication). Expansion appears to have slowed in California and much of Oregon, but field investigations indicate a continuation of the trend in some areas (Eddleman personal communication).

The expansion and increasing density of western juniper woodlands greatly concern private landowners, government land managers, and scientists. Many juniper-dominated sites show clear evidence of watershed degradation, loss of site productivity, decrease in forage production, loss of wildlife habitat, and over-all

reduction in biodiversity (Eddleman 1995; Bedell et al. 1993).

Numerous private landowners undertake juniper clearing operations every year in Eastern Oregon and Northeastern California. In total, clearing operations probably average 5,000 to 10,000 acres per year, which amounts to an estimated 1.1 to 2.2 million cubic feet of juniper fiber⁽²⁾ (Okholm personal communication; Gedney in Haugen 1993). Eddleman offers an estimate of around 40,000 acres of western juniper woodlands treated over the last 10 years (Eddleman et al. 1995 in Miller et al. 1995:9). Due to lack of demand and markets, as well as economics, the juniper removed is often piled and burnt, or simply left to decompose after being knocked-down or cut. Government agencies are currently less active in clearing juniper than private landowners, due to concerns about legal challenges and lack of funding for such projects.

Clearing operations are expected to continue despite a decrease in government subsidies. According to Tom Birch, a Forest Service scientist who summarized data from a national study of forested land owners and their harvest plans, there are probably at least 3,000 ranchers in Oregon and California who plan to thin their juniper woodlands within the next 10 years, at a minimum cost of more than 13 million dollars (personal communication about unpublished research data).⁽³⁾ As one rancher puts it: "I feel like I'm buying my land a second time due to costs of beating back the juniper." (Otley personal communication).

Historic and Current Western Juniper Wood Product Markets

The majority of western juniper harvested over the years has been used for fence posts and firewood. There are reports going back at least 50 years though, of mills processing and test marketing the species (Loveness personal communication). The earliest wood products research known to involve western juniper began in 1949, as part of an Oregon State University study of the service life of treated and untreated posts (Miller 1986).⁽⁴⁾

The research literature also indicates temporary interest in the 1950s for use of juniper in composites and extractive oil, and a surge of interest in the late 1970s due to concerns about an energy crisis.

The most successful commercial western juniper operation of any size was a mill owned and operated by Gary Gumpert in Prineville in the mid- to late-1970s (five to 10 employees). Primary product emphasis was interior paneling, but other products were made in the course of refining the panel product (such as furniture and mantel pieces). At the time the mill was sold, about one-third of the production was juniper and the remainder incense cedar (Gumpert personal communication in Swan 1996).

Probably the greatest use of juniper over the last 10 years has been as a source of fuel for power generation. In the early- to mid-1990s, at least a thousand acres of juniper woodlands in Northeastern California were harvested for power generation biomass (Ward personal communication). Power generation markets for juniper have virtually disappeared over the last several years though, due to changes in state law and tax structure governing alternative power purchases.

In early 1995, when Oregon lottery funding for the *Western Juniper Furniture Market Research and Design Project* was approved by Governor Kitzhaber, there were probably between five to 10 mostly small, "cottage industry" size manufacturers who used juniper on an inconsistent basis, mainly for high-end, rustic roundwood furniture. Monthly lumber production, mostly by portable mills, probably averaged less than 5,000 board feet per month. The rough, green lumber produced was used mainly for exterior, low-value applications such as corrals, barns, and other outbuildings (Breedlove personal communication). There was also a short-term increase in production of juniper chips from mid-1994 through late-1995 (probably no more than 20,000 bone dry tons [Vanderpol personal communication]) because of a temporary peak in chip prices.

Substantial progress has been made over the last year or two, due in large part to the efforts of the ad hoc Western Juniper Commercialization Steering Committee and State of Oregon funding support for activities of

the Western Juniper Industry Facilitator (currently Bill Breedlove, Klamath Falls). For example, there are now at least 35 manufacturers in Eastern Oregon who process juniper for various primary and secondary markets (probably only five to 10 consistently). Products include rough green lumber for farm and ranch use, shaped logs and beams for log homes, heartwood posts, landscape timbers, decking, fencing, flooring, interior paneling, architectural doors, cabinetry, furniture, store displays, and novelties. It is estimated total juniper lumber production now averages 10,000 to 15,000 board feet per month.

Fiber product production has lagged due to a combination of low chip prices and high juniper harvest costs. However, a juniper shavings mill in Klamath Falls, with a projected annual processing capacity of 12,000 green tons, is scheduled to start production before the end of 1998 (which will permit the thinning of 600 to 800 juniper woodland acres per year).

Preliminary Market Research

Considerable information was available from several years of informal market research and manufacturing trials by the time the *Western Juniper Furniture Marketing Research and Prototype Design Project* was begun in late 1995. The basic message from over 30 primary and secondary manufacturers was that specialty rather than commodity markets needed to be pursued. The main reasons were: 1) Lack of a consistent flow of higher-quality juniper in the supply pipeline; 2) High raw material costs (averaging \$550-\$600 per thousand board feet for kiln-dried mill run lumber); and 3) Lower recovery ratios than traditional commercial Pacific Northwest species.

At the same time, critical manufacturing and processing information was just becoming available from pioneering studies conducted by Ed Burke (University of Montana, Missoula) concerning juniper physical and mechanical characteristics, and Mike Milota (Forest Research Laboratory, Oregon State University, Corvallis) concerning juniper drying schedules (Burke 1994a, 1994b, 1994c, 1994d, 1994e, 1994f, 1994g; Milota 1995a, 1995b, 1996; Milota and Swan 1995; Leavengood and Swan 1997).

The first step taken to determine which specialty markets to explore consisted of defining the unique and special characteristics of western juniper. A partial list follows:

- Appearance - The wood is often richly colored with dramatic heart and sapwood differentiation. Swirling grain patterns, created by numerous knots and bark pockets, suggest use in product lines which emphasize a rustic appearance.
- Fragrance - The wood is aromatic and offers the perception of moth-repellent characteristics similar to eastern redcedar (*Juniperus virginiana*), a closely related species.
- Machining Characteristics - As one manufacturer states: "Juniper machines like butter and surfaces well" (Hanson personal communication).
- Physical Characteristics - Juniper is significantly more stable in shrink/swell tests than other commonly-used Pacific Northwest species, such as Douglas-fir and ponderosa pine, and most hardwoods (Burke 1994e). The wood bends well and holds its form, similar to beech, birch, and ash. It is also denser and harder than ponderosa and lodgepole pine, and even red alder (Burke 1994a, 1994f, and 1994g).
- Other Manufacturing Characteristics - The wood glues well and finishes well with a variety of commercial lacquers and common consumer finishes. Joinery results are similar to other species and it has excellent nail withdrawal strength (Burke 1994b and 1994c).
- In-Service Below-Ground Durability - The results of a long-term fence post service life study conducted by Oregon State University (Miller 1986) indicate that the heartwood of western juniper is more durable than any other Pacific Northwest species.

The unique characteristics of juniper also constrain fabrication techniques and potential product line development. These include:

- Numerous Knots and Grain Differentiation - What makes juniper beautiful also makes it difficult to maintain consistent quality using standard, commodity-oriented manufacturing techniques. Based on years of experience, Mike Connolly, Connolly Wood Products (Bend) believes that with juniper, "...the shorter the better - anything over six feet in a value-added application is asking for trouble." It is also difficult to obtain large, clear, solid pieces greater than one-inch thick, four-inches wide, and 18 inches or longer (Hanson, see [Appendix A](#)).
- Weak Longitudinal Grain Structure - Weak longitudinal grain structure means the wood splits easily with the grain and chips easily if a sharp corner or edge is exposed in service.

A number of potential specialty markets were suggested by looking at products manufactured and distributed in Oregon out of eastern redcedar (Leavengood and Swan 1994), analysis of the unique and special characteristics of western juniper, and results of interviews conducted with manufacturers:

- Gifts and accessories (such as awards, plaques, and boxes);
- Accent items for household decorating (such as benches, frames, small tables, coat or hat racks, and chests);
- Office accessories (such as pen and pencil sets, and desktop office supplies containers);
- Outdoor accent items (such as benches, and flower and planter boxes);
- Horse and stable accessories (such as hat, tack, and saddle racks); and
- Store displays (such as boxes and crates).

Product lines for all six of these potential specialty markets could be fabricated with shorter pieces, benefit from the rustic appearance of the wood contrasted with its fine finishing qualities, and highlight its fragrance (especially for indoor applications).

Potential Manufacturer Interest and Capabilities

More than 30 manufacturers, mostly located in Eastern Oregon, were visited or consulted from late 1995 through 1996 concerning their interest in developing juniper furniture or other value-added product lines (see Appendix C, *Partial List of Manufacturer Contacts*). Capabilities were also informally assessed (such as manufacturing equipment and experience, financial resources, and business experience). Hanson's report summarizes a portion of those contacts (see Appendix A, [Western Juniper Furniture Market Research and Prototype Design Report](#)).

Although interest was high, manufacturing capabilities and experience differed widely, as did business experience and personal financing.

Prototype Product Line Design and Fabrication

The primary market focus of the first series of product prototypes was "gifts and accessories". This decision was based on observations of manufacturing experience and capabilities of Eastern Oregon wood products manufacturers interested in juniper, as well as initial feedback from at least 10 different retailers (see Appendix F, *Partial List of Market Research Contacts, 1995-96*). A total of eight prototypes were developed for review with potential retailers and distributors (see Appendix D, *Project Prototype Photos*). Designs covered a variety of skill levels and equipment capabilities:

- Basket Weave Box
- Desk Clock/Business Card Holder
- Rustic Picture Frame

- Pendleton Blanket Stool
- Sweater/Shirt Box
- Multi-Purpose Divided Box (Garden Tool Caddy; Compact Disk Holder; stationary Box; Gift Box; Display Box)
- Blanket Chest

Prototype designs and retailer contacts are included in Hanson's report, [*Western Juniper Furniture Market Research and Prototype Design Report*](#) (see Appendix A).

Prototype Product Line Retailer Feedback

Prototypes were shown to 10 large and small retailers who specialize in "gifts and accessories" (see Appendix F, *Partial List of Market Research Contacts, 1995-96*). Copies of the interview questions used to obtain retailer feedback as well as a Retailer Fact Sheet are included in Appendix E (*Retailer Interview Questions and Retailer Western Juniper Fact Sheet*).

Retailer feedback was excellent and it was evident that follow-up could generate orders. However, a large discrepancy existed between the needs of larger retailers and catalog companies who appeared most interested, and capabilities of the small juniper manufacturers who had indicated an interest in pursuing the "gifts and accessories" market. For example, larger retailers require suppliers to respond in a timely manner (30 days or less) to high volume orders (hundreds of units at a time), and carry production and inventory costs for 90 days or more before being paid.

Hanson provides a list of buyers for larger retail chain stores or catalogs, as well as a list of shops and galleries which may be interested in single items or small quantities (see Appendix A, [*Western Juniper Furniture Market Research and Prototype Design Report*](#)).⁽⁵⁾

Niche Market Confirmation and Followup

- *Pendleton Woolen Mills* -

Based on feedback from several retailers and marketing insight gained through the last couple of years, an appointment was obtained with the National Retail Manager for Pendleton Woolen Mills (Portland). Retailer feedback had been very positive about the Pendleton Blanket Stool and sweater/blanket display/gift box prototypes, and the appearance and fragrance of juniper seemed to fit the style and wool goods highlighted at the Pendleton Stores visited.

The Pendleton National Retail Manager was very positive about the presentation made to him and provided sketches and dimensions of displays in which he was interested. A series of prototypes were made by Connolly Wood Products (Bend) with material provided by High Desert Wood Products (now 4-Mac Industries, Dairy). Between March, 1997 and June, 1998, Pendleton Woolen Mills, Retail Division, has placed eight separate orders totaling over \$19,000. The Pendleton display product line now consists of 21 different items and is in 37 Pendleton retail store locations throughout the U.S. (see Appendix G, *Pendleton Woolen Mill Retail Store Display Photos, Fact Sheet, and Prototype Poster*).

Companies participating in the manufacturing flex network which services the Pendleton account are coordinated by Bill Breedlove, Western Juniper Industry Facilitator. Participants include Connolly Wood Products, 4-Mac Industries, Northwest Forest Industries (Paisley), The Wood Shed (Mitchell), Al DeGormo (Bend), and Walters Personalization (Bend). In addition, Juniper House Logs (Mitchell) contributed house logs

and Bear Creek Wood Works (Baker City) contributed a bed frame for a prototype display at the Pendleton retail store in Reno. The bedroom display will be replicated in the Pendleton retail store in Washougal, WA., in 1998.

Bill Breedlove continues to work with Pendleton Woolen Mills, Retail Store Division, to expand the current juniper retail display and product line. A "Point of Purchase" display box is being prepared to hold juniper postcards (taken by Larry Turner, a professional photographer from Malin, CA.) and scented juniper sprays. A large juniper poster frame and additional wood display items are also being developed. Photos of some of the Pendleton store display items are included in Appendix G, *Pendleton Woolen Mill Retail Store Display Photos, Fact Sheet, and Prototype Poster*.

- "Gifts and Accessories" and "Gifts and Awards" -

"Gifts and accessories" sales leads were followed-up with a number of small independent retailers, and a few corporate and government accounts. Potential order size appeared within the capabilities of interested western juniper manufacturers. "Gifts and accessories" and "gifts and awards" orders were obtained from the Capital Gift Shop (Salem), Oregon Economic Development Department (Salem), City of Prineville, and other small accounts for 10 different products. Orders were also obtained from several remanufacturers, such as Burnich Frame and Moulding (Missoula, MT.), who used juniper for rustic picture frame moulding. Orders to date total about \$6,000.

The manufacturing flex net for the "gifts and accessories", "gifts and awards", and remanufacturer markets is coordinated by Bill Breedlove, Juniper Industry Facilitator. The flex net currently includes Northwest Forest Industries (Paisley), 4-Mac Industries (Dairy), Artistry in Wood (Paisley), Walter's Personalization Services (Bend), Al DeGormo (Bend), and Connolly Wood Products (Bend). A photo of an award produced for the Oregon Economic Development Department is included in Appendix D (*Project Prototype Photos*).

Grading Rules and Standards

Grading rules and standards for western juniper have been a topic of conversation since at least 1992, when juniper commercialization activity increased in earnest. The ad hoc Western Juniper Commercialization Industry Steering Committee decided to hold off proposing rules and guidelines until a better idea of end-use products was known. By late 1997, the Steering Committee felt product lines were starting to emerge and contracted with Don Prielipp, formerly with P&M Cedar (Anderson, CA.) to assist. Prielipp has extensive experience with eastern redcedar, a species closely related to western juniper.

Prielipp's background discussion and summary is included in Appendix B(2) (*Background Report - Lumber Grading Rules for Western Juniper*). Appendix B(1) (*Western Juniper Proprietary Grade, First Edition, 1998*) contains the actual grade rules published as a result of extensive discussions involving multiple members of the Western Juniper Commercialization Steering Committee.

The emphasis of *Western Juniper Proprietary Grade* rules is on appearance rather than strength characteristics. Evaluation criteria for sorting logs and evaluating commercial quality of standing timber are also included. Use and certification of log and lumber rules by existing Grading Bureaus was not considered cost-effective or reasonable given the small size of the current market. The Steering Committee indicates it will reconsider the decision not to pursue special western juniper grade rules certification and a tie-in to a professional grading bureau at a later date.

Summary and Recommendations

-Summary -

Preliminary market research performed for the *Western Juniper Furniture and Market Research and Design Project* indicated that efforts should focus on specialty value-added markets, which take advantage of the unique characteristics of juniper, rather than try to compete with traditional Pacific Northwest commercial species in large markets. Among the unique and special characteristics identified were appearance, fragrance, and "finishability". Drawbacks to using juniper were also identified. These included inconsistent supply, the need to use shorter lengths, and weak longitudinal grain structure. Several potential specialty markets were tentatively identified, including "gifts and accessories" and "store displays".

Over 30 different manufacturers were visited or consulted during the course of this project about their interest in developing value-added juniper product lines, as well as their capabilities (such as manufacturing equipment and experience, financial resources, and business experience). Although interest was high, capabilities and experience varied widely.

The "gifts and accessories" specialty market was chosen as the primary focus of the prototypes designed and produced for this project, based on a rough assessment of interested manufacturers and preliminary market research. Designs covered a full range of skill levels and equipment capabilities.

Ten large and small "gifts and accessories" retailers were visited and shown the prototypes produced for this project. Retailers were asked questions concerning current and future product lines and needs, and their reactions to the prototypes. Retailer feedback was excellent and several sales leads identified. However, a large discrepancy existed between the better business prospects, who were large retailers and catalog companies, and the small manufacturers who were most interested in this type of market. Very few of the juniper manufacturers can afford the time and resources necessary to develop a full "gifts and accessories" product line, respond to high volume orders in a timely manner, and carry inventory and production costs for three months or more.

Efforts were then made to find smaller markets. Based on market research performed for this project by Hanson (see [Appendix A](#)), several leads were followed-up and orders obtained by Bill Breedlove, Western Juniper Industry Facilitator. Total value of orders placed to date by small retailers, corporate and government accounts, and remanufacturers is about \$6,000. The manufacturing flexible network coordinated by Mr. Breedlove for these markets consists of six companies, only one of which has more than two employees.

The most productive niche market identified and confirmed was for "store displays". There is now a full line of juniper store display products in 37 Pendleton Woolen Mill retail stores throughout the U.S. Additional products are under development. More than \$19,000 sales has been generated from eight separate orders.

The Western Juniper Industry Facilitator performs a key role in coordinating the manufacturing flexible network which supplies the store display products for the Pendleton orders. There are six companies currently involved and it is expected more will be added as the Pendleton Retail store display product line expands.

[Log sort evaluation criteria and lumber grading rules](#) were developed as part of the *Western Juniper Furniture and Market Research and Design Project*. The effort was coordinated by Bill Breedlove, with assistance from Don Prielp, a wood products private industry consultant, and members of the ad hoc Western Juniper Commercialization Industry Steering Committee. Larry Swan, U.S. Forest Service, compiled the "log sort evaluation criteria" based on discussions with juniper sawmill operators and personal observations.

- Recommendations -

The following recommendations outline ways to help develop a juniper value-added industry, and are based on key problems and opportunities identified during the course of this project:

Compensate for Lack of Industry Infrastructure - A process or person(s) is needed to expedite and facilitate marketing and filling orders due to lack of juniper industry infrastructure. For example, before an order can be filled, landowners have to be connected to harvesters, harvesters to primary processors, primary processors to dry kiln facilities, kiln-dried lumber delivered to secondary processors, and final products shipped to end-users. The Western Juniper Industry Facilitator (Bill Breedlove), funded by the State of Oregon through its Regional Strategies Program, currently manages this process.

Continue Support for Facilitated Flexible Networks - A major issue facing most small, rural manufacturers is marketing, which includes everything from product line development to distribution and sales. One way to deal with this issue is to form informal cooperative networks. An Industry Facilitator can assist independent and isolated small manufacturers without getting into the political and administrative costs necessary for a more formal network, such as a cooperative or association.

Appoint a Single Administrator for Juniper Revolving Loan Fund Applications - Another major issue facing most small, rural manufacturers, especially those interested in juniper, is access to working capital. Currently, the lender of last resort for juniper manufacturers in Eastern Oregon are various regional revolving loan funds administered by local service providers. These service providers have a wide-range of wood products business expertise and exposure to the juniper industry. A single lead service provider and advisory group, similar to what was done for the special Oregon Regional Strategies-funded forest products marketing program, will increase expertise, encourage consistency, and provide oversight for the various economic development boards who want to contribute.

Identify and Cooperatively Participate in Key Trade Shows - Another way to assist small and medium manufacturers is to help them target specific trade shows, and cooperatively fund participation and trade show booth development. For example, 10 western juniper manufacturers recently participated in well-attended log and timber frame home shows in Portland and Tacoma. Coordination was provided by the Industry Facilitator and costs were shared through a special Oregon Regional Strategies-funded forest products marketing program.

Maintain Lumber Inventory - Manufacturers currently hesitate to solicit or accept orders which require large quantities (more than 5,000 board feet) of high quality raw material, due in part to working capital needs and inventory costs. It is estimated that about 250,000 board feet of inventory is needed on a state-wide basis to give manufacturers the flexibility and confidence to solicit and accept larger orders, and increase buyer confidence in the ability of the industry to fill larger orders.

Pursue Untapped Sales Leads - [Mark Hanson's report](#) (included in its entirety as an appendix) provides sales leads for the "gifts and accessories" market as well as a list of key trade shows. It is important to note that there has been a two-year time lag between when Hanson initially made contact with the people listed and this report.

Highlight Unique and Special Characteristics - Hanson makes recommendations about how to incorporate some of the unique and special characteristics of juniper into attractive design elements. For example, he suggests that a small woven accent could become a well-recognized "trademark" of western juniper products. Retailer response to his woven accent design on one of the prototypes was universally positive.

Continue Publication of the Western Juniper Newsletter - Continuation of the *Western Juniper Newsletter* is considered critical to expedite communication between the diverse individuals and groups who are interested in the management and commercialization of western juniper. Circulation has increased over 300% since the first issue (the mailing list is now over 800) and many people report loaning their copies to other interested individuals and groups. The first four issues of the newsletter were partially subsidized through the Oregon Regional Strategies Program. Other funding sources must be developed.

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1. For this project, a "flexible network" consists of three or more companies cooperating to achieve a mutual goal. The emphasis here is on manufacturing, but flexible networks could just as well involve marketing, distribution, workers compensation, or any other area of mutual interest and benefit.

2. Assuming an average of 225 cu. ft./ac.

3. Key assumption is that ranchers who intend to thin their woodlands over the next 10 years will treat 25% of the average 350 woodland acres/landowner, at a minimum cost of \$50 per acre.

4. According to Miller (1986), western juniper is the most durable heartwood species in the Pacific Northwest, with an average service life in western Oregon exceeding 30 years. Other species included in the study were Pacific yew, redwood, various cedar species, and Oregon white oak.

5. Small manufacturers and artisans may also wish to contact Northwest Best Limited, Inc., a small catalog company based in Medford, OR. (541/734-5466). The company recently accepted several western juniper

products for its 1998-99 catalog series

Western Juniper Furniture Market Research and Prototype Design Report

By
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May 1, 1996

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Introduction

Western Juniper (*Juniperus occidentalis*), also known as "Oregon's largest weed" by many ranchers in Eastern Oregon, is not yet harvested commercially on a consistent basis. The Klamath County Economic Development Association, at the request of the Western Juniper Commercialization Industry Steering Committee, commissioned me to conduct market research, produce designs, and fabricate prototypes which would help create jobs in Oregon and give added value to Western Juniper. Larry Swan, U.S. Forest Service, was the project coordinator.

Visual and Manufacturing Characteristics

Western Juniper has some rather unique characteristics. First noticeable is its great visual appeal. The wood is multicolored with dramatic heart and sapwood variations. There are often knots and bark pockets which are especially pleasing in a rustic uses. It is highly aromatic so it could be used for hangers, blanket chests, even potpourri. It is also fairly limited in range (Eastern Oregon, Northeastern California, and Owyhee County in Idaho), which means a distinctive western style and brand awareness could be created.

Western Juniper is a strong wood, yet is on the softer side of the hardwood scale. It has great flexibility; it can be bent and even woven! The wood glues well. Many fasteners have been tested and holding ability is superior in some cases to other woods. The wood appears to be hydrophobic, or moisture retardant, and pest resistant. It is highly resistant to rot and could be used for exterior uses, such as posts or flower boxes.

Finally, the wood takes a stain and finish consistently, but it should be noted that it is also good-looking unfinished and will then retain its scent this way. (When filling small knots and voids in surfaces before finishing my recommendation is a water base wood filler by Famowood in the color Cherry/Dark Mahogany.)

The wood machines relatively well. However, there are a few manufacturing disadvantages - hidden, longitudinal cracks in some of the wood can cause weak grain structure and radical problems with machining. When shaping or routing edge grain, curved or serpentine shapes should be avoided (the grain will tear and fray). Another solution is to form a two-ply glue lamination panel. (Take two boards of equal thickness and bond together their longitudinal face-grain parallel to one another.) Finger-jointed panels can also help to strengthen and stabilize Western Juniper.

Finally, large, clear and solid stock pieces are rare. Boards thicker than 1" and wider than 3 1/2" usually have knots and bark pockets in lengths over 18".

Partial List Manufacturer Contacts and Capabilities

My portion of the project began with interviews of potential Western Juniper manufacturers. Larry Swan organized a trip through some rural areas of Oregon and we spoke to most of the following people and businesses. This was done to establish interest and evaluate manufacturing capabilities. Many of the rural craftsmen were producing pieces on an independent level.

David J. Bettencourt
510 S. 6th St.
Klamath Falls OR. 97601
(541) 883-7708

David Bettencourt has a factory/showroom gallery with 8 employees. The shop produces mainly a production line of residential furniture. Within the line they offer customizing to the consumer. They have a finishing spray booth and offer some upholstered pieces in the line. Some specialty tools in the shop are: a 42" wide belt sander, a multi-spindle boring machine, and a cut off chop saw.

Lakeview Oregon Arts Council Meeting
Sara Buntin, Al Bailie, Mike Hendrick, and Robert Lund

Larry and I gave an overview of our mission to the Lakeview Arts Council, which was met with enthusiasm. However, every one seemed very nervous when we spoke about the possibility of filling even small orders from retailers. My impression is that production would be very slow even on the most basic of designs.

Al Bailie
Paisley, Oregon
(541) 943-3174

Al Bailie has experience making kitchen cabinets and small laminated wood boxes with simple joinery. He has a small work shop that he built for making kitchen cabinets. He is eager to get started with a project.

Mike Hendrick

Lakeview, Oregon
(541) 947-3046

Mike Hendrick has made a few basic pieces of furniture and his work shows some craftsmanship. He has a simple work shop; probably enough to get started.

Robert Lund
Lakeview, Oregon
(541) 947-3977

Robert Lund is interested in branding turned bowls and making Christmas ornaments. He has a lathe and a drill press. Because he works full time for the BLM his ability to fill any retail orders would be on a part time basis.

(Further assistance was requested by Robert concerning how to improve the design of his XMas tree ornaments. See my response to Robert in Appendix A, *Feedback Concerning XMas Tree Ornaments Design and Manufacturing*).

George McDonald & Son (also known as 2 Mac Enterprises)
George McDonald
Lakeview, Oregon

The McDonalds are owners/operators of a Woodmizer portable saw mill and larger portable saw mill mounted on semi- trailers. George has some experience cutting Western Juniper. He estimates he could cut an average of about 1000 board feet per day. He does not think kiln drying is an option for him without trucking the wood elsewhere first. Air drying is a possibility.

(Author's Note: According to Bill Breedlove, Western Juniper Industry Facilitator, Fremont Sawmill, Lakeview, has dried more than 60 thousand board feet of juniper lumber over the past couple of years, and is willing to dry more on a space available basis.)

Mike McFarland Door Mfg.
Mike McFarland
Lakeview, Oregon

McFarland Door Mfg. has 20+ employees and a very sophisticated factory setup for manufacturing high quality, unfinished, solid wood exterior doors. Some of the notable stationary tools in the shop are: a CNC router, 2 shapers, 2 molders, and a gang rip saw and an extra wide belt sander. McFarland Door recently received an order for 30,000 exterior doors which may hinder his ability to produce other product lines.

Iron Horse Machine
Rick Holland
P.O. Box 390
933 1/2 4th St. North
Lakeview, Oregon 97630
(541) 947-2275 Fax (541) 947-3936

Rick has made some custom built wood and metal furniture and accessories. He builds on order and some on speculation for gallery display. His machine shop has 2 employees. The shop is a near complete shop with a plasma cutter, two mills, a lathe, presses and forge for wrought iron.

Hines Oregon Millwork Enterprises (HOME)
Marshall Brown, V.P. Engineering & Lori Cheek, V.P. Operations
P.O. Box 826

Hotchkiss Lane Extension
Hines, Oregon 97738
(541) 573-3244 Fax (541) 573-3241

Hines Oregon Millwork Enterprises (HOME) is in an impressive 5/8 mi.- long building with 54 employees. They have a unique market niche specializing in making hard-to-process defective, softwood boards into useful finger-jointed shop or shop common grade lumber (high grading). Scraps from other manufactures, as small as 3 7/8" in length, could be used in finger joining larger continuous length boards. They could be very useful in manufacturing what would otherwise be non-usable material.

Connolly Wood Products, Inc.
Mike Connolly
Bend, Oregon
(503) 385-8641 Fax (503) 385-8697

Mike Connolly has a woodwork mill shop with molders, shapers, a wide belt sander, and a gang rip saw set-up for architectural grade moldings and floors. In addition, he has a retail hardwood supply business. (Author's Note: Mike closed this aspect of his business in early 1997.) Mike has experimented with more juniper value-added products than any other manufacturer in Oregon. His present product interests include flooring, fireplace mantels, cabinet doors, paneling, decking, and railings.

Brent McGregor
PO. Box 1477
Sisters, Oregon 97759
(541) 549-1322

Glen Burleigh
Box 106
Powell Butte Oregon 97753
(541) 548-6913

Both Brent McGregor and Glen Burleigh are high-end rustic furniture makers with their own shops. They use older growth Western Juniper to create free-form art/furniture. They often use rescued limbs and trunks from fallen timber rather than live trees. Brent has been working consistently with juniper in a commercial value-added longer than anyone else in Oregon, and been featured in numerous media pieces. Both Glen and Brent access locations and markets which might accept other juniper products, such as paneling, flooring, cabinetry, doors, etc.

John Vomos Sr.
Willamina, Oregon

John Vomos Sr. makes small wooden gifts and products.

AMS
Lewis Anderson
PO. Box 1498
Sisters, Oregon 97759
(541) 549-0320 FAX (541) 549-0428

Lewis Anderson is an owner/operator of a CNC router system for contract purpose. He has seven employees. He is acquiring some new machinery that is fed blanks of wood (as small as 7" in length) which the machine will then duplicate. Ornaments, plaques or pieces can be mass produced and/or later assembled into boxes etc.

Manufacturing Process Recommendations

I suggest that higher grade 4/4 kiln dried Western Juniper fall-off from larger manufacturers should be made

available to smaller manufacturers.

For example, if a market for Western Juniper style doors were established, McFarland Door Mfg. could supply the Lakeview Arts Council Members and other manufactures with the fall-off waste materials. In this way, the larger manufacturer eliminates some of his waste products.

Giving smaller manufactures the cut-off pieces of surface sanded boards from a larger operation would put "scraps" to good use, gives the smaller manufactures a supply of wood (often hard to find in rural areas), and eliminates a step of surface sanding which smaller manufactures often do not have the capabilities to do themselves. In addition, smaller manufacturers could have larger boards surface sanded by McFarland Doors as needed.

Finally, the saw dust and shavings could be used in garden mulch and/or potpourri bags. Further recommendations might include using the HOME factory in Hines, Oregon to make high-grade longer length boards for Mike Connolly's flooring and other products.

Market Research

A broad cross-section of retailers were contacted to see what types of products they needed or wanted, as well as a few manufacturers who already have appropriate distribution channels set-up. The larger retailers were somewhat difficult to contact. Most retailers preferred to see actual products, rather than stating their own product needs or ideas to be developed. I developed a list of possible products to assist in gathering ideas, taken from previous discussions with retailers and manufacturers, as well as some of my own ideas. A copy of the list is attached to this report as

Appendix B (*Western Juniper Product Idea Categories*).

Retailers Contacted With An Interest in Western Juniper Following is a list of retailers who have indicated an interest in Western Juniper products. A few manufacturers are also listed who have distribution channels established for similar products.

Carter Associates, Inc.
Penny Carter
Corporate Gifts and Incentives
The Lawrence Building
308 SW First Avenue, Suite 190
Portland, OR 97204
(503) 223-7063 FAX (503) 223-7806

Carter Associates, Inc. would like to see office desk clocks built a on slant with a business card holder attached. A high gloss finish, quality control and establishing a good retail price is very important to them. They are also interested in wooden bases for glass awards.

Oregon Marketplace (OMP)
Robert Edgar (Project Manager)
Chemeketa Community College
365 Ferry Street SE
Salem, OR 97301
(503) 399-5181 FAX (503) 581-6017

(Author's Note: The OMP Program has moved offices and consolidated with other programs. The correct

number to call is 1-800-967-6734. Bob Edgar is no longer with this operation.)

Bob Edgar runs the Oregon Marketplace, a first class program with an international reputation of helping Oregon businesses in a variety of ways. Economic development is the main focus by networking buyer with seller, or buyer with manufacturer, or manufacturer with supplier. This is basically a business to business service. Bob creates a bimonthly newsletter called *The Match*. It reaches a statewide audience with articles about upcoming statewide business opportunities, requests for bids direct from interested buyers, and an inexpensive way for businesses to sell services or goods to a focused SIC code market. The newsletter is published on the 1st and 15th of every month. Parties interested in the mentioned services should fill out an *Intake Form* which will enable OMP to establish a SIC code specific to their business and goods.

Northwest Business News
Dennis Martin
(503) 227-1410

Northwest Business News is a weekly radio program that can help promote products to a large audience.

JETRO (Japan External Trade Organization)
Hiroshi Natsui (Senior Trade Adviser)
Genichi (Assistant)
(503) 229-5625

JETRO has published a 1995 Product Market Report about Japan. *PIER J* magazine is a monthly publication about business opportunities in Japan. There is an article about patio furniture in the November, 1995 issue of *PIER J*. JETRO is establishing two home building material and design showrooms in Japan. Businesses will be able to show their products and receive trade assistance at JETRO. Prefabricated houses made with 2 x 4 construction are in great demand in Japan. JETRO has helped Oregon businesses form a group which produces a prefab house, called *My Oregon Home*, in Japan. Bob Harrison, CEO of Western Pacific Building Consolidated, in Portland, is in charge of the Oregon business group.

Greater NW Fiber Corporation
Ron Barthel / Harless Gardener
(541) 924-9699

Curly Cue Pet Bedding is Greater NW Fiber Corporation's main product. They make a blend of Eastern Red Cedar and Pine bedding and they are very interested in expanding their market.

Crosscut Hardwoods
Bryant or Craig
3065 NW Front Ave.
Portland, OR 97210
(503) 224- 9663

Crosscut Hardwoods currently handles a wide variety of domestic and imported hardwoods, sheet goods, and assorted materials for professional and hobbyist woodworkers. They are looking to expand their line of native northwestern woods. They buy kiln dried wood by the unit, with rough cut live edges in thicknesses of 4/4, 5/4, 6/4, 8/4, 10/4, 12/4, and 16/4. They are currently paying \$0.87/BF for Eastern Red Cedar.

OEDD (Oregon Economic Development Division)
Maureen Boushard (Marketing Section)
775 Summer Street NE
Salem, OR 97310

OEDD is looking for a variety of Oregon made gift items. Products should be light-weight, unbreakable, and small enough to fit into luggage. The price range is \$5 to \$50 in quantities of 5 to 15.

Capital Gift Shop
Juliana Klein
(503) 986-1391

Capital Gift Shop wants high quality Oregon made gift items bearing the State Seal of Oregon. The retail business is broken down into three categories of consumers: state government, tourist, and Christmas/holiday. The price for low-end products ranges from \$5 - \$20 and high-end products up to \$100. They are interested in quantities of 200 - 500 pieces per order.

The Real Mother Goose
Owner/Operator - Stan & Judy Gillis 901 S.W. Yamhill
Portland, OR 97205
(503) 223-9510

The Real Mother Goose is a gallery featuring hand crafted woodworking etc. I presented my prototypes to them for a jury review. Overall, they reacted very favorably toward the products and gave some interesting comments. They especially liked the woven box and felt it could be sold for \$45.00 to \$100.00. The small stool was nice; they preferred it as a stool rather than the table concept. They recommended that the stool be made in a smaller size and possibly in a bench version. The clock/business card holder could sell for \$30.00. The picture frame should come complete with glass and backing, ready for mounting. However, due to the rustic nature of the wood, they felt the products wouldn't be right for their shop (see Appendix C, *The Real Mother Goose Gallery - Juried Feedback About Prototypes*).

Oregon Log Home
(541) 549-9354

Oregon Log Home currently builds homes out of Lodge Pole Pine, Douglas Fir, and Spruce. They make all the parts in-house and occasionally have made doors and fireplace mantels out of Western Juniper.

Wood Country
Cheryl Doyle
Pendleton, OR
(541) 276-5363

Wood Country makes *the Outdoor Cedar Convertible Picnic Table*. They sold all 64 units in under 4 minutes on QVC TV.

Pendleton
Store Manager - Patty
900 SW 5th
Portland, OR
(503) 242-0037

Pendleton owns 29 stores nationwide and sells their merchandise to about 50 independent retailers nationwide. They also have two Mill Stores that sell fabric, blankets, yarn, buttons, thread and elastic. Patty, the store manager of Pendleton in Portland, says that blankets are their biggest selling items. With a twin or full sized blanket the customer gets a cardboard box; there are no boxes for any of the larger sized blankets. Patty said her budget doesn't allow for other products. She wasn't very interested in any store display items such as blanket chests, blanket boxes, sweater boxes, shirt boxes, blanket racks, or any other furniture items (such as stools or tables). No customer had asked for any of these items. She thought that Western Juniper would compete with

the Oak retail rack in the store. And she added that she thought the boxes would be cost prohibitive for any sales with the Pendleton merchandise. She would consider only 2-3 boxes at Christmas, but price would be an issue. Though she was rather negative, she did suggest we show our ideas to David Armentrout in the corporate office.

Harry & David
Store Director Bill Krumpeck
1314 Center Drive
Medford, OR 97501
(541) 776-2277

Bill Krumpeck and his assistant were very enthusiastic in the uniqueness of the wood and our prototypes. Corporate does all the purchasing for their 30 retail stores and their mail order business. Currently most or all of their domestic wooden boxes and baskets for packaging are made in Vermont and shipped here. Outside of the prototypes we showed them, they mentioned that bird houses and bird feeders do very well, especially in designs with a theme (for example lighthouses). In addition, they mentioned wooden jam boxes and medium sized gift boxes would sell well, especially in the \$5 - \$12 price range. Branding or silk screening the Harry & David logo on the box would be very important. They feel their main stream customers are into casual life styles and the rustic characteristics of Western Juniper would be great.

Northwest Scent Products
Steve & Hope Dransfelt
Otis, Oregon

Northwest Scent Products makes clay scented pine cone ornaments. They could possibly buy secondary use boxes for their ornaments.

Made in Oregon
Mrs. Pendergrass
5 NW Front
Portland, Oregon
(503) 273-8498

Made in Oregon is tired of Myrtle wood and would like to see something new. They get a lot of travelers from out of state that are all looking for gift items. Toys, small clocks and other small, reasonably priced products do very well. Gift baskets and small crates for souvenir packaging are especially good sellers.

Other Retailers and Buyers Worth Contacting

Although I did not personally contact the following retailers, they would be worth a call and visit:

<u>Name & Contact</u>	<u>Telephone</u>
Beards Frame Shops (Val Hail)	(503) 245-1245
Bibelot (Shelly)	(503) 244-8483
Dazzle (Faviana Priola)	(503) 224-1294
Gallery Earth (Ben Harrel)	(503) 232-8722
HK Limited (David & Nancy)	(503) 223-3131
Kitchen Kaboodle (Caroline Baxter)	(503) 243-5043
Norm Thompsons (Dale Hobbs)	(503) 614-4600 x 4560
Pottery Barn (Ken Wingard)	(800) 421-2004 x 7865
Present Perfect (Jean Stephens)	(503) 228-9727

Twist (Heather) (503) 224-0334
Urbino (Rob Friedman) (503) 220-0053

Sales Representatives

One way for manufacturers to access larger markets is to use Sales Representatives. Prior to signing an agreement or contract though, the manufacturer needs to do their homework. At a minimum, I suggest requesting the following:

- Marketing Plan, broken down by quarter and including sales projections, advertising and promotion plans.
- Current list of clients (to obtain feedback about rep's track record and level of service - such as providing feedback about retailer and consumer comments and suggestions).
- List of trade shows attended and results.

Trade Shows Worth Considering

Below is a list of trade shows that could be used to promote and test retailer and buyer reception to new Western Juniper products, especially if trying to enter the "gifts and accessories" market.

American Craft Council Craft Fairs
Joann Brown, Director
American Craft Enterprises
21 SO Eltings Corner Rd.
Highland, New York 12528
Tel (914) 883-6100 Fax (914) 833-6130

The show exhibits merchandise made in the USA. Features 700 booths including ceramics, fiber, glass, jewelry, leather, metal and wood. All exhibitors are selected by a jury of craft professionals. Show dates, location & attendance:

96 Mar 1-3 Baltimore, MD Conv. Center 36,000
96 Mar 16-17 Atlanta, GA Georgia Dome 11,500 * top show in country
96 Apr 12-14 St. Paul, MN Civic Center 14,000
96 Jun 14-16 W Springfield, MA Eastern States Expo 13,000
96 Jun 29-Jul 1 Columbus, OH Columbus Convention Center 12,000
96 Aug 9-11 San Francisco, CA Fort Mason Center 15,500

American & International Crafts West
Deborah Hartstein, Div. Mgr.
Tel (914) 421-3287 Fax (914) 948-6180

A division of San Francisco Intl. Gift Fair featuring unique craft objects. All merchandise is selected by a panel of craft professionals for uniqueness, originality and marketability with an emphasis on how each item is made. Show dates, location & attendance:

96 Jul 27-31 San Francisco CA Moscone Conv Center 30,000

Contemporary Crafts Market
1142 Auahi St., #2820
Honolulu, Hawaii 96814-4917 Fax (808) 423-1688

A collection of 350 American craft artists. Show dates, locations:

June 21-23, 1996 - Civic Auditorium, Main Street at Pico Blvd., Santa Monica, CA

September 28-29, 1996 - The Concourse at Showplace Square, 8th Street at Brannon, San Francisco, CA

November 1-3, 1996 - Civic Auditorium, Main Street at Pico Blvd., Santa Monica, CA

Frame-O-Rama/Galleria

Paul Karel, Show Mgr.

Decor Magazine

330 N Fourth St.

Comm Publish CO

St. Louis, MO 63102

Tel (314) 454-3110 Fax (314) 421-1070

Exhibits picture frames, molding, framing equipment, supplies, hardware, merchandising aids, fine and decorative art, and crafts. Attendees are gallery and frame shop personnel, interior decorators, OEM buyers, gift shop and department store representatives, mass merchandisers, and foreign buyers. Show dates, location & attendance:

96 Mar 8-10 New York, NY Passenger Ship Terminal 15,000

Holiday Fair

Sandra Reese, Dir.

Textile Hall Corp.

PO Box 5823

Greenville, SC 26906

Tel (803) 233-2562 Fax (803) 233-0619

Arts and crafts exhibition with a Christmas theme; 800 booths. Show dates, location & attendance:

96 Dec 5-7 Greenville SC Palmetto Expo Center 25,000

97 Dec 4-6 Greenville SC Palmetto Expo Center 25,000

International Contemporary Furniture Fair (ICFF)

May 18-21, 1996

Javits Convention Center, New York, NY

(800) 272-7469 or (914) 421-3206 Fax (914) 948-6194

The Portland Gift Show

June 8-11, 1996 and January 11-14, 1997

(415) 346-6666

The San Francisco International Gift Fair

July 27-31, 1996 and February 1-5, 1997

(415) 346-6666

The Seattle Gift Show

August 24-28, 1996 and January 25-29, 1997

(415) 346-6666

Atlanta Crafts Show

Not date obtained - promoted as the #1 crafts show in the country

Galleries/Shops Worth a Visit

Following is a list of galleries that might be interested in showing and promoting high quality juniper products:

-Oregon-

The Northwest Collectors Gallery
Director - Chere' Winters
Rte 1, Box 1310
Bandon, OR 97411
(918) 747-1829

Features glass , wood, metal , fine art, ceramics and jewelry.

Opus 5 Gallery
Owner Locey and Hal Pfeifer
136 E Broadway
Eugene , OR 97401
(503) 484-1710

Features clay, metal, fiber, wood and glass.

The Real Mother Goose
Owner /Operator - Stan & Judy Gillis
901 S.W. Yamhill
Portland, OR 97205
(503) 223-9510

Features wood, metal, glass and jewelry.

-Washington-

Bela Bellena LTD
Owner/ Director - Patricia Semon
8825 N. Harborview Dr.
Gig Harbor, WA 98335
(206) 858-7434

Features clay, wood, jewelry and glass.

Crackerjack Contemporary Crafts
Owner/Dir. - Kathleen D. Koch
1815 N 45th, #212
Seattle, WA 98103
(206) 547-4983

Features jewelry, ceramics, glass fiber and wood.

Earthenworks Owner/Director - Cynthia Hoskins

713 1st St.,
PO Box 702
La Conner, WA 98257

1002 Water St.,
Port Townsend, WA 98368
(206)385-0328

(206) 466-4422

Features pottery , jewelry, woodworking, fiber, painting , prints, sculpture, and glass.

Fine NW Woodworking
101 S. Jackson
Seattle , WA 98104
(206) 625-0542 Fax (206) 382-1965

Represents wood artisans of the Northwest.

Folk Art Gallery
Owner/ Director - Leslie Grace
4138 University Way NE
La Tienda, WA 98105
(206) 632-1796

Features ceramics, wood , jewelry, glass and textiles.

Wood Merchant
Owners/Directors - Stuart & Laurie Hutt
707 S 1st St.
La Conner, WA 98257
(206)466-4741

Features woodworking.

Additional Market Research Resources

Crafts Report
PO Box 1992
Wilmington, DE 19899-9962

The *Crafts Report* magazine has ads and other information on shows and fairs across the county. In addition, there tips and articles for crafts people.

The Match
Robert I. Edgar
Oregon Marketplace
365 Ferry Street SE
Salem, Oregon 97301

The Match is bi-monthly news bulletin in which Western Juniper could be featured.

WPCC, Inc.
64672 Cook Ave., Suite B
Bend, Oregon 97701
(541) 385-5353

(Author's Note: WPCC recently changed its name to "Northwest Wood Products Association. Location of the office has also changed. Phone number has not been changed.)

The WPCC is an association of secondary wood product manufactures in Oregon. They have an wide variety of services including the *Wood Exchange List* which lists items from companies who want to buy and sell excess and residual materials from one another.

Woodworkers Network
PO Box 390670
Mountain View, CA 94039-0670

A newsletter for and about woodworkers.

Prototypes

Based on feedback from market research contacts, such as Carter Associates Inc. and Capital Gift Shop, many retailers seem interested in gift items. Also very popular was secondary use packaging, such as for Harry & David. Keeping manufacturing capabilities, retailer needs, and local businesses in mind, I designed and fabricated several prototypes out of Western Juniper (see Appendix D, *Prototype Design Plans and Specifications*).

Pendleton Blanket Stool

This design could be in various sizes or could have a table top surface, in place of the cushion, for coffee or end table use. Pendleton fabric, another Northwest original, was used on the cushion cover. The casual style would fit well in a cabin or next to a fireplace or wood burning stove. The stool could be part of a distinctively Northwest rustic furniture line. Miter joinery was used with plate type biscuits. It was designed for the intermediate to advanced woodworker.

Rustic Picture Frame

This rustic frame could be made for standard size photos or small works of art. The frame would come complete with glass and backer stand or wall hanger. It could be sold finished or unfinished. The entire frame was made on a table saw. Large runs of stock could be made with a few basic set ups. These could be sold in a Made In Oregon shop.

Desk Clock Business Card Holder

This desk clock and card holder combination has a high polished finish (a finish the retailers requested). It is a decorative yet functional office accessory. It would do well as a personal or corporate gift item. Large runs of stock could be made and cut off at length. It was designed with high dollar value versus minimal effort to produce, in mind.

Basket Weave Box

This woven topped box, made with box joints, could also be finished or left unfinished and made in various sizes. The basket weave top displays the great flexibility of Western Juniper and could be done in a variety of weaves. The lid has a leather pull and brass rivet details. The idea was to create a secondary use gift box. Goodies could be placed on the inside for the initial gifting, and afterwards the box could be used as a stationary box, photo storage, sewing box, or wall hung cabinet etc.

Sweater/Shirt Box

This simple box could be sold or given with purchases of sweaters, shirts, or blankets. A retailer's logo could be

silk screened or branded into the surface to add a higher value with minimal cost. The box was designed with production in mind. Pin nails fasten the box and no finish is needed. Chamfer edges give it a tailored look. This is another box which could have secondary uses. A Pendleton blanket, wool shirt or sweater might sell well in these boxes.

Secondary Use Packaging (Wood Caddy and Divided Box)

The wood caddy and divided box are just a few ideas for secondary use boxes. They could be filled with packing straw and any gifts (as a basket would be) and given as a present. Then after the items are used, the box could be used again as a CD box, a tool caddy, or a stationary box, etc. Harry & David might be a good candidate for these products. Both were made with butt joints fastened with pin nails for an inexpensive product.

Blanket Chest

This large chest could be used to store sweaters or blankets. It has a finished exterior, but an unfinished interior, to give its contents the great cedar-like scent. It has a hinged lid and a movable interior shelf. Because of the large wooden members, a finger jointed panel was used to stabilize the wood. Box joints were used in the corners, for their strength and durability. Woven details could be incorporated. Chests could be sold the general public or retail chains, such as Pendleton, for store display.

Conclusion and Recommendations

Western Juniper is a unique looking wood with several interesting and marketable characteristics, such as its fragrance and flexibility. The distinctive and pleasing scent could make it "the Camphor wood of Oregon". In working with the wood I found it excellent for smaller rustic items and even larger pieces, when certain techniques were employed to stabilize the wood.

Many of the Eastern Oregon cottage industries I visited were enthusiastic, but are limited by their shop equipment and woodworking experience. In designing products, I kept several things in mind:

- I created designs for all skill levels, including the novice.
- The designs reflect a broad range of uses for Western Juniper.
- Designs display the unique properties of the wood, while working around the few innate problems with Western Juniper.

I used several techniques, based on traditional woodworking, to join and work the wood. These techniques could be used alone or in combination to inspire even more designs. Any one of the designs could be produced on a small scale with basic tools or on a much larger scale for production.

The Western Juniper prototypes were met with great interest from a majority of the retailers. Most popular were the secondary use packaging and small gift items. Another interesting prospect would be to create a rustic furniture line around the stool or blanket chest and promote it as a "distinctively Oregon" product. The *Oregon Market Place* (a program designed to help network buyer with seller, buyer with manufacturer, or manufacturer with supplier) might be valuable resource in marketing these products.

A final aspect worth pursuing would be to make sure the wood and wood products are used in a minimal waste/maximum yield manner. The larger manufacture's waste products (such as smaller wood pieces, and even saw dust and shavings) could go to smaller manufactures or other industries (such as for Greater NW Fiber Corporation's for animal bedding mixes or Northwest Scent Products for potpourri). The WPCC's *Wood Exchange List* might be helpful in such ventures.

Western Juniper, known by some as "Oregon's largest weed", could become "Oregon's next cash crop"!

Appendix B
Western Juniper Product Idea Categories
& Manufacturing

Western Juniper Product Idea Categories
Western Juniper Furniture Market Research and Design Report

Household Items

- _ Benches
- _ Blanket Chest
- _ CD Rack
- _ Clock
- _ Coasters
- _ Coat Rack
- _ Hangers
- _ Fireplace Log Stand
- _ Hanging Racks
- _ Magazine Rack
- _ Ottoman
- _ Outdoor Furniture
- _ Serving Tray
- _ Shelves
- _ Small Tables
- _ Spice Rack
- _ Stools
- _ Tables
- _ Towel Rack
- _ Umbrella Stand
- _ Wine Rack
- _ Other

Specialty Items

- _ Animal Bedding
- _ Baskets
- _ Bird Houses
- _ Boxes
- _ Business Card Box
- _ Children's Toys
(Rocking Horses, Blocks)
- _ Christmas Ornaments
- _ Cigar Humidors
- _ Corporate Award Plaques
- _ Crates
- _ Dog or Cat House
- _ Equestrian Saddle Racks
- _ Flower Boxes
- _ Flower Boxes
- _ Games
- _ Jewelry Bracelet
- _ Mulch Mix
- _ Office Accessories
- _ Picture Frames
- _ Potpourri Sack
- _ Quality Packaging
w/Secondary uses
- _ Taxidermy Trophies
- _ Western Hat Rack
- _ Other