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 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 Bunten, 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
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 manufacturers, 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.

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 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:

<table>
<thead>
<tr>
<th>Name &amp; Contact</th>
<th>Telephone</th>
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<tbody>
<tr>
<td>Beards Frame Shops (Val Hail)</td>
<td>(503) 245-1245</td>
</tr>
<tr>
<td>Bibelot (Shelly)</td>
<td>(503) 244-8483</td>
</tr>
<tr>
<td>Dazzle (Faviana Priola)</td>
<td>(503) 224-1294</td>
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<td>Gallery Earth (Ben Harrel)</td>
<td>(503) 232-8722</td>
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<td>HK Limited (David &amp; Nancy)</td>
<td>(503) 223-3131</td>
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<tr>
<td>Kitchen Kaboodle (Caroline Baxter)</td>
<td>(503) 243-5043</td>
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<tr>
<td>Norm Thompsons (Dale Hobbs)</td>
<td>(503) 614-4600 x 4560</td>
</tr>
<tr>
<td>Pottery Barn (Ken Wingard)</td>
<td>(800) 421-2004 x 7865</td>
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<tr>
<td>Present Perfect (Jean Stephens)</td>
<td>(503) 228-9727</td>
</tr>
</tbody>
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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
(415) 346-6666

The Seattle Gift Show
(415) 346-6666

Altanta 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
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

<table>
<thead>
<tr>
<th>Household Items</th>
<th>Specialty Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>_Benches</td>
<td>_Animal Bedding</td>
</tr>
<tr>
<td>_Blanket Chest</td>
<td>_Baskets</td>
</tr>
<tr>
<td>_CD Rack</td>
<td>_Bird Houses</td>
</tr>
<tr>
<td>_Clock</td>
<td>_Boxes</td>
</tr>
<tr>
<td>_Coasters</td>
<td>_Business Card Box</td>
</tr>
<tr>
<td>_Coat Rack</td>
<td>_Children's Toys (Rocking Horses, Blocks)</td>
</tr>
<tr>
<td>_Hangers</td>
<td>_Christmas Ornaments</td>
</tr>
<tr>
<td>_Fireplace Log Stand</td>
<td>_Cigar Humidors</td>
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<tr>
<td>_Hanging Racks</td>
<td>_Corporate Award Plaques</td>
</tr>
<tr>
<td>_Magazine Rack</td>
<td>_Crates</td>
</tr>
<tr>
<td>_Ottoman</td>
<td>_Dog or Cat House</td>
</tr>
<tr>
<td>_Outdoor Furniture</td>
<td>_Equestrian Saddle Racks</td>
</tr>
<tr>
<td>_Serving Tray</td>
<td>_Flower Boxes</td>
</tr>
<tr>
<td>_Shelves</td>
<td>_Flower Boxes</td>
</tr>
<tr>
<td>_Small Tables</td>
<td>_Games</td>
</tr>
<tr>
<td>_Spice Rack</td>
<td>_Jewelry Bracelet</td>
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<tr>
<td>_Stools</td>
<td>_Mulch Mix</td>
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<tr>
<td>_Tables</td>
<td>_Office Accessories</td>
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<tr>
<td>_Towel Rack</td>
<td>_Picture Frames</td>
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<tr>
<td>_Umbrella Stand</td>
<td>_Potpourri Sack</td>
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<tr>
<td>_Wine Rack</td>
<td>_Quality Packaging w/Secondary uses</td>
</tr>
<tr>
<td>_Other</td>
<td>_Taxidermy Trophies</td>
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<tr>
<td></td>
<td>_Western Hat Rack</td>
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<tr>
<td></td>
<td>_Other</td>
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