About the Co-op

- 48 members
  - New membership since January up 17%
- ~20,000 acres
  - Almost doubled acreage since January
- 11 counties
  - Washington, Yamhill, Clatsop, Clackamas, Marion, Tillamook, Benton, Columbia, Lincoln, Polk, Douglas

History

- Founded in 1981
- Response to difficult timber market
- Consulting Forester provided timber marketing support and professional services
Today

• 2005: A new vision – Business Plan
• Value-added Products and Services
• Pro-active approach
• Non-timber forest products
  – Traditional: firewood and medicinals
  – New: Ecosystem Services, Biofuel
• USDA Grants

2008

• USDA working capital grant
• 3 coordinators
• New programs
  – Firewood
  – Custom Cuts: specialized and mainstream
  – Purchase of goods and services that reduce costs to landowner for operations

Reducing Costs

• Preferred Vendor Relationships
  – Consulting Foresters
  – Milling and other manufacturers
  – Wilco
  – Forestry Supplies

• General Discount
  – Ag Stores
  – Farm Stores

• Bulk Purchasing
  – Fuel
  – Fertilizer
  – Chemicals
Consulting Foresters

- Mike Barnes
  - 30+ years experience
  - Founding member of the co-op

- Trout Mountain Forestry
  - Scott Ferguson, Barry Sims, Mark Miller

Special Milling

- Kevin Kaster
  - Eastside, Molalla

- Lyal Purinton
  - Westside, Buxton

Value Added Processing

- Now
  - Custom Cutting: plan, goals, results
  - Firewood: plan, goals, results
  - Floral Greens

- Soon
  - Essential Oils
  - Medicinals

Custom Cut Model

- Woodland Owner
  - Raw Material
  - Maintains ownership
  - Through process

- OWC
  - Coordinating Body

- Consumer
  - Demand for unique high quality products

- Sawmill Contractor
- Dry Kiln Contractor
- Planer Mill Contractor

Material Flow in black

Dollar flow in red
Wenzel Custom Cut
• Small Scale
• Specialty Products
• Challenges

Beveled Cedar Siding

Cedar Custom Cut
• Robert Wenzel – OWC - Kevin Kaster

<table>
<thead>
<tr>
<th>Material</th>
<th>Quantity</th>
<th>Rate</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beveled Cedar Siding</td>
<td>1500 lf</td>
<td>$1.5/lf</td>
<td>$2250</td>
</tr>
<tr>
<td>Cedar Decking</td>
<td>2000 bf</td>
<td>$0.60/bf</td>
<td>$1200</td>
</tr>
<tr>
<td>Redwood Paneling</td>
<td>3500 lf</td>
<td>$0.50/lf</td>
<td>$1750</td>
</tr>
<tr>
<td>Total Value</td>
<td></td>
<td></td>
<td>$5200</td>
</tr>
</tbody>
</table>

Large Custom Cut
• Scott Zimmerman
• Trout Mountain
• Background

Cut Details
• 3x and 4x Lumber
• 160+ MBF
• Value Added
## Custom Cut Results

<table>
<thead>
<tr>
<th>Landowner/Truck Title</th>
<th>Sort #</th>
<th>Length</th>
<th>Diameter</th>
<th>Gross</th>
<th>Net</th>
<th>% of total</th>
<th>$/MBF</th>
<th>$/MBF Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>G</td>
<td>15,510</td>
<td>14,600</td>
<td>9%</td>
<td>$425.00</td>
<td>$8,111.75</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>E</td>
<td>14,290</td>
<td>14,600</td>
<td>7%</td>
<td>$455.00</td>
<td>$6,675.40</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>E</td>
<td>7,630</td>
<td>7,620</td>
<td>5%</td>
<td>$420.00</td>
<td>$3,246.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>E</td>
<td>11,490</td>
<td>11,470</td>
<td>7%</td>
<td>$405.00</td>
<td>$4,594.50</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>E</td>
<td>17,060</td>
<td>16,910</td>
<td>9%</td>
<td>$480.00</td>
<td>$7,668.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>H</td>
<td>35,360</td>
<td>36,630</td>
<td>21%</td>
<td>$145.00</td>
<td>$5,107.35</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>G</td>
<td>20,570</td>
<td>20,610</td>
<td>18%</td>
<td>$385.00</td>
<td>$7,770.50</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>H</td>
<td>20,250</td>
<td>19,320</td>
<td>17%</td>
<td>$385.00</td>
<td>$7,506.95</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>G</td>
<td>2,010</td>
<td>1,840</td>
<td>4%</td>
<td>$450.00</td>
<td>$865.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grand Total</td>
<td></td>
<td>171,169,830</td>
<td>166,270</td>
<td>100%</td>
<td>$192,930</td>
<td>$87,218.00</td>
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<td></td>
</tr>
</tbody>
</table>

### Firewood

<table>
<thead>
<tr>
<th>Class</th>
<th>MRF</th>
<th>$/MBF</th>
<th>% of Yield</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Logs</td>
<td>164.7</td>
<td>$100.00</td>
<td>59.7%</td>
<td>$15,530</td>
</tr>
<tr>
<td>Kiln</td>
<td>21.10</td>
<td>$50.00</td>
<td>8.0%</td>
<td>$1,055</td>
</tr>
<tr>
<td>Totals</td>
<td></td>
<td></td>
<td>6.4%</td>
<td>$16,585</td>
</tr>
<tr>
<td>Other costs</td>
<td></td>
<td></td>
<td></td>
<td>$1,055</td>
</tr>
<tr>
<td>Total</td>
<td>103.3</td>
<td>$145.00</td>
<td>93.3%</td>
<td>$17,640</td>
</tr>
</tbody>
</table>

Return on investment: $17,640

Bonus returned to premium for logs ($/MBF): $354.44

Bonus expressed as a percentage of log value: 10.7%
Firewood

- **Strategy**
  - Bundled Firewood
  - Local, Sustainable, Producer Owned

- **Current Customers**
  - New Seasons and Grocery Outlet

- **Future Markets**
  - Whole Foods and Zupans

**Firewood Economics**

<table>
<thead>
<tr>
<th>Summary table (170 bundles per cord of wood):</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bundle</td>
</tr>
<tr>
<td>-------</td>
</tr>
<tr>
<td>Target Price</td>
</tr>
<tr>
<td>Less: Bundling</td>
</tr>
<tr>
<td>Less: Processing</td>
</tr>
<tr>
<td>Less: Transportation</td>
</tr>
<tr>
<td>Less: VOC Fee</td>
</tr>
<tr>
<td>Return to landowner</td>
</tr>
</tbody>
</table>

Compare to $1000/load for pulp or $2000/load for saw logs

**Programs coming soon**

- **Essential Oils**
  - Douglas-fir and other tree needles
  - Used for aromatherapy and other scent applications

- **Medicinals from Special Forest Products**
  - Oregon Grape Root
  - Cascara Bark

- **Floral Greens**
  - Expand current operation

**Essential Oils**

- **Distillation just like mint or lavender oil**
- **Douglas-fir needle oil imported from France**
Mobile Distilling

• Trial run, October 18th – Tree Farm National Convention Field Day

Images courtesy of vitanetonline.com and shop.com

Medicinals

• Extracts
  – Cascara Bark
  – Oregon Grape Root
  – Devil’s Club
  – Horsetail

• Retail Values of $7.50/oz or more
  – That’s $60 for a coffee cup of extract

Ecosystem Services

• Utilizing natural systems to solve challenges created by growth and development

• Global markets exist for:
  – Water quality and quantity
  – Carbon and air
  – Habitat and biodiversity
  – Hazard reduction

Ecosystem Partners

– OWEB Grant Program

– CleanWater Services

– Soil and Water Conservation District
OWEB Grant Program

• Bateman creek

Carbon Markets

• Market and regulations under development
• OWC member of Western Climate Initiative for forests in Oregon
• Lots of external interest and noise
• New opportunity – Woodland Carbon Company

What is the Co-op’s Role?

• Education and Preparation
• Assist Members Become Involved
• Due Diligence
• Listen – Measure - Register

OWC = Added Value

• Economies of Scale
  – Reducing Costs
  – Increasing Margins
• Programs
  – Preferred Vendors
  – Niche and Traditional Timber Marketing
  – Non-Timber Forest Products
  – Carbon/Ecosystem Marketing Services
• Be empowered - Become a MEMBER!