In an effort to meet the needs of forest landowners in Coos and surrounding counties, I have decided to publish a quarterly newsletter. I have been tossing around the idea for a while, and I have finally got up the gumption to develop a useful tool for forest landowners to take advantage of.

This newsletter will provide information on a variety of topics that are important to forest landowners. I will be including articles from Oregon State University (OSU) Extension Foresters and Specialists. In addition, I will be posting articles written by a variety of public/private/federal forestry related entities. The articles will provide some basic information that in turn you can apply to your land if you choose to do so, or aid in building your knowledge base about forestry related concepts/issues!

This newsletter will also have a section of landowner questions and answers that commonly come into our office. If you have questions that you feel would be beneficial for your fellow forest landowners, then give me a call/email and I will get them in the Coos County Woodland Update for your peers to read.

This newsletter will capture the essence of what you need to know, so forest landowners active participation will aid in this newsletter being a success! I wish you all a safe and happy holiday.

Best Regards,

Jonathan Martz
Forestry Educator & 4-H Youth
Reforestation: Native vs. Non-Native Species

Submitted by Steve Bowers, Lane & Linn Forestry Extension

Reforestation project on the horizon?

Have you ordered your seedlings from an established nursery? If not, you’re quite possibly too late. Done your site-prep? If you haven’t, you’ll be fighting the weeds next spring. Lined up a contractor or doing the job yourself? Planting trees can be rewarding, but extremely frustrating if you don’t do it right.

Hopefully, you have a management plan for your property. Written management plans are highly recommended for private woodland owners, but at the very least you need a mental picture of what you’re trying to accomplish in your tree planting efforts other than meeting reforestation requirements. So before it’s full speed ahead, stop and consider the following information.

What tree species are/were present on your property?

Mother Nature is a better judge than us as to what trees should be growing on your land. If you have purchased a recently logged piece of land and aren’t really sure what it looked like before the harvest, visit your neighbors. What tree species are present in the surrounding areas? There’s no golden rule that says you can’t introduce tree species that aren’t indigenous to a particular area, but be informed that there can be an increase in the chances of abiotic or biotic diseases with non-native species.

What kinds of trees do you want to plant?

If you are meeting reforestation requirements, and you want to plant a tree species not native to the area, you will have to obtain permission from the Oregon Department of Forestry. You will be required to submit a written plan (there’s that pesky management plan again) describing the species and how it will be used to meet reforestation requirements. The plan must address the species to be planted, evidence that it is ecologically suited for the site, evidence it is capable of producing commercial forest products and research demonstrating the tree has been successfully used.

Are you matching selected tree species to site characteristics?

One of the most important decisions you’ll make in your project is matching tree species to site conditions. Different tree species have variable responses to variations in climate, shade, wet soil, and animal damage. In order for trees to survive and thrive you need to correctly estimate the given factors for your property. The chart on page three lists tolerance levels for certain site conditions. These figures are for trees grown in the Willamette Valley. While variations may exist between specific sites in the coast range, eastern and western slopes of the Willamette Valley foothills and lower elevations of the Cascades, the chart remains a reasonably successful guide for matching tree species to site conditions. Considerable research exists for some of the species listed (Douglas-fir), while others are lacking (redwood).

Finally, what are you trying to create with your reforestation project?

If you want to grow wood fiber as fast as you can, then pick a species with rapid growth providing it meets the other parameters in the chart (Table 1). There is an increasing interest in multiple species planting. In this case, be sure to select tree species that can accommodate each other. For example, if you’re trying to reintroduce native ponderosa pine to the Willamette Valley, be sure the pine get a good start because they cannot tolerate shade from potentially faster growing Douglas-fir. Special care needs to be taken if you plan on mixing conifers and hardwoods. Growth rates for hardwoods are generally more variable than conifers so be sure your species are compatible in the short and long term.
The NEW Oregon Forest Industry Directory is helping to connect woodland owners, wood products manufacturers, industry consultants and anyone else interested in Oregon’s forest industry. Some of the potential audiences and uses for the Directory include:

- **Small woodland owners** –
  - Searching for log buyers
  - Searching for service providers
  - Searching for niche markets
  - Posting items for sale

- **Sawmills** –
  - Searching for suppliers
  - Searching for customers
  - Searching for buyers for waste products/ downfall
  - Searching for service providers
  - Posting items wanted or items for sale

- **Furniture makers, Cabinetmakers, etc.** –
  - Searching for suppliers
  - Searching for opportunities for outsourcing or partnerships
  - Searching for buyers for waste products/ downfall
  - Posting items wanted or items for sale

- **Other Audiences** –
  - Architects
  - General public

How will we ensure information is kept up-to-date? – The Oregon Forest Industry Directory allows firms to update their own information. Firms not currently on the list can join by filling out an on-line form.

Contact OSU Wood Products Extension Agent and database administrator Scott Leavengood (503-725-2123; Scott.Leavengood@oregonstate.edu) with comments, questions or suggestions.

### Tree Performance

<table>
<thead>
<tr>
<th>Southwest Oregon</th>
<th>Level of use</th>
<th>Growth</th>
<th>Shade tolerance</th>
<th>Game Damage</th>
<th>Frost</th>
<th>Drainage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Douglas-fir</td>
<td>5</td>
<td>5</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Western Hemlock</td>
<td>3</td>
<td>5</td>
<td>5</td>
<td>3</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Western</td>
<td>2</td>
<td>4</td>
<td>4</td>
<td>2</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Red cedar</td>
<td>2</td>
<td>5</td>
<td>3</td>
<td>3</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Grand fir</td>
<td>1</td>
<td>5</td>
<td>4</td>
<td>2</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>Sitka spruce</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Shore pine</td>
<td>1</td>
<td>3</td>
<td>3</td>
<td>4</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Nobel fir</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Red alder</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
</tbody>
</table>

Level of Reforestation Use 5 = planted on more than 90% of the sites; 1 = Infrequently planted

Height and volume Growth 5 = superior; 1 = slow/poor

Shade tolerance 5 = able to grow well with over story shade; 1 = requires full sunlight

Game damage 5 = infrequently browsed by deer or elk; 1 = frequently browsed

Frost resistance 5 = high resistance to low temperatures; 1 = easily damaged by frost

Drainage 5 = tolerates poor drainage or some standing water for short periods; 1 = requires well drained soils

(Table 1, Relative Tree Performance Ratings, for various tree species in Southwestern Oregon, Adapted from the Woodland Workbook, Reforestation, EC 1196, Selecting and Buying Quality Seedlings, Oregon State University Extension Service)
Ecosystems are Dynamic...not Static

Thanks to Arlene Whalen and the Oregon Department of Forestry (ODF) for allowing a portion of this article to be reprinted in the Coos County Woodland Update. The article can be viewed in its entirety in the ODF newsletter FALL 2004.

Ecosystems are constantly changing over space and time.

Tree growth and succession, wildfires, drought, disease and insect infestation all play an important role in the overall long-term health of a forest. Current science supports the notion that disturbances often help to maintain and create biodiversity, as well as enhance ecosystem productivity.

“We know from our current experiences that protection measures are resulting in consequences that are inconsistent with the objectives of our forest management approaches,” said Ted Lorensen, ODF Resources Division Policy Chief and author of the document.

“We’ve got to do something different or we’re going to keep getting what we’re getting, and this includes catastrophic fires and disincentives for people to do restoration or management work that’s helpful for fish and our economy,” Lorensen said. “The Board is trying to promote sustainability, and often what we’re seeing now in terms of forest management isn’t sustainable... economically, socially or environmentally. Part of that is because of the way we are thinking about ‘protection.’ There has been considerable debate in the scientific community about how to define “protection” and decide what forms or levels of protection are adequate.

“This schism in the scientific community, between those who see nature as dynamic and robust and those who see it as static and fragile, complicates the understanding of the issues for policymakers and the public,” said Lorensen. “Unfortunately, this is not reality,” said Lorensen. “Some of our most successful protections in the short-term have created conditions for uncharacteristically intense disturbances that our forests have not evolved to accommodate.”

“We need to learn not to ‘fix’ or attempt to prevent impacts that have historically been viewed as damage,” stressed Lorensen.

A prominent example of this is policy that recognizes the need to manage for ‘dynamic’ landscapes, yet relies on ‘static’ strategies that shun active management and promote fire suppression. When tree density increases and trees become stressed by competition for water and nutrients, they are more vulnerable to insect attack and disease outbreaks. The resulting dead and dying trees create more fuel, which increases the potential for catastrophic fire.

 Landslides and debris flows, too, have historically been thought of as natural events that needed to be controlled because they caused damage. “Damage is a human term”, said Lorensen. “In a dynamic system, that is an oxymoron. Landslides also provide benefits. Talking about them just in terms of ‘damage’ is pretty simplistic, as they can produce changes that we want, as is the case when they deposit gravel, large wood and boulders in rivers and streams and improve habitat over the long-term.

“We need to learn not to ‘fix’ or attempt to prevent impacts that have historically been viewed as damage,” stressed Lorensen. “There is emerging scientific evidence that the basic underlying premises about forest protection are flawed. By better considering key ecosystem processes and cause-effect relationships, we may be able to achieve less costly and more efficient and effective protection strategies.”

Lorensen believes it is ironic that forests are described within a context of disturbance, followed by recovery, through succession to mature forest. He feels terms like ‘protection’ and ‘recovery’ reinforce a static view of forests and the notion that protection means preventing change. “In my ongoing evolution of thought on this matter, I am beginning to think that it is just as reasonable to view disturbance as the recovery,” said Lorensen. “Certainly, the Oak Savannah restoration efforts being undertaken today provide a clear example of that.” (Oak trees that were once cultivated by Native Americans using low intensity burns are now competing fiercely with each other in some areas, producing stands of thin and crowded trees. This has impacted the forest ecosystem, changing the plant and animal species that inhabit such areas.)

A better strategy, he suggests, is to emulate natural processes, keeping in mind that different tools and applied protection strategies are needed to produce a variety of desirable outcomes. “…it will be important to recognize that considerable intellectual and scientific horsepower will be needed to think out of the box and avoid falling back into the more comfortable approach of ‘protection means preventing change.’”

Lorensen predicts this will be the start of a very long process. The department is currently drafting a work plan that will bring the necessary players to the table to begin scientific discussion. “The ‘fight over the forest’ stems from people’s views that there ought to be a single objective,” said Lorensen. “You’ve got some folks who want to manage forestland as industrial tree farms and others that want it untouched as reserves. The Board emphasizes that we need to have a mix of uses. That creates conflict and will require a paradigm shift for some people. Considerable energy will be needed to overcome existing barriers and develop and move potential new concepts to reality.”
Master Watershed Steward Program is Here!

The Master Watershed Steward (MWS) program, a program of Oregon State University (OSU) Extension Service, is coming to the Coos/Curry area. The MWS program consists of eight topics that provide practical watershed education to groups and community members interested in watershed stewardship. Combining expertise from OSU and other natural resource professionals, the program strives to balance principles and applied examples in a variety of land-use types.

The eight topics include: Watershed and Stream Processes; Salmonid Biology; Soils, Erosion, and Conservation; Riparian Area Functions and Management; Stream Assessment and Restoration; Wetland Evaluation and Enhancement; Working Together to Create Successful Groups; and Water Quality Monitoring.

The MWS program is accredited with the Certified Crop Adviser Program (CCA), the Associated Oregon Loggers’ Pro-Logger Program (OPL), the Society of American Foresters (SAF), and the Society for Range Management (SRM). Please inform the Extension Host if you would like to receive credits.

Schedule of Classes
Indoor: 6:30 pm—8:30 / Field: 9 am –4 pm

<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>January 4</td>
<td>Indoor Introduction</td>
</tr>
<tr>
<td>January 6</td>
<td>Indoor Salmonid Biology</td>
</tr>
<tr>
<td>January 20</td>
<td>Indoor Stream Assessment and Restoration</td>
</tr>
<tr>
<td>January 22</td>
<td>Field</td>
</tr>
<tr>
<td>February 3</td>
<td>Indoor Water Quality</td>
</tr>
<tr>
<td>February 17</td>
<td>Indoor Working Together</td>
</tr>
<tr>
<td>February 19</td>
<td>Field (morning indoors)</td>
</tr>
<tr>
<td>March 3</td>
<td>Indoor Watershed and Stream Processes</td>
</tr>
<tr>
<td>March 10</td>
<td>Indoor Riparian Areas</td>
</tr>
<tr>
<td>March 12</td>
<td>Field</td>
</tr>
<tr>
<td>April 7</td>
<td>Indoor Soils</td>
</tr>
<tr>
<td>April 21</td>
<td>Indoor Wetlands</td>
</tr>
<tr>
<td>April 28</td>
<td>Field (morning indoors)</td>
</tr>
</tbody>
</table>

Indoor Sessions: Will be held at the South Slough National Estuarine Research Reserve (SSNERR) 61907 Seven Devils Road in Charleston.

Outdoor Sessions: Will depart from the SSNERR Visitors center in Charleston.

Cost: The workshop fee is $75.00 for both the Master Watershed Stewards and Watershed Stewards (both include a Learning Guide, the primary resources “notebook”).

For Individual sessions: Two indoor sessions and one field day is $25.00 (also includes a Learning Guide). Priority will be given to those attending the whole program if space becomes limited.

For more details please call the Curry County Extension Service by December 23rd at 1-541-247-6672 or 1-800-356-3986 also check out the web site at: [http://seagrant.orst.edu/wsep/](http://seagrant.orst.edu/wsep/)

2004 Oregon Interagency Noxious Weed Symposium: Register Now!

**When:** December 7, 8, and 9, 2004

**Where:** LaSells Stewart Center, Corvallis, OR

**Cost:** Registration is $145.00

- Oregon re-certification credits available
- Mail payment and registration to:
  ODA, Attn: Jo Davis, 635 Capitol St. NBE, Salem, OR 97301
- For Questions, Call Jo at 503-986-4621
Starker Lecture Series Online

Society and Forest Health: Exploring the Links is the theme of this year’s Starker Lecture series through the college of Forestry. If you want to learn about some hot topics among the forestry community then go online at http://www.cof.orst.edu/starkerlectures/. A variety of classes are offered online free.

Some of the classes have already been aired, but don’t fret, you can still watch these lectures at the link provided under the archives that have been saved for your enjoyment.

The topics being covered are:

• “The Greatest Good: 100 Years of Forestry in America, Char Miller, Professor History & Director of Urban Studies at Trinity University”

• “The Role of Fire in Creating Proactive Community Involvement in Forest Management,” Panel

• “The Role of Fire in Forest Restoration,” James Agee, Virginia & Prentice Bloedel Professor of Forestry Ecology

• “Conserving Ours, Consuming Theirs,” Tom Knudson, Two-time Pulitzer Prize-winning investigative journalist

SAF continuing Education credits available: 1CFE credit, category 1, per lecture (after “passing” a quiz). More info on the quiz coming soon to the previously mentioned web site!

Forest Landowner Question and Answer?

Submit questions or comments about anything related to forestry/natural resources, and I will make them available in future issues of the Coos County Woodland Update. Your active participation with this newsletter will make it a success. Information can be submitted via email or phone. Please contact Jonathan Martz today at 572-5263 or email at jonathan.martz@oregonstate.edu.

Winter Time Blues... Here Is Stuff To Do!

Submitted by Elissa Wells, Forestry Instructor, Douglas County OSU Extension Service

It’s always nice to keep busy during those winter months, so I asked Elissa Wells over in Douglas County what forest landowners need to focus their efforts on during the long winter months. Elissa responded with some great information. As far as tree maintenance in the winter, not too much needs to be done beyond reforestation efforts.

Winter is a good time of year to do pruning, if people have plans to do any of that. Call your local Extension office to obtain the OSU Extension publication related to pruning.

Landowners may want to monitor seedlings for browse damage, and maintain tree protection (vexar) tubes, etc.

It’s also a good idea for people to be monitoring their roads and culverts for storm overflow, debris jams, erosion, etc.

Planning little or large projects for your woodland is also a good thing to think about at this time of year. Winter is not too early for people to start planning any spring noxious and problem weed control.

While on the topic of plans, winter is a great time to work on resource management plans – folks can stay inside and out of the rain!

Call your local Extension office today to obtain this publication:

• Pruning to enhance tree and stand value EC 1457
BOND IT LIKE BYSSI
From the sea: a glue idea for wood
Notable notes in forest research at Oregon State University College of Forestry

A special thanks to the Forestry Communication Group for allowing this article to be published in the Coos County Forestry Update.

Have you ever wondered how mussels hold so tightly to wharves and rocks? Kai-chang Li, of the Wood Science and Engineering Department at OSU, did as he struggled to harvest mussels one day. “I was amazed at how the mussels stuck together so strongly,” Li says. “No glue could work in water so well.”

His curiosity is leading to new, environmentally friendly wood glues made from renewable natural resources. Such glues are much in demand. Formaldehyde, one of the ingredients in the currently used wood glues, is associated with several human health problems. The currently used wood glues are based on petroleum, which isn’t renewable.

Li researched mussel chemistry. He found out that the secret to their hold-tight ability is a high concentration of a certain amino acid in the threads (byssi) that attach mussels to their substrates. He modified readily available and abundant soy protein with a chemical similar to that in the mussel protein and created a strong, water-resistant wood glue.

Li also found that condensed tannins, which are abundant in tree bark, and wood decayed by brown rot fungus have chemistry similar to that of the amino acid in mussel protein. So he has invented ways to convert bark and rotted wood to effective, environmentally friendly wood glues. Even though rotting wood may seem to be everywhere as you walk through a forest, harvesting enough from natural sources to allow commercial production of adhesives is too expensive and time-consuming. Li’s team now is trying to find ways to produce rotted wood on a large scale.

The formaldehyde-free wood glues are good for replacing the resins used in exterior wood composites, but the dark glue lines that they produce are undesirable for interior finishes. To replace the resins used in interior wood composites, Li has developed another formaldehyde-free wood glue based on soy flour. The glue lines are light, and the glue is water-resistant and safe. The walls and furniture for your first apartment might be held together with the glue he developed!

Forestry Communications Group, 256 Peavy, Oregon State University, Corvallis OR

SNAP, CRACKLE, & POP
Designing buildings that can survive natural disasters
Notable notes in forest research at Oregon State University College of Forestry

A special thanks to the Forestry Communication Group for allowing this article to be published in the Coos County Forestry Update.

Snap, crackle, and pop—good noises from your cereal bowl, but not so good if your house is making them as you’re squinched in the tub, hoping the storm will blow away before your roof does. Houses and other wooden buildings have lots of joints made with fasteners, like nails and screws. Hurricanes, tornadoes, and earthquakes stress them out; those groans and pops are your house’s cries of distress. Buildings can’t hide—so how do they survive those natural forces? Dave Rosowsky, of the Wood Science and Engineering department, is a civil engineer. He is interested in designing buildings so that they, as well as the people in them, can survive natural disasters. Like people, buildings need to be flexible, yet strong, under stress if they’re going to hold together. Rosowsky hooks up computers to models of walls and joints to test just how much force different kinds of wood and fasteners can take. “What’s really great about this work,” says Rosowsky, “is that it can be applied right away and can appear in building codes within 12 months.” Builders have to follow the rules in those codes, so safer houses soon follow meaning that the economic and personal costs of the next disaster are much less. Rosowsky became involved in forestry because it offered the chance to work with wood experts. As an engineer, he had to “go outside the engineering box” to study natural hazards. He works with sociologists, economists, urban planners, emergency managers, and manufacturers to deal with issues arising from the hazards. “There are many opportunities in this area,” he says, “for people who want to connect the tree with the timber with the structure—biologists interested in natural resources who also are intrigued by computers and technology, for example.”

To find out more about the work of Dr. Rosowsky and other wood engineers at OSU, visit http://wood-science.oregonstate.edu.

For additional notable notes go to the web site: http://www.cof.orst.edu/cof/extended/K-12/notablenotes/
Insect and Disease Workshop Coming February

Currently Coos County Oregon State University Extension Service is working with Oregon Department of Forestry to provide a workshop on Insects and Disease. We have nailed down a date and we are currently working on all the logistics. Information will be coming in the mail soon, so reserve February 23rd for a day of in class and field learning.

Interested Landowners Call Jennifer!

Jennifer Wright, Stewardship Forester, ODF, has been working with local landowners and non-profit organizations, who are interested, in purchasing 400-500, 3/8- inch to ½-inch diameter, 3-4 feet red osier dogwood cuttings as well as approximately 700-800 cottonwood cuttings. Some nurseries are selling these cuttings but different organizations are willing to pay landowners for their cuttings. Folks would rather purchase these locally if possible. Other species of interest include elderberry, Oregon ash, Pacific crabapple, Western hemlock, big leaf maple and red alder. However, these species do not respond well to vegetative propagation. Different propagation techniques are required to assure a successful transplant. Landowners interested in this endeavor should contact Jennifer Wright at 267-1753. If there is a workshop interest on this topic please Call Jennifer or Jon Martz at 572-5263.