Woodland Notes Winter 2018-19

Winter greetings from your Extension Forester!

The 29th annual Clackamas Tree School is coming up on March 23, 2019. This year we offer 75 classes covering key topics to support successful management of small woodlands. There will be a new Youth Fire Academy (age 14-20 years) along with activities for children (aged 6-13 years). The Tree School catalog will be in the mail on January 18, at the Extension office and online starting January 22. Registration opens at 10:00am, Monday, January 28. You can register online, in-person, or by mail. Please note that many classes fill in the first few days of registration. For more information see http://bit.ly/TreeSchoolClackamas or give us a call at 503-655-8631.

Our new Clackamas Extension Forestry Education Program Coordinator, Rose Clarke, started work in September 2018. Rose was hired to replace Jennifer Gorski, who is now attending OSU to get her Masters in Forestry. Growing up in SE Portland, Rose got an early start in outdoor natural resource education at the Environmental Middle School. She went on to Oregon State University for a dual degree in Botany/Biology. Her work experience includes five seasons as a Field Instructor with Multnomah County Outdoor School and two years with Extension in Minnesota, supporting groups of professionals and volunteers on natural resource projects. Rose has a reputation as an excellent communicator and coordinator, just what is needed to help us put together Tree School 2019.

Winter is a good time for tree planting, but also for finding and helping those evergreen seedlings amongst the other vegetation that is down for the dormant season. In forest inventory and measurements, winter is a busy time for looking at trees when we can see better through the undergrowth. For purposes of reducing both fuels and competing vegetation, winter is a chance to cut back the brush and thin out excess trees. Winter can also be a good time to apply some herbicide to competing shrubs or trees using appropriate methods for the species and season.

To help you with your woodlands this winter, please browse this newsletter and look to Extension for workshops, classes, and other resources online, in print, on the phone, or in person at my office.

Glenn Ahrens, OSU Extension Forester, Clackamas, Marion, Hood River Counties
Forest Regeneration Winter Maintenance  
Saturday, January 12, 2019, 8:30am-2:30pm  
Hopkins Demonstration Forest, 16750 S. Brockway Rd., Oregon City

Winter is a good time to find your seedlings and help them get ready for the next growing season. Combined with Hopkins Community Forestry Day, this hands-on field workshop will provide tips, tools, and techniques for maintaining seedlings and saplings, in clearings and underneath the canopy. **Registration required** to reserve space and count you in for a free hot lunch; **RSVP** by contacting Jean Bremer at jean.bremer@oregonstate.edu or at the Extension office at 503-655-8631.

**LEARN BY DOING—IT’S THE HOPKINS WAY WE MANAGE OUR FOREST!**

Tour of the Horning Tree Seed Orchard  
Tuesday, January 15, 2019, 9:30am–12:30pm  
Horning Tree Seed Orchard, 27004 South Sheckly Road, Colton

Join the Benton and Polk Chapter of Oregon Small Woodlands Association (OSWA) for this seed orchard tour. See the methods of seed production for several important tree species, see how the trees are grown, cones produced, seed collected and prepared by drying, sorting, etc.  

Registration is not required. For more information, contact Mark Havel at 503-876-2197 or vmarkhavel@gmail.com.  

See online announcement at [https://extension.oregonstate.edu/benton/events/tour-horning-tree-seed-orchard](https://extension.oregonstate.edu/benton/events/tour-horning-tree-seed-orchard).
Federal Income Taxes for Woodland Owners

Tuesday, February 5, 2019, 6:00–8:30pm
OSU Clackamas Extension Annex, 200 Warner Milne Rd., Oregon City

This class is a must for anyone having recent forest income or planning for future income from their forestland. Many landowners are unaware of the special provisions in the Internal Revenue Code that pertain to forestland and income generated from their land. This session will help you improve the records you keep on your forestland as well as minimize the taxes that you pay for income generated by your forest.

The instructor for this session is Tammy Cushing, our Extension Specialist in Forest Economics, Management and Policy, and Starker Chair in Family and Private Forestry, Oregon State University, Corvallis, Oregon. Tammy has gotten to know the range of woodland owner situations in Oregon. Come prepared with your questions to get some answers for your situation.

There is no fee, but registration is required to reserve your seat. To register, call 503-655-8631 or email jean.bremer@oregonstate.edu.

Forest Wetland Pond Restoration and Native Planting Preparation

Saturdays, February 9 & March 9, 2019, 9:00am–3:00pm
Hopkins Demonstration Forest, 16750 Brockway Rd., Oregon City

The new wetland pond at Hopkins is full of water and ready for the next phase: preparation for planting, development of trails and wetland wildlife observation opportunities. Registration required for these Hopkins Community Forestry Days. Lunch is included so please RSVP by contacting Jean Bremer at jean.bremer@oregonstate.edu or 503-655-8631 to get on the list.
Oregon Season Tracker Citizen Science Training:
Your excuse to go outside!
February 19, 2019, 6:00-8:00pm
OSU Clackamas Extension Annex, 200 Warner Milne Rd., Oregon City

Make getting outdoors every day one of your 2019 New Year resolutions!

Oregon Season Trackers (OST) is an OSU Extension citizen science network engaging volunteers to use standardized yet simple methods for monitoring seasonal patterns of precipitation and plant phenology on-the-ground throughout the state. As an Oregon Season Tracker, you are encouraged to:

**OBSERVE:** Dedicate as little as 20 minutes a week to observing rainfall amounts and the seasonal changes of specific plants on a site you adopt. Your site can be anywhere convenient for you to visit often: your home, your work or school, or a local park.

<table>
<thead>
<tr>
<th>Do you see...?</th>
<th>Date:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breaking leaf buds</td>
<td></td>
</tr>
<tr>
<td>Leaves</td>
<td></td>
</tr>
<tr>
<td>Increasing leaf size</td>
<td></td>
</tr>
<tr>
<td>Colored leaves</td>
<td></td>
</tr>
<tr>
<td>Falling leaves</td>
<td></td>
</tr>
<tr>
<td>Flowers</td>
<td></td>
</tr>
<tr>
<td>Open flowers</td>
<td></td>
</tr>
<tr>
<td>Pollen release</td>
<td></td>
</tr>
<tr>
<td>Fruits</td>
<td></td>
</tr>
<tr>
<td>Ripe fruits</td>
<td></td>
</tr>
<tr>
<td>Recent fruit drop</td>
<td></td>
</tr>
<tr>
<td>Check when data entered online:</td>
<td>☐</td>
</tr>
</tbody>
</table>

**REPORT:** Share your information with the OST network, including statewide researchers using the data for climate modeling and weather mapping. Online or in the Nature’s Notebook app enter precipitation amounts and answer simple yes/no questions to track plant changes.

**REPEAT:** The OST program has been growing steadily since it began in 2014. By tracking your site over time, you provide valuable context and insight into what’s happening in your micro-climate!

OST participants track the phenology (seasonal changes) of plants including Douglas-fir, Oregon White oak, common snowberry, vine maple, bigleaf maple, ponderosa pine, and more.
Interested in participating in Oregon Season Tracker? Join our Spring 2019 OST training: two hours of self-paced online learning followed by an in-person skill-building session to be held at the Clackamas County Extension office annex, 200 Warner-Milne Rd., Oregon City, Oregon on February 19, 2019 from 6:00-8:00 pm.

Registration required. The training fee is $40 per household and includes the program-approved rain gauge to set up on your site. Register online at http://bit.ly/ORSeasonTrackerTraining or contact Jean Bremer at 503-655-8631 or jean.bremer@oregonstate.edu.

In the in-person training session, new OST citizen scientists learn what characteristics to look for when tracking phenology in different types of plants.

Keeping Your Home and Property Safe from Wildfire: Workshops for Landowners and Residents

Four workshops in your area. All workshops are 6:00-8:00pm
- February 28—Estacada Community Center, 200 SW Clubhouse Dr., Estacada
- March 12—Molalla Grange Hall, 127 Grange Ave., Molalla
- April 4—Hoodland Fire Station, 69634 E Hwy 26, Welches
- April 18—Oregon Farm Bureau Board Room, 1320 Capitol St NE, Salem

Oregonians live in a fire-prone environment, but there are effective practices for minimizing impacts of fire in your neighborhood. Are you and your community prepared for wildfire? Do you want to know how you can give your home and property the best chance to survive wildfire? By taking action now, you can reduce the chance that your home will burn during a wildfire.

Continued on page 6...
Keeping home and property safe cont...

To learn more, attend this program in any of four locations. The sessions will be led by a team of OSU Extension Forestry and Oregon Department of Forestry instructors at each location. Learn how a fire professional views your home and property, and the steps you can take to reduce risk. Presentation, discussion, and reference material will cover:

- How to create defensible space around homes and buildings.
- Thinning, pruning, and groundcover management practices to reduce fire hazards in your landscape and woodland.
- Sources of assistance for assessing your risk, planning and implementing fuels reduction and other treatments to reduce hazards.

There is no fee, but space is limited and **pre-registration is required** to reserve your seat. To register:

- For workshops in Clackamas County (Estacada, Molalla, or Welches), contact Clackamas Soil and Water Conservation District at 503-210-6000 or email t.guttridge@conservationdistrict.org.
- For the workshop in Salem, contact OSU Extension at 503-655-8631 or jean.bremer@oregonstate.edu.

---

**Tree School, March 23, 2019**

**Clackamas Community College**


Catalogs will be mailed on January 18 to over 13,000 homes, businesses, and libraries. Copies will also be available at the Clackamas Extension office. If you have not received one by January 25, make your request with Jean Bremer by email at jean.bremer@oregonstate.edu or call Jean at the Extension office at 503-655-8631.

**Registration opens Monday, January 28, 2019 at 10:00am.**
Woodland Management—A Basic Forestry Course

Tuesday evening sessions: April 9, 16, and 30, 6:00-8:30pm
Saturday field session: May 4, 9:00am-3:00pm
Oregon Farm Bureau Board Room, 1320 Capitol St NE, Salem

This five-session course is for anyone who is just starting out taking care of a woodland property. It also serves as preparation for the OSU Master Woodland Manager Training.

Topics covered include:

- **Getting Started** - Exploring your woodland property and its potential with respect to your goals.
- **What’s Going on in Your Woods?** Assessing current woodland resource conditions, forest health and stages of development.
- **Taking Care of Your Woods** - Tree planting, weed control, care for an established forest, and improving forest conditions for your desired outcomes.
- **Getting it Done** - Safety, tools and techniques, timber sale logistics, and laws and regulations.

Instructor: Glenn Ahrens, OSU Forestry & Natural Resources Extension Agent.

**Cost for the course:**

$40 for one participant, $50 for two or more participants from the same family. Please **pre-register no later than April 1**.

Register online at [http://bit.ly/osuwoodlandcourse](http://bit.ly/osuwoodlandcourse) or call 503-655-8631 or email [jean.bremer@oregonstate.edu](mailto:jean.bremer@oregonstate.edu).

Questions? Contact Glenn Ahrens, 503-655-8631 or [glenn.ahrens@oregonstate.edu](mailto:glenn.ahrens@oregonstate.edu).
The Guttridge Brothers’ family history in the Estacada area began in the 1860’s when their great grandfather acquired land and settled in the Springwater area. Six generations have been involved in farming and forestry. The five Guttridge brothers started Guttridge Brothers tree farm with the acquisition of 20 acres from their mother Wilma in 1985. They added another 80 acres from their uncle in 2005. The brothers all had a hand in working on the family farm growing up, but the effort on their own patch began in earnest with the rehabilitation of understocked brushy areas, doing battle with hazel brush, blackberry, and other weeds, and planting trees.

In 2012, Alan Guttridge, recently retired from his job as a forester with the US Forest Service, led the effort on developing their management plan with help from a consulting forester. This helped to clarify their vision and goals to:

- Encourage and maintain growth of commercial tree species for current and future generations.
- Maintain variety of wildlife habitats.
- Protect water quality, minimize erosion and storm impacts.
- Provide a road system and year-round access for management and recreation.
- Harvest timber to capture value, minimize loss, reduce fuels and fire hazard.
- Maintain and improve forest health and diversity.
- Maximize natural regeneration.

Highlights of their management efforts include:

- Rehabilitating understocked, brushy areas and establishing more trees (especially western redcedar).
- Managing root disease areas and converting declining forest stands to new regeneration.
- Developing rock road access to all management areas in conjunction with timber harvest activities.
- Vegetation management and blackberry control, along with thinning and pruning in young stands, are annual activities to promote success of their trees, both planted and natural.

Continued on page 9...
Hollingsworth Tree Farms, Molalla.

John Hollingsworth recalls many days of his youth spent in the woods that his father James acquired back in about 1933. Much of the land was logged in the 1930’s and 1940’s and John remembers open ground with cows grazing on the cutover land. After the unfortunate passing of his father in 1959, John inherited the farm and he and his family have managed it ever since. The Hollingsworths’ goal for their tree farm is to “Maintain and protect the environmental and aesthetic qualities of the forest while producing a periodic income.” Toward this goal, their objectives are to:

- Conduct all operations in such a manner that timber, soil, water, wildlife, and other resources are protected, meeting or exceeding Oregon’s Forest Practices Rules.
- Keep most of the acreage stocked with sawtimber at all times.
- Receive periodic income that is sustainable indefinitely.
- Sustain or enhance amenities and income opportunities for future generations.

The work they are doing on the ground to achieve these objectives includes:

- Small patch clearcuts, some for the purpose of sanitizing rootrot areas which are planted to western redcedar.
- Commercial thinning.
- Reforestation, weed control and vegetation management.
- Improving roads and stream crossings to maintain good access.

Recently, the Hollingsworths made major improvements by installing an 8-foot diameter by 60-foot long culvert under their main access road. They hauled the big pipe back from Eugene in two 30-foot sections on their trailer, which made for an exciting but successful journey on Oregon highways. Notably, while there are sometimes government programs that help pay for stream crossings, the Hollingsworths covered the entire expense. Their efforts will ensure proper stream flow and a good all-season stream crossing that maintains both water quality and fish passage.

The Hollingsworth Tree Farms management approach has maintained a great diversity of forest types providing a variety of wildlife habitats. These include young regeneration, mixed species of varied ages, riparian forests, and large areas of mature and older timber, some of which is 100-years plus with very tall trees (180 feet and more).

Congratulations to John and Adair Hollingsworth and Hollingsworth Tree Farms

For all of their good work over more than 30 years, congratulations to Guttridge Brothers LLC.
Loren and Sylvia Bowman were recognized with the 2018 Evergreen Award for their continuing devotion to the practice and promotion of tree farming in our community. Farming in Clackamas County has been in the Bowman family since 1889 when Loren’s grandfather Joel Bowman purchased property in the area. Loren grew up on the farm and began the third generation of his family farm in 1968 when he and his wife Sylvia purchased 160 acres across the road from grandfather Bowman’s place. Loren and Sylvia built a home in 1969 and started managing as tree farmers. After Loren retired from 30 years with AT&T, he became a full time tree farmer.

The Bowmans manage their land as a small family tree farm and they do the majority of the work themselves. Their goals for Delph Creek Tree Farm are to:

- Manage for sustainable forest resources in perpetuity.
- Protect and enhance riparian resources on Delph Creek.
- Protect and enhance wildlife resources.
- Retain the tree farm as a financial “security blanket” for the larger Bowman family.

In pursuit of these goals, the long list of periodic management actions is an impressive testament to “what it takes” to care for a tree farm.

These management actions include:

- Harvest mature and overmature, dead, dying, and unhealthy trees.
- Treat slash promptly.
- Replant cutover areas promptly.
- Thin young stands.
- Manage brush and invasive weeds.
- Conduct riparian enhancement, stream crossing improvement, wildlife habitat enhancement.
- Monitor stands annually and adjust management.

A list on paper is well and good, but you don’t really understand what goes into it until you tour the property with Loren and see firsthand the results of their attention to growing trees at all stages across more than 30 different management units.

The Clackamas Evergreen Award recognizes a past Woodland Farmer of the Year who demonstrates outstanding devotion to forest stewardship, sound forestry practices, community service, and education. The Bowmans have been doing this for many decades. After they were recognized as Woodland Farmer of the Year 2003, Loren became an OSU Master Woodland Manager in 2007. This allowed him to help many fellow woodland owners learn about forest stewardship. The Bowman’s hosted an amazing Small Woodland Equipment Show in 2010. Sylvia’s hand-made centerpieces have been a wonderful contribution to many woodland owner banquets over the years. As Loren said at the recognition banquet, “Many people don’t know what it really takes to be a good tree farmer.” Thanks to the Bowmans, many people are learning to appreciate what it takes, and how to succeed in their own woodland management efforts.

Congratulations Loren and Sylvia Bowman, Delph Creek Tree Farm, on receiving the Clackamas County Evergreen Award for 2018!
If you are planning to plant trees in 2019, I hope you have a confirmed supply of seedlings. Availability of tree seedlings for reforestation and Christmas tree plantings is very limited once again this year. But there are still some possibilities. Here is more information if you are looking for seedlings:

**Clackamas County Farm Forestry Association Seedling Sale:**
CCFFA members can purchase seedlings through the annual seedling sale. Seedlings are sold out for 2019, but now is a good time to plan for 2020. Contact Stan Beyer for more information about availability of seedlings at 503-519-5289 or email: skbeyer@molalla.net.

**Weyerhaeuser Public Seedling Sales:**
February 9, 2019, 8:00am to 12 noon, Aurora, Oregon
March 2, 2019, 8:00am to 12 noon, Rochester, Washington

Check the *Forest Seedling Network* ([www.forestseedlingnetwork.com](http://www.forestseedlingnetwork.com)) to see if seedlings are posted for sale. As of now, there is nothing in the Willamette Valley counties for 2019, but surplus seedlings may be posted in the next couple of months as people finish planting and find that they have a surplus.

Oregon Department of Forestry publication on *Sources of Native Forest Nursery Seedlings*:
[https://www.oregon.gov/ODF/Documents/WorkingForests/seedling-catalog.pdf](https://www.oregon.gov/ODF/Documents/WorkingForests/seedling-catalog.pdf). Growers make their estimates on availability based on seedling counts and take orders based on those counts. After the seedlings are lifted this winter, they may have extras, so it does help to get on their waiting list if they keep one.

*Saplings LLC* is a web-based business that allows small woodland owners to plan for their reforesting needs by ordering the trees they want for the year they want them (at least one year in advance).

**Surplus Seedlings in February-March:** After the planting season is well under way, surplus seedlings may become available. Woodland owners who have pre-ordered seedlings from their local OSWA seedling sales may have surplus bags after they finish planting. You can contact the sales chairs and ask to be notified if anyone has surplus to re-sell (Clackamas, Washington, or Columbia Counties). Likewise, large landowners sometimes have surplus seedlings at the end of the planting season. Try calling your local ODF office starting around March 1 to see whether they know of any surplus available.
Year Closes with the Passing of Great Contributors

By Mike Bondi

With the end of 2018, came the passing of three wonderful woodland owners and supporters for our education programs here in Clackamas County. **Connie Hopkins Battaile** passed away on December 11 following a terminal diagnosis with cancer three months earlier. Just the day before, on December 10, **Clem Hunter** passed away. **Vera Watson** passed away on April 25. These tree farmers and Master Woodland Managers had lasting impacts on our woodland community that will be felt and appreciated for years to come.

**Connie’s** parents, Howard and Margaret Hopkins purchased their 120 acre Grouse Hollow Tree Farm in Beavercreek in 1962. Following Howard’s death in 1989, Margaret donated the property to the newly formed non-profit, Forests Forever, Inc., to establish the Hopkins Memorial Tree Farm—later re-named the Hopkins Demonstration Forest. Connie and her sister, Jill, worked with their mom to support the creation of the forest designed to be a community place for hands-on natural resource education for youth, woodland owners, and the public.

Connie was a real champion for the forest and was actively involved in the woodland community. She trained as a Master Woodland Manager in Clackamas County during 2002-2003 so she could be more closely connected to our community and the new educational forest. Connie was also active in helping manage the family’s other tree farm property in Scappoose. Connie was a historian and a writer too. Visit the Hopkins Demonstration Forest website ([www.demonstrationforest.org](http://www.demonstrationforest.org)) and click on the History link to find an article she wrote in 1993 about the history of the Hopkins forest property—including her views about the legacy of the family property as an education forest.

This article and her involvement in the family’s Beavercreek forest, along with Connie’s active role in helping manage the family’s other tree farm property in Scappoose, and her work with the community of woodland owners in our state will be an enduring memory for us about Connie and her commitment to Oregon’s forests.
Clem Hunter and his wife, Phyllis, purchased their Highland woodland property about the same time the Hopkins family purchased their Beavercreek forest in the early 1960s. Clem was a passionate tree farmer who advocated for active forest management on private and public forest lands. He began transitioning the family farm from mostly an agricultural operation to focus on trees beginning in the 1980s, working with forestry consultant, Ken Everett. Over the years, Clem had Ken manage regular timber harvests and reforestation projects. As Clem’s young forests grew, so did his interest in stand management and sharing his experiences with others in the community.

Clem was in the inaugural class of Clackamas Master Woodland Managers in 1987. He often commented what a life changing experience it was being an OSU Master Woodland Manager. He would share that being able to sit next to accomplished woodland owners like John Poppino—also an MWM and long-time professional forester—made the experience so powerful. Clem loved making tree farm visits to see woodland properties, answering questions, and sharing his knowledge with new landowners and managers.

Clem also had a passion for the Hopkins Demonstration Forest and the education mission there. He and Phyllis were very generous financial contributors to projects at Hopkins including the construction of Everett Hall, parking lot and lighting upgrades, the fire tower, and the Hopkins shop. Clem was on the Board of Directors for more than 10 years. He challenged the Board to come up with an endowment program to create a sustainable flow of finances that would support the Forest’s annual budget. Earlier in 2018, Clem established the Phyllis Genevieve Hunter Memorial Fund with an initial gift of $50,000. The proceeds from this fund—paid out annually at 5%—creates a new stream of income for Hopkins. And also provides a way for other landowners and the public to contribute growing the fund plus provides perpetual support for the Hopkins Demonstration Forest.

Another passing in 2018—earlier in the year—that we shouldn’t forget was Vera Watson, Lotsa Rocks Tree Farm in Oregon City. Vera and husband, Bob, were wonderful tree farmers who did an amazing job reforesting their property and dedicated themselves to helping others learn about woodland management and caring for the land. Interestingly, the Hopkins Demonstration Forest was, again, a place that brought so many together in our community. We will never forget the hours of time and energy Vera and Bob spent in the early days of developing Hopkins with their gift of our entry sign stonework and gate posts as you enter the property.

All woodland owners in Clackamas County have been blessed to have Connie Battaile and her family, Clem and Phyllis Hunter, and Vera and Bob Watson as a special part of this community.

Their memories will endure forever.
Sadly, the last three summers have been murderous on newly planted seedlings in Christmas tree farms. That is especially true for plantings of noble fir. Some growers have had three straight years where the mortality rate is above 80%. The “normal” mortality rate is around 15% (Fig.1).

Almost all Christmas tree fields are planted in a dryland condition, meaning there is no planned irrigation. Seedlings need to survive the summer and fall by quickly establishing roots after planting and hope there is enough soil moisture to get through summer and fall until the rain returns. Seedlings are planted typically in February-March. The last three years have been quite hot and dry from May through October. Trees may survive fine until late August and just give up—due to excessive heat (high respiration) and lack of soil moisture.

Douglas-fir, Nordmann, and Turkish fir have survived better than noble, as it seems these species establish roots more quickly. Mortality rates are up for these species as well.

What options do Christmas tree growers have, if we assume that warmer, dryer summers are here to stay? Basically growers have a few potential options:

- Plant other species besides noble.
- Plant trees in the fall. This gives the tree a chance to develop a larger root system by the following summer. However, most nurseries do not have plants ready for fall planting at this time.

Continued on page 15...
Getting trees to survive cont...

- Conserve water. Competing vegetation removes some moisture, so weed control around trees might help. Another idea is to shade the trees and/or use mulch to help retain soil moisture.
- Encourage faster root growth. There are some root dips that tout faster root growth.
- Develop a method to bring water to the trees.
- Control the transpiration of the trees using growth regulators or spray-on films.

We looked into a number of options this past summer on two fields. Essentially, we looked into watering, shading (Fig. 2), using a root growth stimulator (RootTex®), and spraying with Moisture-Loc® an anti-transpirant. These treatments were applied both individually, in pairs and all-together.

After some brief fall rain in October 2018, we looked at tree mortality in two noble fir plantings. To make a long story short, the shading, RootTex® and Moisture-Loc® applications had only a minor impact on field survival.

Watering the trees turned out to be the only treatment that really helped. But it is expensive and hard. Just ask any Christmas tree grower who tried watering. Growers used a variety of creative solutions-driplines with small emitters, injecting water into the root zone, watering cans with small holes, or water basins around each tree are just some of the ideas. It turns out that getting water to the roots is much more complicated than just dumping it on the surface: as the soil dries out it appears to repel water. So, to be effective in getting water to the roots it must be applied slowly to wet the profile. And to make matters more difficult, multiple applications are needed during the summer.

This is not welcome news. Hauling water out to distant fields and slowly watering trees is many times more expensive than the cost of the trees and planting. Next year we hope to evaluate fall planting and try other plant growth regulators. Maybe there will be a less costly solution.

Figure 2. Treatments to help noble fir as they looked after planting.
If you missed the Selling Logs Symposium in Clackamas County, you may be interested in attending the Selling Logs From Your Property in Roseburg, Oregon. Saturday, January 26, 2019, 9:00am-5:45pm Phoenix Charter School, 3131 Northeast Diamond Lake Boulevard, Roseburg, OR 97470

Selling logs is one of the most important decisions you face as a landowner. Attend this one-day educational event to learn more about sale fundamentals, getting a fair value for your logs, rights and responsibilities, working with a consulting forester and logger, harvest taxes and contracts, and more.

Cost: $25/person by January 14, 2019 or $35/person between January 15-20, 2019. Contact Holly Burton at 541-672-4461 or holly.burton@oregonstate.edu.

Sudden Oak Death Citizen Science Workshop (Coos County) Wednesday, January 23, 2019, 5:30-8:00pm

Learn the science behind bucket and stream baiting for early detection of Phytophthora ramorum, the pathogen that causes Sudden Oak Death. Learn how to assemble and locate bucket and stream baits and process samples.

This event is free. Contact Shawna at 541-572-5263 or Shawna.horner@oregonstate.edu.

OSU Extension Forestry events can be found on this website: https://extension.oregonstate.edu/events