Greetings from your Extension Forester.

Fall rain and cooler weather would be welcome at this point after the rather hot, dry summer of 2018. However, the seasonal projection for September-November is for continued warmer and drier weather than average (National Weather Service website http://www.cpc.ncep.noaa.gov/products/predictions/90day/). So it seems likely that drought and heat stress will continue to be a primary cause of tree health problems and sick-tree calls coming to me in the Extension office.

Given the importance of climatic extremes affecting forest health and fire hazards, I am always looking for good sources of information to help me understand our local climate and trends. We are fortunate in Oregon to have an outstanding climate service with the PRISM Climate Group http://prism.oregonstate.edu. I have found that they are constantly developing and improving their toolkit for both researchers and public users for assessing and monitoring climate trends. Chris Daly, is the OSU researcher who led the development of the PRISM Climate Group starting in 1991. Some of his current research is helping us understand how Oregon’s macro climate translates to the local climate in a specific location, in the valley or up in the hills.

We keep referring to drought and heat as a major cause of tree health problems. I found myself thinking - hot dry summers are a normal part of the cycle in the Willamette Valley area - so what’s different now? The PRISM Climate tools made it easy for me to look at our recent climate in comparison to historical events over the last 50 or 100 years. It does appear that the last several years have been extraordinary. For more on this see pg. 8.

Given yet another bad fire season, I am compelled to provide an update on the OSU Extension Fire Program. It really is a landscape-level problem that foresters have to address across property boundaries. For more on this, see the article on pg. 6. Also, with all the smoke in our air this fire season, the latest publication in the Extension series of Fire FAQs is rather timely: Air quality impacts from prescribed fire and wildfire: How do they compare? EM 9203

With students heading back to school this fall, it is a good time to think about supporting forestry education at Hopkins Demonstration Forest. Please see the upcoming opportunities for volunteering at Hopkins Community Forestry Days (pg. 2) or consider becoming a Friend of Hopkins. http://www.demonstrationforest.org/become-a-friend

Glenn Ahrens,
OSU Extension Forester, Clackamas, Marion, Hood River Counties
Community Forestry Days at Hopkins Demonstration Forest
Sept. 8, Oct. 13, Nov. 10, 2018, 8:30am-2:30pm
16750 S. Brockway Rd., Oregon City

WE NEED YOUR HELP to create, support, and maintain forestry education opportunities at Hopkins. This is your chance to learn by doing a variety of projects in a sustainably managed woodland.

Upcoming or ongoing projects and events include:
- Assessment of conditions and silvicultural options in 26 acres of 70 to 80-year old Douglas-fir/cedar/maple stands that have been thinned periodically. It’s time to visit these stands and see how they are doing and consider thinning vs. selection, or patch harvesting methods.
- Volunteer Host/Visitor Center storage shed conversion
- School Group Entrance renovation
- Foot-bridge and trail signage inventory and maintenance prioritization
- Stair construction @ Hopkins Trailhead
- Stair maintenance on Cedar Grove Shelter bathroom stairs
- Wetland Interpretation access trail
- Sawmill work for foot-bridge maintenance needs
- Roads, culverts and drainage inventory and maintenance prioritization
- Trail and road network maintenance needs
- Winterization of facilities

A delicious hot lunch will be provided.
Registration is requested at 503-655-8631 or jean.bremer@oregonstate.edu.
For more information contact Peter Matzka at peter.matzka@oregonstate.edu

LEARN BY DOING—IT’S THE HOPKINS WAY WE MANAGE OUR FOREST!
**Forest Thinning Tour**  
**Tuesday Sept. 25, 2018, 4:00-6:00pm**  
Matteson Demonstration Forest  

A commercial thinning of about 30 acres of 30-year old Douglas-fir plantation is underway at the Matteson Demonstration Forest. On this tour we will talk about how the harvest is meeting management objectives, which include improving the stand, producing income and creating more diversity. We'll discuss markets for the cut logs (including short poles). We'll also see how a cut-to-length processing system is used, and fire conditions permitting, will see a demonstration of the logging equipment.

**RSVP** by contacting Sonia Reagan at Sonia.Reagan@oregonstate.edu or 503-397-3462. Please include your phone and email so we can contact you if needed. Parking space is limited - please carpool if possible. Wear closed toed shoes and bring a hard hat if you have one.

Directions to the Matteson Forest:  
Highway 47 to the Hagg Lake /Scoggins Valley Park turnoff. Follow Scoggins Valley Rd. past the park gate and turn left on West Shore Drive, crossing the dam. Proceed another two miles past the dam on West Shore Drive. Turn left on Hankins Rd. Follow to the property gate on your right.

Forest Thinning Tour website:  
https://extension.oregonstate.edu/events/forest-thinning-tour  
Forest Thinning Tour flyer:  

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**Mt. Angel Abbey Forest Tour**  
**Marion/Polk County Small Woodlands Tour**  
**Saturday, Sept. 22, 2018, 9:00am**  
1 Abbey Dr., St. Benedict, OR 97373

This event will start off with a tour of the Mt. Angel Abbey. The Abbey is a private Roman Catholic seminary, university, and community of Benedictine monks who also own and manage forestland. The Abbey hill woodland in Mt. Angel is managed by the monks themselves. This is separate from the 2,600 acre Abbey tree farm up Abiqua Creek and managed by Mason, Bruce and Girard. The Abbey hill is a mix of timber and pasture, the SW side is mostly oak, and NE side planted to Doug-fir in most places. The total area (about 300 acres) is fenced, with trees as well as pasture for their sheep and goats. John Hettwer (a Marion/Polk Chapter Director) has done most of the logging here since 1992. We'll start our tour on top to see the views from both sides, Mt. Hood to the NE, and Salem and valley to the SW.

No registration required.
Managing Your Woodland Property – Establishing, managing and protecting Trees, Woodlands, and Forests

Hood River Sessions, Hood River Extension Conference Room
1st Session Oct. 16, 5:30-8:00pm; 2nd Session, Oct. 30, 5:30-8:00pm

Salem Sessions, Oregon Farm Bureau, Hall of Fame Room
1st Session Oct. 25, 5:30-8:00pm; 2nd Session, Nov. 8, 5:30-8:00pm

Field visits To-be-arranged among participant properties

Homework assignments and next sessions will be customized to meet the interests of participants at the first session. Resource packets and additional sessions will cover topics including:

- Maintaining forestland tax status
- Maintaining forest and tree health
- Prevention of and preparation for fire hazards
- Harvesting, marketing, business, and financial incentives
- Enhancing and conserving habitat for fish, wildlife, and ecosystem functions
- Sources of assistance, public and private professionals, and trained volunteers

Learn from foresters and other woodland owners. Variety of learning modes to meet your needs. In class and in the field, sharing key steps and lessons learned across participants’ properties.

Registration is required. The cost is $20. Additional costs will be determined at the first session, depending on resources and publications you choose and future sessions you wish to sign up for. To Register, online at Hood River: https://tinyurl.com/WoodlandPropHR or Salem: https://tinyurl.com/WoodlandPropSalem call 503-655-8631 or email jean.bremer@oregonstate.edu.

Producing and Marketing Christmas Boughs Workshop

Beavercreek area, Oct. 24, 9:00am-12:00pm

This field workshop will cover the basics of culturing noble fir plantings for bough production. Topics include:

- Existing plantings, converting overgrown CTs’, starting over with combined CT’s and boughs across multiple fields.
- Rates of production and yield, workable scales of operation.
- Marketing, harvesting, handling, storage, and delivery.
- Sharing experience and opportunities among growers, buyers, harvesters.

Registration is required. There is no fee. To Register, call 503-655-8631 or email jean.bremer@oregonstate.edu.

Directions will be provided for registered participants only.
How to sell logs is one of the most important decisions you face as a landowner.

Landowners log their property for a number of reasons. For some it’s the culmination of decades of planning and hard work to produce a valuable crop. For others it might be a liquidation of an asset to meet a sudden financial need. Still others might be undertaking a thinning operation to improve forest health and habitat.

Logging is a high stakes endeavor with consequences that can last decades—this is not a time to cut corners! Timber is a valuable financial asset, YOUR asset, that took decades to produce—don’t lose out on thousands of dollars by not getting a fair deal for your logs. Don’t expose yourself to unnecessary liability or be left “on the hook” for someone else’s mistake. Make sure your property looks how you want it to when the job is done and don’t risk unnecessary damage to your property that could take decades to restore.

Speakers will include: consulting foresters, experienced landowners, log buyers, loggers, and representatives from the OSU Extension Service and the Oregon Department of Forestry (ODF). Topics include:

- Types of sales and other fundamentals
- Getting fair value for your logs
- Your rights and responsibilities
- What a consulting forester can offer you
- Minimizing your liability
- Notifications and harvest regulations
- How to select a logger
- Road access and operational logistics
- Inventory, appraisal, and product mixes
- Harvest Taxes and Contracts
- What log buyers look for
- Portable sawmilling
- Log scaling

FIELD TRIP
Log scaling demonstration, portable sawmill demonstration, and forest tour to see examples of harvesting, reforestation, and post-harvest conditions.

REGISTRATION REQUIRED
COST (Includes Friday dinner, Saturday Lunch, and field trip transportation)
$40/person before October 15, 2018 (early registration) $50/person October 15 through October 26, 2018
Registration closes on October 26, walk-in registrations will NOT be accepted.
- Register online with a credit card at https://tinyurl.com/Sellinglogsymposium
- Complete the registration form on page 12.
- Call 503-320-9133 or email jean.bremer@oregonstate.edu

SPONSORS
This program is made possible by USDA Renewable Resources Extension Act grant funding. Special thanks to Forests Forever, Inc. and Associated Oregon Loggers Inc. for additional funding support.
Fire Program Update

As I reported previously, OSU Extension Forestry and Natural Resources is developing a Statewide Extension Fire Program. As part of this, Extension helped organize and facilitate the 2018 Fire Summit to provide elected officials and policymakers with recommended actions to address the increasing challenges facing our fire-prone forest landscapes. Results are summarized with thoughtful commentary in an article in the Western Forester Fire and Fuels Management in the Future: Roles and Challenges, by John Bailey, OSU Professor of Silviculture and Fire Management. [http://www.nwoffice.forestry.org/sites/default/files/WFAprMayJune2018final.pdf](http://www.nwoffice.forestry.org/sites/default/files/WFAprMayJune2018final.pdf).

Key recommendations include:

1. Expand Strategic Use of Commercial Thinning, Prescribed Fires, and Managed Wildfire as Forest Management Tools.
2. Improve Coordination Across Jurisdictions and Ownership Boundaries.
4. Address Inequities Associated with Liability for Cross-Boundary Fires.

We must move forward on these goals in order to reduce losses of life and property, to reduce the escalating costs of fire suppression; and to prevent uncharacteristic destructiveness of fire in the forest. With the development of the Statewide Extension Fire Program, I see new opportunities for us to facilitate progress working with the diverse interest groups and agencies involved.

“Foresters are uniquely prepared to critically think and solve land management problems over large spatial areas and lengthy time spans—it is what we do. The solutions to our wildfire problem, rooted in unprecedented fuel conditions and overcharged fire seasons, are in our view. Active land management that sees and treats our forested landscapes as fuels (in addition to all the other things that are our forests) will be our path forward. Let’s get to work.”

John D. Bailey, Maybelle Clarke MacDonald Professor of Teaching Excellence, Silviculture and Fire Management
OSU College of Forestry, Corvallis, OR  john.bailey@oregonstate.edu

What you can do about wildfire in your neighborhood

Become a leader to help your community become Firewise and Fire Adapted. Sign up for Citizen Fire Academy; or contact OSU Extension or your local Oregon Department of Forestry fire program.

Another Stressful Year for Trees

For several years now, we have been blaming drought and heat stress for many of the ongoing tree problems across Oregon. Hot, dry summers are part of the normal cycle in most of western Oregon and our long-lived native trees have survived many hot summers. Is there really anything different going on now? In the Willamette Valley area, the answer is YES. First, we are planting more trees and more varieties of trees across a range of marginal environments, many of which used to be thinned out by frequent fire. And recently, the climate has caused higher levels of moisture stress than previously experienced by many of the trees.

With stressful climate conditions, the pattern of tree problems on the landscape is helping us identify the marginal soil or topographic site conditions. If you were not already familiar with your soil and site conditions, climatic extremes will help you learn where the trouble spots are located. Trees are having problems in marginal site conditions caused by soils that are wet, shallow, rocky, low in moisture-holding capacity; upper slopes, south facing slopes, and ridgetops. Damage done by heat and drought stress can have long-lasting effects on trees that survive the initial damage. With a series of extreme heat and drought events, year after year, it adds up. Northwest Oregon has been relatively mild compared to the severe heat and drought in southern Oregon, California, and other parts of the western US. So impacts on trees have been more subtle, and limited to more marginal site conditions.

In the Willamette Valley and foothills, drought-stress and drought interactions with insects and disease have indeed been the major drivers of forest and tree health problems for several years now. So it is no surprise that we continue to see sick, dying, and dead trees this summer. But rapid mortality of 80 to 100 year old trees that seemed healthy and in their prime a year ago is puzzling given that these trees have survived many hard times in the past - hot dry summers are a normal part of the cycle in the Willamette Valley area. So what’s different now?

Long term climate data and tools for exploring this data help shed light on this question. The PRISM Climate Group at OSU provides both the data and the tools useful for examining climate trends. PRISM Climate Group at OSU [http://prism.oregonstate.edu](http://prism.oregonstate.edu) and PRISM Climate data explorer [http://prism.oregonstate.edu/explorer/](http://prism.oregonstate.edu/explorer/).
Recalling my basic tree physiology, “vapor pressure deficit” (VPD) is a key measure of atmospheric moisture demand. VPD integrates both temperature and humidity, providing a direct expression of the driving force of water loss from a leaf, getting at just how dry it “feels” to a plant. The PRISM data explorer allows one to look at estimates of VPD past and present.

Based on estimates of VPD, is the moisture demand of the last few years really different from previous years’ experience? In my neighborhood (300 foot elevation, Willamette Valley margin, near Mulino, OR), the answer appears to be “YES”. For 3 of the last 4 years, maximum VPD in July and August has exceeded all previous estimates over the last 50 years. Summer 2018 has been about as hot and dry as it gets. The last measurable rain was June 24 and total rainfall for May-August is the lowest in the last 94 years.

Note that a quick look at some other locations in different geo-climatic zones - the Coast Range or further north in the Washington Cascades – does not show the same trend. Conditions are not as extreme and there is no clear indication that VPD over the last several years was higher than other hot dry periods over the last 50 years.

The Willamette Valley and Foothills - a “Marginal Environment”

The stresses and strains of climatic extremes or changes in climate are often most evident at the margins – the edge of a species range of tolerance in relation to temperature, moisture, and other environmental factors. For example, we know from studies in the lab and in the field that red alder (Alnus rubra) is particularly sensitive to high atmospheric moisture demand (high VPD). In the Willamette Valley, red alder tops die back in hot dry summers even when growing along streams with roots in the water (or in irrigated yards). And moisture-stressed red alder suffer from stem diseases and increased insect attack. Red alder does best in more cool/moist canyons or in the mild Coast Range. White alder (Alnus rhombifolia) is better adapted to the Willamette Valley.

The lesson for woodland owners is to know your soil/site conditions and where you are with respect to the margins. Stay tuned for new information as we learn more about how our major tree species react to climate extremes. If in doubt, favor species that are better adapted to heat and drought in a given location.
Review of the main problems by species

**Douglas-fir** is the most common casualty, as it is the most abundant and widely planted species.

Common ongoing issues for Douglas-fir include:
- Drought
- Stem canker disease
- Flathead borers
- Root diseases
- Twig weevils

**Red alder**
- Top dieback, even in wet areas
- Stem canker disease
- Flea beetle infestations

**Western redcedar**
- Scattered mortality of previously healthy trees, singly or in groups
- Climate stress is the number one suspect, but no clear causal agent has been identified.
- Alarming and increasing in occurrence

**Bigleaf maple**
- Top dieback
- Leaf blights, fungal stem cankers, bacterial canker
- Whole tree mortality caused by unknown agents

**Grand fir and noble fir**, especially in dense, overgrown Christmas tree plantations at lower elevations.
- Bark beetles, especially fir engraver beetle
- Needle diseases
- Root diseases

**Western hemlock**
- Drought mortality at low elevations (below 1000 feet)

Across the range of species and issues, the Oregon Department of Forestry has an excellent series of fact sheets and videos on drought, insects, disease, pheromone repellants, storm damage, and slash management, etc. I encourage you to visit the site to investigate your situation more. Do not hesitate to contact your OSU Extension Forester for help in trying to understand forest and tree health issues.

Also, see the blog article “Another Rough Year for Willamette Valley Trees” by Brad Withrow-Robinson http://blogs.oregonstate.edu/treetopics/2018/06/14/another-rough-year-for-willamette-valley-trees-part-2/
Should I water my seedlings?
Amy Grotta, OSU Forestry and Natural Resources Extension – Columbia, Washington and Yamhill Counties

Often around this time of year, I’ll get a question from a small woodland owner asking whether it’s worth the trouble to try to water their newly planted tree seedlings. My standard reply has always been “No.” Of course, in most cases, it’s not even a practical consideration, because the logistical challenges of delivering water to hundreds, if not thousands of seedlings on steep or rough terrain far from any water source far outweigh any potential benefits. I also point out that our Douglas-fir trees are adapted to withstand dry summers. After all, millions of Douglas-fir trees are planted each year in Oregon, and most of them make it without any supplemental water. I know one or two woodland owners who have watered trees that they were concerned about, only to have them die anyway.

But this year, after fielding the question of watering young trees again, I started to think a little more about my standard answer. All signs are pointing another drought year. Scientists predict that summers in the Pacific Northwest are only going to get hotter and drier in the future. In light of these factors it doesn’t seem like an unreasonable question.

So, suppose you planted a reasonably small number of trees, and they are easily accessible (on flattish ground, near a road), and you have some method of getting water to the site (a water tank, a hose, etc.) These conditions could make watering feasible, so for the woodland owner who wants to give their baby trees the best start in life, or who just has a micromanager personality type, is it worth the time and effort?

I decided to try a small, highly non-scientific experiment to help shed light on this question, so I went out to a nearby clearcut that had been replanted last year. I brought a soil probe, a jug of water, and a couple of quart-sized containers (i.e. yogurt tubs). My intention was to see how different methods of watering affected the soil moisture profile.

Don’t water the weeds!

The soil core from un-watered soil, showing that the bottom few inches were still moist in July.
The first thing to note are the weedy annuals surrounding the seedlings, a common condition two summers after planting. Watering in these conditions would defeat the purpose, as you would be watering the weeds too.

I took a soil sample with my probe in a bare spot near a seedling. I was able to get down about six inches. The first two to three inches were dry. Below that the soil was cool and moist. By early July, the soil still had good moisture for the seedlings’ fine roots to access. A month from now, it may be a different story.

Then I set out my two yogurt tubs in different bare spots, but in one, I punched a small hole in the bottom to allow the quart of water to seep out gradually. In the other, I just poured the water directly onto the ground. I thought that maybe delivering the water slowly would allow it to penetrate more deeply, whereas pouring the water might cause it to run off. I know this happens when I water my yard, and for landscape trees, it’s always recommended to water slowly, deeply and infrequently.

Two hours later, I probed the soil in the two watered locations. As expected, the entire soil profile that I was able to collect was moist. In the slow-watered spot, I brought up eight inches of evenly moistened soil. In the fast-watered spot, I could only get down about four inches. There turned out to be a lot of buried bark in that spot, so that limited the probe. I can’t really compare the difference between the two. Dang, I should have done a few more repetitions!

I’ll go back to my earlier point that Douglas-fir trees are adapted to dry summers. They produce fine roots mostly in the upper eight inches of mineral soil, and any organic material on the soil surface acts as a sort of buffer or mulch. As the upper inches of soil dry out in the summer, I sort of wonder whether replenishing their moisture is beneficial to a new seedling or not. Perhaps that encourages more fine roots to persist in those upper few inches of soil, rather than developing more deeply where moisture remains longer into the season. Could that cause problems when you stop nurturing them? Take a look at the root profiles (next page) of some three-year-old trees that were part of an experiment. From the left, the first and third trees received supplemental irrigation while the second and fourth did not. Note the differences in where the roots are!

Anyways, here is what I took away from this small investigation, for you to consider if you are thinking of watering your seedlings.

I stand my by earlier statement: No, watering probably isn’t worth the time and effort. But for those who aren’t totally convinced, or don’t have enough to keep them busy on their tree farm, I would say, you should only water IF you can answer NO to all of the following conditions.

- *Are there weeds in the rooting zone of your seedlings?* (If the answer is yes, you risk giving the weeds even more of a competitive edge by watering.)
• **Is the soil moist 4-8 inches below the soil surface?** You’ll need to dig some holes to find out, and you might be surprised. When you test out your proposed watering method (which you should), does the water run off before reaching the root zone of the seedling (roughly the top 8 inches of mineral soil)? You should try delivering water slowly and quickly and see what happens in your particular soil. The soil type where I tried this is a silty loam with moderate drainage according to the [Web Soil Survey](https://websoilsurvey.nrcs.usda.gov). If you have more clay in your soil, it may act quite differently.

• **Were the trees planted more than two growing seasons ago?** Any older than that, and their root systems are probably too large, and require too much water, for you to feasibly deliver.

Will we need to take measures to improve seedling survival in the hot, dry summers of the future? I think yes, but I don’t think supplemental water is the answer. We might go back to the practice of taking advantage of suitable “microclimates” when planting, such as planting seedlings on the north side of a stumps or downed logs. This is feasible at any scale and topography. In the long term, tree breeding programs will probably select for increased drought tolerance in seedlings.

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**Selling logs from your property: An educational symposium for landowners**

Hopkins Demonstration Forest, 16750 S. Brockway Rd., Oregon City, OR
Friday, November 2, 5:00–8:30pm and Saturday, November 3, 9:00am–5:30pm

Name(s)_______________________________________________________________________________________________

Mailing Address_________________________________________________________________________________________

Phone: _____________________________________ Email: ________________________________________________________

Make checks payable to OSU Extension. Mail this form to: Forestry Program, OSU Extension Service, 200 Warner-Milner Rd., Oregon City, OR 97045

$40/person before October 10, 2018 (early registration)
$50/person October 10 through October 26, 2018

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What’s happening at the OSU Ramsdell Forest this Summer?

By Jen Gorski, OSU Extension Forestry/Natural Resources

The riparian area at Ramsdell Forest has a wide floodplain, allowing Woodcock Creek to meander freely with seasonal flows into Milk Creek, then into the Molalla River. One of Oregon State University’s College Forests, Ramsdell is a working forest which must pay for itself. Yet it is unique, with 100 year old plus western redcedar along the creek.

Ramsdell Forest, located southeast of Molalla’s town center, is the focus of attention for a project funded by a Clackamas Innovative Grant awarded through a proposal written by Glenn Ahrens. It is also the focus of Jen Gorski’s graduate project for a Master’s of Forestry through OSU. Jon Souder who is OSU’s Forest Watershed Extension Specialist is Jen’s major advisor and he has become fascinatedly engaged.

Outcomes of the project include:

- Stream and vegetation inventory to categorize the riparian forest (zone of interaction between forest land and forest stream)
- Outreach to forest landowners with riparian areas to discover their main priorities
- Recommendation of forest practices and options to address landowner priorities

First on the list of priorities was to get training from Oregon Department of Fish & Wildlife (ODFW) on Aquatic Inventories, a once a year training that was held in June. Next Jen and Korik Ward followed the ODFW protocols to categorize the main stream channel of Woodcock Creek from the east to west boundaries of Ramsdell Forest. Battling hornet nests and salmonberry, the pair identified channel types, measured shading, widths, lengths, active channels, floodprone, terrace and valley widths. Additionally, sand, gravel, cobble and boulders were quantified as well as 17 metrics of riparian tree counts on both sides of the stream. The inventory took 13 days to complete.
Meanwhile, 17 generous forest landowners in the Molalla and Clackamas River Watershed areas, joined two focus groups and identified their management priorities for their riparian areas. One more focus group for the Sandy River Watershed area is scheduled in August. Results will be analyzed and future public publications or workshops and demonstrations will be created based on public input.

The last component consists of a detailed data collection effort with plant species types and sizes found in 12-15 sampling plots. These plots can be re-measured over time and after management activities like timber harvests and thinning to see how vegetation and moisture are affected. Jen Gorski and Forestry student intern, Lauren Zinkel will be completing this in August.

If you would like to give us any input on priorities you have for your riparian forests, please send to Jen Gorski: Jennifer.gorski@oregonstate.edu. We’ll keep you updated on all the results!

CHAL’S CHRISTMAS TREE CORNER

Trojan fir- A New Christmas Tree Species for Oregon?

Chal Landgren
OSU Christmas Tree Specialist, North Willamette Research and Extension Center (NWREC), Aurora

Noble fir may well be the perfect Christmas tree - excellent needle keepability, good growth rate and so on. But the last few summers have poked some holes in this perfection. With the summer scorching heat and no rain, many growers have been replanting nobles for the past three years as trees fail to survive the year. Heat damage and needle necrosis turn fully grown nobles unsaleable.

Nordmann and Turkish fir survive the summer drought and heat better than nobles. Another new species that seems to survive the hot summers is Trojan fir - *Abies equi-trojani*.

The native area for the species is in far western Turkey near the city of Canakkale. Legend has it that this was the tree species used to build the Trojan Horse, hence the name. Botanists debate scientific name for the species - some think it is a sub-species of Nordmann, yet most botanists in Turkey

Figure 1. Trojan fir cones for collection.
list it as an individual species. I was fortunate to join a team of four from the US to participate in a seed/cone collection trip in 2010. In Turkey, we hired tree climbers and guides familiar with the terrain to assist with our one month collection trip which included collections of Turkish fir and a review of Nordmann fir collection sites. The timeline for collecting and evaluating this trial is listed below:

- **2009** — Establish a cooperative seed collection project between OSU, WSU, MSU, NC State, Penn. State, Connecticut Agric. Research Station, Univ. of Copenhagen, and major Christmas Tree Growers Associations. Dr. John Frampton, lead.
- **2010** — Cone collections in Turkey; For Trojan fir: 40 trees in two regions, For Turkish fir: 60 trees in three regions. Seed shipped to Oregon.
- **2010-2012** — 31,000 seedlings grown for testing
- **2013** — Establish 11 progeny testing sites - 10 in the US, one in Denmark. Each site includes around 3,000 trees.
- **2014-2022** — Evaluate progeny tests to find potential Christmas tree sources
- **2018** — First cuttings selected for seed orchard grafting at NWREC

My point in bringing up this “new” species is that at our Cooperative Trojan and Turkish fir progeny test site at SnowShoe Evergreen in Washington, Trojan fir is an early top performer. Trees from the Balikesir (KAZ) provenance were top performers for growth and initial quality. They also had low needle loss in tests performed by Dr. Gary Chastagner. The trees are two years from harvest at this fast-growing site, but there is good reason to expect many of the Trojan fir families to remain in these top spots.

In our repeated evaluations of the progeny test sites, Trojan fir as a group tends to break bud before Turkish fir, so may not be a good option in frost-prone sites where Turkish fir is damaged. Otherwise, the species looks much like Turkish fir and seems to grow more rapidly.

It’s very likely that seedlings of Trojan fir are not currently available. Seed collection has been sporadic and very few growers have produced the species. But, if these warm, dry summers continue, our initial tests indicate that this should be a viable species for Oregon and Washington.
A timber sale is the culmination of many years of woodland management. For many small woodland owners, it is an opportunity for a financial return on their property. However, owners who don’t frequently market timber may find it a daunting task. Harvesting and Selling Timber: A Field Guide provides a step-by-step overview of harvesting and selling timber. The process is the same whether you are contracting the operation, relying on a private consultant, or personally performing the job. This book will help owners control the process, confidently deal with loggers and log buyers, make better decisions, and enjoy a greater return—from both an environmental and financial perspective—on their woodland property.

Join your fellow tree farmers at the

CCFFA WOODLAND FARMER OF THE YEAR BANQUET

Thursday, October 18, 2018
Hopkins Demonstration Forest
16750 S. Brockway Road
6:00-9:00 pm

Registration is required Contact Jean Bremer at jean.bremer@oregonstate.edu or 503-655-8631 for details and to get on the list.