

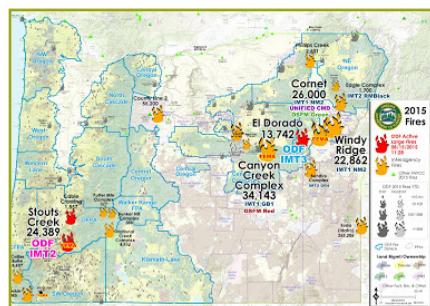
Life on the Dry Side

An OSU Forestry and Natural Resources newsletter serving land managers and owners east of the Cascades

2015 Oregon Fires By the Numbers

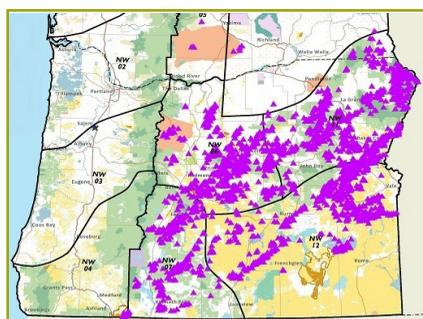
Daniel Leavell, Forestry and Natural Resources Extension, Klamath, Lake and Harney Counties

Between January, 2015 and the end of November, 2015, a total of 9,801,692 acres burned as the result of 56,341 wildland fires nationwide. The yearly average for wildland fires that burned from 2005 to 2014



Oregon fires in 2015. Map credit: Oregon Department of Forestry.

was 6,702,831 acres and 68,337 fires. The State of Oregon witnessed more than 631,000 acres burned in 2015 on all forestland jurisdictions in Oregon (private, County, State, and Federal) and firefighting costs totaled \$240.5 million. The 631,000 acres burned during this year's fire season was the fourth-highest total in Oregon since 2003 according to data from the National Interagency Fire Center. Eighty-six percent of fires burned in



Oregon lightning strikes in 2015. Map credit: Oregon Department of Forestry.

Oregon during 2015 occurred on the eastside of the State (over 544,000 acres), resulting from 43 individual fires. Two were over 100,000 acres

Oregon Department of Forestry's (ODF) Fire Protection program protects 16 million acres of forest, a \$60 billion asset.

(Canyon Creek and Cornet-Windy Ridge). Human-caused fires burned over 107,000 acres; lightning-caused fires burned over 274,000 acres and the remaining was of undetermined origin. Crater Lake National Park had the largest fire in the Park's history this year (National Creek Complex of 21,000 acres). Fires burned in Oregon due to a combination of drought, dry lightning, low humidity, and high fuel loads.

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Welcome to Your Newsletter!

Dear Readers,

This quarterly newsletter is the result of a collaborative effort of the OSU Forestry and Natural Resources Extension agents from Central and Eastern Oregon. Our goal is to provide you with relevant technical information as it relates to your property, as well as inform you of upcoming educational events and other resources that are available to you.

We hope that you provide us with feedback and let us know what you are interested in learning more about. If you would like to receive this newsletter in a digital format, please contact your local agent (see page 4 for contact information). And please know that we are always soliciting landowner-written articles!

Sincerely,

Nicole Strong
Extension Forester
Deschutes, Crook, Jefferson Counties
and the Confederated Tribes of the Warm Springs

Our Central and Eastern Oregon Forestry and Natural Resources Extension team also includes:

Paul Oester
Extension Forester
Union, Umatilla, and Wallowa Counties

Daniel Leavell
Extension Forester
Klamath, Lake and Harney Counties

Bob Parker
Extension Forester
Baker and Grant Counties

2015 OR Fires, continued from page 1...

As Oregon's largest fire department, Oregon Department of Forestry's (ODF) Fire Protection program protects 16 million acres of forest, a \$60 billion asset. These lands consist of privately owned forests as well as some public lands, including state-owned forests and, by contract, US Bureau of Land Management forests in western Oregon. ODF is also part of an extensive fire protection network that includes landowner resources, contract crews and aircraft, inmate crews, and agreements with public agencies across Oregon, the US and British Columbia.

ODF's firefighting policy is straightforward: Put out fires quickly at the smallest possible size. Most of the lands protected by the agency are working forests that produce revenue and support jobs. It is crucial to prevent fire damage to the timber resource that is an essential element of Oregon's economy. This aggressive approach to firefighting also safeguards ecosystem values such as fish and wildlife habitats. During a normal fire season, firefighting crews succeed in suppressing over 98% of all fire starts.



Master Woodland Manager is coming to Lake and Klamath Counties...

For the first time in 20 years!

Tiffany Fegel, MWM Coordinator, and Daniel Leavell

Beginning April 1, 2016, the Master Woodland Manager (MWM) program will start in Lake and Klamath County. The MWM program is a training program offered by Oregon State University Forestry Extension for landowners who are interested in intensive forest management training and in sharing the knowledge gained through this training with people in their local communities. Graduates of the program have been serving Oregon for over 30 years. Retired manager of the Defrees Ranch in Baker County, Lyle Defrees is one of those graduates. The Defrees ranch includes two enterprises: cattle and timber. The entire ranch totals 2,000 acres.

“The MWM program got me out of a rut of not doing anything with the trees to developing a management plan and managing the timber. It helped me see the bigger picture of how the timber could be beneficial to the ranch,” says Defrees. “When you get down to it, ranching and managing timber complement each other really well. Most ranchers manage their timber land by having someone come in and cut timber when they need additional income. You can get a lot more income with good man-

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Your Woodland Management Plan

The most important tool in your forest management toolbox.

Nicole Strong

What is a woodland management plan?

A woodland management plan is a tool for land managers/owners that will help you lay out and organize what is important to you (goals and/or objectives); lets you describe the current condition (inventory of resources) of your land; and lays out a path (action steps) that allows you to either get or keep your land in the state that you want it. A management plan organizes your short- and long-term plans for your land – something you can hand off from generation to generation.

Why Should I have a plan?

There are many reasons to have a management plan. If you are new to your property, it can be a terrific way to learn more about what is on your land and what might be good for forest health, tree vigor, fire resistance, wildlife habitat, or forage quality and quantity.

Other reasons to write a plan might include:

Financial assistance. Any assistance programs (State, Federal, non-profit, local) that will help you reduce fuels, increase forest health, stream health, or wildlife habitat require a written plan.

Understand the value of your land. Whether you want to know how much marketable timber volume is present on your land and its economic value – wildlife habitat quality, or grazing quality, a management plan and resource inventory will help you better understand and manage for the

economic and non-economic values (fishing, bird watching, etc).

A way to communicate with your family. A regularly updated woodland management plan creates a legacy and historical record. Getting a plan written can also be a wonderful way to engage your family. Your kids may be far away, but they can help with creating maps and gathering other information online. A land management can be passed on to future generations and aid others in your family to keep the resources healthy.

Certification. If you would like to certify your land in the Oregon Tree Farm System or another program, you need to have a written plan.

Organize your thoughts. It can be overwhelming to know where to start working on your property! A good land management plan helps you establish priorities and a set of actions – to organize your thoughts and plans.

Stay accountable. A plan can help you stay on track and make sure you accomplished what you said you would accomplish in a given time. But don't worry, plans are flexible, adaptable documents, and can be altered when things come up you may not anticipate, (and they will inevitably come up!).

Adaptive Learning. By recording what you did in the short- and long-term – and by recording the results of your actions, you are learning what works best and what doesn't work so well for you on your property. This is important in helping yourself and future managers of your land to avoid repeating the same mistakes.

Where Do I Begin?

Contact your local OSU Extension office to talk about your management plan needs. You can start with a Woodland Discovery plan, our introductory plan template, or dive straight into our Uniform Management Plan, the full-meal deal template. You can also sign up for an upcoming management plan writing workshop, and receive contact information for your Oregon Department of Forestry (ODF) Stewardship Forester, Natural Resources Conservation Service (NRCS) Service Center, or Oregon Department of Fish and Wildlife (ODFW) office.

Online Planning Resources:

OSU Extension Uniform Management planning website

Includes a template plan and instructions, tutorials and other resources. <http://outreach.oregonstate.edu/programs/forestry/oregon-forest-management-planning>

My Land Plan

An online tool that helps you get a map and establish a simple plan. <http://mylandplan.org/>

Oregon Tree Farm System

Certification information and supporting resources. Check out their video series! <http://www.otfs.org/>

Dealing with Timber Loss Due to Fire: the Federal tax implications

Tamara L. Cushing, Starker Chair of Private and Family Forestry, Extension Specialist, Oregon State University

I hope most of you don't need to read this but we need to talk about what to do if you had fire on your property in 2015. Normally, taxpayers are only able to recover their investment in timber at the time of a harvest. This is done through the use of depletion. However, if you have a loss on your property, you can also reclaim some of that investment in the form of a casualty loss deduction.

The Internal Revenue Code considers any event that is sudden, unusual and unexpected to be in the casualty loss category. Fire, ice, tornado, and hurricanes all fit that description. The sudden part of the definition is talking about the loss in value. The timber must experience a very sudden drop in value not a slow deterioration. If your trees die or suffer a deformity due to insects or disease, that loss would not meet the standard for a casualty loss due to the slow nature of the loss in value.

If you meet the definition of a casualty loss, the next step is figuring out the amount of the loss. Tax law allows you to take a deduction in the amount of the lower of a) reduction in fair market value or b) your adjusted basis in the single identifiable property (SIP). For those of you who have established basis accounts for your timber, the SIP will align with those accounts. For example, if you have a tract of 40 acres and you have a basis account for the land and one for the timber, that is your SIP. If you haven't set up basis accounts for your timber yet, that can be done retroactively

but make sure you have a defensible logic behind how you set it up. The IRS is aware that taxpayers may retroactively set up the account to take advantage of a large SIP.

I alluded to having a large SIP and that being an advantage. If you have a large unit and lose timber on only a small portion of it, you will most likely be able to claim the entire loss. Remember the limitation is change in fair market value or your adjusted basis (whichever is lower). The larger the unit, the more basis available. There are problems with using a large unit though. In an audit situation, it will be necessary to show how fair market value was determined before and after the casualty event. This will require good records and/or an appraisal, both of which will have a cost attached to it.

In addition to calculating the dollar value of the loss, you must account for any insurance proceeds or salvage received. It is possible that you end up with a taxable gain due to salvage. The gain may be postponed if qualified replacement property is acquired within two years. Make sure to keep records related to the casualty event. It is important to show what the event was that caused your loss, when it occurred that the loss was directly related to the event and whether you made any claims for reimbursement or salvage attempts.

If you were the victim of a casualty event, make sure you contact a forester. The forester can be helpful in determining your options on the property going forward including whether or not to salvage. You may also need the assistance of a forester in determining your fair market value before the loss. An accountant can help you with determining what your loss limitation is for the event and assist you in filing the return.

While none of this erases the frustration associated with the loss, hopefully it can help you recover some of your loss.

**Disclaimer: These comments are general in nature for your awareness; your facts and circumstances may require different tax treatment.*

After the Fire Online Resources

Oregon Department of Forestry Help After a Fire website:

<http://www.oregon.gov/ODF/Fire/Pages/AfterAFire.aspx>

Other Economic Online Resources

National Timber Tax website

<http://www.timbertax.org/>

OSU Extension narrated presentation on the Oregon Forest Harvest Tax

<http://extensionweb.forestry.oregon-state.edu/presentations/oregon-forest-harvest-tax>

Sign up to receive the FNR newsletter via email!

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MWM, continued from page 2....

agement as well as protection from wildfire and disease if you manage for those things. You just get a lot more out of it.”

Whether you own five or 10,000 acres, the MWM program will help you gain skills for tending your forest and for providing you with opportunities to share your passion for land stewardship with others.

The MWM training covers:

- *Making your forest better suited for wildlife, timber production, & recreation*
- *Managing forage and habitat potential for livestock and big game*
- *Improving riparian and wetland habitat*
- *Making your forest resilient to fire, pest & disease*
- *Managing water quality and availability*
- *Managing road building & maintenance*
- *Filing your taxes correctly*

- *Understanding local ecological factors*
- *Conducting assessments to determine forest health & growth patterns*
- *Meeting long term visions for your property*
- *Helping others with their forest management goals*

All of this entails approximately 75 hours of in class and field tour learning from Statewide experts on the topics – for the cost of fifty dollars. Along with that comes the commitment to share what you have learned with the local community by paying back an equivalent number of volunteer hours.

“I had no problem filling the required volunteer hours,” says Lyle. “A lot of time that was just people coming to me knowing the interests that I had and that I had taken the course. I was able to share what I had gained with them. There is a lot of ways to return those hours.” Defrees continues to

“The Master Woodland Manager program opened doors of opportunity that I would not have otherwise found”

report hours 26 years after completing the MWM course.

The last MWM training offered in the Lake and Klamath region was 20 years ago. Come out and be a part of the group that brings this prestigious program back in the area. Register with your local Forestry Extension Agent, Daniel Leavell (541-883-7131) today!

Visit the MWM website for more information:
<http://extensionweb.forestry.oregonstate.edu/mwm/>

Take it from an Eastside rancher, “The Master Woodland Managers program opened doors of opportunity that I would not have otherwise found,” says Defrees. “This includes meeting people. Meeting other MWMs, foresters, accountants, attorneys, a lot of those kind of folks. There were all smarter and wiser than I was and they all had something to teach me.”

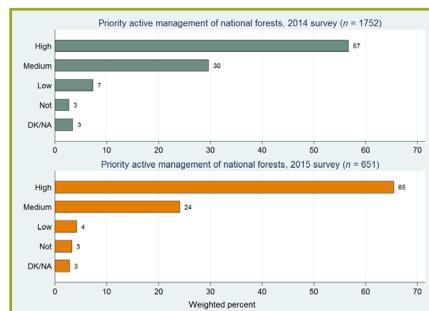
New Publications:

- **EM 9131. Before Wildfire Strikes: A Handbook for Homeowners and Communities in Southwest Oregon.** Max Bennett. This is a manual that helps homeowners and neighborhoods prepare their areas and their homes for wildfire. A fire-adapted community is a community located in a fire-prone area that requires little assistance from firefighters during a wildfire.
- **EM 9129. Small-Scale Harvesting for Woodland Owners.** Steve Bowers and Francisca Belart. For woodland owners with small acreages, timber harvesting presents unique challenges and opportunities. Planning the harvest, working with contractors, and selling the logs are tasks that can seem intimidating. This publication mentions pitfalls to avoid and offers helpful information about small-scale harvests, from making a plan and selecting contractors to determining costs and increasing revenue.
- **EM 9116. Fire-Adapted Communities: The Next Step in Wildfire Preparedness.** Daniel Leavell. This is a manual that helps homeowners and neighborhoods prepare their areas and their homes for wildfire. A fire-adapted community is a community located in a fire-prone area that requires little assistance from firefighters during a wildfire.
- **EC1438. Selecting, Planting, and Caring for a New Tree.** Stephen A. Fitzgerald & Paul Ries. This book is published as both an interactive app designed for tablet devices and as a downloadable pdf. Both versions cover basic information on choosing a planting site, selecting the right species for the site, proper planting techniques, and first-year care. The app includes a variety of additional features, including videos explaining the concept of “Right Tree, Right Place” and other issues related to early tree care. It also includes tree selection guides to help you choose specific trees for specific locations and purposes, including fall color, under utility wires, tough sites, spring flowering, shade, and water conservation. **Get the app (iOS or Android):** Search for New Tree, by Oregon State University.

Public Support for Active Forest Management Grows

Larry Hamilton, Joel Hartter, Angela Boag, University of Colorado, Communities and Forests in Oregon Project

A recent survey of eastern Oregon residents found that public support for active management on national forests has increased, compared with one year ago. Sixty-five percent of the respondents interviewed for an October/November 2015 telephone survey said that “active management for national forests, with some tree thinning and/or grazing,” should be a high priority for land management in northeast Oregon. That 65% represents a modest but statistically significant increase from the 57% who gave this answer on an earlier survey in summer/fall 2014.



While the percentage of “high priority” responses increased from 2014 to 2015, the percent giving active management a medium or low priority declined. On both surveys about 3% said active management is not a priority, and 3% said they didn’t know or gave no answer (DK/NA).

2015 Survey Results

The 2015 survey results are based on interviews with 651 randomly-selected residents in 7 northeast Oregon counties: Baker, Crook, Grant, Umatilla, Union, Wallowa and Wheeler. The 2014 survey had interviewed a separate sample of 1,752 people

from these same counties. Both surveys were conducted under the Communities and Forests in Oregon (CAFOR) project (described at www.cafor.weebly.com), as part of their continuing study of environmental and community change in this region. Random sampling and interviewing were carried out by the Survey Center at the University of New Hampshire.

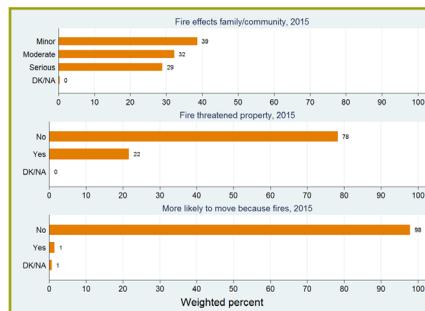
Eastern Oregonians’ increased public support for active management, which was already a popular option, might reflect recent experience with their record-setting 2015 wildfire season. The fall survey included some questions about its impacts:

“Would you say the fires this year had serious, moderate or minor effects on your family and community?”

“Was your own property, or that of your neighbors, directly threatened by fires this year?”

“As a result of recent fire seasons, do you think that you are more likely to move away from this area? Or have the fires had no effect on your plans to stay or leave?”

As shown in the graph, 71% said this year’s fires had moderate or serious effects on their family and community, although only 22% reported that



their own property (or neighbors’) was threatened directly. Almost no one (1%) said the fires made them more likely to leave the region.

A report presenting results from the 2014 survey can be obtained from the Carsey School of Public Policy (<http://scholars.unh.edu/carsey/238/>). The 2015 survey results shown above are preliminary, with more detailed analysis of these and other survey questions still to come. The CAFOR team will visit northeast Oregon in summer 2016, giving public talks to discuss the surveys and research results.

About CAFOR

Communities and Forest in Oregon (CAFOR) project is a multi-year joint research project with the University of Colorado, the University of New Hampshire, the University of Louisville, Oregon State University Extension, Wallowa Resources, and the Carsey School of the Public. Research objectives include:

- Quantify the current range of variation in forest conditions with a focus on small private landowners, and assess current landowner strategies for mitigating climate variability in forest and silvo-pastoral systems.
- Examine historic range of variation, current range of variation, and “business as usual” projections of future variability to target and prioritize strategies for improving forest resilience to an uncertain and variable future climate. Use recent climate data, IPCC scenarios, and climate matching techniques to enable landowner visualization of potential climate risks over the mid-term (10-30 years)
- Analyze multivariate relationships between perceptions of climate change and strategies for adaptation and mitigation, separately among general public and forest-landowner populations
- Use our findings to probe the mindset of stakeholder groups, collaboratives, and institutions regarding climate change to learn how the uncertainty of future conditions are factored and into and prioritized for management decision-making.

Assessing Your Property after Wildfire

Stephen Fitzgerald, Director College Forests and Silviculture Specialist

Wildfires become personal when you've lost your home and outbuildings, timber, or sustained damage to meadows and streams. There are no words to describe losing the home or timber you have nurtured over the last few decades. Where do you begin? This article talks about assessing damage to your property and provides basic tips for recovery.

If You Lost Your Home or other Structures

Only go back to your home and property when it is safe to do so and threat of wildfire has subsided. In examining and sifting through burnt structures, wear protective clothing, gloves and boots as there are often sharp objects that are hidden in the ash and debris. Be careful where you step as there can still be smoldering hot spots that are not visible.

Take a video of what remains. If you have a video inventory of your home and its contents prior to the fire, that will provide extremely valuable information when making an insurance claim. There are mobile home inventory apps for smart phones that make inventorying your home's contents much easier. Most homeowner's policies cover property losses caused by forest fires, but you should check your policy to make sure it covers the current "replacement value" of your home and other structures. There may be other items your policy doesn't cover. It is good to review your homeowner's policy yearly with your insurance agent.

Burn Severity	Description	Management Recommendation
Lightly Burned	Plants/trees are charred or scorched. Most of the trees survive, particularly fire-resistant tree species (ponderosa pine & western larch). Very little of the soil is burned. Logs are lightly charred or completely intact.	No action required.
Moderately Burned	Trees are partially or totally scorched but (red) needles remain on tree. Approximately 50 percent of organic matter on the soil surface is burned or consumed. Logs are deeply charred with some consumption.	No action to some targeted action. If a significant amount of trees were killed or severely injured, you might consider salvage logging burnt and heavily damaged trees followed by replanting (see below). Consider reseeded native grasses and forbs on steep slopes or in areas that contain invasive plants, which will compete and help contain invasive plants like cheatgrass and knapweed.
Severely Burned	Trees are completely dead. No needles remain on trees and most of the small branches and twigs have been consumed. Most or all the organic matter is consumed. Logs are consumed. Soils may be red or have a white ash layer on top. Soils are often "hydrophobic" (repell water).	First, you might consider a salvage harvest to re-coop the value of dead and dying trees. This needs to be followed by replanting trees. Don't seed native grasses and forbs in areas you plan to plant with trees as the competition caused by this vegetation will result in poor survival and growth of tree seedlings. On steep slopes (>30 %) you might consider some kind of mulch to protect the soil from rainfall impact, this might be particularly helpful if a stream is directly below the steep slope. There are other erosion control devices that can be used on steep slopes, such as contour falling of trees, hay bales (make sure they are weed free), and waddles but they are expensive to do so prioritize accordingly.

Table 1. Descriptions of different burn severities you might find on your property and corresponding management recommendations.

Trees and Forest

In assessing your forest and/or rangeland areas, look at the severity of the fire across your property. Areas burned can be classified into severe, moderate, or low severity depending on fire's effects on vegetation and soils (see Table 1).

In order to triage your property, begin first by determining area of the forest that experienced severe, moderate, and low fire severity and note whether it is on steep, moderate, or a flat slope. Slope affects the movement of water. The steeper the slope the greater the potential for erosion after wildfire when trees are killed (with no needles) and organic matter on the soil surface has been consumed. Areas that have been severely burned and are on steep slopes are prone to erosion because the loss of tree canopy, consumption of surface organic matter and from the ash that fills in between the soil particles (plugs) and

prevents water from infiltrating into the soil. Water then begins to flow over the top of the soil (overland flow) and on moderate to steep slopes it begins to erode creating larger and larger rills that may cause debris flows into intermittent and perennial streams. This negatively affects water quality and fish habitat.

What can or should be done?

The answer to this depends on the fire's severity, slope steepness, and the proximity of these areas to streams, roads, homes, and other infrastructure. The degree to which you do anything to ameliorate these conditions also depends on costs and effectiveness of various treatments. You should also consider your long term goals, which will affect your decision to replant trees if all or portions of your forest where damaged or killed.

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Baker and Grant County News

Bob Parker

The devastating impacts of the 2015 wildfire season continue to ripple through Baker and Grant counties in multiple ways. The log markets have already been weakened by declining lumber demand, high log inventories, continued lumber overproduction, and a fair amount of turmoil and uncertainty in the national and international economic scenes. Now we have added to all that a tremendous amount of fire-killed timber that woodland owners need to remove from their property for a variety of reasons but which unfortunately adds to the glut of wood, eroding log prices even further. Bottom line is it's a lousy time to harvest time so unless you absolutely have to, probably better to hold off and wait for better market conditions.

On the bright side, the snowpack situation seems to be better than last year and as of early January the Snow Water Equivalent (SWE) in much of Baker and Grant counties was close to or above normal which is great news. Maybe by the end of the season things will be even better which will hopefully translate into a milder wildfire season and more water for our crops. Let's keep our fingers crossed!

Baker/Grant Upcoming Events:
Baker County Private Woodlands Association Monthly Meeting. February 18, 2016, 6:30 PM to 8:30 PM at the OSU Baker County Extension office, 2600 East Street, Baker City. Our February meeting will feature Jim James, Executive Director for the state-wide Oregon Small Woodlands Association (OSWA). Jim will provide an update on OSWA activities including their efforts to represent the interests of family forestland owners on the political and regulatory fronts, the benefits

of OSWA membership and an update on the OSWA annual meeting which will be held in Baker City next June and which will include a tour of the Oregon Tree Farmer of the Year award winner, the Defrees Family Ranch in Sumpter!

Ritter Collaborative Juniper Workshop, Part I. On March 1st there will be an indoor juniper workshop at the Herold residence in Ritter from 10:00 – 2:00 p.m. The workshop will cover the ecology and science of a juniper tree and assist a landowners' decision making process as to where juniper should be cut and removed and where retaining them provide a benefit to the land. In addition the speakers will inform landowners on how to identify which junipers have market value, getting them from the stump to the landing, and which manufacturers are available to receive their material. Removing and selling quality juniper saw logs can provide landowners funding to help offset their treatment costs.

Tree School East 2016. April 23 2016 at the Baker City High School in Baker City, OR. Our biennial Tree School East event will offer 25 different classes such as: Post-fire restoration; What's killing my trees; Controlling weeds; Climate change implications for NE Oregon; Applying Drone technology; Planning for reforestation success, Minimizing your federal tax burden and a whole lot more. The conference costs only \$50 per person and includes a great lunch and snacks! The deadline for registration is April 8, 2016. Call your local office (see below) to request a Tree School Booklet which contains all the information on available classes and a registration form.

You can register for any of these events by calling the Baker County Extension office at 541-523-6418 or the Union County Extension office at 541-963-1010.

Umatilla Adaptive Forest Workshop

Dave Powell, US Forest Service Silviculturist (Retired), and Paul Oester

We all know that the climate is changing in northeastern Oregon, and we can see these changes all around us – lower snowpack levels than decades ago, the snowpack now melts earlier in spring than it used to, and fire seasons are longer and more severe than previously. And climate information suggests these changes will continue, and probably worsen, as temperature continues to rise and precipitation becomes more variable in the future.

Perhaps no natural resource has a longer timeframe than forestry – seedlings we plant next spring may still be living two centuries from now. For this reason, climate change is expected to cause substantial impact on the forests of Umatilla County as well as the rest of the Blue Mountains. "Adaptation can be defined as an adjustment in natural systems, to a new or changing environment, which exploits beneficial opportunities or moderates negative effects."

A workshop, sponsored by multiple agencies and organizations, has been scheduled for Saturday March 12, 2016, in Pendleton to bring forest landowners together and jointly develop possible adaptation actions for Umatilla County forests. The workshop will explore one primary question: Which adaptation actions are most likely to sustain healthy forests for Umatilla County in a climate-changed future?

If you own or work with forests in Umatilla County, please consider attending this free workshop. For more information, please call the OSU Union County Extension Office at 541-963-1010 or email sherry.nantz@oregonstate.edu

Klamath Basin Research and Experiment Station (KBREC)

Daniel Leavell

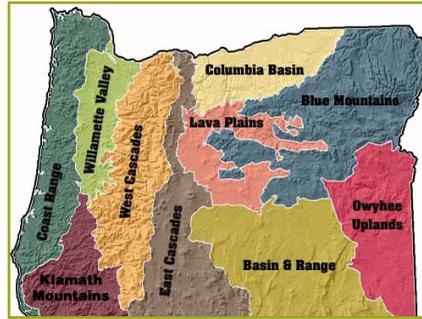
Oregon State University's Klamath Basin Research and Experiment Station (KBREC) is headquartered in Klamath Falls with branch offices in Lakeview and Burns. KBREC administers the OSU Extension mission and activities for Klamath, Lake, and Harney counties.

Klamath, Lake, and Harney counties comprise 25% of the total land area of the State of Oregon. Only 2% of the population of the State resides in this tri-county area, with the majority of residents living in Klamath County (81%). Fifty-one percent of the three-county residents live in and around Klamath Falls.



Ecoregion Setting

The south-central OSU Extension area administered by KBREC is east of the Klamath Mountains and southern end of the Cascades, falling on the east slope of range within the East Cascades ecoregion. The mountainous west side extends to the east towards the Basin and Range ecoregion to the Steens Mountain.



Forest Resources

The extent of forest resources within the three counties varies considerably. Klamath County is 75% forest-suitable with Lake County at 20% and Harney County at 10%. Klamath County elevations range from 4050 feet to a high of 8938 (Mount Scott, Crater Lake National Park).

Forests are primarily composed of ponderosa pine at mid to low elevations with sugar pine and incense cedar mixed mainly towards the southern end of the County. White fir with some Douglas-fir and white pine occupy more moist sites at mid to high elevation. Pacific silver fir, Shasta red fir, and hemlock occupy mid to higher elevations to the west side of the County on the east slope of the Cascades.

Lodgepole pine occupies extensive areas where pumice soils exist, primarily north- to northeast of Crater Lake. Scattered woodlands of Oregon white oak can be found east of Klamath Lake. West of Klamath Lake, ponderosa pine dominates eastward to the juniper transition.

Lake County is a high plateau dissected by a series of parallel, north to south extending mountain ranges. Originating from fault-block uplift, these ranges have steep slopes on one side and gentle, sloping topography on the opposite edge. Valleys between the ranges sit at about 4200 to 4900 feet in elevation. The highest

elevations vary from 6000 to 8000 feet. Forest resources are composed primarily of ponderosa pine extending north and south along the west edge of the County. White fir and Douglas-fir are scattered at mid to higher elevations on northerly aspect, more moist sites. The northernmost end of the Warner Mountains has this type of forest composition. Juniper is extensive at mid to lower elevations, south aspects, and flat topography throughout the County.

Oregon's forest ownership

Most of the forests along the Cascade Range are in public ownership, but many other acres are in private hands.



Source: Oregon Department of Forestry STEVE COWDEN/THE OREGONIAN

Harney County extends eastward with primarily level topography broken by the Massive uplifted Steens Mountain to the east edge of the County. Elevations within the County range from 4,000 feet at valley bottoms to 9670 feet to the top of The Steens. The forest resource is limited to the northernmost 10% of the County and composed mainly of ponderosa pine. The remaining 90% of the County, including mid to higher elevations of The Steens Mountain (10 to 40 inches of rain annually) is non-forest. Juniper is extensive throughout the County at mid elevations, with sage occupying the lower elevations and more level topography.

Central Oregon Update

I hope you are all as grateful for this unexpected snow as I am. Hopefully this means less tree stress and mortality, and less wildfire for us in 2016.

For me winter is the time I work on educational materials, and start planning our workshops and field tours for the Spring and Summer, so stay tuned for the April newsletter! I do publish monthly e-newsletters in between these quarterly issues, so if you have not sent me your email address yet, please do so and I will make sure you stay up to date.

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Upcoming Events

Starker Lecture Series: Burning Questions: People, Forests, and Fire

Thursday, March 3, 2016
The Riverhouse Convention Center,
Bend, OR

Field Tour: 10:00am – 2:00pm

Join us for a tour where we will discuss local fire history, neighborhood planning and home building opportunities and challenges, Firewise Community strategies, as well as fuels reduction that is occurring in the Wildland Urban Interface (WUI) and Deschutes National Forest. Contact me for more information and to RSVP (required).

Starker Lecture: 3:30pm – 5:00pm Exposure of Buildings to Wildfire: Vulnerabilities and Mitigation Strategies

Steve Quarles, Senior Scientist, Insurance
Institute for Business & Home Safety

Buildings threatened by wildfire must be able to resist exposure from wind-blown embers. These embers, resulting from burning vegetation and/or other burning structures, can ignite a building directly by accumulation on or against a combustible construction material, or indirectly by igniting combustible vegetation or other materials located near the building. Indirect ignition can result from a radiant heat or direct flame contact exposure to the building. Until recently, building survival has focused on selection, placement and management of vegetation on and near the property. Information on structural materials and building design issues, however, is becoming more widely available and prevalent as a result of research focused on these topics. The focus of this presentation will be to review vulnerable building features and discuss mitigation strategies that can help buildings survive wildfire.

Learn more about this event:
<http://starkerlectures.forestry.oregonstate.edu/>

Living on a Few Acres

Saturday March 12, 2016,
Deschutes County Fairgrounds

This full day conference includes a vendor fair and several directly forest-related classes, including: Forest Potpourri (making management decisions for health, fire resilience and wildlife), Fuels Reduction and Defensible Space, What's Killing My Trees?", Chainsaw Safety, and How to Find and Hire a Service Provider. The conference also includes several classes of general interest, including food preservation, gardening, and farming. To request a registration packet: <http://extension.oregonstate.edu/deschutes/LOAFA> or (541) 548-6088

Central Oregon Fire Science Symposium

March 24-26, Bend, Oregon

<http://centraloregonfiresymposium.org>

Presentations will focus on alternative landscape futures, social factors, climate change and fire, and principles and examples of restoring fire-prone landscapes. Later presentations will discuss fire effects in Sage-Steppe ecosystems, fire in beetle killed lodgepole pine, fire and cavity nesters, fuels management, monitoring, public perceptions on preparing for wildfire, smoke management, and managing large fires. Saturday will be comprised of several field trips.

Mentored Management Planning Workshops

1st Session: March 10th, 4pm - 7pm,
Deschutes County Fairgrounds

As this goes to print I am working with the Oregon Department of Forestry (ODF) and Natural Resources Conservation Service (NRCS) to develop a collaborative workshop series to help landowners write or update management plans. Locations are still flexible, so let us know if you are interested and where you are located, and we can schedule accordingly. Workshops will be held March-April.

Save the Date!

*Oregon Small
Woodlands Annual
Conference*

*"Sustaining Family
Forests for 75 Years"*

*Baker City
June 9-11*

Assessing, continued from page 7...

To salvage log or not?

The answer to this is complex and it depends on many factors such as how much of your forest and trees were killed or severely damaged; accessibility for logging equipment; the price that area mills are willing to pay for your burnt timber, and the cost of logging and transporting the trees to the mill. If you are interested in wildlife, such as woodpeckers, consider leaving some dead trees (for snags) in small groups scattered throughout the burn area (but not near homes, structures, roads or trails).

Another cost to consider is that of reforestation. If the salvage harvest results in a net profit, then you are required (by state law) to reforest after harvesting your dead trees. In general, if the value of your trees don't cover the logging costs, then you are not required to replant. Remember that it takes 2 years to grow seedlings, so you should order seedlings soon after you've made the decision to salvage harvest.

Because there are some legal nuances here, you should check with Oregon Department of Forestry (ODF) Stewardship Forester to determine whether your situation will require reforestation after salvage harvesting. If you chose to not salvage harvest, then you are not required to reforest your property unless you want to replant on your own. The only issue with that decision is that as the trees die and fall to the ground, surface fuels accumulate and the trees you replanted could succumb to a future fire burning in the heavy fuels.

Streams & Streamside Vegetation

If you have streams or other bodies of water on your property, assess how much of the streamside vegetation and trees has been damaged or killed. If the streamside vegetation sustained

moderate to low severity burns, you probably do not need to do much. The area will recover on its own. If the majority of the streamside vegetation was severely burned, then some sort of planting of native shrubs and tree seedlings would be warranted so that shade can be re-established as the trees grow into the overstory over time. Be aware that you may need to control competing vegetation around tree seedlings and/or protect them from deer or elk browsing. Consult with a Stewardship Forester about what you should plant steps necessary to insure success.

If you have aspen along your stream or spring and they were burned, the good news is that aspen will often resprout profusely. The bad news is that tender aspen sprouts are like candy to deer, elk, and cattle. You will likely need to protect the tender sprouts by fencing off the area.

Useful Websites

For more information on homeowner's insurance, visit the Insurance Information Institute's website: <http://www.iii.org>

Information on salvage harvesting, visit the Oregon Department of Forestry website: <http://www.oregon.gov/ODF/Documents/WorkingForests/TimberSalvageAfterWildfires.pdf>

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Post-Fire Range Rehabilitation Tips

Leticia Henderson, Baker/Union County Livestock and Range Agent

As you plan for a new spring post-fire, consider a few tips and facts about post fire rehabilitation.

Annual Invasives

One of the most damaging results of fire is the establishment of annual invasive species. As the disturbance regime changes, conditions become more favorable for species such as cheatgrass (*Bromus tectorum*) and medusahead (*Taeniatherum caput-medusae*). A good indicator to decide whether or not invasive species pose a threat is whether a species was present pre-fire. If so, chances are it can become a problem post-fire. Careful monitoring is essential to prevent establishment of invasive species. If problems do arise, treatment with herbicides, reseeding, or grazing may be necessary.

Soil Erosion

Even if a plant community is expected to re-establish on its own, there is a risk that a site can experience short-term problems due to soil erosion. The first two years following a fire are the most vulnerable times. Areas affected by fires experience a loss in vegetation and ground cover, two critical components to a site's ability to absorb water. Further, in areas with moderate to high burn severity, the fire creates a hydrophobic layer, reducing the amount of water that will infiltrate the soil. Several methods are available to land owners, including reseeding, to using low inputs such as mulches and contour logging, to installing structures such as silt fences and straw wattles. Be sure that the method you choose matches your management goals.

Planting Trees?

OSU Extension has you covered. Visit <http://catalog.extension.oregonstate.edu> and search for the following:

PNW 520. Enhancing Reforestation Success in the Inland Northwest.

P. Oester and S. Fitzgerald. This publication highlights vegetation management methods to improve conifer seedling survival and growth. Its focus is on competition from grasses, shrubs, forbs and small hardwood trees.

EC 1504. The Care and Planting of Tree Seedlings on Your Woodland.

M. Elefritz, M.M. Atkinson and S.A. Fitzgerald. Proper care and handling is essential to good survival and growth of out-planted seedlings. Learn about proper moisture control, temperature, care during transportation and storage and handling at the planting site.

EC 1196. Selecting and Buying Quality Seedlings.

R.E. Duddles and C.G. Landgren. Successful reforestation is more than just planting some trees and hoping they survive and grow. Ensuring success involves understanding seed zones and selecting adapted species, selecting the right stock type, matching seedling to site, and knowing when to plant and order seedlings.

EC 1498. Successful Reforestation: An Overview. S.A. Fitzgerald. Getting started on the right foot is so important when planting forest seedlings.

LOG MARKET REPORT \$/1,000 board feet

January 15, 2016

Umatilla/Pendleton									
Douglas-fir /Larch	6-11"	9-11"	Ponderosa Pine		20+"	Grand fir /White fir	Lodgepole Pine	Engelmann Spruce	Pulp/Chip Logs
			12-15"	16-19"					
310	—	300	380	380	400+	320	280-290	320	call
La Grando/Elgin/Joseph									
Douglas-fir /Larch	6-11"	9-11"	Ponderosa Pine		20-24"	Grand fir /White fir	Lodgepole Pine	Engelmann Spruce	Pulp/Chip Logs
			12-17"	18+"					
380	260	260	260	385	400	280	280	280	call
Burns/John Day									
Douglas-fir /Larch	8-11"	Ponderosa Pine		18+"	Grand fir /White fir	Lodgepole Pine	Engelmann Spruce	Pulp/Chip Logs	
		12-17"	18-23"						
8" - 275	—	250	300	300-320	—	8" - 225	—	—	—
11"+ -300	—	—	—	—	—	11"+ - 250	—	—	—
Redmond/Bend/Gilchrist									
Douglas-fir /Larch	6-11"	Ponderosa Pine			24*+	White fir	Lodgepole Pine	Engelmann Spruce	Pulp/Chip Logs
		12-15"	16-19"	20-23"					
—	305	320	335	360	360	—	6"+ - 350	—	—
Export to Longview		Pine \$525		Hemlock 540-545					
Export to Dallasport		J-Sort \$790		C-Sort \$550					
Lakewood/Klamath Falls									
Douglas-fir Western Larch	CR	6-11"	Ponderosa Pine		24*+	White fir	Lodgepole Pine	Incense Cedar	
		12-16"	17-23"						
—	—	250	300	350	350	8"+-275	8"+ -275	275	

Source: Oregon Log Market Report, Editor John Lindberg, ph 360-693-6766, fax 360-694-8466, logmkt@comcast.net

This publication covers steps involved in a typical reforestation operation, including planting site preparation, obtaining suitable seedlings, how to plant seedlings correctly, plantation maintenance and financing reforestation activities.



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