When considering a forest, it’s easy to focus on just the trees—the largest, most obvious, and arguably most economically important species. Sometimes we overlook all the other forms of life existing in the forest, whether they be tiny flowers, lichens, insects, or larger animals. But these species—thousands could exist on your property—are critical parts that constantly interact with one another. Biodiversity refers to the abundance or variation of species in an environment and is something that ultimately determines the fate of your forest.

Here is an example of biodiversity at work. Recently many people have called in from Yamhill County reporting dying branches on oak trees. There are actually two interacting species causing this damage. An oak twig gall wasp lays its eggs underneath the bark of the small branches. Then, western grey squirrels strip off the bark in search of the eggs and grubs, girdling the branch. We see flare-ups of this activity each year, but rarely in one spot for many successive years. Why not? My guess is that the local squirrels knock down the insects. Without them, the wasp populations would build up.

Western tent caterpillars made a dramatic appearance near Rainer this spring (see page 4). This is another case of biodiversity in action: the caterpillars meet their demise when other naturally occurring species parasitize them.

In a broad sense, biodiversity, along with age diversity and other types of variety can make forests more resilient to forces like climate change. We can likely never know the full extent of biodiversity within our forests, or the many unseen interactions among species, but we can be proactive in maintaining biodiversity. A Twilight Tour on August 14th will feature a property where biodiversity conservation is the owners’ priority (see page 3).
Our hosts for this year’s tour are Randy and Bonnie Holce, CCSWA members and OSU Master Woodland Managers. Come at 8:30 for hot coffee and pastries. The morning program will consist of a walking tour beginning at 9:00 am. Please wear comfortable sturdy shoes. We will be walking a one-mile loop on unsurfaced pathways with some gentle climbs and descents.

Randy is the second generation in his family to own this property. Originally managed as pasture and other farm uses, the farm was converted to timber over the years and now consists of various stands from recently planted to mature. We will see many highlights of the Holces’ current activities on the tour.

Rob Hahmeyer, pole buyer with McCormick Pole Yard, will be on hand for a pole marking demonstration so we can learn to distinguish trees that might have potential for this lucrative market. We will also look at a commercial thinning in progress and see how a less productive area has been enhanced as a wildlife set-aside.

Farm Table Catering, a local company, will serve a delicious pulled pork sandwich lunch with side dishes and dessert. Lunch is provided to all attendees courtesy of CCSWA. Non-CCSWA members, please consider a cash donation to cover your lunch cost.

After lunch, we will visit the barn with its century-old hand-hewn timbers and get a taste of the history of the Nehalem Valley. We’ll also have an equipment show-and-tell, since no tree farm is complete without a few “toys”!

Remember, family is invited. Please include the number in your party when you RSVP to Debra Booth at 503-568-4929 or globe.trotters.email@gmail.com by July 18th. RSVP is needed for accurate food preparation, please!

Directions (look for yellow “Tree Tour” signs en route):

From north of Vernonia travel south on Hwy 47, 2.2 miles from Scappoose-Vernonia Hwy junction turn right on Stoney Point Road. Go 1.7 miles, driveway on right.

From Vernonia and points south, turn north on State Ave. (@ NAPA), go 0.6 mile, turn right just over the top of the hill on Stoney Point Road, go one mile, driveway on left at the carved bear.
More Upcoming Events

**Oak Conservation Workshop — Thursday, July 31st, 1:00—5:00 pm, Dallas**
Northwest Natural Resources Group and Willamette Partnership are hosting a workshop on measurement tools to evaluate oak woodland habitat quality. Topics: background on oak conservation in the Willamette Valley, explanation of the measurement tool, hands-on training, and case studies by landowners who have put oak restoration into practice. For details and registration, contact meagan@nnrg.org, (503) 545-8685.

**Yamhill County Small Woodlands Association Tree Farmer of the Year Tour and BBQ — Tuesday, August 5th, 5:30 pm, 24001 NE Ellis Lane, Newberg**
Brian and Barbara Doyle are this year’s hosts and county Tree Farmer of the Year nominees. YSWA will provide hamburgers, hotdogs and beverages. Bring a side dish if you like. Tour will begin at 7:00 pm following dinner. Please RSVP for food planning to Hal Hagglund, 503-843-2173 or hal.elin@gmail.com.

**Twilight Tour—Native Plant Restoration — Thursday, August 14th, 6:00—8:00 pm, 78210 Rutters Rd., Clatskanie**
Are you interested in adding native plant diversity on your property? This event will interest you. Paul Wilson and Linda Farris have been actively restoring a range of native grasses, shrubs, and trees to what was a neglected, invasives-filled hillside on their small woodland property. We will see how they propagate their own plants, are creating a small oak meadow, a native hedgerow, and adding plant diversity to a young tree plantation. No RSVP needed. Plan for walking up and downhill short distances on gravel. Located 0.1 mile past Quincy Grange; for detailed directions, call the Extension office, 503-397-3462.

**Rural Living Field Day — Saturday, August 23rd, 8:30 am — 2:00 pm, Howell Territorial Park, Sauvie Island**
Rural Living Field Day is a fun event for rural landowners. The event features speakers addressing a variety of issues that face rural homeowners, farmers, and land managers every day. Topics include wildlife, forests, pollinators, invasive weeds, orchards, crops and health soil, horse health and manure composting. It is organized by our local Soil & Water Conservation Districts. To register, visit www.wmswcd.org and click on “Events.” Cost is $15 per person or $20 for families. Lunch is included.

**Cut-to-Length Thinning Demonstration — Wednesday, Sept. 3rd, time TBD, Miller Woods, McMinnville**
There is a thinning operation scheduled this summer at Miller Woods. The contractor uses a mechanized cut-to-length harvester and forwarder, capable of moving in tight spaces, minimizing soil disturbance, and maximizing log output. We will see the equipment in action and discuss the pros and cons. Time and other details TBD and will be announced via e-mail and on the OSU Extension website.

**Lewis River Reforestation Tour — Saturday, Sept. 20th, 10 am - noon, Woodland, Washington**
Sponsored by Washington County Small Woodlands Association. See where and how WCSWA’s seedlings are grown. Watch www.wcswa.com for more details.

**Yamhill Small Woodlands Association Meeting — Wednesday, Sept. 24th, 6:30 pm social hour/7:00 program, 2050 NE Lafayette Ave, McMinnville**
Dan Upton will talk about the Oregon Woodland Cooperative’s recent Scandinavian forestry tour.
The boom-and-bust life of defoliating insects

By Amy Grotta, Forestry & Natural Resources Extension—Columbia, Washington & Yamhill Counties
Reprinted from TreeTopics, http://blogs.oregonstate.edu/treetopics, June 20, 2014

It is shaping up to be another exciting year in forest health here in northwest Oregon. Fortunately, neither of the two defoliating insects currently on the scene are serious threats to forest or human health, but they are certainly causing a stir.

In June, Columbia County experienced the largest documented western tent caterpillar outbreak that Oregon has seen in two decades, according to the Oregon Department of Forestry. I first noticed a few tent caterpillar clusters on one site in the area two years ago. Last summer, our Extension office received many calls as the caterpillar population built up. Aerial surveys done a few weeks ago show that at least 13,000 acres are affected in the county this year.

The caterpillars were everywhere in the most heavily affected areas. It was impossible to move without stepping on them, and looking up through a stand of alder, it looked like early spring as there are no leaves left on the trees.

When the population gets to this level, natural parasites and diseases set in. Upon closer inspection, one could see that some of the caterpillars are hanging limply from their midsections: a symptom that these diseases are beginning to take hold, signaling the end of the boom years and the beginning of the bust.

Other defoliating insects follow similar boom-and-bust cycles, in concert with their respective natural enemies. The western oak looper, which made its appearance in 2012 and 2013 in the mid-Willamette Valley, and the pine butterfly, which affected over 250,000 acres in eastern Oregon in 2011-12, are two examples. Reports are beginning to trickle in that the oak looper is still on the scene in places this year, but the pine butterfly outbreak is over. In 2013, researchers in eastern Oregon observed abundant “boom” populations of two insects that are predators of the pine butterfly larvae.

In Columbia County, 2014 will go down in the books as another “year of the caterpillar”. Longtime residents can recall the years marked by previous outbreaks of these insects, just as with big floods and wind storms. One Rainier old-timer recalls another big tent caterpillar year in the 1950’s.

The interactions between these forest insects and their natural enemies are an example of how biodiversity at the smallest scale within a forest system leads to patterns that we can observe. Sadly, in our coastal ecosystem, a pathogen is killing off sea stars in unprecedented numbers. It remains to be seen whether the sea stars will be able to rebound, or if they will be busted for good.
At a recent Christmas tree gathering, a grower offered some recent and firsthand advice on dealing with theft. On the upside, all the stolen equipment was recovered thanks in part to helpful neighbors, a quick response from the deputies and rather inept thief. One lesson from the experience the farm’s owner wanted to share is to make sure you have records and easy access to all the serial numbers for your equipment (chainsaws, tractors, anything with a number). This saves time trying to rummage through old bills of sale, and who knows where they are! And time is of the essence. Many thefts are made in order to quickly sell the stuff to get cash for drugs. Police need the numbers to trace sales. For items without serial numbers, photos and lists of your valuables could help prove they belong to you. Write your name or farm name somewhere. Engrave your name on metal items, permanent ink on other things. Having alert, helpful neighbors is critical as is being a good neighbor in return. In this case, a neighbor noticed a suspicious vehicle and immediately called the farm owner. The chainsaws, bars and other items were all recovered. The thief is in custody for a long list of additional sins.

On another front, be prepared for the inevitable worker accident on your farm. It just happened to me. On our farm, a college-age worker/friend was installing fence posts to keep joy riders from running over my trees (another story) with a manual fence post pounder. One of the hand-holds grazed his scalp. It was not a “bad” cut and we went up to get the first-aid kit on the 2nd floor of a shed. 1st bit of advice- avoid taking potentially injured people up- bring the first-aid kit down. We got up to the 2nd floor and treated the wound. I turned to put the kit away and my “patient” passed out and fell down the stairs headfirst. So here I am- my patient is too big for me to lift, unconscious and stuck on the stairs about ½ way down. Not a happy scene. After an eternity of 30 seconds he “woke up” and wondered why he was upside down on the stairs. His back and neck were fine but his memory of the “event” was not very clear. He did know where he was, who he was and all the needed phone numbers. So, we headed off first to Urgent Care and later to the Emergency Room. The CAT scan showed no problems and he stayed the night in the hospital for observation. He feels fine now. But concussions can be quite serious. We had one while I was working on Ski Patrol last month. A young girl hit her head falling off her inter-tube while sledding. No big deal at first, just a small bump. But within 20 minutes she went from looking fine, to unconscious and barely breathing. She went by Life Flight to a hospital where she spent a few tough days before recovering.

The lessons and messages I learned: 1) Treat your patient/worker while sitting down on (or near) the ground, 2) know how to get in touch with family/friends of each worker, 3) know the best way to local ER/Urgent Care facilities, 4) don’t take potential concussions lightly, they can be quite serious, 5) know about insurance and payments prior to the hospital visit, 6) where possible, know about potential medical “issues” a worker might have that could influence treatment (diabetes, allergies, medicines needed or taken etc.).

In both the cases above “stolen stuff” was recovered and workers recovered, but preparation before “things” happen can make a huge difference in outcomes.
Watching out for the Emerald Ash Borer and Other Invasives

By Brad Withrow-Robinson, OSU Forestry & Natural Resources Extension—Benton, Linn & Polk Counties, and Wyatt Williams, Oregon Department of Forestry Invasive Species Specialist


A large purple box hanging in the trees along Airlie Road last year caught my attention at 55 mph. Pulling over I recognized it as a monitoring trap for one of the current invasive species threatening Oregon’s woodlands. Luckily Oregon Department of Forestry (ODF) and others are watching out.

The emerald ash borer (EAB), an invasive insect from Asia, has killed an estimated 100 million trees and caused more than $3.5 billion dollars’ worth of damage and property value losses in the eastern U.S. since its arrival in the 1990’s. All 16 North American ash species are threatened with extinction, including our native Oregon ash. The furthest west population yet detected is in Boulder, Colorado – a day’s drive or so from Oregon in a motor home. Originally introduced to the U.S. via wood packaging material, it is now spread across the continent in infested firewood.

With summer travel and camping season upon us, you can do your part by educating people about the dangers of moving firewood. There is a whole national campaign about this: Don’t Move Firewood. If like me, you enjoy bossing people around, insist your visitors not transport wood!

ODF is working with Oregon State University and OSU Extension, the Oregon Department of Agriculture, the US Forest Service, APHIS, and Washington Department of Natural Resources in order to ‘save our ash.’

Of course this is not the only invasive we worry about, as human travel and commerce create ever increasing opportunities for insects and diseases to jump around. Chestnut blight and Port-Orford-cedar root rot are some older examples and sudden oak death a more recent arrival. Here in the Willamette Valley, people are becoming aware of a problem in black walnuts. Here is a good article about the thousand canker disease which is killing black walnuts in the area that was just posted last week.

Wow. That is a lot of grim information. We’ll try to find something happier next time.....

For more information on the emerald ash borer: http://emeraldashborer.info/

For more information on the risks of moving firewood: http://www.dontmovefirewood.org/

Reading this on paper?

You can receive this newsletter (in full color and with working links) and other news by subscribing to our email list.

Just send an email to vicki.krenz@oregonstate.edu and request to be on the forestry email list.

Please indicate which county you are in. Include a physical address and phone number (so we can remove you from our paper mailing list and keep our email list current).
New Oregon Wildflower App for Smartphones

The Oregon Wildflowers app helps the user to identify and learn about nearly 1,000 wildflower species found in our state. There are two main ways to use the app. If you think you know the plant’s common name, you can find it in an alphabetical listing and then view photos and a description. Or, to identify an unknown plant, you can narrow it down by choosing the geographic region, habitat type, flower color, leaf traits, and other characteristics to arrive at a few options.

The Oregon Wildflower app is a product of the Oregon Flora Project, which in turn is housed in OSU’s Department of Botany and Plant Pathology. A portion of the proceeds from the app’s $7.99 purchase price goes to support the Oregon Flora Project.

To learn more about and download the Oregon Wildflower app, visit http://www.oregonflora.org.

Oregon White Oak and Wildlife

Reprinted from Oregon Department of Fish & Wildlife, On the Ground Newsletter

The Oregon white oak is the most widely distributed oak species in Oregon and the dominant oak of the Willamette Valley. It provides food and shelter for a great variety of wildlife. Acorn woodpeckers and western gray squirrels feed on the acorns. Birds forage for insects among the variety of lichens and mosses that grow on the large limbs. Mistletoe parasitizes its branches, providing fruit as important winter food for western bluebirds and is a host plant for Nelson’s hairstreak (butterfly). Probably the most valuable habitat features of white oak are its dead branches and cavities, which provide safe places for wildlife to rest and raise young.

Oregon white oaks are slow growing and shade intolerant. Open-canopy, large-diameter trees are continuing to be lost due to overshadowing by conifers, removal and natural causes, but are not being replaced. Landowners can maintain the oak’s legacy by conserving older trees and managing younger trees.

Oak woodlands are a Strategy Habitat in the Coast Range, East Cascades, Klamath Mountains, West Cascades and Willamette Valley ecoregions.

Warmer Summers May Mean Slower Douglas-fir Growth

Douglas-fir growth is often thought to be limited by water availability, but a new study suggests that as Oregon’s temperature continues to rise, summer heat may also limit Douglas-fir growth in the future. Researcher Peter Beedlow and colleagues examined the response of Douglas-fir growth to air temperature and soil water patterns over twelve growing seasons and five sites in Oregon.

At four of the five sites, tree growth was equally affected by maximum daily air temperature and soil water. At the coastal site, soil water was more important. Growth rates were optimal at temperatures of about 20 to 25 degrees Celsius (68-77° F), while rates decreased at higher temperatures. The researchers conclude that the interaction of temperature and moisture limits growth at all sites when summer temperatures are above average; and if climate change results in hotter summers as predicted then Douglas-fir will experience more growth limitation. Source: PNW Climate Impacts Research Consortium (http://pnwcirc.org/)
Pity the vulture, historically misunderstood and maligned by so many, but one of the most interesting birds you may, literally, stumble across in your woodlands. It wasn't all that long ago that my very own husband was making his way up a shrubby slope in our forest and disturbed a Turkey Vulture (TV) chick hopping about near a nest at the base of an old broken-off maple tree. I don't know who was more surprised.

We are all used to seeing vultures v-shaped and teetering in the sky or hanging out with their buddies near roadkill, but until recently I have given them relatively little thought. Out with other birdwatchers, someone might spot a large bird in the sky, look for a few moments, and then announce, "Oh, it's only a Turkey Vulture." But, wait. Only a Turkey Vulture?

Turkey Vultures, the only vultures we are likely to see in the Northwest, are social birds. A group of them can be referred to as a "committee," a "venue," or a "volt." Flying in a group, they are known as a "kettle" of vultures. Alongside the road, feeding on a carcass, call them a "wake" of vultures. And whether a venue, a kettle, or a wake of Turkey Vultures, these eagle-sized birds deserve our thanks. They literally clean up tons of dead and decaying meat that might otherwise be left lying in our farmyards, backyards, woodlots and roadsides until, well, who knows. They are drawn to dead critters by their powerful sense of smell; they can smell the odor of a dead animal from a mile above the source. They can smell a carcass even through a closed canopy forest. TVs also use sight to help locate a meal, but they are unusual in the bird world for their amazing sense of smell.

At one time, it was believed that Vultures were carriers of disease or that they would kill live, healthy animals. This is not true. They eat carrion, or dead animals, mostly mammals, but also animals as small as crickets and mayflies. By quickly disposing of large quantities of meat that would otherwise rot, they get rid of potential disease sources that could have gone on to infect other animals. The strong acid in their intestinal tracts destroys most pathogens. And it doesn't make the TV sick to ingest and wade through these germs; in fact, their acidic poop runs down their legs and feet, effectively disinfecting them. Far from being a disease vector, Turkey Vultures are the supreme cleaner-uppers of our landscapes.

Turkey Vultures are monogamous and long-lived. They are also migratory, spending winters in Central and South America. At our forest in the Willamette Valley, we typically see TVs returning in early March. Although they typically roost in large groups, TVs nest in wooded, isolated areas. Large, low tree cavities and brush piles are preferred, so think about leaving large hollow trees where you find them in your woods. Next spring you may just come across a couple of chicks yourself. If you do, give them some space for a few weeks till they fledge, and the next time you see a kettle of Vultures, you can wonder if one or two of them might be "yours."
Pacific Logging Congress –

In the Woods Show and Forestry Tour for Community Leaders

YOUR HELP NEEDED!

We are looking for volunteers from the woodland owner community to help out at the Pacific Logging Congress coming up September 25 and 26 in the Molalla area.

OSU Extension is coordinating volunteers for two specific pieces:

1) Forestry Learning Station – Thursday and Friday, September 25 and 26, 8:30am-2:30 pm. We need volunteers to work with school groups and general public visitors. Please consider signing up to help for the whole period or for 2-hour blocks of time. This is an opportunity to help young people see the wide variety of career paths related to forestry and the knowledge and skills needed to do this work. It is an opportunity to educate people, young and old about forest stewardship and the work that is done in Oregon’s forests supporting all the benefits from the forest. Activities include sharing about knowledge, skills, and tools used by forest owners and managers. Looking at a sample plot of 50-year-old timber to learn about tree measurements, stand density, timber volume, and decision-making about thinning or harvesting.

2) Guides for groups of Community Leaders – Friday, September 26, 8:00am-2:00 pm. We are bringing up to 100 community leaders (government, business, community groups, etc.) on a special tour of the In the Woods Show. The goal is to educate community leaders and the public about the status and importance of the forest sector in the regional economy and community. Volunteers are needed to lead groups of 20-30 community leaders through the whole show, starting at the bus loading area in Molalla, through all the events at the Show and back on the bus to the starting point. Lunch and refreshments provided.

Volunteers will have the opportunity to visit other events at the In the Woods Show. Events include active demonstrations of cut-to-length harvesting, shovel logging, high lead cable yarding, biomass grinding, and logging sports in action. Other learning stations will include wildlife, wood products, tree planting recreation and fire safety.

To volunteer for either of the above, please contact Glenn Ahrens at 503-655-8631 or glenn.ahrens@oregonstate.edu.

Pacific Logging Congress information:
http://pacificloggingcongress.org/

OSU Forestry & Natural Resources Extension is now on Facebook!

https://facebook.com/osufnr

“Log” on and engage with the Oregon forestry community from your home, from the forest, from just about anywhere!
In this issue:

- Columbia County Summer Woodland Tour
- More Upcoming Events
- Defoliating Insects
- Being Prepared
- Emerald Ash Borer
- Oregon Wildflower App
- Oregon White Oak and Wildlife
- Warmer Summers and Douglas-fir
- Birds of a Feather—the Turkey Vulture
- Pacific Logging Congress

Oregon State University Extension Service offers educational programs, activities, and materials without discrimination based on age, color, disability, gender identity or expression, marital status, national origin, race, religion, sex, sexual orientation, or veteran’s status. Oregon State University Extension Service is an Equal Opportunity Employer.