The Labor Day fires in Oregon have been on the forefront of our minds and much of our time has been dedicated to helping landowners affected by the fires. If this is you, we can't even begin to imagine all that you've gone through and continue to experience each day. We are so sorry. Please know that the OSU Extension Forestry team is here to help. Five webinars covering topics pertinent to soil, water, and vegetation after a fire have been posted to the Extension Fire Program website (https://beav.es/ozv). We are maintaining a list of fire affected landowners and forwarding important information as it comes our way (contact us to get on this list). We are also arranging site visits if you just don't know where to start and need someone on the ground to help get you going. If you've been affected by a fire or know someone who has, please get in touch or pass along our information. We're here to help.

We are still living in a covid-world, so for now all of our efforts to hold workshops are (still) virtual. Tree School Online is continuing twice a month through June 2021. Over 40 webinars have been offered so far, and all are available for you to view online. We guarantee there are multiple webinars that will be useful to you as you continue to manage and care for your land. See page 2 for TSO details and a full calendar of upcoming events/programs.

While you’re spending extra time at home, now is a good time to check that your forest roads are ready for winter (page 5) and make sure that your reforestation plans will be successful (page 3). If you’ve noticed any mushrooms in your woods, be sure to learn all about fungi in the forest on page 6. The next time you walk your land, keep an eye out for declining or dead Western redcedar. You might be able to help scientists better understand why they’ve been declining lately (pg. 8). And as always, be sure to read the quarterly log/non-timber forest product prices report on page 9 – this is especially important if you’re looking to see logs anytime soon.

Have a safe, happy, and forest filled season,

Alicia & Lauren
Douglas & Lane County Extension Foresters

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Upcoming Events

Nov. 5 TAX CONSIDERATIONS FOR THOSE IMPACTED BY WILDFIRE OR OTHER NATURAL DISASTERS (webinar). 3pm – 5pm. This is the final webinar in the OSU Extension After the Fire Webinar Series. This webinar will cover the information you will need to handle your taxes after the fires: possibilities for deducting losses, how to determine the amount of loss, and reconstructing your basis in the trees. If you need to report a gain from the salvage of the timber, you may be considering whether you even want to replant after harvest/salvage. We will talk about how that decision can impact your property tax status here in Oregon federal tax incentives available for those who are replanting. To view previously recorded webinars and register for this one, visit https://extension.oregonstate.edu/fire-program/fire-program-online-webinar-guide.

Dec. 2 HOLIDAY WREATH MAKING (virtual). Hosted by the Women Owning Woodlands Network. 6pm – 7:30pm. Free. Join us and virtually gather with family and friends to learn how to make your very own holiday wreath! We will introduce you to the world of non-timber forest products and some of the fun festive decorations you can make with items found in your own woods/backyard. We’ll learn to identify some common trees used to make wreaths in Oregon, then teach you exactly how to make one at home. Collect some greenery and a wreath base ahead of time so you can make one with us live. Interested in attending? Email Tiffany Hopkins at tiffany.hopkins@oregonstate.edu and she will notify you when registration is available. Questions? Contact Tiffany or Alicia Christiansen – alicia.christiansen@oregonstate.edu or 541-236-3002.

Winter 2021 WOODLAND POLLINATOR STEWARDS (pilot program). Registration starts Nov. 15th. Limited to 30 woodland managers. Do you want to help pollinators on your managed forest? Are you looking for practical training on how to build, maintain and establish pollinator habitat? Are you already helping pollinators and looking for recognition for your efforts? The OSU Pollinator Steward Program is for you. The program consist of self-paced online training and an optional field days course coupled with options for volunteer activity, surveying for bees and/or creating new pollinator habitat. Completion of the requirements will qualify you for recognition as an Oregon Bee Project Pollinator Steward. Visit https://extension.oregonstate.edu/pollinator-steward to register.

Feb. 6 LANE COUNTY SMALL WOODLANDS ASSOC. ANNUAL SEEDLING SALE. Doors open at 8am, but folks start arriving up to an hour ahead of time. Alton Baker Park under the south picnic shelter off the Day Island Rd. entrance. Seedlings are sold on a first come first serve basis and the sale ends at noon or when sold out. Prices per seedling vary. Bare root/plugs: incense cedar, grand fir, coastal redwood, giant sequoia, western redcedar, Douglas-fir, red alder, madrone, Willamette Valley ponderosa pine, noble fir. Native plants: Oregon grape, red osier dogwood, blue elderberry, nuka rose, snowberry, thimbleberry, indian plum, pacific ninebark. For more information, contact Michael Atkinson: 1964coyote1963@gmail.com or 541-344-4991.

Tree School Online All sessions are offered from 3pm – 4:30pm

Attend free webinars from the comfort of your home! Can’t make it? All sessions are recorded & available to view anytime.

To register and view over 40 recorded webinars, visit https://knowyourforest.org/TreeSchoolOnline

Nov. 17 DIAMOND UNDER THE DOUGLAS FIR! Introduction to the wild and cultivated truffles in W. OR. The famous Oregon truffles are common beneath Douglas-fir, and are harvested profitably throughout W. OR. They occur naturally in 15-30 year-old stands planted on former pasture or farmland, usually in small woodlots. Learn how you can locate, recognize, and harvest these gems and participate in the emerging Oregon truffle industry.

Dec. 1 REPLANTING YOUR FOREST AFTER TIMBER HARVEST OR WILDFIRE. If you are planning on planting tree seedlings in the next few years, then this class is for you! Topics include: steps in securing seedlings, matching seedlings to the site, how to transport & plant your seedlings right, minimize seedling stress, protect your seedlings from wildlife damage, and evaluate seedling survival and growth. Because of the recent rash of wildfires across Oregon, reforestation challenges following wildfire will also be discussed.

Dec. 8 MAKING MAPS FOR MANAGEMENT PLANNING. In this webinar, participants will be offered a hands-on introduction to Landmapper, a new and free online tool that makes it easier than ever to quickly gather maps as you begin work on a Forest Management Plan (or if you’re just curious to learn more about the soils, terrain, and other aspects of your property).

Dec. 15 MANAGING YOUR FOREST WITH FIRE IN MIND. The fires of September 2020 were a brutal reminder that W. OR is a fire-driven landscape. Part of the new reality is a greater awareness that we need to manage forests and stands in W. OR to be more resistant to wildfire, while still managing for other objectives such as recreation, wildlife habitat and economics. We will discuss challenges, management options, and strategies to increase fire resilience along with other common values in woodland properties, communities and landscapes.
Tree Planting: Tips for Success

By Alicia Christiansen, OSU Extension Forestry Agent – Douglas County

For forestland owners in Western Oregon, winter is the time to get out on the land to plant the next generation of trees. There are many important things to keep in mind when planting seedlings, whether you’re planting 10 or 10,000. Keep these things in mind and refer to the publications listed below for more details on each subject.

TIMING

There’s a saying that goes, “the best time to plant a tree was 30 years ago – the next best time is now.” Well, that’s true as long as “now” is when the seedlings are dormant and the site is favorable for proper planting. At lower elevations wet of the Cascades, conditions are often suitable from early January through the end of March on cool, wet days. Avoid planting during times of frozen or dry soil, snow, hot or dry weather, and especially dry, windy days.

TRANSPORTING & STORING SEEDLINGS

It is crucial that seedlings are kept cool during transportation from the nursery to the woods (or intermediate storage location). Ideally, arrange transport in a refrigerated truck. If that is not possible and you transfer them yourself, use an insulated van or pickup with a canopy, or cover the trees with a special thermal “space blanket.” Avoid transporting trees uncovered or with a dark tarp, which can cause added heating. Plant seedlings as soon as possible, within 3-4 days if they are stored at temperatures above 42°F. If you must store seedlings, keep them cool and moist. Check to see if there are any local cold storage facilities available. Otherwise, a cool, shaded, indoor location is acceptable for periods less than one week. You can make a temporary storage cooler of plywood, Styrofoam insulation, and some blocks of ice.

PROPER HANDLING

Handle seedlings as little as possible. When you’re at the planting location, keep them in a cool, shaded area at all times. Remove a manageable number of seedlings from the storage container, dip them in water (do not leave them in water for more than 1 minute), and place them in a planting bag or bucket. Avoid overfilling the bag/bucket, as stuffing them in will damage the roots and cause you to drop trees when pulling them out. The container will protect the roots from drying, as long as it isn’t a windy day. Avoid exposing the roots to air or touching the roots when planting. The easiest way to do this is to only remove the tree once you’ve prepared the hole and are ready to place the seedling in the hole.

CHOOSING THE RIGHT SPOT

Determine your spacing ahead of time (see the resources mentioned below for help on how to do that). Plant your seedlings systematically, following a logical boundary. When selecting individual planting spots, take advantage of cleared spots and protected spots. Your spacing does not need to be perfect, as the forest will offer obstacles for you to plant around and potentially use to your advantage (such as stumps that can help shade a new seedling on a hot summer...)

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day). Characteristics of a good planting spot include spots with exposed mineral soil, away from animal holes and game trails, away from concentrations of resprouting brush, and protected/shaded areas next to a stump/log.

**USE THE RIGHT TOOL**

If you’re only planting a few seedlings, a garden shovel will do just fine. But if you’re planting a large area, you may want to invest in a specialized tree planting shovel. Planting hoe/hoedads are good for clearing debris away from the planting spot and occasionally used for planting plugs.

**USE THE RIGHT TECHNIQUE**

The goal when planting is to create a large enough opening in the ground so the seedling is positioned naturally and ready to grow. You do not have to dig a traditional hole. Rather, you will loosen the soil using your shovel until you’ve created a rectangular hole that will accommodate your seedling roots so they go straight down when planted. There is a special technique to doing this, so check out The care and planting of tree seedlings on your woodland – EC 1504 for more detailed instructions. Avoid crooked roots by digging a hole slightly deeper than the roots are long. After planting the tree, tamp the soil down around the tree to avoid future air pockets, which can cause roots to die (do not stomp on the soil). Be careful not to damage the bark of the seedling when tamping the soil.

**WHERE TO GET HELP**

If you don’t have the time, tools, or strength to do the planting yourself, you will need to hire a tree planting contractor to do it for you (or call on family and friends!). Professional tree planters can plant 1,000 trees or more a day, whereas it would take most of us a week to plant that many. If you choose to hire a contractor, do it before planting season to avoid a rush. Read Choosing the Right Tree Planting Contractor for your Family Forest for help on how to hire. You may also choose to hire a consulting forester who can make arrangements for hiring a planting crew and take care of the paperwork. See Choosing the Right Consulting Forester for your Family Forest for more information.

**FOR MORE INFORMATION**

Visit the OSU Extension Catalog Forestry & Natural Resources Reforestation page at [https://beav.es/oRu](https://beav.es/oRu). Some key publications worthy of reading before you plant are:

*Successful Reforestation: An Overview (EC 1498)*

*The Care & Planting of Tree Seedlings on your Woodland (EC 1504)*

*Choosing the Right Tree Planting Contractor for your Family Forest (EM 9201)*

*Choosing the Right Consulting Forester for your Family Forest (EM 9241)*
Have you been logging this summer? Or perhaps your woodland roads just need a tune-up. Proper maintenance will save you time and money. Walk your roads with the Fall Road Checklist (below) and schedule needed repairs before the winter rains start. This is also a great time to take note of bigger tasks; are your culverts starting to rust out, or is the gravel road starting to lose its shape? The winter months are a great time to start calculating costs and arranging contractors for nonurgent tasks that can be completed next summer. But for now, make sure that dirt spurs have been properly spaced and angled water bars to prevent rutting and sediment entry into streams. Check the ditch-relief culverts; do the inlets need to be cleaned out? Don’t get carried away with cleaning out road ditches, remember vegetated road ditches can be a good thing; vegetation collects sediment and slows down the water.

Have you found a lot of problems? Go ahead and make a list prioritizing the work. High priority should go to fixing road drainage problems, sediment discharges into streams, and fill or cut-slope failures that could end up blocking your road (as well as delivering sediment to a stream). Arc-shaped cracks in the fill or roadway or other signs of slope instability may require consultation with a technical specialist. Problems that affect fish passage/stream crossings are also serious issues, consult an Oregon Department of Forestry Stewardship Forester.

Don’t forget, you will need to file a Notification of Operations with the Oregon Department of Forestry, if you are planning road building or reconstruction, or replacing a cross-drain or stream crossing. Oregon’s Forest Protection Laws: An Illustrated Manual Third Edition is a great reference to the rules and regulations. The updated 2018 edition is now available at: https://www.oregonforests.org/publications

Once the rains start, pull on some raingear and head out for a walk. This is a great time to see how your road maintenance is holding up. The old road contractor saying is “Follow the Water”. Is the water running where it should? That is, are the water bars properly diverting the water off the roads and is the water draining through the culverts? Small problems at this stage can often be fixed with a little hand shoveling before they turn into big ones.
Fantastic Forest Fungi

By Lauren Grand, OSU Extension Forestry Agent – Lane County

What are fungi? They are neither plant nor animal and are classified in their own kingdom called Fungi. Throughout Oregon’s forests, there is a tremendous diversity of fungi above and below ground. They can grow on and in rotting logs, living trees, soil, and other substrates. Ninety percent of the forest soil biomass (weight of the living things), not including roots, is fungi. The majority of these fungi are beneficial to the overall health of the forest stands they are living in. Throughout its range and lifespan, Douglas-fir may associate with more than 2,000 species of fungi.

Fungal cells are microscopic and grow by attaching in strings called hyphae. Hyphae join in bundles called mycelia, which grow a few inches to several feet in the soil or plant material. Most of a fungus occurs as spreading hyphae in the soil or in trees/plants. Mushrooms are the fruiting bodies of this large fungal mass, just a very small part of the whole organism.

There are three main functional groups of fungi: saprotrophic (decomposers), pathogenic (parasitic), and mutualistic (mycorrhiza). All three of these play major roles in a healthy forest.

Saprotrophic fungi are decomposition experts. This group of fungi use enzymes to break down deadwood, leaves, and other organic materials. Tree cell walls contain a compound called lignin, which makes tree rigid and woody. Lignin is tough and fungi are thought to be the only major organism that can break it down. Without the decaying action of fungi, wood would not break down to release carbon, minerals, and nutrients that living plants and trees can absorb. Additionally, the fruiting bodies of these fungi are a major source of nitrogen, phosphorus, and potassium from the decaying logs, particularly in the early stages of decomposition.

Mycorrhizal (pronounced: my – cor – rhi – za) fungi form a mutually beneficial relationship with their host plants. These fungi form a thin sheath around the tree’s root tips. Because fungi cannot photosynthesize, they require tree roots to provide them with food in the form of sugars and other carbohydrates. Fungi, in turn, provide water, phosphorus, and nitrogen that trees could not obtain otherwise. Mycorrhizal fungi are extensively woven into the life history of forests. The fungi are tremendously diverse, and distinct fungal communities are found in each stage of forest development.

In contrast with saprotrophic fungi, parasitic fungi or pathogens breakdown and feed upon living organisms causing diseases. Some fungi can be serious forest pests causing diseases such as rusts, root diseases, rots, and others—that can weaken trees or kill them outright. From a timber perspective, these diseases can diminish the value of the logs. From an ecological point of view, however, this mortality can be beneficial. By killing trees, pathogenic fungi cause gaps in the forest canopy that may increase plant species diversity, and add to accumulation of dead wood. As a consequence of altering plant diversity, pathogenic fungi in turn alter the fungal community. Other pathogenic fungi such as heart rot fungi, while not true tree killers, have an influence on nutrient cycling and wildlife habitat. Fungal pathogens can influence the trajectory of succession by selectively killing or slowing the growth of one

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species, allowing another to be more competitive. Over millions of years, pathogens and their hosts have coevolved to a state of balance where both can survive. This breaks down, however, when pests are introduced from another area. Many of the worst fungal pests in the forest are exotic species.

Fungi also support forests through:

- **Soil Creation.** Fungi build soil and maintain soil structure by breaking down bedrock, aggregating soil particles, and creating pores that aerate the soil.
- **Nutrient Retention.** As nutrients are bound up in the fungal hyphae, they are protected from loss by leaching. Carbon is also retained this way.
- **Carbon Sinks.** Mycorrhiza move carbon from plants into the soil and help keep it there.
- **Food Web.** Fungi are an indispensable food for many forest creatures including microbes, arthropods, nematodes, and mammals. Small mammals happily eat the calorie-rich fungal fruits and transport their reproductive spores through digestion and excretion. This allows the fungi to spread more widely across the landscape, a task they could not perform alone.
- **Non-timber Forest Products.** The harvest of edible and medicinal fungi is a growing industry that supports alternative forest management goals and income. In addition, recreational mushroom collecting has become increasingly popular in the past several decades.

Forest fungi, both edible and obscure varieties, are interwoven throughout forest food webs, and their conservation is today widely recognized as a crucial component of ecosystem management. So what can you do to support your forest’s fungal communities?

It turns out that there is a large number of fungal species in each forest age class, however, you do not find the same species in each type of stand. In fact, more than a third of fungi species are unique to only one age class. As forests age, new species of fungi move in, and old species move out, paralleling the forest’s succession. Therefore, finding ways to maintain various age classes of forests is important for maintaining the biological diversity of fungi and the organisms they support.

Forest management strategies that maintain old-growth components, like large decaying logs, in young managed stands have the potential to conserve biodiversity in one forest age class through recruitment and retention of old-growth associated fungi. This is because the fungi are attracted to the chemical environment in decayed logs regardless of the age of the surrounding forest. These logs also provide important ecosystem functions such as water, nutrient storage, and critical wildlife habitat.

Next time you go for a walk in your woods, give a big THANK YOU to your forest fungi for breaking down dead wood to feed your live plants, keeping your soil healthy, feeding your wildlife, and helping to maintain a diverse forest community and structure.
What’s with all of the dying western redcedar?

By Christine Buhl, Forest Entomologist - Oregon Department of Forestry

From Oregon through western Canada, western redcedar (*Thuja plicata*) has been dying in areas where it should be thriving, such as along streams and within closed canopies. The cause for this sometimes sudden and expanding dieback is currently unknown. Insects and diseases known to attack western redcedar are typically secondary, meaning that they are not direct tree killers but are opportunistic pests and can only attack dead and dying redcedar. Redcedar can even tolerate endemic levels of bark beetles and stem rots for many years. These known pests are not always found in dieback pockets nor have novel pests been observed.

The predominant theory for this sudden mortality is that these trees are being impacted by a changing climate that includes increasing average temperatures and drought stress in the form of reduced and inconsistent precipitation. Even shaded sites along streams are at risk due to higher than usual average temperatures and reduced stream flow. Western redcedar is a species more sensitive to slight changes in climate and may be crossing the lower limits of where they can thrive in some areas, which may eventually result in a range shift.

Oregon Department of Forestry, in collaboration with Washington Department of Natural Resources, the U.S. Forest Service, and various university researchers and natural resource agencies, is conducting a study to determine the distribution and cause. We are mapping locations of dieback and monitoring some of these sites over the long-term. **We are now asking for your help in identifying sites of decline.** Discerning dying redcedar from other tree species is difficult using our current methods of identifying disturbance (aerial surveys and imagery analysis), so we must also rely on ground reports. **We are looking for pockets of dieback containing at least two trees with any of the following symptoms: thin crown, topkill, yellowing crown, and branch dieback.**

Do not report sites where the cause of dieback is known (e.g., mechanical damage, single sun-exposed trees, decadent old growth candelabra crowns) or trees with normal, seasonal dieback of older needles rather than whole-branch mortality.

Lastly, western redcedar may be confused with the other two species that we call “cedar”: incense cedar and Port Orford cedar (none are true cedar, which do not occur naturally in Oregon). The easiest way to identify western redcedar is by looking at the cones. Western redcedar produces cones that look like woody roses, incense cedar has larger cones that split open like duck bills, and Port Orford cedar has cones that resemble soccer balls. Assist us in this effort to understand what is happening with this majestic staple of Pacific Northwest forests and urban areas.

**Please submit locations of redcedar dieback to:**
christine.j.buhl@oregon.gov
Things got hot and heavy this summer with prices increasing to the $900/mbf range. While these prices aren’t record breaking, we set those in the summer of 2017, lumber prices were. Record breaking lumber prices along with a reduction in wood as a result of the coronavirus brought up those log process to numbers rarely seen in the summer. Usually a bad fire season also adds to a slight increase in price as we come out of the summer due to equipment shut downs, slowing wood to the mills. But, we didn’t have just a bad fire season, we had a bad fire year. As we recover from the Labor Day fires, many landowners will be looking to salvage their burned timber and this increase in wood to the mill will likely start to drive down prices.

Right now, some mills are taking both green and burned wood. However, you’ll be hard pressed to find a mill willing to take charred wood. Green wood is fresh cut timber that was not burned in a fire. Burned wood is timber that burned in the fire, but only the bark, not the wood, was damaged. Charred wood is timber that was in the fire and both the wood and the bark was damaged. In the fire world, high winds make fire behavior more intense and the fire harder to fight. The silver lining here is that because of the winds, the fire moved so fast that it mostly burned and scorched the trees and didn’t do as much consumption. This means that unless the trees had spike knots or previous scars, it is unlikely that you have a lot of charred wood on your hands and most of it is in the “burned” category.

Now for the meat. Green wood Douglas-fir prices are currently sitting in the high $700 – low $800/mbf range. This is lower than the prices you saw last month, because more wood is headed to the mills which causes lumber prices to start to decrease (but still higher than historic summer prices). There will be a discount price for burned wood and either a huge discount or cull ($0) for charred wood. Make sure you understand the mill or yard’s specifications when selling fire salvage timber.

Chips haven’t been exciting in the recent past, and this quarter is no different. There seems to be a steady stream of

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chips coming as byproduct from the lumber mills to satisfy most of the fiber market in the area. Chip and saw can be an option for you if you have smaller trees that were in the fire, but the bark is thinner on smaller trees. Thinner bark means increased damage and fiber mills can’t use burned chips. Right now chips are in the high $20-$30 per ton range.

The current pole market is good and buyers are taking burned wood, but no char. Buyers are looking for everything from a 30 foot to 135 foot pole height, but the 45 and 55 footers with a 23 inch minimum diameter and 85-100 footers are in the highest demand. Prices are strong with purchase orders going out at over $1000 for 30 footers.

The Hem-fir sorts (spruce, hemlock, grand and white fir) are not too exciting this quarter but if you search you might find some good prices. I’m seeing prices in the $400 - $600/mbf range. These species have thinner bark and are therefore more susceptible to wood damage during a fire so logs coming from the burned areas are closer to $300/mbf. Be sure to investigate the burned versus char status of these species.

Typically, trends in the Alder market follow Douglas-fir, but more recently have been slowing down and flattening out. They are up a bit from last quarter and are sitting in the $500/mbf range.

Redcedar prices are on the rise from last quarter and are in high demand, fetching $1300/mbf, which is $300/mbf more than our last report. Incense-cedar on the other hand is holding steady. If you are in the Eugene area you are looking at $550/mbf and $650/mbf in Douglas County area. Port-Orford-cedar prices are holding steady in the $475 range.

It isn’t Christmas yet, but in the non-timber forest products game that’s the buzz. It is all about trees and greenery right now. Most other products are on hold now but will likely start up again in December.

So, to salvage or not to salvage? Hopefully your property hasn’t burned and you don’t have to worry about this question. If your wood is green and it fits in your plans to harvest, now might be a good time since we are possibly heading into a wood surplus as a result of the fires which will likely drive down the prices. Remember winter is coming and dirt roads will be off limits soon. If your property has burned you might consider salvaging, but it depends on your objectives. Burned wood will only be good on the stump for about a year and larger trees last longer than smaller ones. If you wait until the spring, there will be more insects entering the wood and your mill choices will decrease to those that sell dried lumber. If you plan to harvest, note that loggers will be in high demand since there will be so much clean up to do, and unfortunately there was a lot of equipment lost in the fires. Make sure to find your logger early and be a bit flexible. Good luck and always remember to get your purchase order before you cut!

**Meet Your Trees!**

Golden chinkapin (*Chrysolepis chrysophylla*)

**Character:** This evergreen hardwood tree can grow to be 150 ft. tall and 6 ft. in diameter but will grow as a shrub at high elevations.

**Identification:** Look for gold on the underside of the leaf. It also has spiny burrs (fruit) unlike any other Oregon tree. Leaves are stiff and long, and the flowers are creamy white arranged in fluffy spikes.

**Distribution:** Found in clumps in most of Western Oregon below 5000 ft. elevation and scattered on the east slopes of the Cascades.

**Uses:** Golden chinkapin has excellent qualities for furniture, plywood, construction lumber, and packaging. However, it has little commercial use because of its scattered distribution on the landscape.