

What oaks do for you and how you can give back



Oregon white oaks are desirable for many reasons, but what does that mean for residents of the East Cascades?

In a nutshell—or, an acorn shell if you prefer—oaks grow at lower elevations, where people's homes are usually concentrated. While fire is an inevitable part of living in the East Cascades, and one that can feel frightening at times, there are countless ways to go about preparing your home for fire. And, by natural design, oaks make incredible neighbors without having to do much, because oak trees and many of the plants that grow beneath them are actually wildfire resistant.

How can a tree be wildfire resistant?

Like much of the land, Oregon white oaks have evolved with fire. They have especially thick bark, waxy leaves that resist burning, and insulated buds that can withstand extremely high heat. They're much less likely to burn or carry wildfire than pine or fir trees—even dead oak leaves burn less readily than dead pine or fir needles! And when fire is hot enough to kill the crown, or leafy top, of an oak tree, they can even "stump sprout," giving rise to new stems.

Many of the plants that grow beneath oaks—bluebunch wheatgrass, Idaho fescue, Iomatium and balsamroot—are also fire adapted. And in some spaces, the survival of oak trees depends on fire removing the faster-growing conifer trees that aren't as fire adapted.

We're seeing the real-time effects of a warming climate here, in a region that's already drought- and lightning-prone. Yet, the natural fire resistance of oak trees can act as a buffer against two of our biggest collective concerns: catastrophic wildfire and loss of biodiversity, or the variety of life growing within this habitat.



Why we're a resilient region

Depending on rainfall, sun exposure, soil type and how frequently fires burn, Oregon white oak habitats can take several forms. In some places, they naturally mix with pine and fir trees, while in others, they grow in shallow, rocky soils where no other tree species can survive.

These different types of habitats are scattered throughout the region; a natural patchwork of places where various plants and animals can grow and prosper. The connectedness across these patches gives those same plants and animals the opportunity to move in response to changes in temperature or rainfall. And this is what gives our home it's predicted resilience to climate change.

Your place within the patchwork

As you live in this vital, thriving region, there are a number of things you can do to maintain or even improve the resilience of land around your home.



Start by practicing wildlife-friendly fuels reduction through the selective thinning of stressed vegetation on your property. When you are done, plant and seed native plants on exposed soil to prevent weeds from moving in. Cluster any buildings you might add, so you don't break up naturally-occurring oak woodlands. Install nest boxes for

birds, bees and even bats! Deal with **noxious weeds** and, if you own livestock, **try rotational grazing** to give native plants a rest every few years in the spring when they are trying to reproduce.



Prescribed fire is a meaningful part of the solution

Lighting fires intentionally may seem counter-intuitive, but allow us to explain: When prescribed fires are done safely, there's less smoke in more controlled amounts over shorter periods of time than during a wildfire. Flame height and rate of spread can be both calculated and controlled, while the areas most in need of the **healing effects** of fire can be prioritized. What's more, prescribed fire lowers the temperature of future wildfires by consuming the accumulated fuels. And because they're planned in advance, people with sensitivities to smoke can be notified well ahead of time.



CASE STUDY

Meet Marv and Lynn Fast

Marv and Lynn are the managers of a conservation easement held by the Columbia Land Trust on the Little Klickitat River in Washington. Marv and Lynn balance their busy day-to-day lives with practical, but thoughtful actions on the property: clearing old trash piles, controlling weeds and starting fuels reduction and thinning projects to promote forest health. "We're in our second phase of forest improvement, cleaning up excessive fuels and thinning stressed pine trees," Marv details. "It's very satisfying, especially in the context of concerns about forest management practices and increased fires."

While they remove the unhealthy trees that have multiplied in the absence of fire, Marv and Lynn show a beautiful balance of care toward the land's natural features, leaving in place low-hanging oak limbs, pockets of brush, native plants and delicate soils.

"Oaks in Klickitat County are one of nature's wonderful multipliers—they thrive in difficult soils, on slopes and in rocky areas. Many of them on this property occupy a space that other trees don't," they add. Marv and Lynn innately understand the value Oregon white oaks bring to the property; everything from erosion control and shade from summer heat to a rich habitat of understory grasses and plants that support a huge diversity of wildlife. And their conscientious conservation of the land is, in itself, a best practice; a model of what East Cascades Oak Partnership hopes to help others accomplish.



bring added value to the [oak] ecosystem ... We bring added meaning and value to ourselves."

Marv and Lynn Fast

How you can help

ECOP strongly encourages you to become educated about wildfires here at home and to prepare for future ones. Being open to the use of prescribed fire in your neighborhood while you work to "fire-wise" your space in a wildlife and pollinator-friendly way, doesn't only reduce potential fuels around your property, it ensures your land continues to support the variety of life that probably drew you here in the first place. After all, oak woodlands not only feed deer and other animals, they support pollinators and migratory birds and help keep creeks and rivers clean.

On our end, we're working on management guidance to share with you; building off of what we know as an organization with what we learn, together. You can read more at www.columbialandtrust.org/ecop or contact your local conservation district.

We're also happy to help walk you through the steps when you send us a note at oaks@columbialandtrust.org.



Get connected:

 ${\bf www.} {\bf East Cascades Oak Partner ship.org} \\ {\bf oaks@columbial and trust.org}$

