

The majestic Oregon white oak: Doing our share

BY CATHY RODGERS

Covering almost half the state of Oregon, forests are a key feature of our state's natural beauty and ruggedness. From the towering ponderosa pines to the iconic Douglas firs, trees have long played a crucial role in our state. Today they play an even more important role in helping combat climate change and protecting our planet for generations to come. Trees, beyond just their natural beauty, play a vital role in our community—from providing shade and wildlife habitats to cleansing our air, filtering our water, and mitigating storm runoff. Our rural countryside, upland hiking trails, rivers, and streams are even more beautiful and healthy because of our trees.

The Oregon white oak, a majestic tree native to the Pacific Northwest, is too slow-growing to be a choice for landscape

Gilli Pineda, RiverCrest Ranch farmer, collects acorns for the Grow Oregon tree planting project.



projects or targeted replanting, but a statewide effort is now under way to change that. The Growing Oaks' project, funded through the Community Action Fund for Equity and Sustainability, is a student-led collaborative effort through Willamette University with a goal to plant 100,000 of these trees. The project is partnering with communities throughout the state, including the Applegate Valley, to collect acorns, nurture them, and replant them. Rooted in Hope, a nonprofit organization that is committed to combating climate change through forest restoration and water conservation and that has been supporting ecocentric sustainable student engagement projects in the Applegate Valley for the past eight years, is participating in the Growing Oaks program.

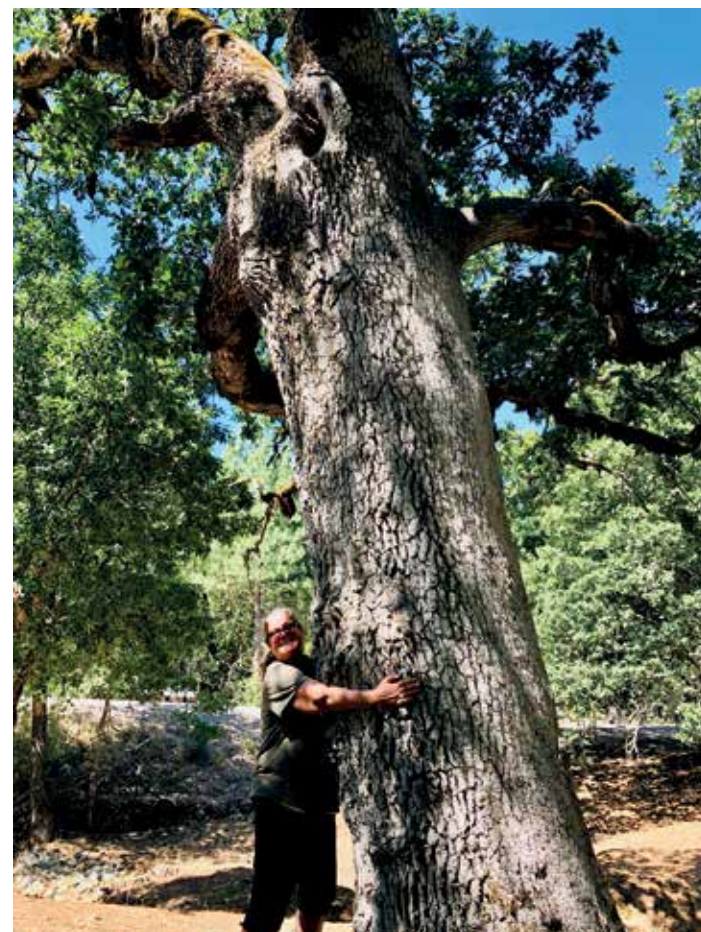
Participants in the project, which started in 2022, work toward the goal of restoring this spectacular native species within Oregon by collecting viable Oregon white oak acorns, nurturing the acorns into tree starts, and planting those seedlings. The Oregon white oak is a massive tree that, over its life, can grow to be 100 feet tall. Found primarily at lower, drier elevations, it can live up to 500 years. These spectacular oaks have long dotted our valleys, providing critical habitat for many types of wildlife and enjoyment for all those who live among them.

Rooted in Hope, working with RiverCrest Ranch, an ecofriendly, sustainable vineyard along the banks of the Applegate River, is thrilled to be a part of this important effort. Gilli Pineda and I began collecting acorns this fall, following the Honorable Harvest guidelines as developed and practiced by indigenous communities for generations. The

Honorable Harvest is based on a philosophy of respecting nature and approaching each harvest in a responsible, sustainable way. Seven basic principles define the Honorable Harvest:

1. Know the ways of the ones who take care of you, so you can take care of them.
2. I n t r o d u c e yourself. Ask permission before taking and abide by the answer.
3. Never take the first. Never take the last. Take only what you need.
4. Take only that which is given.
5. Never take more than half. Leave some for others. Harvest in a way to minimize harm.
6. Use it respectfully. Never waste what you have taken. Share!
7. Give thanks for what you have been given. Gift a gift, in reciprocity, for what you've taken.

Gilli and I collected acorns this October from the Mother Oak that has occupied a beautiful knoll at RiverCrest Ranch in the upper Applegate for more than 450 years. (It was studied and dated by Jeff LaLande, local historian and archeologist.) That's 450 years of watching indigenous people come to fish, pioneers make their way to a new life, miners scour the soils for gold, and now the current generation of farmers who have come to the Applegate to grow crops.



Cathy Rodgers, founder of Rooted in Hope, gives the Mother Oak a hug in gratitude for the bountiful acorn harvest.

This special Mother Oak has given rise to the next generation in the small oak grove she has nurtured beneath her branches. Owls have made homes in her hollows. Pileated woodpeckers peck away. Fawns have rested at her trunk, and squirrels have run wildly around gathering acorns. There is an abundance of natural joy as this treasured tree brings out the best in all and now will give rise to the next generation of Oregon oaks.

For more information, email growing-oaks@willamette.edu or visit rootedinhope.org.

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The wonderful oaks at Pacifica

BY PEG PRAG

Pacifica is especially fond of this time of year for several reasons.

One is that we are preparing for our much-loved annual Winter Art and Music Festival from 10 am-3 pm December 2-3. Come listen to amazing music while you choose that perfect Christmas present from among 40 talented local crafters.

Another is the enjoyment of watching incredible mushrooms pop up like brilliant eggs in their pine needle and oak-leaf nests.

Then there is acorn collecting and planting. We join the acorn woodpeckers in this. It's fun to watch their red heads bobbing and listen to their joyful chattering as they collect. We're not nearly so much fun to watch but we are enthusiastic! You might plant one (or more!) acorns yourself. Save an acorn from a road, dig a small hole within 100+/- feet of an oak tree (the acorns need the mycorrhizae the tree can provide) but not right underneath (too much shade). Plant the acorn sideways and cover with leaves. Plant as many as you can! Not all—maybe half—will grow and will be enjoyed and appreciated by all for many years to come.

Much of Pacifica is oak savannah. We love it! And it may become ever more important. With rising heat and the resulting drought, pines and firs no longer have enough water to make sap to defend themselves against ever-present insect predators. We're starting to lose those trees. Oaks may become the predominant tree

in the area...and a great tree it is to hold that title.

An oak tree is a keystone species, which is a plant or animal that is critical to the survival of a whole ecosystem or habitat. A keystone species could be a predator, like a wolf, which is responsible for keeping the natural balance, or a plant whose existence is essential for the survival of other species within the ecosystem—like the oak.

Providing essential food for humans and beasts through much of history, the oak tree has always been considered the king of trees. The Greeks dedicated it to Zeus, the king of gods. The Celts worshipped the oak as the symbol of hospitality, their most prized virtue.

Oak trees harbor one of the richest faunas of any tree. Providing food and habitat for a diverse and abundant group of creatures, oak trees are the basis for an elaborate food web—5,000 kinds of insects, 80 kinds of reptiles, 100+ species of birds, and 25+ of mammals. Because acorns are high in protein, fats, carbohydrates, and vitamins, bears and deer depend on them. They can make up to 40 percent of a mule deer's diet in fall when deer need to build up fat for winter.

Native American use. In southern Oregon (and across much of the country), one of the most important plants to Native Americans was the oak tree with its acorns. Very nutritious, acorns can contain up to 18 percent fat, 6 percent protein, and 68 percent carbohydrates. Black oak acorns were considered the best tasting. A family had to collect 500 pounds a year to survive.



Oregon oak leaf.

There are about 90 acorns per pound. (How many acorns had to be found and collected each year?) The acorns were dried and pounded into flour in a shallow hole in a rock. This flour was bitter with oak tannin, so water was poured through it many times. It could take all day to make enough cereal for just two days. If you'd like a simpler recipe for acorn flour, email peg@pacificagarden.org.

There are three main kinds of oak trees in this area. Can you identify their leaves?

Oregon oak (*Quercus garryana*). This oak has leaves with rounded lobes. Its acorns have a small cap. Adaptable, but it prefers lowlands (even hardpan) and sun.

California oak (*Quercus kelloggii*). This oak has leaves with pointed lobes. Its acorns have longer (almost half the acorn) shaggier caps. Adaptable, it prefers hillsides with good drainage and sun.

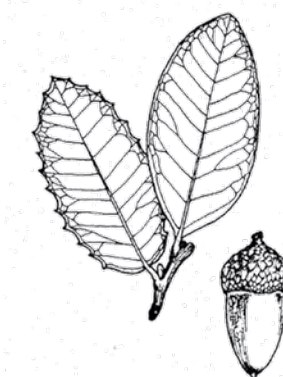
Canyon live oak (*Quercus chrysolepis*). This evergreen oak has smaller leaves with either smooth or pointy edges. Its acorns have larger, wider caps. It will tolerate dry, rocky soils and can live in hot canyons.

We look forward to seeing you at Pacifica walking one of the trails and enjoying the beautiful fall-golden oaks. Happy holidays to everyone.

Peg Prag
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California oak leaf.



Canyon live oak leaf.

The Legend of the Acorn Maidens

Once, acorns were spirit people. They were told, "You will soon have to leave the Spirit World and must make nice hats to wear when you go. So the acorn maidens started weaving their hats. Then all at once they were told, "You will have to go now! Human is being raised and will need you. Quickly!" The acorn maidens didn't have their hats finished, however, so they were all different, just as their caps still are today. (From the Bureau of American Ethnography, 1932.)