

HOW YOU CAN HELP

- 1 Protect existing oak communities.**

Because as much as 99 percent of the oak communities in some areas have already been lost, it is important to protect those that remain. If oaks are growing on your property, protect them from conifer encroachment and nonnative plant invasion.
- 2 Remove conifers growing around oaks.**

Conifers grow much faster than do oaks and can quickly overtake oaks and shade them out. Learn about management techniques, like oak release, that can curb conifer growth and create conditions ideal for oak communities and the countless species they support.
- 3 Eliminate invasives from oak communities.**

Invasive plants aggressively compete for resources and can rapidly dominate oak communities once they become established. Learn how to identify and safely remove invasive plants growing on your property.
- 4 Plant oaks in new areas.**

To help offset the loss of the region's oak communities, consider planting seedlings of native oak species, such as Oregon white oak, on your property.
- 5 Reestablish native plants.**

When planting on your property, consider choosing native species instead of non-native ornamentals. Many of the species found in oak communities can be purchased from nurseries that specialize in native plants.

LEARN MORE

Publications

Move Over, Douglas-Fir: Oregon White Oaks Need Room to Grow (Science Findings #98, 2007)
<http://www.fs.fed.us/pnw/science/scifi98.pdf>
To request a print copy, call (503) 261-1211.

A Practical Guide to Oak Release
Gen. Tech. Rep. PNW-GTR-666, 2006
http://www.fs.fed.us/pnw/pubs/pnw_gtr666.pdf
To request a print copy, call (503) 261-1211.

A Landowner's Guide for Restoring and Managing Oregon White Oak Habitats
<http://www.oregonoaks.org/documents/landguide.pdf>
To request a print copy, call (503) 375-5646.

Regional Working Groups

Garry Oak Ecosystems Recovery Team (Canada)
<http://www.goert.ca/>

Oregon Oak Communities
<http://www.oregonoaks.org/>

South Puget Sound Prairie Landscape
<http://www.southsoundprairies.org/>

Financial and Technical Assistance

If you are a private landowner, you can receive additional information and may be eligible for financial or technical assistance to support your oak preservation and restoration activities. Contact the Natural Resources Conservation Service, your extension office, or your state's forestry or wildlife organizations for more information and to learn about possible cost-share programs.

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PACIFIC NORTHWEST
OAK COMMUNITIES

RICH PAST, UNCERTAIN FUTURE

For hundreds of years, oaks thrived in many parts of the Pacific Northwest's lowlands, growing in a variety of conditions and as part of several ecological communities—from dry rock outcrops and wetlands, to prairie edges, grassy savannas, and woodlands. Periodic fires in the region, especially those set by Native Americans, limited the growth of conifers in some places and favored the fire-tolerant oaks.

But, today, many of the region's oak communities are in decline.

Decades of fire suppression following European settlement have allowed conifers to overtop, and shade out, oaks. At the same time, many oak communities have been overrun by invasive plants or converted to agricultural or urban land. The result: as much as 99 percent of the oak communities historically present in some areas of the Pacific Northwest have been lost.

A MYRIAD OF THREATS

Conifer Encroachment

Decades of fire suppression have created conditions largely inhospitable to oaks. Oak communities, which are fire-tolerant and slow-growing, are increasingly being overtopped and shaded out by faster-growing conifers, which were historically controlled by fire. Without abundant sunlight, oaks and the other shade-intolerant plant species found in oak communities eventually die.



W. Devine, U.S. Forest Service

Invasive Plants

Like many of the region's other ecosystems, oak communities also are threatened by invasive plants. These nonnative plants, such as Scots broom and Himalayan blackberry, grow much faster than do many of the plants in oak communities. When the native plants are crowded out, the habitat is no longer suitable for the wildlife species that depend on them.

Land Use Change

Many of the region's oak communities also have been converted to agricultural or urban land. The lowland areas that provide ideal conditions for oaks also

are attractive for the development of farms and commercial and residential sites.

PARTNERS IN CONSERVATION

Pacific Northwest Research Station scientists are studying ways to restore and manage the region's oak communities. They are conducting studies that will help enhance understanding of the biology of Oregon white oak—the region's most widespread oak species—and are using their results to address pressing management issues.

Station scientists also are making their findings accessible to, and forming partnerships with, private landowners—key partners in preserving and restoring the legacy of the Pacific Northwest's oak communities. Collectively, this work is helping to ensure that the region's oaks do not become a thing of the past.

MAGNET FOR BIODIVERSITY

Oak communities play a major role in sustaining the region's biological diversity. Over 200 species of mammals, birds, reptiles, amphibians, and insects—some of them rare or threatened—use oaks for the shelter and food they provide. Oak communities also support other species indirectly by maintaining open areas in the landscape. These open habitats are ideal for many types of wildlife and shade-intolerant plants. Often, the wildlife and plants that live and grow in oak communities are found in no other habitat type. Some of the species that rely on oak communities include:



D. Powell, U.S. Forest Service, Bugwood.org

Camas. Blue-flowering and a member of the lily family, the common camas has edible, starchy bulbs that have been harvested by Native Americans for generations. It thrives in open, grassy meadows.



Washington Dept. of Fish and Wildlife

Taylor's Checkerspot. This colorful butterfly exists in only a few populations in Washington and Oregon. Camas is an important nectar source for adult checkerspots.



T. Spohn, U.S. Forest Service, Bugwood.org

Oregon Sunshine. This plant, whose leaves and stems are covered with fine hairs, grows in open, sunny areas. It provides nectar for butterflies and is browsed by caterpillars for food.



T. Spohn, U.S. Forest Service, Bugwood.org

Western Gray Squirrel. The western gray squirrel is the largest native tree squirrel in Washington State, where it also is a threatened species. It is closely associated with oaks, which provide denning and nesting sites, acorns for food, and seasonal cover.