

Living With Wildfire: Protecting Trees, Homes, and Health

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As wildfire seasons grow longer and more intense, Oregonians face increasing risks from both wildfire and wildfire smoke. While we cannot eliminate fire from the landscape, we can take practical steps to protect our trees, homes, and health.

The good news is that many of the same actions that improve the health of our landscapes also help reduce wildfire risk.



Protecting Yard Trees

Healthy trees are generally more resistant to fire than stressed trees. Choosing the right species and providing proper care can improve their chances of surviving wildfire.

- **Plant fire-resistant native trees.** Consider Oregon species such as Oregon white oak, bigleaf maple, Pacific madrone, western larch, red alder, and ponderosa pine. When planting new trees, allow adequate spacing between canopies to reduce the chance of fire spreading from tree to tree.
- **Keep trees hydrated.** Healthy trees with adequate water content contain a higher moisture content which makes them far more fire-resistant. Use a soaker hose during hot, dry summer months to ensure mature trees receive adequate deep-root watering.
- **Mulch wisely.** Use noncombustible or low-combustible mulch around the base of the tree to lock in moisture and protect roots from drought. Spread the mulch in a circular form around the base of the tree at a maximum depth of 2 to 3 inches at least to the edge of the branch canopy. Avoid piling mulch against the trunk, and keep the tree root flare uncovered. Create breaks in

your mulch beds by using concrete, stone, or lawn to prevent a continuous path of fuel to your home.

- **Prune and clean up.** Remove any dead, dying, or diseased trees and plants and accumulated debris beneath trees. For mature trees, pruning lower branches at least six to ten feet above the ground can reduce the chance of surface fires reaching the canopy. For shorter or younger trees, never prune more than 1/3 of the live crown at one time.



Protecting Your Home

Research shows that homes are most often ignited by wind-blown embers rather than by a wall of flames. As a result, the condition of the home and the area immediately surrounding it are often more important than conditions in distant forests.

Creating a defensible space around structures can significantly improve a home's chances of surviving a wildfire. This includes trimming vegetation, removing combustible materials near buildings, cleaning roofs and gutters, and maintaining adequate spacing between plants and structures.

Wildfire-resistant building materials and home-hardening measures can provide additional protection. Communities can also reduce risk through thoughtful land-use planning, building codes, and coordinated preparedness efforts.



Protecting Your Health

Wildfire smoke can affect communities hundreds of miles from a fire. Even healthy people may experience eye irritation, coughing, headaches, or breathing difficulties when smoke levels are high.

Older adults, young children, and people with heart or lung conditions are especially vulnerable.

During smoke events:

- Stay indoors with windows and doors closed.
- Use air purifiers or high-efficiency air filters when possible.
- Avoid activities that create indoor air pollution, such as vacuuming or burning candles.
- Stay hydrated and limit outdoor exertion.

Preparing before fire season begins can help reduce health impacts when smoke arrives.



Living With Fire

Wildfire is a natural part of many western ecosystems, but its impacts on people can be reduced through preparation. By caring for our trees, hardening our homes, and protecting our health, we can build communities that are better prepared for Oregon's fire-prone future.

Resources

Trees and Landscaping

- Oregon State University Extension: [*Fire-Resistant Plants for Home Landscapes*](#)
- Oregon State University Extension: [*Fire-Resistant Plants*](#)

Home Protection

- Oregon State University Extension: [*Keeping Your Home and Property Safe from Wildfire*](#)

- Oregon Department of Consumer and Business Services: [*What Homeowners Need to Know About Home Hardening*](#)
- Sonoma County: [*Home Hardening Guide*](#)

Health and Smoke

- Oregon State University Extension: [*Protecting Indoor Air From Wildfire Smoke*](#)
- Oregon Health Authority: [*Wildfire Smoke and Your Health*](#)

Additional Reading

- Headwaters Economics: [*Full Community Costs of Wildfire*](#)