



# **Acknowledgements**

#### Fire-Resistant Shrubs and Trees for Privacy in Southwestern Oregon

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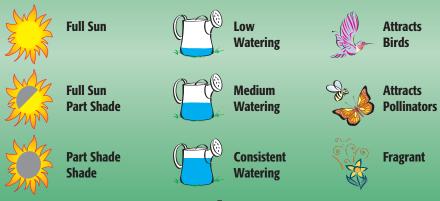
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**Publisher's Note:** Deciduous plants lose their leaves seasonally and generally present a lower fire risk than conifers. Conifers are generally needle bearing evergreens with higher resin content and can present a fire risk. The list of shrubs and trees in this publication is not exhaustive, but merely provides suggestions, an overview of the plants' growing needs, and characteristics to look for when selecting fire-resistant plants. Due to the countless variables in life and in nature, readers should know that there are no guarantees.

# **Symbols Key**

The graphics below are generalized representations of plant characteristics that may differ depending upon conditions. Soil type, aspect, location, watering mode, and climate are a few of the variables that should be taken into account when selecting plants, shrubs, and trees. When choosing native and drought tolerant plants, remember that they also need water, especially the first two to three years after planting.



# **Use Fire-Resistant Plants for Privacy**

Property owners often use shrubs or trees for creating privacy, screening unwanted views, dust and noise reduction, and as part of an attractive home landscape. However, some commonly used privacy screen plants such as Leyland cypress and ornamental juniper are highly flammable. These plants can be hazardous to use near your home in wildfire-prone environments. Aside from having flammable foliage, such plants accumulate dried, dead material inside the plant due to shading from the outer foliage. As a result, these plants can form a dense fuel ladder from the ground upward. When ignited, they burn intensely. If the screening plants are in contact with a fence or outbuilding, they may serve as a wick, allowing fire to spread to a wooden structure – possibly your home.

If you live in an area where there is significant risk of wildfire – as is the case for most of southern Oregon – consider using fire-resistant plants for privacy screens. This publication provides examples of fire-resistant shrubs and trees that can be used to create a more fire-safe home landscape while providing the privacy you desire.

## **Fire-Resistant vs. Highly Flammable Plants**

Fire-resistant plants are those that do not readily ignite from an ember or other ignition sources. These plants can be damaged or even killed by fire; however, their foliage and stems do not significantly contribute to the fuel load and therefore, the fire's intensity. There are several other factors that influence the fire-resistant characteristics of plants, including leaf moisture content, presence of dead material, and chemical content in the sap.

#### Fire-resistant plants have:

- Moist and supple leaves
- Minimal dead wood and do not tend to accumulate dry/dead material within the plant
- · Low sap or resin materials
- Sufficient water and nutrients to be healthy

#### Highly flammable plants have:

- Fine, dry, or dead material within the plant, such as twigs, needles, and leaves
- Volatile waxes, terpenes, or oils in their leaves, twigs and stems
- Strong odor when leaves are crushed
- Sap that is gummy, resinous, and has a strong odor
- Loose or papery bark

Text adapted from PNW 590, Fire-resistant Plants for Home Landscapes.

### Fire-resistant does not mean fire proof!

Even fire-resistant plants that are not well maintained can burn. Be sure to keep all of your landscape plants healthy with appropriate watering, pruning, etc.



Examples of highly flammable plants that are often used include ornamental juniper, Leyland cypress, Italian cypress, rosemary, arborvitae, eucalyptus, and some ornamental grasses. However, any plant that has not been cared for and has not been adequately watered can become dry and brittle, making it more fire prone.



Poorly pruned Juniper hedge. Note accumulation of dead material.

Note: Just because some trees, shrubs, or other plants have been identified as more fire prone does not mean that you should completely clear them off your property. In fact, it is more important to consider where they are located, if they are within the defensible space near your home, and if they are healthy and well maintained. Placement and care are very important factors to consider before planting or removing plants in a fire-resistant landscape.



### **Create Defensible Space!**

To help protect your home from wildfire, create a defensible space between your home and its surroundings. Defensible space allows room for firefighters to safely defend your home from a wildfire.



# Three critical steps in creating defensible space include:

- 1. Use fire-resistant building materials
- 2. Landscape with fire-resistant plants
- 3. Reduce wildland fuel around the home

# **Designing a Privacy Screen**

When selecting fire-resistant shrubs or trees for creating privacy, choose a mixture of plants that have seasonal attributes, benefit wildlife, and add to biodiversity. Consider using multi-trunk plants with large foliage to maximize the amount of screening they provide. In addition, consider alternatives to the traditional hedge, where one type of shrub is planted in a row. Instead, mix different varieties to create a beautiful and low-risk landscape with year-round interest.

Consider contacting your local fire professional for advice about the design, location and recommended distances of privacy screens and other vegetation from the home.



#### **Use Multi-Trunk or Low-Branching Plants**

Privacy hedges are enhanced by multi-trunk trees or shrubs that are both evergreen and deciduous. Low branching shrubs and trees, or those with multiple stems, make it more difficult to see through an area and can provide more coverage than a single trunk of a higher branching shrub or tree. Even when these plants lose their leaves, they can still break up lines of sight

and create a visual buffer. By selecting low-branching or multi-trunk shrubs or trees, a thick barrier of foliage can provide privacy from a foot or two above the ground, to as high as ten to twenty feet.

#### **Mix Different Species**

When designing a hedge for privacy, many people conjure images of the formal groupings of one type of shrub similar to those found in Europe or modern housing developments. It can be more aesthetically pleasing, however, to mix and match multiple species of fire-resistant shrubs or trees to create a natural layered look that provides year-round interest and privacy. A common problem in uniformly planted



hedges (with only one species or variety) occurs when one shrub dies, and it becomes almost impossible to exactly match the size and shape of the replacement shrub with the existing hedge. In a mixed hedge, it is much easier to add or replace plants as needed, as well as to select different varieties for flowers, fall color, or wildlife benefits.

#### **Stagger Plantings**

By avoiding planting shrubs or trees in a straight row, multiple species can be incorporated into the privacy screen. This means that each plant is offset, or triangulated, with the ones nearest to it. Although this will take up more space, it still provides a screen



and the separation of plants helps reduce the spread of fire. By staggering plantings, it is possible to create a dense buffer of foliage, while maintaining necessary space between each plant. Even if shrubs or trees are staggered, it is still important to maintain adequate growing space between each specimen to avoid developing ladder fuels that can easily spread a wildfire's flames.

### **Maintenance is Critical**

As with any fire-resistant landscaping, maintenance is critical. Deep watering, mulching, and the removal of deadwood and leaves help to maintain the overall health of the plant, thereby reducing the flammability of the overall landscape. Planting the appropriate shrub or tree in the right place can make all the difference in its long term health and vigor. Keep in mind that heavy shearing or pruning may promote a dense outer crown, resulting in less sunlight reaching the interior of the hedge and causing dieback of twigs. This dieback will create flammable material in the center of even healthy, well spaced shrubs and trees. Ongoing maintenance is critical for fire-resistant landscapes of all kinds: water adequately, fertilize as needed, control pests, prune to remove dead material, and remove dry leaves or weeds annually that accumulate between plantings.

#### Fire-Resistant Mulches

Most wood-based mulches, such as fir bark, shredded cypress bark, and wood chips will burn. To make wood-based mulch more fire resistant, keep your mulch moist, add compost on top of it, or avoid bark mulch directly around structures. Instead use compost, rock, or mix compost with chips for mulch options that won't contribute to a fire.

# **Alternative Options for Fire-Resistant Privacy**

When creating privacy for interior spaces, curtains and blinds are preferable to fire-prone landscaping. Also, consider the strategic placement of a metal arbor, trellis, detached fence panel or a metal fence with a vine planted on it, which can offer privacy in specific locations in the home landscape.

# **Reducing Fire Risk**

In fire-prone areas, the use of fire-resistant plants in privacy screens can reduce wildfire risk associated with fire-prone shrubs or trees. The following list includes some trees and shrubs, both deciduous and evergreen, that are fire-resistant and suitable for hedgerows, screening, and plantings for privacy in the interior of Southwestern Oregon (Jackson & Josephine Counties specifically). Some are natives; some are ornamentals. This list is not exhaustive, but includes a variety of plants from which to choose. Carefully consider the mature size of the plant; for example, plants should not be taller than 25 feet if they are located under utility lines. Privacy and safety can go hand-in-hand when selecting fire-resistant shrubs and trees. By planting away from structures, removing dead material when necessary, and maintaining the plant's overall health, it is possible to add beauty and privacy to the home landscape.

### Shrubs 5' to 15'

Fire-resistant shrubs that grow to 5-15 feet tall provide a visual buffer from common neighborhood nuisances. The fire-resistant shrubs highlighted in this section will offer privacy, and some species will also offer fragrant flowers, berries that attract wildlife, or attractive foliage.

- Coffeeberry
- Laurel
- Evergreen Euonymus
- Flowering Quince
- Japanese Privet
- Photinia

- Pittosporum
- Pyracantha
- Tall or American Boxwood
- Thorny Silverberry

## **Coffeeberry**

Rhamnus californica









Blue-gray leaves, red berries, native to Oregon.

- 6 ft to 10 ft tall
- 5 ft to 8 ft wide
- Semi-evergreen
- · Sun, part shade
- Consistent watering



### **Laurel species**

Prunus laurocerasus or lusitanica









English and Portuguese species, shiny leaves with white flowers.

- 10 ft to 20 ft tall
- 10 ft to 12 ft wide
- Evergreen
- Sun
- · Medium watering



# **Evergreen Euonymus**

Euonymus japonicus







Varigated varieties, leathery glossy leaves, easily shaped

- 6 ft to 10 ft tall
- 5 ft to 8 ft wide
- Evergreen
- Sun
- · Low watering



# **Flowering Quince**

Chaenomeles sp.









Multi-trunk, medium-size leaves with bright flowers.

- 12 ft to 15 ft tall
- 10 ft to 12 ft wide
- Semi-evergreen
- Sun
- Low watering



### **Japanese Privet**

Ligustrum japonicum









Shiny leaves, easily pruned or shaped, white flowers.

- 10 ft tall
- 10 ft wide
- Evergreen
- Sun
- · Low watering



#### **Photinia**

Photinia x fraseri









New leaf growth is red, but turns green, white flowers.

- 15 ft to 20 ft tall
- 20 ft wide
- Evergreen
- Sun
- Low watering



# **Pittosporum**

Pittosporum tobira











Rounded form, low branching, fragrant white flowers.

- 10 ft to 12 ft tall
- 10 ft to 15 ft wide
- Evergreen
- Sun, part shade
- Medium watering



### **Pyracantha**

Pyracantha coccinea











White flowers lead to orange berries, shrub can be espaliered.

- 12 ft tall
- 12 ft wide
- Evergreen
- Sun, part shade
- · Low watering



### **Tall or American Boxwood**

Buxus sempervirens







Species specific, small tight leaf, flower not notable.

- 12 ft tall
- 12 ft wide
- Evergreen
- Sun, part shade
- Medium watering



# **Thorny Silverberry**

Elaeagnus ebbingei







Can be variegated, species specific (E. umbellata is invasive).

- 12 ft tall
- 12 ft wide
- Evergreen
- Sun
- · Low watering



# Trees Under 20'

Trees that grow 20 feet tall provide visual barriers similar to shrubs in this height range, but often do not grow as wide. Choose small, fire-resistant trees that are low branching, or have a multiple trunks for coverage that does not take-up as much space, but still offer screening options for small structures, cars, or other unsightly objects. Many of these small trees for privacy also offer wonderful fall color, beautiful flowers, or berries for attracting birds.

Cascara

- Osoberry
- Vine Maple

Oleander

Seven Sons Flower

#### Cascara

Rhamnus purshiana







Multi-trunk, low branching, thin and tall, native to Oregon.

- 10 ft to 25 ft tall
- 8 ft to 12 ft wide
- Deciduous
- · Sun, Part shade
- Consistent watering



### **Oleander**

Nerium oleander









Cold hardiness variety dependent, all parts very poisonous.

- 12 ft tall
- 12 ft wide
- Semi-deciduous
- Sun
- Low watering



# **Osoberry** *Oemleria cerasiformis*











Multi-trunk, hanging white flowers, purple fruit, native to Oregon.

- 10 ft to 15 ft tall
- 8 ft to 10 ft wide
- Deciduous
- Sun, part shade
- Consistent watering



#### **Seven Sons Flower**

Heptacodium miconioides









Low branching, fan-shaped habit, fragrant flowers with pink bracts.

- 10 ft to 20 ft tall
- 10 ft to 12 ft wide
- Deciduous
- Sun, part shade
- · Medium watering



# **Vine Maple**

Acer circinatum







Needs partial shade, low branching, fall color, native to Oregon.

- 15 ft to 20 ft tall
- 8 ft to 10 ft wide
- Deciduous
- Sun, part shade
- · Medium to consistent watering



# Trees Over 25'

Fire-resistant trees that grow taller than 25 feet offer large-scale screening options from buildings, neighboring homes, or other large objects. These trees should not be planted under power lines or too close to a structure; however, they will offer privacy from larger objects, especially when used in conjunction with shrubs or trees from the previous sections.

- Flowering Horsechestnut
- Mountain Ash

Southern Magnolia

• Japanese Elm

• Persian Parrotia

# **Flowering Horsechestnut**

Aesculus x briotii





Oval form, beautiful flowers, chesnuts are poisonous on this species.

- 15 ft to 25 ft tall
- 15 ft to 25 ft wide
- Deciduous
- Sun
- Low watering



### **Japanese Elm**

Zelkova serrata







Fan-shaped habit, small leaves, fall color, can screen buildings.

- 50 ft to 70 ft tall
- 40 ft to 50 ft wide
- Deciduous
- Sun
- Low watering



#### **Mountain Ash**

Sorbus americana









Soft leaves, white flowers lead to orange bunches of berries.

- 25 ft to 30 ft tall
- 15 ft to 20 ft wide
- Deciduous
- Sun, part shade
- · Low to medium watering



#### **Persian Parrotia**

Parrotia persica







Low branching, amazing fall color, vase-shaped habit.

- 20 ft to 30 ft tall
- 15 ft wide
- Deciduous
- Sun, part shade
- · Low watering



# **Southern Magnolia**

Magnolia grandiflora











Big glossy leaves, large creamy flowers, oval-shape growing habit.

- 60 ft tall
- 40 ft wide
- Evergreen
- Sun
- Low watering



### Shrubs for Shade

Fire-resistant shrubs for shade offer options for areas that receive only morning sunlight, or have limited sun exposure throughout the day. These shrubs can offer privacy for areas with shady conditions like a sitting area, north-facing window, or an area that already has existing large trees. Many of these shrubs also offer vibrantly-colored flowers, berries for wildlife, or glossy evergreen leaves. Make sure these shrubs are planted far enough away from the house so that when mature they will conform to defensible space guidelines.

Camellia

Japanese Aralia

Rhododendron

Aucuba

Mockorange

#### **Camellia**

Camellia sp.









Glossy, dark green leaves, showy flowers in spring.

- 8 ft tall
- 8 ft wide
- Evergreen
- · Part shade, shade
- Medium to consistant watering



### **Aucuba**

Aucuba japonica









Rounded shrub, variegated varieties available, red berries.

- 7 ft tall
- 7 ft wide
- Evergreen
- · Part shade, shade
- Medium watering



### **Japanese Aralia**

Fatsia japonica









Big tropical, palm-like leaves, white flowers.

- 10 ft tall
- 8 ft wide
- Evergreen
- · Part shade, shade
- Low watering



# Mockorange

Philadelphus lewisii









Multi-trunk, small leaves, fragrant white flowers, native to Oregon.

- 7 ft to 10 ft tall
- 5 ft to 7 ft wide
- Deciduous
- Part-shade, shade
- · Medium watering



### Rhododendron

Rhododendron macrophyllum









Choose tall varieties, glossy leaves, many flower colors, native to Oregon.

- 9 ft tall
- 7 ft wide
- Evergreen
- · Part shade, shade
- Medium watering



# Shrubs for Layering

Instead of only planting multiples of a single species in a row, consider staggering plantings, creating visual layers in the landscape. This approach combines the benefits of several types of plants to create a living privacy screen that is beautiful year-round. Other fire-resistant shrubs for layering can be found in Extension Publication, PNW 590, *Fire-Resistant Plants for Home Landscapes*.



#### Lilac

Syringa sp.

Choose tall varieties, large rounded habit, fragrant purple flowers.

- 10 ft tall 8 ft wide
- Deciduous



## **Oregon Grape**

Mahonia aquifolium

Deer-resistant, colorful new growth, yellow flowers, native to Oregon.

- 6 ft tall 4 ft wide
- Evergreen



#### **Osmanthus**

Osmanthus burkwoodii

Fragrant white flowers, small leaf, drought tolerant.

- 8 ft to 10 ft tall 5 ft to 7 ft wide
- Evergreen

#### Rose

Rosa sp.

Choose tall varieties, known for its flowers, some species native to Oregon.

- Size dependent on species
- Evergreen
- Deciduous





# **Red-osier Dogwood**

Cornus sericea (C. stolonifera)

Vase-shaped habit, white flowers, very red stems, native to Oregon.

- 8 ft to 10 ft tall 5 ft to 7 ft wide
- Deciduous

#### **Publications**

#### **Fire-Resistant Plants for Home Landscapes**

A Pacific Northwest Extension publication: PNW 590 http://www.firefree.org/images/uploads/FIR\_FireResPlants\_07.pdf



City of Ashland Firewise program http://ashland.or.us/Files/Firewise brochure.pdf



Rogue Valley Fire Prevention Co-op http://www.ci.medford.or.us/Files/livingwithwildfire.pdf



**City of Ashland Firewise Communities** (local information)

http://ashlandfirewise.org

Information & guidelines for firewise landscaping, lists of firewise plants

Firewise (national) http://www.firewise.org/

Extensive information about home wildfire protection

Oregon Department of Forestry, SW Oregon District,

Fire Protection page (local information) <a href="http://www.swofire.oregon.gov/">http://www.swofire.oregon.gov/</a> Information about how to protect your home against wildfires, defensible space, local fire protection, and more

**OSU Extension, Wildfire in Oregon** (statewide)

http://extension.oregonstate.edu/tough\_times/emergency/wildfire-oregon Facts sheets and links regarding home wildfire protection

**Rogue Valley Fire Prevention Co-op** (local information) http://www.rvfpc.com/ Look under the "Preparedness" tab for information about creating defensible space, local regulations, and more

### **Printable one-page overview**

One-page overview of

Fire-Resistant Shrubs and Trees for Privacy in Southwest Oregon

http://extension.oregonstate.edu/sorec/forestry



