

6. **Low Flammability Landscape Plants** - From the Colorado State University Extension. Fact Sheet 6.305 in the Wildfire Mitigation Series, Landscaping and Planting. This document states that planting the right plants around structures is important for wildfire safety. It describes the attributes of plants that affect plant flammability. It includes a lengthy list of low-flammability plants that are recommended for planting in Zone 1: 0-5 feet and Zone 2: 3-30 feet.

[Low Flammability Landscape Plants - Extension \(colostate.edu\)](https://colostate.edu/extension/fact-sheet/6.305-low-flammability-landscape-plants)



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Low Flammability Landscape Plants 6.305 >>

Fact Sheet 6.305 | Wildfire Mitigation Series, Landscaping and Planting

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Quick Facts

- The right plants around structures are important for wildfire safety
- Management of defensible space and plant types are essential
- This factsheet is a series of three
- Plants rated 10 have the least flammability
- This factsheet recommends low flammability plants for Zone 1 and 2
- Refer to the [CSFS-HIZ2021 Guide](#) for further details on HIZ zones

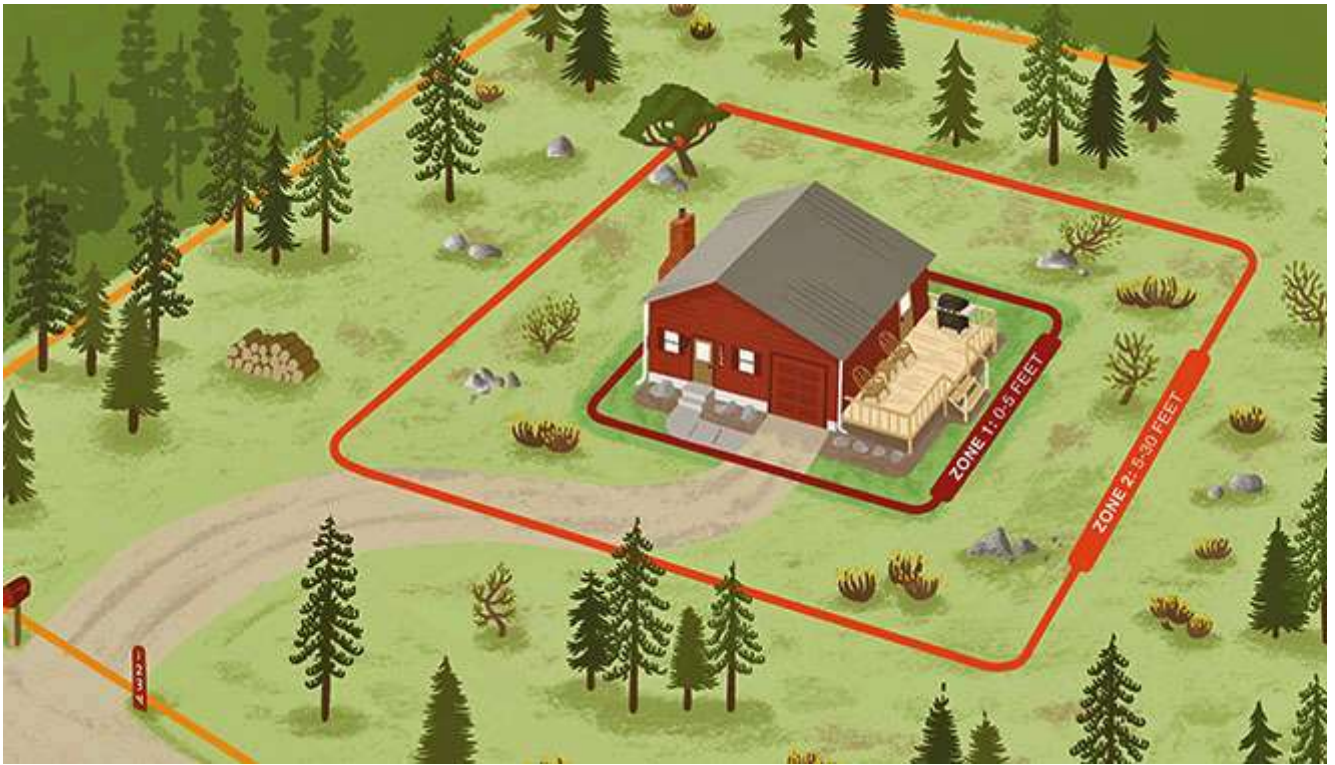


Introduction

In Colorado, in the wildland-urban interface, it is not a matter of if a wildfire will impact residences and properties, but where structures and other human developments meet or intermingle with wildland vegetative fuels, including grasses, are a natural part of Colorado’s varied ecosystems. Planning ahead and taking action to reduce the risk of wildfires can help you survive when wildfires occur. Firefighters always do their best to protect residents, but ultimately, it is your responsibility to make investments from wildfire.

This factsheet is a part of a series of three publications that can help homeowners focus on actions that are effective in protecting their properties. It is important to recognize that these efforts should always begin with the home or structure itself and the defensible space is the area around a home or other structures that has been modified to reduce fire hazards by creating a discontinuity and horizontally.

In this area, natural and manmade fuels are treated, removed or reduced to slow the spread of wildfire and alter fire behavior. Plants with low flammability are selected for planting, especially closer to the home. Creating an effective defensible space involves creating management zones. Develop these zones around each building, including detached garages, storage buildings, barns and sheds; that fuel continuity and density play a critical role in wildfire behavior.



Zones are defined from the structure edge in feet:

- **Zone 1:** 0-5 feet
- **Zone 2:** 5-30 feet
- **Zone 3:** 30-100 feet

This fact sheet will cover plants in zones 1 and 2, the Fire-Resistant Landscaping fact sheet will cover plants as they relate to the space plan for properties, contact either the nearest CSFS field office or local CSU-Extension office for guidance. Consult with department staff or community organization appropriately trained in wildfire mitigation practices.



Pictured: Purple Ice Plant (Photo by S. Carter)

Low-Flammability Plant Characteristics

This fact sheet replaces Firewise Plant Materials (6.303). Recommendations on this list are based on a methodology developed by Boise, Idaho. A link to their site is provided in the supporting publications section. The methodology rates the flammability characteristics in the boxes below based on a scale of 0-10 with 0 the most flammable and 10 the least flammable. To protect structures, the recommendation is to plant only plants with scores of 8, 9 and 10 for zones 1 and 2 within 30 feet of structures. These species are the least flammable plants to plant near structures, but keep in mind that there are no truly "fireproof" plants. Vegetation with scores below an 8 (indicating more flammability), is addressed in the Fire-Resistant Landscaping fact sheet.

View the PDF Fact Sheet to review tables of low-water flowers, groundcover plants, shrubs, trees, cacti, and grasses.

Plants that have lower flammability and are more resistant to wildfire and plants that have a higher flammability and the specific characteristics below:

Attributes that decrease flammability

- Low oil or resin content
- High moisture content
- Soap, latex or pectin content
- Compact growth form
- Green stems
- Drought tolerant

Attributes that increase flammability

- High oil or resin content
- Low moisture content
- Tall growth
- Open form
- Fine wood (twiggy) stems
- High water need

Many plants are highly flammable during different seasons of the year. At such times, left unmanaged, they can accelerate through your neighborhood, threatening homes, property and lives. All vegetation, naturally occurring and otherwise, its amount and arrangement have a dramatic effect on fire behavior.



Pictured: Opuntia (Photo by I. Shonle)

There are no “fireproof” plant species. Plant choice, spacing and maintenance are critical to defensible space landscape

There are many concept to keep in mind when choosing low-flammability plants. A plant’s moisture content is the sin governing its volatility. However, resin content and other factors in some species render them flammable even when Conifers tend to be flammable due to their oil and pitch content, regardless of their water content. Deciduous plants t because their leaves have higher moisture content and their basic chemistry is less flammable. Also, when deciduous fuel to carry fire through their canopies.

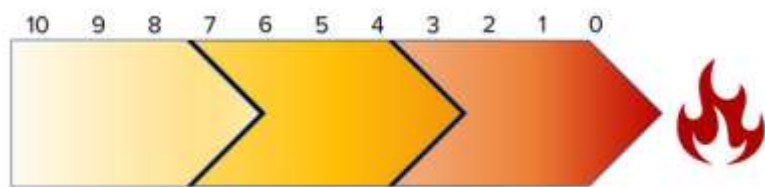
In some cases, there is a strong correlation between drought tolerance and fire resistance. These plants offer less fue content, both of which help reduce fire hazard. There also appears to be a correlation between a plant’s salt tolerance adapted to salty conditions, and actually growing in salty situations, may better resist burning.



Pictured: Rocky Mountain Penstemon (Photo by I. Shonle)

Most of our native vegetation is adapted to fire and is flammable. Common flammable plants have flammability score flammable trees are junipers, pines, firs, and spruces. Common flammable shrubs are gambel oak, three-leaf sumac a would discourage planting these species adjacent to the home in defensible space zones 1 and 2.

If they are already present, consider replacing them with some of the recommended species listed here. If you decide your landscape, keep it pruned and thinned, remove dead material regularly, and keep it at least 30 feet from any stru mitigation measures will be described in further detail in the Fire Resistant Landscaping Publication (6.303).



- Plants with HIGHER scores means **low flammability**
- Plants with LOWER scores means **high flammability**

Don't Forget Maintenance

A landscape is a dynamic, constantly changing system. Plants considered “fire resistant” and that have low amounts c these characteristics over time. Your landscape, and the plants in it, must be maintained to retain their low flammabil be addressed in further detail in the Fire Resistant Landscaping Publication (6.303).

Supporting Publications from CSU Extension, CSFS, and Idaho Firewise

The following publications are available and are referenced. The CSFS Home Ignition Zone Guide describes the concepts of structural ignitability and defensible space. Low-Flammability Landscape Plants 6.305 recognizes zones 1 and 2 identified in the defensible space section of the CSFS HIZ Guide. Fire-Resistant Landscaping recommends zone 3 and recommends plants with mitigation measure for plants and existing vegetation in zone 3. The CSFS HIZ Guide, Low-Flammability Landscape Plants and Fire Resistant Landscaping are considered a package that can help with develop actions to reduce wildfire risk. These materials provided the basis for the addition of our flammability scoring and approach for this update.

- 1. CSFS Home Ignition Guide, 2021 (Replaces 6.302, Creating Wildfire-Defensible Zones)
- 2. CSFS Fire-Resistant Landscaping Guide
- 3. Idaho Firewise, Fire-Resistant Landscapes – Plant Materials

[View the PDF Fact Sheet](#) to access tables and additional information.

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