

California Native Plants and Fire Resilient Landscaping





Beneficial Beauty:

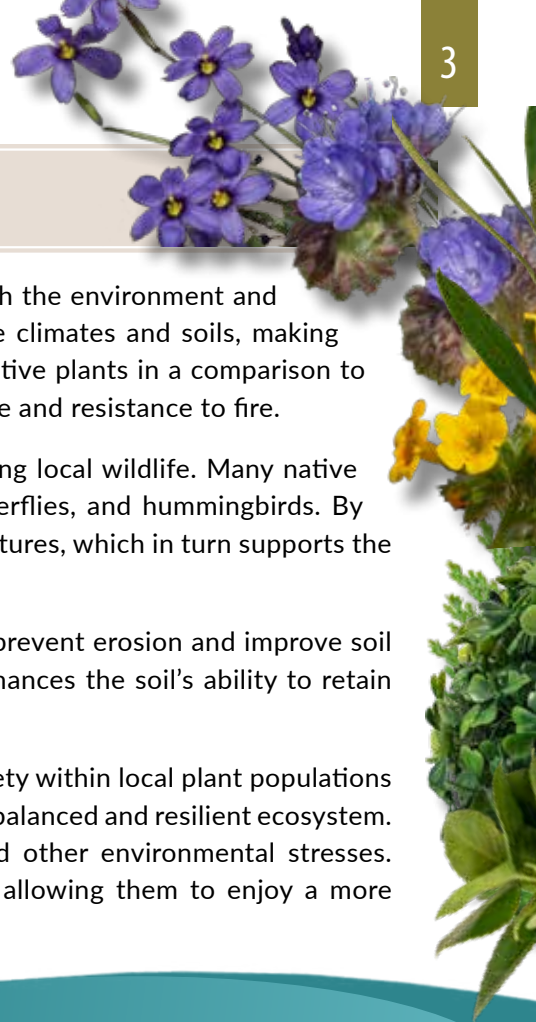
Why Garden with California Native Plants ?

Gardening with California native plants offers a wealth of benefits for both the environment and the gardener. Native plants are uniquely adapted to California's diverse climates and soils, making them particularly resilient and low maintenance. Lightly irrigated California native plants in a comparison to traditional landscaping plants have proven to maintain higher levels of moisture and resistance to fire.

One of the primary advantages of using native plants is their role in supporting local wildlife. Many native species provide essential food and habitat for pollinators such as bees, butterflies, and hummingbirds. By cultivating a garden with these plants, you create a haven for these crucial creatures, which in turn supports the native ecosystem on which we all rely.

Native plants are also beneficial for soil health. Their deep root systems help prevent erosion and improve soil structure by promoting organic matter accumulation. This natural process enhances the soil's ability to retain moisture and nutrients, reducing the need for supplemental soil amendments.

In addition, native plants contribute to biodiversity. They maintain genetic variety within local plant populations and support the broader network of species that rely on them, fostering a more balanced and resilient ecosystem. This biodiversity is particularly important in the face of climate change and other environmental stresses. Moreover, gardeners often find that native plants require less intervention, allowing them to enjoy a more relaxed and satisfying gardening experience.



What is a Fire-Resistant Landscape?

Fire-resistant landscapes are those that are less likely to spread fire from an ignition source to structures. The distance and density of plants near structures, the characteristics of the plants, and their health all affect their fire-resistance and potential to spread fire.

A plant's moisture level, overall volume, presence of dead material, and chemical properties can affect how a plant behaves in a fire. Plants that can be hydrated during the dry season so that their leaves and stems do not ignite readily, that do not accumulate dead stems and leaves creating fuel, and that tend to survive fire are more fire-resistant.

**Rivers & Lands Conservancy is not an authority on fire safety. Please visit the list of resources on page 26 of this pamphlet to learn more about fire safety and creating a fire-resilient home.*

Key Practices Of Maintaining A Wildfire Resilient Landscape

1. Annual Cleanup: Remove all flammable materials within 5 feet of structures and remove dead stems and leaves from all landscaping. Live, hydrated vegetation is less prone to igniting from airborne embers.

2. Limb Up Trees: Trim the lower branches of trees and large shrubs to prevent fires from climbing up. This technique, known as “limbing up,” involves cutting back the lower third of the branches.

3. Tree Pruning: Ensure that trees with overhanging branches are pruned so that their limbs are at least five feet above your roof and ten feet away from the chimney. Also, make sure to regularly clean your gutters.

4. Manage Invasive Plants: Remove invasive and exotic annual herbaceous flowering plants and grasses that can fuel fires and apply a thick layer of mulch to suppress their regrowth for the following year.

5. Water Mindfully: Water your plants appropriately to maintain healthy leaf moisture without encouraging excess growth. This is especially important within 30 feet of structures.

Non-Native vs Non-Native Invasive Species

Non-native species are plants or animals introduced to an area outside their natural range, either intentionally or accidentally. While not all non-natives pose problems, some can become invasive.

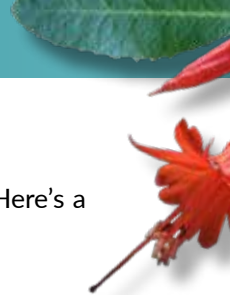
Non-native invasive species are those that, once introduced, spread aggressively and disrupt local ecosystems. They outcompete native species for resources, often leading to reduced biodiversity and altered habitats. For instance, non-native grasses might replace native plants, affecting wildlife that relies on those native species for food and shelter.


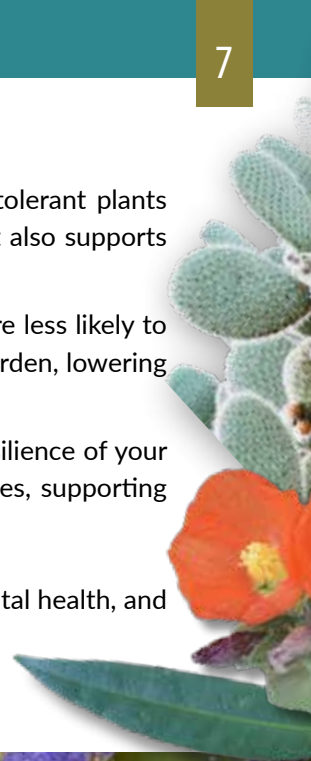
In contrast, non-native species that do not exhibit invasive traits may integrate into the ecosystem without significant negative impacts. They might not spread uncontrollably or displace native flora and fauna. Managing non-native species involves monitoring their behavior and ensuring they don't become invasive, whereas controlling non-native invasives requires targeted strategies to ensure they do not contribute to environmental damage.

Benefits of Gardening with Fire-Smart Landscaping

Gardening with fire-resistant landscaping offers several crucial benefits, especially in fire-prone areas. Here's a detailed look at why this approach is advantageous:

- 1. Reduce The Risk of Fire Spreading to Your Home:** Fire resistant landscaping involves selecting plants and materials that are less likely to ignite or spread flames. Maintain defensible space around your home by using native plants that can be tended to deter fire and by incorporating non-combustible materials like gravel or stone close to structures. Home hardening plays a vital role in protecting your home from fire. Note: See resources to learn more about using fire-resistant building materials.
- 2. Improved Safety:** Creating a defensible space helps protect structures from catching fire. Remove flammable vegetation, flammable objects, and debris within at least the first 5 feet of your home, and establish zones further out that deter the spread of fire
- 3. Enhanced Property Value:** A well-designed fire-resistant landscape not only reduces fire risk, but also enhances the aesthetic appeal of your property. Homebuyers are increasingly looking for properties with fire-resistant features, which can make your home more attractive and potentially increase its market value.



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- 4. Environmental Benefits:** Fire-resistant landscaping often incorporates native and drought-tolerant plants that require less water and are adapted to the local climate. This not only conserves water but also supports local wildlife and reduces the need for chemical fertilizers and pesticides.
 - 5. Lower Maintenance:** Fire-resistant gardens generally involve low-maintenance plants that are less likely to need frequent pruning or watering. This reduces the time and effort required to maintain the garden, lowering the risk of accumulating combustible debris.
 - 6. Community Resilience:** By adopting fire-resistant practices, you contribute to the overall resilience of your community. Well-maintained landscapes can help prevent the spread of fire between properties, supporting broader fire prevention efforts in your area.

Overall, fire-resistant landscaping is a proactive approach that enhances safety, supports environmental health, and increases property value while contributing to community-wide fire resilience.



Top 12 California Native Plant Species for the Inland Empire

Here are twelve hardy California native species well-suited for USDA Hardiness Zones 10A and 9B, which covers the inland foothills and valleys of the Inland Empire. Each plant is chosen for its nursery availability, adaptability, beauty, ecological benefits, and fire-resistance!



Bladderpod (*Isomeris arborea*)

- Height: 3-5 feet
- Light Requirements: Full sun
- Moisture: Low to moderate
- Bloom Time: Flowers all year
- Color: Bright yellow



Bladderpod is a hardy, evergreen shrub native to Southern California and Baja California. It typically grows 3-5 feet tall, thrives in full sun, and flowers all year long, making it perfect for bright, arid gardens. Its vibrant yellow flowers create a stunning display against its pale green to gray-green foliage. Adapted to low to moderate moisture conditions, it tolerates hydration in the dry season and does not accumulate dead fuel. This resilient plant is ideal for water-wise, fire resistant landscaping, providing year-round visual interest. Its unique beauty and tough nature make it a valuable addition to any garden.



Redberry (*Rhamnus crocea*)

- Height: 4-7 feet
- Light Requirements: Full sun to partial shade
- Moisture: Low to moderate; drought-tolerant once established
- Bloom Time: Late winter to spring
- Color: Small, greenish-yellow flowers

Redberry, spiny redberry, or redberry buckthorn is a versatile and attractive shrub native to California. It features dense, evergreen foliage that provides excellent cover and habitat for wildlife. The plant's small yellow flowers are followed by bright red berries when pollinated on female plants. Planting multiple redberry shrubs will increase the likelihood for pollination, creating a wildlife-friendly landscape fire-resistant addition to drought-tolerant gardens.





Scarlet Monkeyflower (*Mimulus (Erythranthe) cardinalis*)

- Approximate Height: 1-3 feet
- Light Requirements: Full sun to partial shade
- Moisture: Moderate to high; prefers consistently moist soil
- Bloom Time: Spring to summer
- Color: Bright red flowers

Scarlet monkeyflower is a striking perennial native to western North America. This plant is celebrated for its vivid red, tubular flowers that attract hummingbirds and butterflies. It thrives in moist soils and can be found growing naturally along streams and in wet meadows. Ideal for garden beds, bog gardens, or near water features, scarlet monkeyflower adds a splash of color and is valued for its ability to thrive in consistently moist conditions.





Toyon (*Heteromeles arbutifolia*)

- Height: 8-15 feet
- Light Requirements: Full sun to partial shade
- Moisture: Low to moderate
- Bloom Time: Late spring to late summer
- Color: White (blooms), red (berries)

Toyon, also known as Christmas berry, is renowned for its attractive clusters of red berries that persist into winter, providing a vital food source for birds and wildlife. This evergreen shrub has dense foliage that offers excellent screening and privacy. Toyon is tolerant to drought and various soil, pruning, and dry season hydration. Additionally, Toyon's glossy, dark green leaves and showy berries make it an aesthetic choice for landscapes that need a bit of year-round color.





Deergrass (*Muhlenbergia rigens*)

- Height: 4-5 feet
- Light Requirements: Full sun, partial shade
- Moisture: Low, moderate
- Bloom Time: Spring
- Color: Yellow, cream

Deergrass is a native bunchgrass commonly found in Southern California on the banks of seasonal creeks or along gullies where runoff forms in winter. This hardy grass best thrives in sandy soil and full sun but can also succeed in partial shade in various soil types with a range of moisture levels. Its adaptability makes it easy to grow in a variety of landscapes while adding unique color and texture to a garden. Tall stalks, up to 6 feet, host an abundance of tiny flowers in the spring followed by seeds that provide important food for birds in the summer.





Western Redbud (*Cercis occidentalis*)

- Height: 10-20 feet
- Light Requirements: Full sun to partial shade
- Moisture: Moderate
- Bloom Time: Early spring
- Color: Pink to magenta

The western redbud is a striking deciduous tree with heart-shaped leaves and vibrant pink to magenta flowers that appear before the foliage in early spring. This early bloom provides crucial nectar for pollinators emerging from winter. Its adaptability to different soil types and moderate water needs make it suitable for a variety of garden settings. Beyond its ornamental value, redbuds can serve as small shade trees, offering a beautiful contrast to other plantings. Its elegant appearance and wildlife benefits make it a valuable addition to native gardens.





Coast Live Oak (*Quercus agrifolia*)

- Approximate Height: 25-82 feet
- Light Requirements: Full sun to partial shade
- Moisture: Low to moderate; drought-tolerant
- Bloom Time: Winter to spring
- Color: Yellow, cream, green

Coast live oak is a large evergreen tree with leathery, dark green leaves. The tree produces acorns which support local wildlife. Its evergreen quality, thick bark, deep roots, and ability to retain moisture in drought conditions make it a fire-smart choice for landscaping. This tree should only be used in a large space and will cast a lot of shade when it matures.





Desert Globe Mallow (*Sphaeralcea ambigua*)

- Approximate Height: 3-5 feet
- Light Requirements: Full sun
- Moisture: Low to moderate; drought-tolerant once established
- Bloom Time: Spring to early summer
- Color: Apricot to orange flower and in some varieties pink

Desert globe mallow is a striking and resilient shrub known for its vibrant apricot to orange blossoms that bloom from spring to early summer. These flowers attract bees and butterflies, making it a valuable addition to pollinator-friendly gardens. With its evergreen foliage, the plant provides year-round greenery and is well-suited for low-water gardens and naturalistic landscapes. It thrives in well-drained soils under full sun, making it an excellent choice for adding both beauty and ecological value to dry, arid environments.





Prickly Pear Cactus (*Opuntia* spp.)

- Approximate Height: 1-6 feet, depending on species
- Light Requirements: Full sun
- Moisture: Low; highly drought-tolerant
- Bloom Time: Spring to summer
- Color: Flowers range from yellow, orange, red and pink; fruit often green, yellow or red

Prickly pear cactus is a diverse genus of cacti. Known for its distinctive flat, pad-like segments and vibrant, showy flowers that attract native bees. The flowers are followed by colorful fruit known as “tunas,” which are edible and can be used in various culinary dishes. With its low water needs and ability to thrive in harsh conditions, opuntia is perfect for xeriscaping and desert gardens. Its unique appearance, coupled with its adaptability to dry environments, makes it a fascinating and practical choice for low-maintenance, fire-resistant landscaping.





Blue Elderberry (*Sambucus mexicana*)

- Approximate Height: 10-15 feet
- Light Requirements: Full sun to partial shade
- Moisture: Moderate to high; prefers consistently moist soil
- Bloom Time: Late spring to early summer
- Color: White to creamy white flowers; blue to purple berries

Blue elderberry is an outstanding native shrub for gardens. In late spring to early summer, blue elderberry produces clusters of creamy white flowers and clusters of blue to purple berries in late summer, providing seasonal interest and attracting wildlife. Berries are a vital food source for various birds and insects, enhancing the ecological value of your garden. By incorporating blue elderberry into your landscape, you not only add beauty but also support local biodiversity and contribute to a balanced ecosystem. To maximize their fire-resistance, water occasionally during the dry season, and remove any dead branches throughout the year.





Ceanothus (*Ceanothus* spp.)

- Height: 6-10 feet in local native species
- Light Requirements: Full sun
- Moisture: Low to moderate
- Bloom Time: Late winter to early spring
- Color: white, pale blue to deep blue

Ceanothus is a popular choice for gardeners seeking a vibrant, low-maintenance shrub. Its colorful blooms attract pollinators such as bees and butterflies. Additionally, their dense foliage offers habitat and shelter for birds and small insects. One of the genus' most notable features is its drought tolerance once established, making it an ideal choice for water-wise gardening. Consult with local experts and websites such as CalScape to find out which species or cultivars would be appropriate for your garden soils and space.





Sugar Bush (*Rhus ovata*)

- Approximate Height: 6-12 feet
- Light Requirements: Full sun
- Moisture: Low to moderate; drought-tolerant once established
- Bloom Time: Late winter to early spring
- Color: Clusters of small white-pinkish flowers with reddish sepals; red to dark brown fruit

Sugar bush is versatile and attractive. This plant features glossy, evergreen leaves that provide a lush backdrop throughout the year. It produces clusters of white-pinkish flowers from late winter to early spring, followed by clusters of red to dark brown fruit that can attract birds. Sugar bush is well-suited for low-water gardening, a variety of soil types, and can be pruned to a desired size making it an excellent choice for low-maintenance, drought-tolerant gardens.



Plants to Avoid and Their Alternatives

There is nothing wrong with having non-native plant species in your garden, especially if they bring you enjoyment and do not cause harm to the environment. However, in California, many non-native invasive species are commonly sold and planted in gardens. This can negatively impact local ecosystems. Here is a list of some common invasive non-natives and suggestions for California native alternatives:



1. **Bermudagrass (*Cynodon dactylon*)**

Invasive Issues: Aggressive spreading, displaces native grasses.

Native Replacement: Blue grama (*Bouteloua gracilis*)



2. **English Ivy (*Hedera helix*)**

Invasive Issues: Smothers native plants, trees, and shrubs.

Native Replacement: Hummingbird sage (*Salvia spathacea*)



3. **Green Fountain Grass (*Pennisetum setaceum*)**

Invasive Issues: Forms dense stands, outcompetes native vegetation.

Native Replacement: Deergrass (*Muhlenbergia rigens*)



4. **Mexican Fan Palm (*Washingtonia robusta*)**

Invasive Issues: Displaces native riparian plants, creates fire hazard.

Native Replacement: Desert willow (*Chilopsis linearis*)





5. **Eucalyptus Species**

Invasive Issues: Forms dense thickets and mulch layer, fire hazard, fall hazard.

Native Replacement: Coast live oak (*Quercus agrifolia*)



6. **Pampas Grass (*Cortaderia selloana*)**

Invasive Issues: Aggressive spread, fire hazard, hazardous blades.

Native Replacement: Deergrass (*Muhlenbergia rigens*)



7. **Periwinkle (*Vinca major*)**

Invasive Issues: Displaces native coastal plants, spreads rapidly.

Native Replacement: Common yarrow (*Achillia millefolium*)



8. **Pepper Tree (*Schinus molle*, *Schinus terebinthifolius*)**

Invasive Issues: Rapid spread of seedlings, fall hazard.

Native Replacement: Coast live oak (*Quercus agrifolia*), Elderberry (*Sambucus mexicana*)



Invasive Species That Should Be Removed

These introduced plants often spread to gardens, open lots, and native habitats. If you see these troublesome invasive species, do the native plants and wildlife a favor. **Remove them before they disperse seeds!**



1. **Stinknet (*Oncosiphon pilulifer*)**

Origin: Native to South Africa

What makes it troublesome: Its many seeds are dispersed through human activities and machinery after disturbances like grading or heavy equipment use. It thrives in the dry sandy soils of the Southwestern U.S.



2. **Mustards (*Hirschfeldia incana*, *Brassica nigra*, *Brassica tournefortii*)**

Origin: Native to the Middle East, North Africa, and the Mediterranean regions of southern Europe

What makes it troublesome: Saharan mustard (*B. tournefortii*) quickly colonizes bare areas, elevating fire risk by creating tall, dense patches of dry brush. As fire frequency increases, mustards quickly spread to newly burned areas.



3. **Tamarisk (*Tamarix ramosissima*)**

Origin: Native to Eurasia, including western Europe, the Mediterranean, North Africa, northeastern China, India, and Japan

What makes it troublesome: *Tamarix ramosissima* is linked to significant alterations in geomorphology, groundwater levels, soil chemistry, fire frequency, plant community structure, and the diversity of native wildlife.



4. **Giant Reed (*Arundo donax*)**

Origin: Native to northern Africa and western and central Asia

What makes it troublesome: *Arundo donax* poses a threat to California's riparian ecosystems by outcompeting native species like willows, diminishing the habitat's value for nesting and foraging, altering streamflow patterns, and consuming more water than native plants.



5. **Russian Thistle (*Salsola tragus*)**

Origin: Native to southeastern Russia and western Siberia

What makes it troublesome: The prickly Russian thistle, also known as tumbleweed, can obstruct traffic, pose fire risks, and serve as a host for the beet leafhopper, an insect pest that affects agriculture.



6. **Yellow Starthistle (*Centaurea solstitialis*)**

Origin: Native to the Mediterranean

What makes it troublesome: Regarded as one of the most problematic rangeland weeds in the state, the very thorny yellow starthistle spreads quickly through seeds, with a single plant capable of producing up to 75,000 seeds.

Invasive Species That Should Be Removed (cont.)



7. **Tree of Heaven (*Ailanthus altissima*)**

Origin: Native to China and Taiwan

What makes it troublesome: Since the 1700s, Tree of Heaven has escaped cultivation, established itself in natural areas, and spread widely through its seeds and creeping roots, which produce many suckers. It is classified as invasive because it can rapidly establish itself, spread extensively, and take over landscapes, in addition to its chemical properties that suppress the growth of surrounding plants.



8. **Castor Bean (*Ricinus communis*)**

Origin: Native to tropical eastern Africa, in and around Ethiopia

What makes it troublesome: The castor bean is seen as an invasive species in California because it can grow quickly in disturbed areas, outcompete native plants, and pose risks to the local ecosystem. It thrives particularly well in mild climates, especially following fires or other disruptions.

Nurseries Offering California Native Plants

Riverside-Corona Resource Conservation District

4500 Glenwood Dr, Riverside, CA 92501
(951) 683-7691

www.rcrcd.org

Greenbelt Growers Inc

9820 Dufferin Ave, Riverside, CA 92503
(951) 688-409

sales@greenbeltgrowers.com

www.greenbeltgrowers.com

Rolling Hills Herbs & Annuals

1304 Rolling Hills Rd, Redlands, CA 92374-6347
909-362-7658

cparker@rollinghillsherbs.com

www.rollinghillsherbs.com

Moosa Creek Nursery

27201 Cool Water Ranch Rd, Valley Center, CA 92082
(760) 749-3216

contact@moosacreek.com

<https://www.moosacreeknursery.com/>

Theodore Payne Foundation

10459 Tuxford St, Sun Valley, CA 91352
(818) 768-1802

info@theodorepayne.org

www.theodorepayne.org

California Botanic Garden - Grow Native Nursery

500 N College Avenue, Claremont CA 91711
(909) 625 8767

gnnclaremont@calbg.org



Resources

CALFIRE - Ready for Wildfire:

<https://readyforwildfire.org/>

Sustainable Defensible Space – Eco-appropriate Homescaping for Wildfire Resilience

<https://defensiblespace.org/>

Wildfire Home Retrofit Guide – How to Harden Homes Against Wildfire

<https://readyforwildfire.org/wp-content/uploads/2024/03/wildfire-home-retrofit-guide-1.26.21.pdf>

California Native Plant Society – Wildfire: Resources for Resilience & Recovery

<https://www.cnps.org/wildfire>

California Native Plant Society – Calscape (find and grow CA native plants)

<https://calscape.org/>

Cal-IPC – Invasive Plants

<https://www.cal-ipc.org/plants/>

Theodore Payne – Native Plant Nursery

<https://store.theodorepayne.org/collections/wildfire-resilient-plants>



Rivers & Lands Conservancy is dedicated to caring for Southern California's natural, wild, and open spaces. One of our many programs is to help our communities experience the benefits and joys of gardening with native plants while fostering an

appreciation for their immense value in both our natural and built landscapes. To learn more about our ongoing efforts to integrate California native plant gardens within community spaces, please visit our website at riversandlands.org.

California Native Plant Gardens



Wildfire Resilience



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