



UNIVERSITY of CALIFORNIA COOPERATIVE EXTENSION  
**Agriculture & Natural Resources**



COOPERATIVE EXTENSION • EL DORADO COUNTY

Bethell-Delfino Agriculture Building · 311 Fair Lane · Placerville, CA 95667 · Tel. 530-621-5502 · Fax 530-642-0803

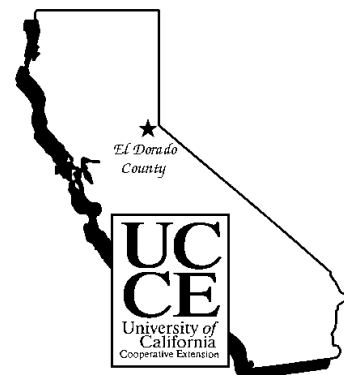
# Fire Resistant Landscaping Plants

## for the

# Cool Area

Prepared by

Bill Frost, Area Natural Resource Advisor  
University of California Cooperative Extension  
May, 2003  
Revised June, 2005



SERVING EL DORADO COUNTY SINCE 1917

University of California, El Dorado County, and United States Department of Agriculture Cooperating

## **Flammable Plants (“Pyrophytes”)**

Blade-leaf or needle leaf evergreens

Leaves are typically stiff, leathery, small or fine lacy

Leaves and wood usually contain volatile waxes, fats, terpenes, or oils

Typically aromatic (crushed leaves have strong odors)

Their sap is usually gummy, resinous and has a strong odor

Usually contain plentiful fine, twiggy, dry or dead materials

May have pubescent (hair covered) leaves

May have loose or papery bark

They are cured and dry

Grasses: Any dry grass

Herbs: Any cured herb

Shrub: Any shrub with excessive dead wood.  
Any over-mature, dying or dead brush.

Trees: Any over-dense forest, stand or urban forest planting when under stress or over-mature.

Water stressed plants that are in poor condition or more flammable

Plants that flame (not smolder) when preheated and ignited with a match

## **Fire-Resistant Plants**

Most broad leaf deciduous trees

Leaves tend to be supple, moist and easily crushed

Trees tend to be clean, not bushy, and have little dead wood

Shrubs are low growing (<2 feet) with minimal dead material

Tall shrubs are clean, not bushy

Sap is water like and typically does not have a strong odor

## **Fire Resistant Landscaping List**

While the species of plant selected is very important, the condition of the plant is just as important. Even some flammable (pyrophytic) species can be quite fire resistant with proper care. The difference is in the growth form and water status. Plants with open growth forms, no dead wood, and well watered are much less likely to burn.

Plant arrangement, spacing, and maintenance are as important as plant type when considering fire safety. Landscapes with plants arranged and spaced to prohibit large amounts of fuel from occurring in close proximity and adequately watered will greatly reduce the fire hazard.

The plants in this list were taken from a recent publication *Defensible Space Landscaping in the Urban/Wildland Interface: A compilation of fire performance ratings of residential landscape plants* recently completed by the University of California Forest Products Lab. This project included compiling the fire resistant status of a large number of landscape plants based upon a large number of studies and publications. This list contains those plant species which were identified by several sources as being fire resistant, and which are suited to the climate in the Volcanoville area.

### ***Up to 12 inches tall***

Fragaria chiloensis  
evergreen groundcover

**Wild strawberry**

Height 6 to 12 inches. Forms low, compact, lush mats. Glossy leaves, large white flowers in spring, followed by red seedy fruits in fall. Needs annual mowing or cutting back in early spring to force new growth and prevent stem buildup. Sun or partial shade.

Lonicera japonica 'Halliana'  
evergreen groundcover

**Hall's honeysuckle**

Groundcover and sometimes vine that runs rampant if given the chance. Blooms show in late spring, summer. Can smother less vigorous plants if not kept in check. Partial or wholly deciduous in coldest regions. Sun or light shade. Best with moderate summer water. Drought tolerant.

Sisyrinchium bellum  
perennial grass

**Yellow-eyed grass**  
**Blue-eyed grass**

Height 4 to 16 inches. Narrow leaves. Flowers are ½ inch and appear in mid-spring. Several forms available including dwarf. Sun or light shade. Tolerates some aridity.

*Fire Resistant Landscaping Plants for the Cool Area*

Sisyrinchium californicum  
perennial grass

**Yellow-eyed grass**

Height 4 to 20 inches. Broad, dull leaved grass. Flowers in May-June. Can grow in wet or poorly drained areas. Sun or light shad. Tolerates some aridity.

Trifolium fragiferum  
perennial groundcover

**O'Connor's legume**

Height 6 to 7 inches. Green mat of groundcover which is deeply rooted. High tolerance of heat, aridity, and moderate salinity. Water well until established, then average water requirement. Full sun or part shade.

Vinca minor  
perennial groundcover

**Dwarf periwinkle myrtle  
Dwarf running myrtle**

Height less than 12 inches. Short stems and flowering branches. Best with 2 to 3 good soaking per month. Lavender blue flowers 1 inch in diameter throughout spring. Closely packed. Shade loving. Drought tolerant. Suitable for erosion control.

**1 to 6 feet tall**

Agapanthus 'Peter Pan'  
evergreen shrub

**Lily of the Nile  
dwarf**

Height is 1 to 3 feet, spreading to about 2 feet wide. Straplike, glossy foliage. The roots are thick and tuberous and should be divided every few seasons in the spring. Flowers in summer. Removal of spent blooms and stems is recommended.

Anaphalis margaritacea  
perennial shrub

**Pearly everlasting**

Height 1 to 1 ½ feet. Upright plant with downy foliage. Produces profuse flowers heads from late summer into autumn. Can become invasive and will spread quickly to the borders of its bed. Full sun to partial shade.

Atriplex canescens  
evergreen shrub

**Four-wing saltbush**

Height 3 to 6 feet. Dense growth form spreading to 4 to 8 feet. Narrow leaves 1.2 to 2 inches long. Unusually tolerant of alkaline soils. Full sun. Very little water.

*Fire Resistant Landscaping Plants for the Cool Area*

Atriplex lentiformis  
deciduous shrub

**Quail saltbush**

Height 3 to 10 feet. Densely branched, commonly spiny shrub. Spreads to 6 to 12 feet. Useful as salt tolerant hedge or windbreak. Full sun. Very little water needed.

Ceanothus gloriosus 'Anchor Bay'  
evergreen groundcover

**Anchor Bay ceanothus**

Height 1 to 1 ½ feet. Spreads 6 to 8 feet wide. Very dense foliage. Produces flowers in spring. Full sun to partial shade. Needs little water once established.

Ceanothus gloriosus exaltatus 'Emily Brown'  
evergreen groundcover

**Emily Brown ceanothus**

Height 1 to 2 feet. Spreads to 6 feet wide. Dark holly-like foliage. Produces flowers in spring. Dense growth, good choice for banks and slopes. Partial shade.

Ceanothus maritimus  
evergreen shrub

**Maritime ceanothus**

Height 1 to 3 feet. Spreads to 6 feet wide. Has small thick leaves with showy flower clusters from mid-winter through early spring. Partial shade.

Cistus hybridus  
evergreen shrub

**Rockrose, White rockrose**

Height 2 to 5 feet, with almost as much width. Spreading form. Produces flowers in late spring. Leaves are grey-green, crinkly, and up to 2". Give an overall shearing to encourage new growth to spread. Full sun. Little or no water once established.

Cistus purpureus  
evergreen shrub

**Orchid rockrose, purple rockrose**

Height to 4 feet, almost as wide. Compact growth. Grey leaves, 1 to 2 inches long. Flowers from June through July. Requires well drained soil. Full sun. Little or no water required once established.

Cistus villosus prostratus  
evergreen groundcover

**Prostrate rockrose**

Height to 2 feet. Wide spreading shrub (up to 6 feet). Flowers profusely in spring. Good bank or ground cover for rough situations. Requires well drained soil. Full sun. Little or no watering once established.

*Fire Resistant Landscaping Plants for the Cool Area*

Convolvus cneorum  
evergreen shrub

**Bush morning glory**

Height 2 to 4 feet. Rapid growth and spreading to almost as wide. Silky smooth leaves. Flowers produced from May to September. Needs light soil and fast drainage. Prune severely to renew plant. More compact form in full sun. Tolerates some aridity.

Cotoneaster congestus  
evergreen shrub

**Likiano**

Height to 3 feet. Slow growing. Dense, downward curving branches with tiny leaves and small fruit. Full sun, little or no water once established. Suitable for erosion control.

Cotoneaster horizontalis  
deciduous shrub

**Rock cotoneaster**

Height 2 to 3 feet. Up to 15 feet wide. Stiff horizontal branches. Out of leaf for only a brief period of time. Blooms in spring, produces showy red fruit. Vigorous and requires low level of maintenance. Full sun. Little or no water once established.

Dendromecon rigida  
evergreen shrub

**Tree poppy**

Height 2 to 8 feet. Freely branched shrub with shredding bark. Has 1 to 4 inch thick leaves. Flowers profusely from March to June. Best in full sun. Thrives in dry soil once established.

Encelia californica  
deciduous shrub

**California encelia**

Height to 5 feet or more. Much branched plant with scattered 2 ½ inch leaves that drop in drought. Daisy-like flowers are produced in spring. Full sun. Needs occasional water.

Eunymous fortunei radicans  
evergreen shrub

**Winter creeper**

Vining, trailing shrub if allowed to climb. Will form spreading mass to 20 feet or more. Touch with thick-textured leaves. Best in full sun or light shade. Needs moderate water.

Gaultheria shallon  
evergreen shrub

**Salal, Wintergreen**

Height to 2 feet. Tufted plant in full sun and grown in poor, dry soil. Will reach 4 to 10 feet in shade and good soil. Has round, glossy leaves. Produces flowers in March through June. Grows best in partial shade. Needs watering during dry season.

*Fire Resistant Landscaping Plants for the Cool Area*

Iris douglasiana  
bulb, shrub

**Pacific coast iris**  
**Douglas iris**

Height 1 to 2 feet. Leaves shaped like sword or grass like. Flowers in spring. Grown from bulbs or rhizomes. Best conditions are sun to light shade. Prefers well drained soil and moderate to light watering in the summer. Will easily tolerate less than ideal conditions.

Kniphofia uvaria  
perennial shrub

**Red hot poker**

Height 3 to 6 feet. Coarse with large, rather dense clumps of long, grasslike leaves. Flower stalks topped with many drooping tubular flowers. Blooms spring through summer. Cut out flower spikes after bloom. Cut old leaves at base in fall, new leaves will replace them by spring. Increase by root divisions. Full sun or little shade. No dry season water. Drought tolerant.

Liriope gigantea  
perennial groundcover

**Giant turf lily**

Forms large clump to 3 feet. Firm, curved leaves and small flowers. Produces a metallic violet blue fruit. Becomes ragged and brown with neglect. Cut back shaggy old foliage after new leaves appear. Extended frosts may cause plant to turn yellow.

Mahonia repens  
evergreen shrub

**Creeping mahonia**

Height to 3 feet with spreading habit. Dull leaves have 3 to 7 spine toothed leaflets. Flowers April through June, followed by blue berries in short clusters. Good groundcover in sun or partial shade. Needs little water. Drought tolerant.

Punica granatum 'Nana'  
deciduous shrub

**Dwarf pomegranate**

Height to 6 feet. Compact, dense foliage bush often grown as a low hedge. Leaves are 3/4 to 1 1/2 inches, narrow and glossy. Flowers in spring. Produces edible fruit. Tolerates heat well. Full sun for best bloom and fruit. Requires little water.

Pyracantha 'Santa Cruz'  
evergreen shrub

**Pyracantha**  
**Firethorn**

Height easily kept below 3 feet by pinching out occasional upright branch. Low growing, branching from base. Small red fruit on spurs along wood of previous year's growth. Clustered flowers are small and numerous. Can be used as ground or bank cover.

*Fire Resistant Landscaping Plants for the Cool Area*

Ribes malvaceum  
deciduous shrub

**Chaparral currant**

Height 4 to 5 feet. Spiny shrub with hairy leaves. Produces short clusters of flowers. Sun or partial shade. No water required once established.

Salvia sonomensis  
perennial shrub

**Sonoma sage**  
**Creeping sage**

Height to 16 inches. Sprawling mat forming plant with hairy leaves. Flowers in erect clusters. No summer water needed once established. Hard to maintain. Full sun.

Solanum xanti  
evergreen shrub

**Purple nightshade**

Height to 2 feet. Leaves 1.75 inches long. Produces 1 inch flowers late in winter or early spring. Erect or sprawling growth. Sun or partial shade. Best with little to moderate watering.

Symphoricarpos mollis  
deciduous groundcover

**Waxberry**  
**Creeping snowberry**

Height to 1 ½ feet. Low growing. Spreads by root suckers. Produces small flowers. Berry-like fruit is produced when leaves fall. Best used in sun or shade for erosion control or on steep banks. Needs no summer water once established.

Zauschneria californica  
perennial shrub

**California fuschia**  
**Hummingbird flower**

Height 1 to 2 feet. Stems upright or somewhat arching. Plants sometimes shrubby at base. Evergreen in mild climate, otherwise becomes twiggy and ungroomed through winter. Little or no water once established. Invasive roots. Will go to seed and reseed itself. Drought tolerant.

**6+ feet tall**

Acer macrophyllum  
deciduous tree

**Bigleaf maple**

Height 30 to 95 feet. Broad topped, dense shade tree. Has leaves that are 6 to 15 inches wide with 3 to 5 lobes. Produces flower clusters in April-May which are followed by clusters of paired winged seeds. Full sun to partial shade. Needs occasional deep watering.



*Fire Resistant Landscaping Plants for the Cool Area*

Acer negundo  
deciduous tree

**Box elder**

Height to 60 feet. Fast growing tree. Leaves are divided into 3 to 5 oval, 2 to 5 inch long leaflets. Seeds readily. Subject to breakage. Full sun to partial shade. Does best with occasional deep watering.

Aeschulus californica  
deciduous tree

**California buckeye**

Height 10 to 20 feet, sometimes taller. Very wide spreading. Mature leaves have 5 to 7 leaflets which are 3 to 6 inches long. Clusters of flowers appear at branch ends in April-May. Large pear shaped fruit is produced in the fall. Drops it leaves very early (approximately July) unless given ample water. Plant in full sun.

Alnus rhombifolia  
deciduous tree

**White alder**

Height 50 to 90 feet, spreading to 40 feet wide. Very fast growing. Clusters of flower catkins appear before leaves in spring. Flowers develop into small, woody cones in winter. Will tolerated any exposure, but requires regular watering. Very tolerant of heat and wind.

Arbutus menziesii  
evergreen tree

**Madrone**

Height 20 to 100 feet. Forms a broad, round head almost as wide as tall. Smooth, reddish brown bark peels in thin flakes. Leathery, 3 to 6 inch leaves. Flowers in spring, followed by clusters of berries in early fall. It must have fast drainage and non-alkaline water. Water just enough to keep plants going until they are established, then only infrequent deep watering. Full sun. Drought tolerant. Useful for erosion control.

Arbutus unedo  
evergreen tree

**Strawberry tree**

Height 8 to 35 feet. Slow growing with equal amount of spread to height. Basal suckers, stem sprouts. Can be pruned to make open crown. Unpruned it forms a screen. Trunk and branches have shreddy bark. Trees tend to become twisted and gnarled with age.

Arctostaphylos manzanita  
evergreen tree

**Manzanita**

Height 6 to 20 feet. Widely adapted tree/tree-like shrub. Spreads 4 to 10 feet. Crooked with picturesque branching habit. Flowers in February through April. Full sun. Does best with some watering.

*Fire Resistant Landscaping Plants for the Cool Area*

Calocedrus decurrens  
evergreen tree

**Incense cedar**

Height 75 to 90 feet. Has symmetric, dense, narrow, pyramidal crown. Slow growing at first, then may grow 2 feet per year when established. Takes summer heat well. Tolerates poor soil. Can grow up out of shade into full sun. Best if watered during the dry season for the first 4 to 5 years.

Campsis radicans  
deciduous vine

**Trumpet vine  
Trumpet creeper**

Height to 40 feet, fast growing. Flowers in clusters, Aug - Sept. Vigorous climber that clings to wood, brick and stucco with aerial rootlets. Unless thinned, old plants become top heavy and pull away from supporting surface. Spreads easily by suckering roots. Full sun or partial shade. Low water requirement. Drought tolerant.

Ceanothus thyrsiflorus  
evergreen shrub

**Blueblossom**

Height 6 to 20 feet, spreading 8 to 30 feet wide. As a small tree it is upright and branching. Glossy, hardy foliage and long leaves (to 2 inches)., Flowers in spike-like clusters in mid- to late-spring. Dead matter must be removed from garden. Full sun to partial shade. Drought tolerant

Cercis occidentalis  
evergreen tree

**Western redbud**

Height 10 to 18 feet with equal spread. Usually grows several trunks from base. Blooms for 3 weeks in the spring, produces seed pods in summer and holds them until winter. Full sun, excellent in dry banks. Water regularly the first year or two. Drought tolerant. Suitable for erosion control.

Comarostaphylis diversifolia  
evergreen shrub

**Summer holly**

Height to 18 feet as a small tree, 6 feet as a shrub. Has leathery leaves and small manzanita-like flowers. Flowers in April-May. Produces clusters of warty berries similar to those of madrone. Partial shade. Can tolerate some aridity.

Cornus stolonifera  
deciduous shrub

**Redtwig dogwood, Creek dogwood**

Height to 15 feet or more. Multi-stemmed shrub that grows rapidly. Spreads widely by creeping underground stems and rooting branches. Small flower clusters are produced throughout the summer months and into fall. Tolerates shade. Does best in moist soil.

*Fire Resistant Landscaping Plants for the Cool Area*

Feijoa sellowiana  
evergreen tree

**Pineapple guava**

Height 18 to 25 feet, with equal spread. Large plant with many stems. Glossy 2 to 3 inch leaves. Fleshy petaled flowers bloom in May or June. Fruit follows blooms in 4 to 7 months depending on location and aspect. Full sun, tolerates aridity.

Fremontodendron spp.  
evergreen shrub

**Flannel bush**  
**Fremontia**

Height 6 to 20 feet. Leathery leaves with saucerlike flowers. Produces conical seed capsules covered with bristly, rust colored hairs. Plants need excellent drainage, hillside planting is best. Shallow roots.

Ligustrum texanum  
evergreen shrub

**Texas privet**

Height 6 to 9 feet. Dense, compact growth. Can be kept lower by trimming. This variety is dense with lush foliage. Roundish, glossy leaves have thick, spongy feeling. Sun or some shade. Needs regular watering.

Mahonia aquifolium  
evergreen shrub

**Oregon grape**

Height 6 feet or more with tall, erect growth form. Leaves are 4 to 10 inches long with spiny-toothed oval leaflets. Produces flowers from March through May. Has edible blue-black fruit. Takes any exposure. Needs little water.

Platanus racemosa  
deciduous tree

**Western sycamore, California sycamore**

Height 50 to 100 feet. Fast growing and robust. Main trunk often divides into spreading/leaning second trunk. Older bark sheds. Produces ball-like seed clusters that hang, 3 to 7, together along a single stalk. Tolerant of heat and wind. Full sun. Best with some deep watering in summer.

Populus tremuloides  
deciduous tree

**Quaking aspen**

Height 20 to 60 feet. Fast growing. Trunk and limbs smooth, almost whitish. Dainty foliage. Brilliant color in fall, leaves need to be raked. Full sun. Best with regular deep watering.

*Fire Resistant Landscaping Plants for the Cool Area*

Prunus caroliniana  
evergreen shrub

**Carolina cherry laurel**

Height 35 to 40 feet. Densely foliated with glossy leaves. Produces small flowers in spikes from February through April, followed by black fruit. Full sun. No water needed once established.

Prunus ilicifolia  
evergreen shrub

**Holly leaved cherry**

Height 20 to 30 feet. Has a moderate growth rate. Usually broader than high. Mature leaves resemble holly leaves. Three to six inch flowers spikes appear in March. Round edible fruit is produced. Growth rate and appearance are improved by deep, infrequent watering. Best in full sun.

Prunus lyonii  
evergreen shrub

**Catalina cherry**

Height to 45 feet if grown as a tree. Spreads to over 30 feet wide. Produces flower clusters April-May, followed by large fruits. Full sun. Little or no irrigation once established.

Punica granatum  
deciduous shrub

**Pomegranate**

Height 1 to 8 feet. Compact, dense foliage bush. Narrow glossy leaves. Flowers in spring, some varieties produce fruit. All varieties tolerate great heat. Requires little water.

Quercus agrifolia  
evergreen tree

**Coast live oak**

Height 20 to 70 feet. Round headed, spreading tree. Smooth bark. Dense foliage with holly-like leaves. Full sun. Does best with some water.

Quercus dumosa  
evergreen tree

**Nuttall's scrub oak, California scrub oak**

Height to 8 feet. Leaves are about 1 inch long, spiny toothed, dark and glossy on top, pale underneath. Well suited to dry, barren surroundings. Full sun. Little water.

Quercus lobata  
deciduous tree

**Valley oak**

Height to 70 feet or more, with equal spread. Trunk and limbs massive with thick, checked bark. Leaves are 3 to 4 inches long and deeply lobed. Full sun. Best in soils where it can tap groundwater.

*Fire Resistant Landscaping Plants for the Cool Area*

Rhamnus alaternus  
evergreen shrub

**Italian buckthorn**

Height 12 to 20 (or more) feet, spreading as wide. Fast, dense growing shrub. Easily trained as a multi-stemmed or single stemmed small tree. Leaves are oval and shiny. Flowers in April, followed by small black fruit. Takes heat. Drought tolerant.

Rhamnus californica  
evergreen shrub

**Coffeberry**

Height 3 to 15 feet. Low spreading habit or upright growth. Leaves 1 to 3 inches long. Large berries. Full sun or half shade. Established plants need no provided water.

## **References**

Defensible Space Landscaping in the Urban/Wildland Interface: A compilation of fire performance ratings of residential landscape plants. University of California Forest Products Laboratory. 1997. 170 p.

Pyrophytic vs. Fire Resistant Plants. HortScript No 18. University of California Cooperative Extension. 1996. 9 p.

The University of California prohibits discrimination or harassment of any person on the basis of race, color, national origin, religion, sex, gender identity, pregnancy (including childbirth, and medical conditions related to pregnancy or childbirth), physical or mental disability, medical condition (cancer-related or genetic characteristics), ancestry, marital status, age, sexual orientation, citizenship, or status as a covered veteran (covered veterans are special disabled veterans, recently separated veterans, Vietnam era veterans, or any other veterans who served on active duty during a war or in a campaign or expedition for which a campaign badge has been authorized) in any of its programs or activities.

University policy is intended to be consistent with the provisions of applicable State and Federal laws.

Inquiries regarding the University's nondiscrimination policies may be directed to the Affirmative Action/Staff Personnel Services Director, University of California, Agriculture and Natural Resources, 300 Lakeside Drive, 6<sup>th</sup> Floor, Oakland, CA 94612-3550, (510) 987-0096.

UNIVERSITY OF CALIFORNIA, UNITED STATES DEPT OF AGRICULTURE AND EL DORADO COUNTY COOPERATING