

TREE OF LIFE

NURSERY

Fire-resilient Landscapes: Creating Beautiful Gardens for Defensible Space

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Association of Professional Landscape Designers, California Chapter

Mike Evans, Tree of Life Nursery

CRITERIA FOR LANDSCAPE DESIGN

Aesthetic

- Engagement (human)

- Appearance

- Wildlife - urban habitat

 - Biodiversity

 - Target species

 - Beneficial invertebrates (including pollinators)

- Locally relevant

Practical

- Water conservation

- Sensible maintenance needs

- Sustainable, regenerative

- Cost effective

Pragmatic

- Watershed, erosion

- Availability of materials

- Fire safety

NATURALISTIC DESIGN

Meets criteria listed above

NATIVE PLANTS

Components of naturalistic design

Turgidity - water content in leaves and stems

FIRE SAFETY

Important, but when put as top priority in Criteria, limits everything else

Evaluate each site and prioritize accordingly

Landscape design for fire safety cannot completely mitigate previous mistakes

- Regional planning blunders

- Site design errors

- Location, access

- Architecture, building materials

- Intended use of site

BASIC CONSIDERATIONS

- Likelihood of fire

- Source of ignition

- Conditions under which fire would be a serious threat

- Potential severity of fire

- Most vulnerable places or site factors

BASIC PRINCIPLES - PLANTS

- Avoid using plants with high content volatile oil
 - Many conifer species
 - Laurel sumac (*Malosma laurina*)
 - Chamise (*Adenostoma fasciculatum*)
- Avoid using perennials and annuals that can become "flash fuels" on the ground
 - Deerweed (*Lotus scoparius*)
 - Tall, tangles annuals from seed i.e.: tall lupines and phacelia
 - Cool season grasses which are summer dry/dormant
- Avoid using subshrubs that can build up dead wood in their centers
 - California buckwheat (*Eriogonum fasciculatum*) - tall growing forms
 - Sages (*Salvia* species) - tall growing forms
 - Coastal sagebrush - (*Artemisia californica*) - tall growing forms

- Avoid creating fuel ladders
 - Low, medium, and tall plants - don't plant close to each other
- Avoid overcrowding
 - Proper spacing
 - Planned succession
- Plan for pruning maintenance, short and long term
 - Keep low plants low, promoting lots of new growth
 - Keep medium and tall plants thinned, removing inner branches
 - Keep dead wood out of all plants
 - Keep invasive exotics out

BASIC PRINCIPLES - DESIGN

Consider all the criteria

Place fire safety in in proper place in the order of considerations

PLANTS - LOW

- *Grindelia stricta*
- *Baccharis pilularis* (groundcover varieties)
- *Iva hayesiana*
- *Ceanothus* (groundcover varieties)
- *Arctostaphylos* (groundcover varieties)
- *Ribes viburnifolium* (shade)
- *Salvia* (low cultivars)
- *Eriogonum* (low cultivars)
- *Adenostoma* (low cultivars, i.e.; 'Nicolas')

PLANTS - MEDIUM

- *Rhamnus californica* (low varieties)
- *Rhus integrifolia*, *R. ovata*
- *Ceanothus* species and cultivars (medium height)
- *Arctostaphylos* species and cultivars (medium height)
- *Cercocarpus betuloides*

PLANTS - TALL

- *Quercus* species
- *Prosopis* species

- *Prunus lyonii*
- *Lyonothamnus floribundus* ssp. *asplenifolius*

PLANTS - SPECIMEN

- *Nolina* species
- *Yucca* species
- *Agave* species

PLANTS - FIRE RETARDANT AND FIRE RESPONDENT

- *Isocoma menziesii*
- *Ericameria* species
- *Atriplex* species
- *Berberis nevadensis*
- *Simmondsia chinensis*
- *Shepherdia argentea*
- *Prunus ilicifolia*
- *Sphaeralcea ambigua*
- *Viguiera laciniata*
- *Calliandra californica*
- *Sphaeralcea ambigua*
- *Cleome arborea*
- *Rhamnus californica*

PLANTS - SHADE

- *Ribes viburnifolium*
- *Symphoricarpos mollis*
- *Iris* 'Pacific Coast Hybrids'
- *Heuchera maxima* plus cultivars
- *Solidago californica*
- *Monardella* species
- *Fragaria californica*
- *Potentilla californica*
- *Rhamnus californica*
- *Philadelphus californica*
- *Arctostaphylos* (groundcover varieties)
- *Ribes* species (currants and gooseberries)

PLANTING COMBINATIONS

- *Opuntia littoralis* patches, or rock outcrops interplanted with:
 - *Romneya* 'White Cloud'
 - *Rosa californica*
 - *Sambucus mexicana*
 - *Epilobium californicum* (many cultivars available)
 - *Eriogonum* species
 - *Gambelia speciosa*
 - *Verbena lilacina*
 - *Mirabilis californica*
 - *Mimulus aurantiacus*, *M. puniceus*
 - Other showy low growing flowering natives
 - Plus: All of the following, interplanted with *Iva*)
- *Iva hayesiana* - nondescript dull green groundcover interplanted with:
 - All of the above (interplanted with *Opuntia*) plus:
 - *Mimulus aurantiacus*, *M. puniceus*
 - *Penstemon spectabilis*
 - *Venegasia carpesioides*
 - *Viguiera laciniata*
 - *Hesperoyucca whipplei*
 - *Heteromeles arbutifolia*
 - Other showy low growing flowering natives

BARE EARTH, AGGREGATE TOPDRESS

Strategic placement

Aesthetic design

Bisected by plantings

Effective wildlife habitat

Pollinators, especially native bees

Ecological "Edge Effect"

Planted with xeric species

- *Agave* species
- *Opuntia* species
- *Yucca schidigera*
- *Salvia* species and cultivars
- *Eriogonum* species

- Condea (Hyptis) emoryi
- Fallugia paradoxa
- Trichostema lanatum
- Arctostaphylos species and cultivars
tall, thinned, artfully pruned

California native plants

Resilient to human efforts to reduce fire "risk"
(to a point)

Resilient to fire

Naturalistic design employing nature's examples

Biodiversity

Beauty in truly sustainable landscapes

FIRE SAFE, FIRE CONSIDERATE, FIRE RESILIENT

Develop a design philosophy taking examples from nature's beauty and biodiversity to make functionally sustainable gardens that are fire-safe (well, more like fire considerate).

Use only native plants in fire-safe landscapes because the pressures of land development and vegetation control statewide in the name of "fire prevention" are so great. simply stated we have to:

"Do enough before it's too late."

Richard Stephen Felger (1926-2020)

NATURE IS ALWAYS THE MODEL