

Mohawk Valley Preferred Planting List From a Fire Resistant Perspective

Deer Resistant where noted



Deer Resistant

Deer-resistant means **deer** are less likely to eat a particular plant. If a **deer** is hungry enough, almost any plant is fair game.

Fire Resistant Plants

While given certain conditions, all plants can and will burn, some plants are more resistant to ignition and supporting fire. In general, plants that are low growing, open structured, and less resinous are most suited to be fire resistant.

Following are general characteristics to look for:

- Higher moisture content in branches, stems and leaves – moist and supple
- Open branching habits either naturally or through pruning
- Trees tend to be clean, not bushy, and have little deadwood
- Less accumulation of woody debris from dead branches, stems and leaves
- Branches, stems and leaves that do not contain significant oil or wax
- Shrubs are low-growing (2') with minimal dead material
- Taller shrubs are clean, not bushy or twiggy
- Most fire-resistant trees are broad-leaf deciduous (lose their leaves), but some thick-leaf evergreens are also fire-resistant
- Sap or resin materials are low
- Sap is water-like and does not have a strong odor

There are no “fire-proof” plants. Even the most resistant plants must be maintained in good health, properly irrigated, and free of dead material, dry twigs, or fallen leaves and needles.

Spacing is as important as plant selection to achieve a fire resilient landscape.

- Minimum vertical spacing between trees, shrubs, and ground cover is determined by a formula of three times the height of the plant to the lowest branches.
- Minimum horizontal spacing depends on the slope of the land and the height of the plants involved. See chart on next page.

Horizontal Clearance for Shrubs and Trees

Uncleared ground fuels provide an open freeway for the rapid spread and increased intensity of fire.

Clearance between shrubs should be 4 to 40 feet depending on the slope of the land and size and type of vegetation. Check the chart below for an estimation of clearance distance. Any questions regarding requirements for a specific property should be addressed to your local fire official.

Minimum Horizontal Clearance

SHRUBS

From edge of one shrub to the edge of the next

Flat to mild slope

(0% to 20% slope)

Two times (2x) the height of the shrub

(Two shrubs 2' high should be spaced 4' apart)



Mild to moderate slope

(20% to 40% slope)

Four times (4x) the height of the shrub

(Two shrubs 2' high should be spaced 8' apart)

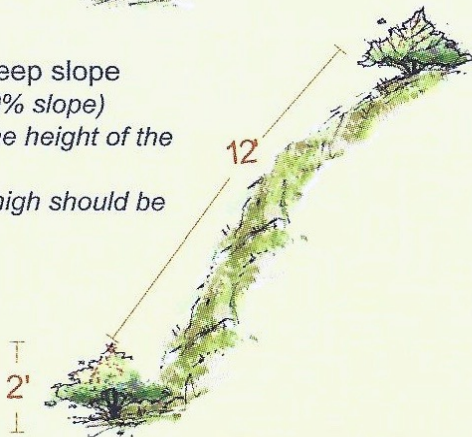


Moderate to steep slope

(greater than 40% slope)

Six times (6x) the height of the shrub

(Two shrubs 2' high should be spaced 12' apart)



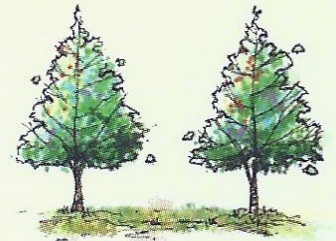
TREES

From edge of one tree canopy to the edge of the next

Flat to mild slope

(0% to 20% slope)

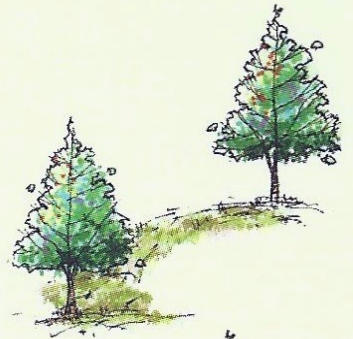
10 feet



Mild to moderate slope

(20% to 40% slope)

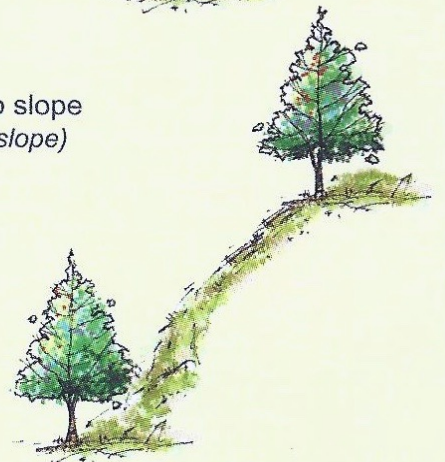
20 feet









Moderate to steep slope

(greater than 40% slope)
















30 feet





















Fire Resistant Plants - Trees

Common Name	Botanical Name	
Alder	Alnus species	
Ash	Fraxinus species	 Deer Resistant
Aspen/Poplars/Cottonwood	Populus species	
Catalpa	Catalpa species	
Crabapple	Malus species	
Giant Sequoia	Sequoiadendron	 Deer Resistant
Goldenchain Tree	Laburnum watereri	
Larch	Larix species	
Locust	Robina species	
Lodgepole Pine	Pinus contorta murrayana species	
Maidenhair Tree	Ginkgo bilboba	
Maple	Acer species	 Deer Resistant
Mountain Alder	Alnus tenuifolia	
Mountain Ash	Sorbus species	
Ornamental Pear	Pyrus species	
Plum or Cherry	Prunus species	
Ponderosa Pine	Pinus ponderosa	 Deer Resistant
Redbud	Cercis species	 Deer Resistant
Smoke Tree	Cotinus coggygria	
Sugar Pine	Pinus lambertiana	 Deer Resistant
Sumac	Rhus species	

Fire Resistant Plants - Shrubs

Common Name	Botanical Name	
Barberry	Berberis species	 Deer Resistant
Buffaloberry	Sheperdia argentea	
Chokecherry	Prunus virginiana	
Cotoneaster	Cotoneaster species	 Deer Resistant
Current/Gooseberry	Ribes species	 Deer Resistant
Dogwood	Cornus species	
Elderberry	Sambucus species	
Euonymus	Euonymus species	
Flowering Quince	Chaenomeles species	 Deer Resistant
Forsythia	Forsythia species	
Germander	Teucrium species	 Deer Resistant
Honeysuckle	Lonicera species	
Laurel	Kalmia species	
Lavender	Santolina species	 Deer Resistant
Lilac	Syringa species	
Mahonia	Mahonia species	 Deer Resistant
Mock Orange	Philadelphus species	
Ninebark	Physocarpus species	
Pieris	Pieris species	
Potentilla	Potentilla species	 Deer Resistant
Redbud	Cercis species	 Deer Resistant
Rhododendron	Rhododendron species	 Deer Resistant
Russian Sage	Perovskia	 Deer Resistant
Saltbrush	Atriplex species	
Serviceberry/Juneberry	Amelanchier species	
Skunkbush	Rhus trilobata	 Deer Resistant
Snowberry/Coralberry	Symphoricarpos species	
Spiraea	Spiraea species	
Sumac	Rhus species	 Deer Resistant
Sunrose	Helianthemum	
Viburnum	Viburnum species	 Deer Resistant
Wild Lilac	Ceanothus species	 Deer Resistant
Willow	Salix species	

Fire Resistant Plants - Groundcover/Vines/Perennials

Common Name	Botanical Name	
Asters	Aster species	 Deer Resistant
Astilbe	Astible species	 Deer Resistant
Basket-of-Gold	Aurinia saxatilis	
Beard Tongue	Penstemon species	 Deer Resistant
Bellflower/Bluebells	Campanula species	 Deer Resistant
Black Eyed Susans	Rudbeckia species	 Deer Resistant
Blanket Flower	Gaillardia species	 Deer Resistant
Blue Fescue	Festuca Ovina Glauca	 Deer Resistant
Candytuft	Iberis species	 Deer Resistant
Carpet Bugle	Ajuga species	 Deer Resistant
Cinquefoil	Potentilla species	 Deer Resistant
Clematis	Clematis species	
Colombine	Aquilegia species	
Coneflower	Echinacea purpurea	 Deer Resistant
Coral Bells	Heuchera species	
Coreopsis	Coreopsis species	 Deer Resistant
Creeping Jenny	Lysimachia species	
Creeping Pinks	Dianthus species	
Creeping Snowberry	Symphoricarpos mallis	
Daisies	Chrysanthemum species	 Deer Resistant
Daylily	Hemerocallis species	
Delphinium	Delphinium species	
Dwarf Periwinkle	Vinca minor	
Dwarf Plumbago	Ceratostigma plumbaginoides	
Geranium	Geranium species	 Deer Resistant
Hens and Chickens	Sempervivum	 Deer Resistant
Honeysuckle	Lonicera species	
Hosta	Hosta species	
Iris	Iris species	 Deer Resistant
Lamb's Ears	Stachys byzantine	 Deer Resistant
Lupine	Lupinus species	 Deer Resistant
Mock Strawberry	Duchesnea indica	

Fire Resistant Plants - Groundcover/Vines/Perennials

Common Name






Botanical Name

Narcissus	Narcissus species	 Deer Resistant
Penstemon	Penstemon species	 Deer Resistant
Phlox	Phlox species	 Deer Resistant
Primrose	Oenothera species	
Ranunculus	Ranunculus species	
Sedum/Stonecrop	Sedum species	
Snow-in-Summer	Cerastium tomentosum	 Deer Resistant
Squaw Carpet	Ceanothus prostratus	
Sulfur Buckwheat	Eriogonum umbellulatum	
Sweet Woodruff	Galium Odoratum	
Thyme	Thymus species	 Deer Resistant
Uva-ursi	Arctostaphylos species	 Deer Resistant
Virginia Creeper	Parthenocissus species	
Winter Creeper	Euonymus fortunei	
Yarrow	Achillea species	 Deer Resistant


Following is a list of plantings that are native to our area and may be acceptable in the landscape when properly maintained.

Even though quite flammable, these species, which are the dominant plants in our area, can be made more fire resistant with proper care. If they have an open growth with no dead wood, and are watered frequently, they will be less likely to burn. Limbing trees and trimming shrubs to keep these plants in control is a definite help to minimize the fire risk.

Trees

Common Name	Botanical Name	
Douglas Fir	<i>Pseudotsuga menziesii</i>	 Deer Resistant
Incense Cedar	<i>Calocedrus decurrens</i>	 Deer Resistant
Pine	<i>Pinus species</i>	 Deer Resistant
Spruce	<i>Picea species</i>	 Deer Resistant
Fir	<i>Abies species</i>	 Deer Resistant

Shrubs

Common Name	Botanical Name	
Bitterbrush	<i>Purshia tridentate</i>	
Manzanita	<i>Arctostaphylos species</i>	 Deer Resistant

Following is a list of plantings that should be avoided.

Common Name	Botanical Name
Acacia	Acacia species
Arborvitae	Thuja species
Bigcone Spruce	Pseudotsuga macrocarpa
Broom	Cytisus species
Cypress	Cupressus species
Douglas Fir	Pseudotsuga menziesii
Dwarf Alberta Spruce	Picea glauca 'Conica'
Dwarf Broom	Genista species
Giant Redwood	Sequoiadendron giganteum
Incense Cedar	Calocedrus decurrens
Juniper	Juniperus species
Manzanita	Arctostaphylos species
Pine	Pinus species
Rabbitbrush	Chrysothamnus nauseosus
Rosemary	Rosmarinus officinalis
Sagebrush or Wormwood	Artemisia species
Spruce	Picea species

These lists are not exhaustive.

The Sunset Western Garden Book is an excellent source for the details of the various species.

Following are some Internet sites that have excellent information on these issues:

- Lassen County Fire Safe Council:
<http://www.lassenfiresafecouncil.org/> and search for: Lassen County and Northeastern California Landscape Plant Guide
- The Spruce
<https://www.thespruce.com/plant-selection-for-the-landscape-2131865>
- Davey Landscapes
<http://blog.davey.com/2017/08/fireproof-landscapes-with-fire-resistant-plants-trees-and-shrubs/>

CAL FIRE and Cal Poly publish the “SelectTree” Database, which has detailed information and can be filtered to show fire resident species.

- <https://selecttree.calpoly.edu/>

Even though the next items were done for Oregon and Washington, they have very good information that also applies to plants that we have in our area of California.

- Fire Resistant Plants for Home Landscapes
<https://ir.library.oregonstate.edu/xmlui/handle/1957/20921>
- Fire Resistant Plants for Chilean/Douglas County Washington
<http://cesutter.ucanr.edu/files/156934.pdf>

This is meant to be a working document. If you have questions, corrections, additions, or comments please send them to: chbowman@prodigy.net.