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Firewise Plants for Utah Landscapes

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Wildland-Urban Interface (Reviewed May 2012)

Firewise Plants for Utah Landscapes

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This fact sheet describes characteristics of firewise plants and firewise landscapes, and lists examples of firewise plants that can be used in Utah landscapes.

Wildland/Urban Interface Fire Hazards

Fire is an important part of many of Utah's natural landscapes, including landscapes in fringe or interface areas near rapidly growing cities, towns, and recreational developments. But when people build homes in these areas, a minor fire that might have burned a few trees and shrubs in a natural area instead can become a major disaster. Throughout Utah wildland/urban interface fires are becoming more of a problem as people choose to live in previously undeveloped areas on the edges of cities, Use of firewise plants alone does not guarantee fire safety for you or your home. But, firewise plants coupled with good design and maintenance help establish a defensible space around your home or neighborhood that assists firefighters in their protection efforts. Native vegetation around homes and neighborhoods also can be managed in a firewise manner through pruning, thinning, and occasional clearing.

This fact sheet mainly covers selection of firewise plants for use in Utah landscapes. Other elements of firewise landscape design, installation, and maintenance will be covered in other fact sheets. Go to http://extension. usu.edu/forestry/HomeTown/HO_Firewise.htm for an electronic version of this fact sheet and a slide presentation showing most of these plants.

areas with trees, shrubs, and grasses that often are very flammable.

Firewise Landscaping

Firewise landscaping is the practice of designing, installing, and maintaining a landscape to minimize fire hazard to structures, residents, and neighbors, while maintaining components of the native ecosystems that attracted people to live in such areas in the first place. Such landscaping uses appropriate plants, then places and maintains them so that fuel loads decrease in zones between an area to be protected (like your home) and the surrounding wildland.



House in dense Gambel oak stand

Firewise Plant Characteristics

Firewise plants have a number of characteristics in common, but also can vary considerably. Following are some important points about these plants and their management.

 \checkmark No plant is fireproof. All will burn in a very intense fire.

 \checkmark Firewise plants all have one or more of these firewise characteristics:

★ Tissues contain more moisture, especially during the fire season.

★ Tissues contain low amounts of volatile oils and other readily flammable chemicals.

★Plants provide less fuel, either by producing less litter or by staying small.

★ Plants are compact or low to the ground, allowing them to be used in the landscape to interrupt fire pathways.

✓ All trees provide large amounts of fuel to a fire, so they should be carefully placed and maintained. Broadleaved trees generally are less flammable than conifers (pines, firs, spruces, junipers).

 \checkmark Most of the firewise plants listed in this publication do well in open, sunny areas typical of most fire-prone sites.

✓ Some firewise plants need minimal or no irrigation to remain green and healthy; over-irrigation may harm such plants or may cause them to grow too fast and become hazardous. Other plants will need supplemental water to survive. Know your plants' needs and habits so you can use and manage them appropriately.

 \checkmark When choosing a particular plant species or cultivar for a firewise planting, favor those that are low to the ground, compact, and that stay green and healthy with low maintenance and minimal water.

✓ All firewise plants should receive periodic maintenance, including removal of dead leaf and stem material within the crown and on the ground, pruning to keep crowns thinner and to keep tree crowns high, and removal of individual plants to break up fuel continuity.

 \checkmark Make sure that the plants you are considering are coldhardy (check the USDA hardiness zone for the plant and compare it to the zone for your area) and otherwise wellsuited for your locale and the specific planting site.

 \checkmark Some plants are weedy and may even be illegal to plant or cultivate.

Firewise Plants for Utah Landscapes

The following table lists plants and groups of plants that can be firewise if used properly in the landscape and properly maintained. Plants or groups of plants marked with an * can become weedy in certain circumstances, and may even be noxious weeds with legal restrictions against their planting and cultivation. Check with your local Extension office or State Department of Agriculture office for information on noxious weeds in your area.

Most of these plants are fairly commonly available in the nursery trade, and cultivars and hybrids usually are available. All of these plants should be cold-hardy in most of Utah (USDA hardiness zones 4 or 5). Some need considerable supplemental irrigation, while others need very little water. Be sure to learn about the plants you use and know their requirements.

Where no particular species or cultivar is listed, or when considering plants not listed here, pick one that has firewise characteristics as described above. Don't assume that a plant is firewise just because it is closely related to one in the list or because it has a similar name.

Botanical Name Common Name
Grasses
Agropyron cristatum Crested Wheatgrass
 resists fire spread due to growth form
Buchloe dactyloidesBuffalograss
•low growing without mowing; moist through summer
with minimal irrigation
Dactylis glomerataOrchardgrass
 must be mowed or grazed
Festuca cinerea and other species Blue Fescue
•most low growing; may need to mow; stays moist with
irrigation
Lolium speciesRye Grass
 stays green with less irrigation than some; need to mow
or graze
Pascopyrum smithiiWestern Wheatgrass
 low fuel loads; regrows quickly after fire
Poa pratensisKentucky Bluegrass
•low growing; may need to mow; stays moist with
irrigation
Poa secunda Sandberg Bluegrass
Iow growing without mowing; low fuel loads

Herbaceous Perennials

Achillea clavennae	Silvery Yarrow
 small plants for dry sites 	

Botanical Name	Common Nam
Achillea filipendulina	
 large; likes dry sites; moist in sun 	
Achillea—other species & hybrids	
•some are volatile; good for dry si	
Aquilegia species & hybrids	
 likes moisture and some shade 	
Armeria maritima	Sea Pink Sea Thri
 low growing; dry, infertile sites o 	
Artemisia stellerianaBeach V	-
 needs very well-drained soil; moi 	, ,
Artemisia—other species & hybrids	
 some are volatile; all like dry soil 	
· · · · ·	
Bergenia species & hybrids	-
•moisture loving; medium-sized; s	•
Centranthus ruberRed	· 1
•gets fairly large; moist in summer	
Cerastium tomentosum	Snow-in-summ
•low growing; moist in summer	
Coreopsis auriculata var. Nana Dw	
 needs moisture; fairly low growing 	
Coreopsis—other perennial species	-
 more drought tolerant; larger plan 	
Delosperma nubigenum	•
 also other ice plants; very drough 	t tolerant; low growing
Dianthus plumarius & others	Pin
 use perennials; needs moisture; m 	noist in summer
Erigeron hybrids	Fleaban
 moist through summer 	
Gaillardia x grandiflora	Dlankatflow
0 0	
•drought, heat tolerant; moist in su	
Geranium cinereum	Hardy Geraniu
 low growing; cool sites 	
Geranium sanguineum Bloody Cranes	
 low/medium growing; partial sha 	
Geranium species	
 use perennials; most low growing 	g; need shade where ho
Hemerocallis species	•
 green and moist through summer 	
Heuchera sanguinea	. Coral Bells, Alum Ro
◆also other species, hybrids; low g	rowing foliage
Iberis sempervirens	Evergreen Candytu
 fairly low growing; evergreen 	
Iris species & hybrids	Iı
•green and moist through summer	
Kniphofia species & hybrids	Red-hot Pok
• large plants, moist in summer	Louand
 large plants; moist in summer Lavandula species 	Laveno
Lavandula species	
	ground regularly

<u>ne</u>	Botanical Name Co	ommon Name
W	Limonium latifoliumSea-lav	vender, Statice
	•low growing leaves; salt resistant; dry soils	,
v*	Linum species	Flax
•	•good for tough sites & soils	
ne	Liriope spicatum	Lilv-turf
	 fairly low growing; moist or dry sites; everg 	
ift	Lupinus species & hybrids	
111	•some are annuals; poisonous to livestock; go	-
or	poor soils	500 101
er	Medicago sativa	A lfalfa
s*	•green & moist through summer; low growin	
5.		-
ia	Oenothera species	
ia	• fairly low growing; best on poor soils	Donner
	Papaver species	Рорру
rd	•easy to grow; cut back regularly	D (
	Penstemon species & hybrids	Penstemon
er	•use on well-drained soils	
	Perovskia atriplicifolia Russian Sag	ge, Azure Sage
sis	•moist through summer; cut back yearly	1.0. 0.1
	Potentilla nepalensis Ne	pal Cinquefoil
sis	•prostrate form	~ ~ ~ ~
	Potentilla neumanniana 'Nana' (P. verna) Sprin	
nt		oing Potentilla
5	Potentilla—other non-shrubby species & hybrids.	-
ks	sulfur cinquefoil is weedy; full sun;	Potentilla*
	moist through summer	
e*	Salvia species & hybrids	
	 some are annuals; Mediterranean sage is we 	edy; only
er	use low growing, small plants	
	Sedum speciesStor	
m	 very low growing; fleshy, moist leaves; drou 	
111	Sempervivum tectorumH	
m	 very low growing; succulent; good on droug 	ghty,
111	poor soils	
m	Sibbaldiopsis (Potentilla) tridentataWinel	eaf Cinquefoil
t	 prostrate, spreading form 	
	Stachys byzantina	Lamb's Ear
ly	 moist through summer; good on poor soils 	
ot	Yucca filamentosa	Yucca
ot	 evergreen; very drought tolerant 	
ıft		
111	Shrubs and Woody Vines	
ris	Arctostaphylos uva-ursi Bearberry, Kinnikinni	
15	 very low and spreading; evergreen; use on p 	oor soils;
or	needs little pruning; salt tolerant	
er	Atriplex species	Saltbush
~~	 very drought tolerant; low maintenance 	
er	Ceanothus americanusN	lew Jersey Tea
SV	•low, dense form; evergreen; fairly trouble fr	ee; drought
sy	tolerant	

Botanical Name Common Name

Botanical Name Common Name
Ceanothus ovatus (C. herbaceous) & others Ceanothus
fairly low growing; evergreen; low maintenance
Cistus species
 not all are cold hardy; evergreen; dry sites; size varies
Cotoneaster dammeriBearberry Cotoneaster
•low growing; evergreen; minimal maintenance; dry sites
Cotoneaster horizontalisRockspray or Rock Cotoneaster
•very low and spreading; evergreen
Cotoneaster—other compact speciesCotoneaster
•low growth form; low maintenance; tough
Hedera helixEnglish Ivy
•evergreen vine; low growing, spreading, climbing; prune
to control spread; sun or shade
Kochia prostrataImmigrant Forage Kochia
 stays green; no volatiles; clumps break up fuel continuity; don't use weedy annual kochia
Lonicera species & hybrids
•shrubs or vines; use low growing species, cultivars
Mahonia repensCreeping Oregon Grape
•very low growing, spreading shrub; evergreen; needs
some shade
Parthenocissus quinquefolia Virginia Creeper
 vine; tough and vary adaptable; prune to control spread
Prunus besseyi (P. pumila var. besseyi) Western Sandcherry
 small, spreading shrub for dry, tough sites
Purshia tridentataBitterbrush, Antelope Bitterbrush
 low maintenance; good for tough, dry sites
Pyracantha species Firethorn, Pyracantha
•evergreen shrub; use low growing selections; prune
regularly
Rhamnus species
 tough shrub; low maintenance
Rhus trilobata
•easy to grow shrub; fairly small; low maintenance
Rhus—other species
•fairly tough and drought tolerant; some get large; thin or
prune periodically
<i>Ribes</i> species Currant, Gooseberry
◆use low growing dwarf forms; fairly tough, adaptable
Rosa rugosa & other hedge rosesRugosa Rose
 medium shrub; tough, fairly drought and salt tolerant
Shepherdia canadensisRusset Buffaloberry
•does well on very poor soils; drought tolerant; fixes
nitrogen; salt tolerant

Botanical Name Common Name

Syringa vulgarisLilac
 small to large shrubs; stays green through summer with
irrigation; thin and prune regularly
Vinca majorLarge Periwinkle
 low growing, prostrate groundcover; sun or shade
Vinca minor Dwarf Periwinkle, Common Periwinkle
•similar to large periwinkle, but very low to the ground

Trees

11665	
Acer species	
◆needs supplemental moisture	
Betula speciesBirch	
 needs supplemental moisture; use borer resistant 	
selections	
Cercis occidentalis (C. orbiculata) California Redbud	
 small tree or shrub; drought and heat resistant 	
Populus tremuloidesQuaking Aspen	
 needs supplemental moisture; good if maintained in 	
young clumps, otherwise not suitable for valleys	
Populus—other speciesPoplar, Cottonwood	
 needs supplemental moisture; most need plenty of space 	
Salix species Willow	
 needs supplemental moisture; disease prone; some good 	
shrubs	

For More Information

Kuhns, Michael 1998. Trees of Utah and the Intermountain West. USU Press, Logan, UT 84322-7800. 341pp.

Still, Steven M. 1994. Manual of Herbaceous Ornamental Plants. Stipes Publ., 10-12 Chester St., Champaign, IL 61820. 814 pp.

Visit the Forestry Extension Web site at http://extension. usu.edu/forestry/ for fire safety information. Also, go to www.firewise.org and www.utahfireinfo.gov for more fire-related information.

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