

- *Attributes of Firewise Plants:*
- High in moisture, soap (saponins), pectin, and/or latex content
- Smaller in size
- Minimal amounts of volatile oils and resins
- Usually can withstand some amount of drought

#### Deciduous Groundcovers, High Moisture or Soap Content:

- Firewise groundcovers cover a lot of space without adding height. The advantage of using groundcovers is "less fuel for the fire" all while adding textural interest and color. Groundcovers are a great competitor for invasive weeds such as annual cheatgrass and medusahead.
- **Examples** of perennial groundcovers: giant flowered soapwort, perennial geranium, cacti, ice plant, pineleaf penstemon
- **Shrub examples** appropriate for groundcover use: 'Pawnee Buttes' sand cherry, Colorado manzanita
- *High moisture and soap content* plants are very difficult to burn!
- **Examples** of high moisture or soap content plants: assorted sedums

and succulents, yucca, giant flowered soapwort, dianthus

- the most firewise plants of all - low-growing, easy maintenance, high-moisture content plants. **E.g.** dianthus, sedums and other succulents, deciduous groundcovers, dwarf statured forbs, limited shrubs/trees, no conifers.

#### 5-30' Zone Examples

- *Campanula* genus, bellflower - **latex** content, high moisture, many cultivars available
- *Dianthus* genus, pinks - **soap** content, xeric, can be utilized as groundcover
- 'Regent' *Amelanchier*, dwarf serviceberry - **pectin** content, dwarf relative of native shrub, supports wildlife
- *Oenothera macrocarpa*, evening primrose - high **moisture** content throughout the season even during the hottest months, useful groundcover

#### 8. Southwest US Native Shrub/Small Tree - Desert Willow:

#### 9. Vines, Latex Content, Test Garden for Southern Idaho:

- *Symphoricarpos* genus, snowberry - native to much of N. America
- High saponin/soap content in leaves and berries
- Pectin content, berries
- Useful as a sun shrub and can tolerate shade
- Low maintenance, prune periodically to retain shape
- The Idaho Firewise Garden is host to the common snowberry (white-berries) as well as a dwarf pink-berry cultivar ('Kolmcan' snowberry)

- *Disclaimer:* the snowberry is more appropriate for firewise landscaping in **Southern Idaho**. In the cooler and wetter climates of Idaho, the snowberry will sucker and spread more rapidly than may be desirable.

#### Latex Content

- *Euphorbia* genus, spurge - high **latex** and moisture content, *gardener's caution if allergic to latex!* Excellent resistance to ignition, many reliable, non-invasive cultivars available from reputable nurseries.

#### *Plant this, not that!*

- Instead of flammable arborvitae... plant **'Ron Williams' Fine Line® Buckthorn** for a very similar look. This shrub is loaded with tiny flowers in spring that attract pollinators.
- Instead of creeping juniper on steep slopes... plant **'Autumn Amber' Sumac** - a tough, spreading shrub useful for slope stabilization and showcases beautiful fall color.
- *Eriogonum umbellatum*, sulphur buckwheat - a very xeric, **firewise native plant** that can be utilized as groundcover or a stand alone specimen. Remove flower stalks down to the foliage in fall, do not attempt to make pruning cuts on the wood.
- ***Salvia pachyphylla*, sage** - this an example of a **flammable native plant** that has been left in the garden - *please touch this plant!* What indicates that **this plant is not firewise?** The heavy fragrance of the leaves indicates a HIGH oil content. We have limited its numbers in the garden to just 1 specimen and it gets pruned every season to limit excess material.
- *Philadelphus* genus, mock orange or as local Idahoans call it, Syringa
- *Philadelphus lewisii*, Idaho's state flower!
- High **saponin/soap** content, blooms in early June, the common name

of mock orange refers to the citrus scent of the flowers

Plants with **pectin** content are beautiful in late summer and fall and provide shelter and food for wildlife.

cotoneaster, Douglas hawthorn, grape, rose, Columbia hawthorn, Fendler's barberry

#### Seasons in the Garden

- Early spring highlights: bulbs, early-blooming shrubs, *Euphorbia*, *Vinca*, *Antennaria*, crabapple
- To see the garden at its most beautiful with many plants blooming at once, visit the Idaho Firewise Garden between **mid-May to mid-June**. Late spring into summer blooms include red hot poker, roses, ice plant, penstemon, evening primrose, mock orange, etc.
- Mid- to late summer highlights: *Sedum*, *Echinacea*, *Rudbeckia*, desert willow, *Mirabilis*
- Fall colors are abundant in the garden: burning bush, 'Autumn Amber' sumac, 'Gro-Low' sumac, Columbia hawthorn, 'Purpurea' grape, 'Pawnee Buttes' sand cherry, and the various pectin content plants mentioned in #14.

## Fire wise Plants for Montana City

Herbaceous plants. Firewise, deer and drought resistant, zone 3 hardy. Generally excerpted from MSU Extension with edits.

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Common Name	Scientific Name	Life Cycle	Bloom time	Color/growth form/ht
Anemones	<i>Anemone spp</i>	Perennial	Spring	Red, blue
Aster	<i>Aster spp.</i>	Perennial	Late Summer Fall	White, blue
Basket of gold	<i>Alyssum saxatilis</i>	Perennial	Late Spring	Yellow
Beebalm	<i>Monarda spp</i>	Perennial	Summer	Pink, purple, red. white
Blanket flower	<i>Gaillardia spp.</i>	Perennial	Late Summer	Yellow or red.
Black-eyed Susan	<i>Rudbeckia spp</i>	Perennial	Late Summer/Fall	Yellow.
Buckwheat, sulphur	<i>Eriogonum umbellatum</i>	Perennial	Summer	Yellow
Butterfly weed	<i>Asclepias tuberosa</i>	Perennial	Late Spring	Orange
Candytuft, evergreen	<i>Iberis sempervirens</i>	Perennial	Late Spring	White. 5-12" tall, 12-18" mounds
Catnip/Catmint/Mint	<i>Nepeta spp</i>	Perennial	Late Spring	Pink, purple, white
Canterbury bells	<i>Campanula medium</i>	biennial	Spring Summer	White, pink, purple. Reseeds itself
Coneflower	<i>Echinacea spp</i>	Perennial	Summer, Fall	White, pink, purple, red
Coreopsis (tickseed)	<i>Coreopsis spp.</i>	Perennial	Summer, Fall	Yellow, orange, pink, white
Cinquefoil	<i>Potentilla spp P. tabernaemontani, P.neumanniana</i>	Perennial	Summer	Yellow
Columbine	<i>Aquilegia spp.</i>	Perennial	Summer	Yellow, pink, white, blue/8"/single
Coral bells	<i>Heuchera sanguinea</i>	Perennial	Spring Summer	Pink/2"/Low growing mound
Daffodils	<i>Narcissus spp</i>	Perennial	Spring	White, yellow/8"/single
Daylily	<i>Hemerocallis spp</i>	Perennial	Summer	Yellow, orange, red/12"/spreading
Dianthus/Pinks	<i>Dianthus spp</i>	Perennial	Spring	White, pink, red/4"/ spreading
Dotted gay feather/Blazing star	<i>Liatris spp</i>	Perennial	Summer	Blue, red, purple, white/8"/single
Flax*	<i>Linum perenne</i>	Perennial	Spring	Blue/12"/Reseeds and spreads
Fleabane	<i>Erigeron spp</i>	Perennial	Summer	Yellow,

				white/5"/spreading
Fringed sagewort	<i>Artemisia frigida</i>	Perennial		Blue fringed foliage/6"/mat forming
Geranium, Perennial Cranesbill Summer skies	<i>Geranium spp</i> <i>G. macrorrhizum</i> <i>G. pratense</i>	Perennial	Spring	White to pink Blue/6"/spreading
Ginger, wild	<i>Asarum caudatum</i>	Perennial	Early Spring	Red/24"/ spreading
Globemallow, scarlet	<i>Sphaeralcea coccinea</i>	Perennial	Spring	Orange/3"/single
Hen and chicks	<i>Sempervivum tectorum</i>	Perennial	Summer	Evergreen, succulent Pink/2"/mat forming
Hyacinths	<i>Hyacinthus orientalis</i>	Perennial	Spring	White, blue, pink, red/8"/single
Ice plant	<i>Delosperma spp HARDY</i>	Perennial	Summer-Fall	Purple, yellow, pink, white, orange/3"/mat forming
Iris	<i>Iris spp.</i>	Perennial	Spring	White, blue/14"/mat forming
Kinninnick/bearberry	<i>Arctostaphylos spp</i>	Perennial	Spring, Summer	Pink/3"/Ground cover
Lamb's ear*	<i>Stachys byzantina</i>	Perennial	Spring, Summer	Aggressive spreader. Blue foliage, pink flower/6"/mat forming
Lupine	<i>Lupinus spp.</i>	Perennial	Spring	White, yellow, pink, blue, red/14"/Single
Oregon grape	<i>Mahonia repens</i>	Perennial	Summer	Yellow/3"/Low growing mat
Peony	<i>Paeonia spp</i>	Perennial	Spring	Various/24"/Single
Penstemon/beard's tongue	<i>Penstemon spp</i>	Perennial	Spring	White, pink, blue/4"/mat formig
Phlox	<i>Phlox spp</i>	Perennial	Spring	White, pink, blue/3"/mat forming
Poppy	<i>Papaver nudicaule</i>	Perennial	Spring	Red/24"/spreading
Poppymallow, purple	<i>Callirhoe involucrata</i>	Perennial	Summer/Fall	Pink, purple* aggressive?/3"/prostrate spreading
Primrose spp	<i>Oenothera fruticosa</i>	Perennial	Spring	Various Yellow*/12"/ Aggressive?
Primula	<i>Primula speciosa</i>	Perennial	Early Spring	Various/2 in./single
Pussytoes	<i>Antennaria spp.</i>	Perennial	Spring	White to red/4"/mat forming
Shasta daisy	<i>Leucanthemum x superbum</i>	Perennial	Spring	Pink, Red, White/24"/spreading
Silene	<i>Silene spp</i>	Perennial	Spring	Red, white, pink, blue/8"/single
Silver mound	<i>Artermisia schmidtiana</i>	Perennial	--	Blue foliage./12"/Mound shape Requires division every 2-3 yrs
Soapwort	<i>Saponaria officinalis</i>	Perennial	Summer/Fall	Pink, white/4"/mat forming
Snow-in-Summer*	<i>Cerastium tomentosum</i>	Perennial	Spring	White. Aggressive spreader

Stonecrop	<i>Sedum spp</i>	Perennial	Summer, Fall	Red, pink, yellow, white/2"-12"/mat forming-single
Strawberry, Beach	<i>Fragaria chiloensis</i>	Perennial	Spring	White/2"/mat forming
Strawberry, Mock	<i>Duchesnea indica</i>	Perennial	Spring	Pink/2"/mat forming
Thrift, common	<i>America maritima</i>	Perennial	Spring	Pink/4"/mat forming, spreading
Thyme, wooly	<i>Thymus praecox ssp. britannicus</i>	Perennial	Spring	Pink/1"/mat forming, spreading
Townsendia spp	<i>Townsendia spp</i>	Perennial	Summer	Pink, purple/6"/mat forming
Valerian	<i>Centranthus rubra</i>	Perennial	Summer	Red/14"/single
Violet, Canadian	<i>Viola canadensis</i>	Perennial	Spring	White/3"/spreading
Yarrow*	<i>Achillea spp</i>	Perennial	Summer	White, red/10"/mat forming
Yucca	<i>Yucca spp (fast growing var)</i>	Perennial	Summer	White/18"/single

\*can be aggressive spreaders

Shrubs. Firewise, deer and drought resistant, zone 3 hardy. From MSU Extension with edits

Common Name	Scientific Name	Size	Bloom time	Other
Barberry*	<i>Berberis</i>	3ft tall, 2 ft wide	Colorful Fall foliage	Need to be Hardcy to Zone 3
Buckthorn, fine line	<i>Rhamnus frangula</i>	7 ft tall, 3 ft wide	NA	Finely cut foliage
Buffaloberry	<i>Shepherdia canadensis</i>	5 feet tall, 4 feet wide	Summer	Red berries
Cinquefoil	<i>Potentilla fruticosa</i>	3 ft tall, 2 ft wide	Summer	Yellow flowers
Cotoneaster, hedge*	<i>Cotoneaster lucidus</i>	6-10 ft tall, 5-6 ft wide	Late Spring	Pink, black berry
Cotoneaster, black-fruited*	<i>Cotoneaster melancarpus</i>	5-8 ft tall, 5-8 feet wide	Late Spring	White, black berries
Cotoneaster, European	<i>Cotoneaster integerrimus</i>	5-8 ft tall, 5-8 feet wide	Late Spring	White, black berries
Currant/Gooseberry	<i>Ribes spp</i>	4-6 ft tall, 3-5 ft wide	Summer	White, yellow, pink. Red to blue berries
Ninebark	<i>Physocarpus malvaceus</i>	4-6 ft tall, 3-5 ft wide	Summer	White flowers,
Oregon grape	<i>Mahonia repens</i>	1 ft tall, spreading	Summer	Yellow, blue berries. Low growing spreading
Rocky Mountain Maple	<i>Acer glabrum</i>	5-6.5 feet tall		Colorful Fall foliage
Rose, wild	<i>Rosa spp</i>	4-6 feet tall	Summer	Pink, yellow, orange. Red berries
Sandcherry	<i>Prunus x cistena</i>	8 feet tall, 8 feet wide	Summer	Purple leaves, pink flowers, red fruit
Silverberry	<i>Eleagnus argentea</i>	7 feet tall, 5 feet wide	Summer	
Snowberry	<i>Symphoricarpos spp</i>	3-4 feet tall, 2-3 feet wide	Summer	White flowers, white berries

Spirea	<i>Spirea spp</i>	Variable	Summer	White, pink
Sumac, skunkbush	<i>Rhus spp</i>	Variable	Summer	Yellow flowers, Foliage red in Fall

\*could be palatable

Trees. Must be of sufficient size and/or protected to be deer resistant

Common Name	Scientific Name	Height	Longevity
Alder, white*	<i>Alnus rhombifolia</i>	50-80 ft,	70+ years
Apple	<i>Malus spp</i>	30-40 feet	30+ years
Ash, green**	<i>Fraxinus pennsylvanica</i>	50-60 ft, 25 feet canopy	75+ years
Cottonwood, cottonless	<i>Populus deltoides x P. nigra</i>	40-50' tall, 30 ft canopy	75+ years
Hackberry	<i>Celtis occidentalis</i>	40-60 ft, 25-45 ft canopy	150+ years
Maple, boxelder	<i>Acer negrundo</i>	35-50- feet tall	75+ years
Maple, sugar	<i>Acer saccharum</i>	50-70 ft tall,	150+ years
Oak, red	<i>Quercus rubra</i>	60-75ft tall, 45' canopy	150+ years

\*Ensure hardiness for zone 3

\*\*Emerald ash borer issue here?

Not good choices for firewise plants for Montana City

Common Name	Scientific name	Why not a good choice for Mt City	Source
barberry	<i>Berberis spp</i>	Hardy zone 4?	Google
Bergenia	<i>Bergenia spp</i>	Shade lover	MSU Extension
Bugleweed	<i>Ajuga reptans</i>	Invasive	MSU Extension
Cherry	<i>Prunus spp</i>	Palatable to deer	
Chokecherry	<i>Prunus virginiana</i>	Palatable to deer	
Cotoneaster, bearberry*	<i>Cotoneaster dammeri</i>	Not hardy zone 3	
Cranberry/Viburnum	<i>Viburnum spp</i>	Shade lover	
Dogwood	<i>Cornus stolonifera</i>	Palatable to deer	
Four o'clock	<i>Mirabilis jilapa</i>	Not hardy	MSU Extension
Honeysuckle		Palatable to deer	
Lavender	<i>Lavendula</i>	Flammable oils	MSU Extension
Lilac		Palatable to deer	
MockOrange		Palatable to deer	
Oceanspray	<i>Holodiscus discolor</i>	Not hardy zone 3	MSU Extension
Periwinkle	<i>Vinca minor</i>	Not full sun	MSU Extension
Poppy, California	<i>Eschscholzia californica</i>	Not hardy (?)	MSU Extension
Raspberry	<i>Rubus spp</i>	Palatable to deer	
Sage	<i>Salvia spp</i>	Oils	MSU
Valerian	<i>Centranthus rubra</i>	Zone 5	MSU
Virginia creeper	<i>Parthenocissus quinquefolia</i>	Aggressive spreader	MSU
winterfat	<i>Eurotia lanata</i>	Palatable to deer	MSU
Quaking aspen	<i>Populus tremuloides</i>	Short lived, disease prone	MSU
Russian olive	<i>Eleagnus angustifolia</i>	INVASIVE SPECIES	MSU
Locust, black	<i>Robinia pseudoacacia</i>	Can be invasive	MSU
Birch	<i>Betula spp</i>	Spindly, diseases?	MSU
Cherry	<i>Prunus</i>	Short stature, short-lived	MSU
Rubber rabbitbrush	<i>Chrysothamnus nauseosus</i>	Palatable to deer	