

Shrubs



Acer glabrum

Rocky Mountain Maple

A shrub to small tree that grows from 8-25' tall by 8' wide. It has 3-5 lobed leaves with double toothed margins. Showy fall foliage varies from red and orange to yellow. This provides a nice substitute for the popular vine maple, which is not as hardy. Rocky Mountain Maple is found from British Columbia to northern CA, and east to ID, MT, UT, WY and northwest CO beneath a coniferous overstory or along streambottoms in forested areas.



Amelanchier alnifolia Saskatoon Serviceberry



Amelanchier alnifolia

Showy racemes of pure white flowers adorn this shrub in April to May, followed by purple fruits resembling blueberries. Although size will vary depending upon available water, this shrub ranges from 5-20' tall by 6-15' wide. It is often more broad than tall. The leaf is almost blue green, the shape cordate at base, and the margin slightly toothed toward the apex. The fruits can be used in pies, jams,

fruit rolls, for jelly and syrup, or pounded to make mince meat. A special Native American delicacy consisted of salmon eggs and dried serviceberries, not mashed, but served boiled or cold (Turner et al., 1980). In emergencies or times of famine, the juice of the fruits was squeezed over Black Tree-Lichen (*Bryoria fremontii*) to add flavor before drying it. In the landscape, use as a specimen, around a patio or deck, as a shelterbelt, or in a naturalized setting for

a continual show from spring flowers, to summer berries, to spectacular fall color. Native to open woods, canyons and hillsides from southern AK to CA, east to Alberta, the Dakotas, NE, NM and AZ.



Arctostaphylos uva-ursi (left), close-up (right)



Arctostaphylos uva-ursi Kinnikinnick

Clusters of pink, urn-shaped flowers bloom from March to April on this mat-forming evergreen shrub. The dense mats rarely exceed 6" in height, can spread to 6' wide, and prefer cooler sites with afternoon shade. The 1" long simple, leathery, dark green leaves become slightly reddish-green to purple in the fall. It roots wherever branches touch the soil. While slow growing initially, once established, it is a low maintenance, long lived ground cover. Well-drained soil is essential. Indians used the bark as tobacco and the fruit may attract songbirds and small mammals (Ogle 1997). According to Cronquist (1973) "it is one of the finest ground covers known, especially for dry banks." Ranges from AK to Labrador, south to coastal CA, ID, and MT and throughout the Rocky Mountains.



Artemisia cana



Artemisia cana Silver Sagebrush

This semi-evergreen shrub grows 3-5' tall with a similar width and has inconspicuous yellow flowers that run the length of the stem. It blooms from August to September. The silver foliage has entire, non-lobed leaves and semi-upright branches making it a nice mid-size shrub in a naturalized landscape. It spreads rhizomatously and can root sprout after a fire. It is the second most populous shrub, after Big Sagebrush (*Artemisia tridentata*), in the 11 western states. Native to mountains and higher valleys, it is often in ephemerally moist meadows and drainage ways that become dry by midsummer. Its range spans British Columbia, CA, UT and NM.



Artemisia frigida



Artemisia frigida Fringed Sagebrush

The finely divided foliage is metallic silver, upright to decumbent, 8-18" tall by 2-3' wide. Small yellow flowers appear in mid to late summer. Within approximately three years, this semi-shrub can withstand short-term drought conditions fairly well. Prior to establishment, it will desiccate easily, preferring a cooler site or shade from surrounding vegetation as it is native to higher elevation sites (> 5,000') in the Intermountain Region. Lightly prune to reduce desiccation and maintain clump growth form. Occurring throughout the western states and Canada, it is the most common sage in Alaska.



Artemisia ludoviciana Louisiana Sage

While it smells strongly of sagebrush, the light gray branches typically reach only 12-18" tall by 24" wide and the leaves tend to be entire or have irregular margins versus tri-lobed. Small greenish yellow flowers bloom in clusters towards the end of the stems of this sub-shrub from late July to early September. Small desert animals utilize it for cover, and it is a food source for sage grouse, cattle, rabbits, rodents, elk and mountain goats. Besides being a key ceremonial plant for the Cheyenne people, it was formulated in various ways by numerous Native Americans to treat the following ailments: stomach problems, nose bleeds, odors, sinus infections, headaches, long standing sores, menstrual disorders, fever, diarrhea and soar throat. *Artemisia* is poisonous in large doses. It can adapt to numerous conditions, including perennial or ephemeral streams, sagebrush steppe, prairies, and disturbed areas as it spreads rhizomatously. It ranges from east of the Cascades in WA and OR south to Mexico, and throughout the Great Plains States into northeast CA.



Artemisia tridentata Big Sagebrush

There are three subspecies of Big Sagebrush: ssp. *tridentata*, ssp. *wyomingensis* and ssp. *vaseyana*. Size is highly variable, from 3-12'. All have yellow, inconspicuous flowers that bloom in the fall. While ssp. *tridentata* (Basin Big Sagebrush) is typically the tallest, with pendulous flowers and uneven growth form, ssp. *vaseyana* (Mountain Big Sagebrush) tends to be smaller, with erect flowering branches that form a level, flat top, and a more compact growth pattern. Subspecies *wyomingensis* (Wyoming Big Sagebrush) is the most drought tolerant, grows in shallower soil, produces 3-parted major branches, and grows about three feet tall. All have gray green hairy leaves that are semi-evergreen with approximately one third of the leaves dropping off in late summer. While Big Sagebrush prefers deep, rich, moist alluvial loams, it is very drought tolerant once established and will rot or become tall and leggy if overwatered. The shrub is an excellent selection when creating a wildlife friendly landscape: sage grouse eat the leaves, flowers and fruit; squirrels, rabbits and small rodents eat the leaves and seeds, and antelope, mule deer and mountain sheep eat the leaves and young twigs. The hard dense wood can be used for firewood and purportedly repels mosquitoes when burned. Big Sagebrush covers more acreage in the 11 western states than any other plant. It is native to the plains, desert, hills and lower mountain slopes from British Columbia to Baja, CA, and east to western NE.



Atriplex canescens (in background)



Atriplex canescens Four-wing Saltbush

The grayish-white leaves are long, linear, and covered with microscopic scales giving the leaves a "crystalline" look. The plant typically grows 4-5' tall, but may reach 6' tall by 8' wide. Inconspicuous yellow blooms appear in mid-spring to midsummer. The name comes from the four large bracts, entire to fringed, that appear on the seeds. Seeds can be ground and cooked like cereal, the leaves eaten, and ashes used to leaven bread (Phillips 1998). For wildlife, it is an important browse plant. *Atriplex* spp. have evolved a unique method of accessing water unavailable to other plants. They

can take in water with high salt content by storing it in their leaves and then shedding them. They can survive in highly alkaline areas, in sand or clay, shallow or deep soils in desert flats, washes, mesas, ridges, slopes or sand dunes. They range throughout the western US as far east as the Dakotas and south to TX.



Cercocarpus ledifolius (left), leaves (right)



Cercocarpus ledifolius
Curl-leaf Mountain Mahogany

This evergreen shrub or multi-stemmed tree grows 8-15' tall by 6-8' wide, with dark green, leathery leaves and attractive gray bark. Pale yellow, inconspicuous flowers bloom in May. *Cercocarpus* comes from the Greek *kerkos*, meaning tail, and *carpos*, meaning fruit, in reference to the decorative curly-cue plume that persists throughout the summer and fall as the seeds ripen. The coil helps work the seed into the ground by coiling when damp and straightening when dry (Knopf 1991). The leaves, approximately 1" long and 1/4" wide, have margins that curl inwards (hence the common name, Curl-Leaf). The curled leaf limits the amount of surface area exposed to the sun and wind, helping it survive during hot, dry weather. The dense compact growth form with upright branches provides an excellent drought tolerant evergreen shrub that could be used as a screen year round. Does best in full sun with well-drained soil, and can survive with approximately 10-20" of rain or irrigation per year. The native range spans ID, as far north as southeast WA, south to CA and AZ and east to MT and CO.



Cercocarpus montanus **Mountain Mahogany**

Also known as Birch-Leaf Mountain Mahogany, white flowers bloom from April to May on this shrub, which grows 5-10' tall by 3-5' wide. It prefers medium to well drained soils, and like *C. ledifolius*, decorative plumes persist into the fall. It provides cover for birds, attracts pollinators, and is a winter browse plant for deer and elk. Tools, such as bows, were made from the wood, and the bark was dried to treat tuberculosis, colds, respiratory

problems, and sores. The Hopi used the bark to make a dye (Mozingo 1997). Native habitats are mountainsides, rocky bluffs, open woodlands, canyons and rim rock from OR to WY, SD, southern CA and central Mexico.



Chamaebatiaria millefolium **Fern Bush**

This upright shrub grows 6-8' tall by 4-6' wide bearing elongated clusters of white flowers in summer. While deciduous in cold climates, it re-leafs by late winter. The fern-like foliage resembles yarrow, hence the same species name, *millefolium*. An excellent choice for hot dry



Chamaebatiaria millefolium

exposures, it can even grow in lava fields. It is very drought tolerant once established. Great Basin Indians used it medicinally as a tea for cramps and stomachaches. It may be browsed by sheep and deer, but rarely cattle (Mozingo 1987). Its native range in rocky habitats amidst juniper and pinyon pine includes the eastern side of the Sierra Nevada, north into OR and ID, south to WY, UT and eastern NV.



Chrysothamnus nauseosus **Rubber Rabbitbrush**

Rubber Rabbitbrush, also known as Gray Rabbitbrush, grows 2-7' tall by 1-4' wide. *Chrys* is Greek for golden yellow, in reference to the dense, dark yellow flowers that cover the bush from late summer into the fall. The long narrow leaves are silvery green and between 1 to 3 inches long. Like Sagebrush, this shrub makes an excellent contrast or accent plant. Rubber Rabbitbrush can resprout after disturbances such as fire. The primary characteristic to distinguish it from the Green Rabbitbrush is the fine woolly hair that can easily be scraped off the stems. The Shoshone of Nevada utilized the shrub for coughs, colds, and to stop diarrhea. The Cheyenne used it dermally for smallpox and to reduce itching (Phillips 1999). The deep roots make it extremely drought tolerant once established. It provides good cover for small rodents and jackrabbits seeking to elude birds of prey and other predators. Native Americans chewed the stems to make a latex gum to relieve hunger and thirst. During rubber shortages of World War II, scientists became interested in the latex and found that a high-quality rubber (called chrysil) could be produced, but not in the high quantities needed at that time (Mozingo 1987). Nevertheless, the name Rubber Rabbitbrush stuck. Native to dry open areas ranging from lowlands to sagebrush steppe to montane forest zones. There are six different varieties that vary morphologically and by range. Collectively, they cover eastern OR, ID, MT, WY and the Great Plains States.



Chrysothamnus viscidiflorus Green Rabbitbrush

A smaller shrub than *Chrysothamnus nauseosus*, it reaches a maximum height of 3', a width of 1-2' and lacks the pubescence or fine wooly hairs on the stems. Leaves are typically green and shiny with glands that give it a sticky texture. Some subspecies have leaves that are twisted lengthwise, and leaves vary from 1/2-2" long. Because both species of rabbitbrush resprout after a fire, germinate easily from seed, and are not the first choice for cattle, they can come to dominate a rangeland damaged by overgrazing or fire (Mozingo 1987). This rabbitbrush is extremely drought tolerant and is found throughout the west.



Cornus stolonifera Red-osier Dogwood

This medium shrub grows 3-9' tall by 5-8' wide, producing white flowers in May or June. Its unusual leaves have veins that curve inwards. It prefers a rich, moist, well-drained soil and may do better with partial shade in hot climates. It makes an excellent shrub for stream stabilization, wind breaks, screens and naturalized landscaping. The berries attract birds and the red branches are very showy in winter. Native throughout the western US, usually along creeks, streams or draws.



Crataegus douglasii Douglas Hawthorn

This species forms a large shrub or round topped tree 8-20' tall by approximately 15' wide, with showy clusters of globe-shaped white flowers in mid spring. Unlike its cousin, Columbia Hawthorn (*C. columbiana*), the red, shiny thorns are only 1/2" to 1" long, compared to 4" long. Both tolerate a wide range of soil conditions, and can be used to stabilize soil along roads, ditches, and banks. For bird habitat, the thorns create excellent protection from predators and the blue-black berries are a source of food. In their native habitat, they are typically found near streams in sagebrush, bunchgrass and Ponderosa Pine areas, intermixed with Douglas-Fir and Cedar-Hemlock in forest openings. Their range spans the Pacific Northwest, from southern AK to British Columbia and northern CA.



Ephedra viridis



Ephedra viridis Mormon Tea

This unusual looking plant in the joint fir family is a twiggly, upright, leafless, but also evergreen shrub, typically 2-5' tall with a similar width. Dioecious, it forms yellow, flower-like cones and berry-like fruits. It is extremely drought tolerant, requires well drained soil and prefers full sun. It would do well as a background plant, or to provide year round interest with its unique form. The plant produces ephedrine, an allergy and asthma treatment, and a rather controversial stimulant and metabolic enhancer. Early Mormon settlers used it to make tea, unaware of its chemical effects on the body and potential risks for stroke or heart attack. It is a common member of salt desert shrub communities, in highly alkaline, sandy soils in association with Shadscale and Greasewood. It is native to NV, UT and eastern CA.



Fallugia paradoxa



Fallugia paradoxa Apache Plume

A medium tall, semi-evergreen shrub (4-6'tall and wide) that produces white to rose flowers that mature into seeds with feathery plumes. The flowers bloom from late spring through early summer. After the plumes form, they remain on the shrub for several months adding texture and interest. The leaves are wedge shaped and tri-lobed, similar to bitterbrush. It is a nice candidate for an informal hedge or specimen plant. It requires moderately coarse soil that is well-drained and prefers full sun. It is very drought tolerant and does well in the Boise valley, though its natural range is the southwest deserts to the Colorado Plateau.



Krascheninnikovia lanata



E 3

Krascheninnikovia (Ceratoides) lanata **Winterfat**

Densely branched, this compact shrub grows 1-3' with a similar spread. The common name refers to its importance as a browse plant for both livestock and wildlife. The branches, leaves and fruit are covered in dense hair (*lanata*). Leaves are linear and the flowers consist of a dense woolly cluster in spring. Like others in the Chenopodiaceae family, it tolerates highly alkaline soil, but is intolerant of acidic or poorly drained soil. Native to the plains and foothills in WA, OR to CA, east to ID and MT.



E 4

Mahonia repens **Creeping Oregon Grape**

This low-growing, evergreen sub-shrub or ground cover with holly-like leaves is very drought and shade tolerant. It grows 1' tall by 1-3' wide. The yellow flowers bloom in a raceme in April to May, and the fruit forms a glaucous-blue fruit resembling a blueberry. The compound leaf has 5-7 leaflets, each typically twice as long as broad. Inconspicuous spinulose teeth again mimic the holly, while the leaf surface is glossy to dull on the upper side and dull on the lower side. This is one of the few plants that can grow well in dry shade, in clay to loam soils. The tart fruits can be used to make jelly, wine, or lemonade. Native Americans used the yellow bark to make dyes and medicinally to ease childbirth, heal infections, fight venereal diseases, and treat kidney problems. Modern herbalists use it to reduce fevers, lower inflammations and infections, reduce indigestion, and to treat liver and gall bladder disorders. By isolating the alkaloid berberine from the yellow sap in the twigs, researchers have found an antibiotic mechanism that can fight a broad range of bacteria (Phillips 1999). Widespread in the western US and Canada.



D 5

Philadelphus lewisii **Mockorange, Syringa**

Idaho's state flower is a lovely deciduous shrub growing 4-10' tall by 6-8' wide with showy, 4 petaled white flowers. They bloom in late spring to early summer. Leaves are ovate to elliptic with entire to serrate margins on oppositely branched stems. The flowers are borne singly on stems or in loose terminal clusters, and are incredibly fragrant (similar to orange blossoms). Syringa grows best in well-drained

soils and is quite drought tolerant, but prefers more water in the spring. Shrubs grow from 2,000' to 7,000' in elevation along waterways, on cliffs, talus slopes and rocky hillsides. Its range spans British Columbia to northern CA, from the coast to Montana and north and central ID.



Philadelphus lewisii



D 3

Physocarpus malvaceus **Ninebark**

This deciduous shrub grows 3-6' tall and wide. Its white flowers are in terminal corymbs in the spring. The branches are alternate; leaves are palmately 3-5 lobed turning beautiful shades of red in the fall. The bark often has stripes and may peel, hence the name, Ninebark. Native to canyons, hillsides, grasslands in Ponderosa Pine and Douglas Fir forests east of the Cascades from southern British Columbia to ID, OR, WA, MT, WY and UT.



Potentilla fruticosa



D 3

Potentilla fruticosa **Shrubby Cinquefoil**

This dense shrub grows 3' tall by 3' wide with small, palmately compound, flat, narrow to elliptic leaves. One inch yellow flowers adorn the shrub from early summer to mid fall. Shorter varieties grow at higher elevations, or on extreme windy slopes. Shrubby Cinquefoil is widely used in the landscape industry today. Those with anything but yellow blooms, such as white, fawn, orange, or red are introduced from Eurasia. It grows at higher elevations from the mountain hemlock zone to beyond the timberline. The range spans AK south to CA, east through the Rocky Mountain States to Labrador, Nova Scotia, NJ and PA.



Prunus emarginata flowers (left), fruit (right)



Prunus emarginata **Bitter Cherry**

Typically 6-8' tall by 4-6' wide, this shrub produces fragrant, white flowers in spring and red cherries in late summer and fall. For fruit production, at least two plants must be present. The leaf edge is finely toothed like the Chokecherry, but smaller and more obtuse at the tip. Foliage turns yellow in the fall. The bark is smooth and silvery gray. Because it will send up suckers it may spread beyond its designated area or need to be pruned back. It prefers well-drained soil and a sunny location. It does not do well in the shade of competing vegetation. Establishing easily on disturbed sites, it can be used to control erosion and stabilize soil. The bark smells like cherry when crushed, but has a bitter taste. Native Americans used the bark to make watertight baskets, ropes, arrows, and as a treatment for tuberculosis. A contraceptive was made from rotting wood. A treatment for cancer, hydrogen cyanide, is found in the leaves and seeds (NRCS Plants Database 8/2003). Deer and elk make use of the shrub for food and cover. It ranges from the edge of the Great Basin north into British Columbia, and east to ID and MT, often in large stands on steep rocky slopes or less dense groups along streams or valley bottoms.



Prunus virginiana **Chokecherry**

This shrub to small tree typically grows 10-20' tall by 8-10' wide (spreading vegetatively). It has finely toothed 3" long leaves. White flowers bloom on 6" pendulant spikes in spring. Colorful red fruits ripen to a deep purple in the summer. The seeds are spread by birds. At certain times of the year, the plant may be toxic to livestock due to the hydrocyanic acid in the foliage (Mozingo 1987). While incredibly bitter, the fruit can be collected and made into excellent syrup or jelly. Chokecherry is widespread throughout the US and Canada with two varieties. Variety *melanocarpa* is the larger of the two (12-20') and has a drupe (type of fruit) that is deep bluish-purple to black. It occurs from British Columbia to CA, east to Alberta and the Dakotas and south to the Rocky Mountain States and NM. Variety *demissa* typically grows 6-12', and has a black drupe. It is found west of the Cascades from British Columbia to northwest OR.



Purshia tridentata flowers



Purshia tridentata **Antelope Bitterbrush**

Yellow, highly fragrant flowers cover this shrub in late April and May. It grows 5-8' tall by 4-6' wide, with dense alternate branching, and is very drought tolerant once established (overwatering may kill it). The wedge shaped leaves, with three deep lobes, are similar to Apache Plume, except the upper leaf surface is green, the lower one covered in dense hairs. It attracts birds and insects and is an important food source for big game and livestock, particularly during the winter. Each flower produces one large black seed, often spread by rodents. Native habitat ranges from sagebrush deserts to Ponderosa Pine forests from British Columbia to CA, east of the Cascades to ID, MT, CO and NM.



Rhus glabra



Rhus glabra **Smooth Sumac**

Compound, blue green leaves turn red in fall on this 4-20' tall bushy shrub with reddish purple stems. Male flowers are bluish-white, while female flowers are greenish red. They bloom in the summer, and form hairy red fruit in the fall. Spreads by rhizomes and may be considered weedy, but also popular as an ornamental. Native east of the Cascades, from British Columbia to NV and Mexico east to NH and GA. While both *Rhus glabra* and *Rhus trilobata* are in the same family as Poison Ivy (Anacardiaceae), neither is known to cause skin irritation.