

**Draft: 9/09**  
**Low Water Use Trees and Shrubs**  
**For Las Vegas New Mexico**

This list of trees and shrubs is intended to provide guidance for tree species selection as well as to develop educational information on trees. This list does not include all the native and non-native species which can grow in Las Vegas. Other suitable species will be added at a later date. We welcome your species suggestions. Trees listed here are not so unusual that they will be difficult to obtain.

When choosing a tree, it is recommended that deciduous trees be placed on the south of the house to provide shade in summer. Because deciduous trees lose their leaves in winter, the sun can warm the house during the cold season. Remember that trees can be used as windbreaks

We have indicated trees which are not suited for planting where you park your car or near a sidewalk where people walk. Trees with poisonous seeds or thorns should not be planted where children play; these trees are noted. We have also listed undesirable trees which are classified by the state of New Mexico as noxious weeds.

Plan for size. Before planting, it is important to know the size of the tree at maturity. For example, a Colorado Blue Spruce may fill the entire front yard. Pruning often ruins the natural shape of the tree. If a tree will become 40 feet wide, be sure to plant it 20 feet away from the side of your house or you will have a problem when the tree is fully grown. Before planting, be sure there are no underground sewer or water lines. Then, look up to make sure you will not be planting a tall tree under electric or phone lines. Although we list the expected size at maturity, it may vary depending on many variables such as water, soil, temperature, wind, etc.

Next, determine the general soil type: does the soil drain well? Is the soil compacted and poorly draining clay? The roots will spread out to the edge of the tree and you probably cannot change the type of soil where your tree will be growing. Determine where water drains—for example, a tree which needs water can be placed where the roof or gutter drains. A tree which does not tolerate wet soil should not be placed where water will drain or in a watered lawn.

Plant for success. The hole should be twice as wide as the depth. It should be dug several inches lower than necessary, but put the soil back in to achieve the right height so the tree is at the same level as when the plant is growing. Planting too deep will kill the tree. If you have a bare root, slightly spread out the roots. If the tree is balled and burlaped, slice through the burlap; remove any wire. Fill half the hole with soil, firming it with your hands; add some water at this point, then continue filling the hole until the soil is level with the ground. Gently tamp the soil and water again. Make an 8-inch wide ditch just outside the hole you made to hold water. Do not let the trunk or stem sit in water because it can rot.

To use less water and keep the soil temperature more even, apply mulch 4—6 inches deep around the drip line, where the branches end. Keep the mulch about 5 inches away from the trunk or stems

to prevent the base of the trunk from rotting. As the tree grows wider, both the watering ditch and the mulch should be extended to the drip line.

If the top 5 inches of soil is dry, water the tree. In clay soil, fill the ditch, let drain, and refill three times. Clay soils, common in Las Vegas, retain water for a longer time than do sandy soils. Water only when it is dry.

Trees and shrubs are listed alphabetically by the Latin name, which is the name you should use when you buy the tree. Common names are listed second and are not as accurate because there is more than one common name, or the common name may be used for more than one tree. Trees and shrubs are listed together because there is often no clear difference between a small tree and a large shrub. Water use refers to the amount of water required for moderate growth once the tree is established.

This species list could not have been completed without the help of members of the Las Vegas Tree Board. Any errors are my own. Nancy Leippe DRAFT September 2009

***Acer negundo*—Boxelder, Ash-leaved Maple**—This deciduous tree has a broad rounded crown. The oval-toothed compound leaves are divided into odd numbered leaflets. The leaves turn yellow-green in fall. Seeds are v-shaped wings. This is a fast growing tree, reaching 60 feet high and wide. It is also a short-lived tree. It does well in moist soils and can tolerate poor soils. It seeds readily and can become a weed. It produces weak suckers which may break in strong winds or heavy snows. The wide and shallow root system robs water and nutrients from the soil and makes it difficult to grow plants near it. This tree is home to box-elder bugs and aphids: if you have parked your car under this tree, you will have noticed the sugary sap which drips from it. The Plains Indians made sugar from the sap. We do not recommend this tree because it is virtually a weed in Las Vegas; Dirr calls it a noxious weed tree.

***Acer palmatum*—Japanese Maple**—This deciduous tree is slow growing to 12—15 feet high and wide. It can be planted in shade. It needs little moisture when established.

***Aesculus hippocastanum*—Horsechestnut**—This non-native deciduous tree grows to 35—40 feet high and wide. It is common in Santa Fe. The leaves are divided into 6 fingerlike parts. It produces spectacular upright white flowers in the spring. It needs water until established. It tolerates many soil types. It provides heavy shade.

***Amelanchier utahensis*—Utah Serviceberry**—This native deciduous shrub grows from 6—15 feet tall and needs little water. It is conspicuous in spring due to the fragrant clusters of white flowers which appear before the leaves develop. It produces edible purple fruit that is slightly sweet. It grows on rocky hillsides and along stream banks.

***Artemisia filifolia*—Sand Sagebrush**—This fragrant silver-gray evergreen shrub grows to 4 feet, and has tiny narrow leaves and graceful branches. It does best in sandy soils, although it will grow in clay soils. It needs no water once established.

***Artemisia tridentata*—Big Sagebrush, Mountain Sage, Bigleaf Sage**—This native semi-evergreen shrub grows from 2 to 7 feet tall. It has hairy green-gray leaves  $\frac{3}{4}$  inch long with three teeth at the tip. It has inconspicuous flowers and strongly aromatic foliage. It may be pruned to

encourage branching. It does best in well-drained soils but will grow in clay soils. It requires no water once established. This rugged native is found in rocky or gravelly slopes. It attracts wildlife. Tea was made from the leaves and used to treat coughs, colds, and indigestion.

***Atriplex canescens*—Four-Wing Saltbush**—This native evergreen shrub is small and dense, spreading from 1—4 feet high to 4 feet wide in sunny dry sites. Native habitat is the western desert and Great Basin areas. It has narrow gray leaves. Female plants produce lots of tan-colored fruit. It needs no water once established, tolerates alkaline soils, and its seeds attract birds. It is fire resistant, drought tolerant and deer resistant. It has been used as a wildlife habitat, for erosion control, as a specimen plant, and as a screen or windbreak.

***Berberis julianae*—Wintergreen Barberry**—This shrub is evergreen or semi-deciduous; temperatures below 0 degrees can damage the leaves; therefore it is mostly deciduous in Las Vegas. The holly-like leathery and spiny leaves are 3 inches long and turn reddish in the fall. It grows to 6 feet with little to moderate water and tolerates poor soils. Because it is spiny, it can be used as a barrier hedge. Do not plant it where children play.

***Buddleia davidii*—Butterfly Bush**—This is a fast growing deciduous shrub which grows about 10 feet high. It has dark green leaves that are about 3 inches long with white hairs on the underside. In July—August, butterflies are attracted to the lilac-like purple flowers with orange centers. This shrub must have well drained soil and will need some watering when dry. The woody branches may freeze back to the ground in winter and will grow again in the spring.

***Caragana aborescens*—Siberian Peashrub**—This deciduous shrub grows rapidly to 10—15 feet high and wide, and is very tolerant of poor soils; it also tolerates drought and some shade. The 2—3 inch leaves have 4 to 6 leaflets. In the spring, it has bright yellow 1 inch flowers which resemble sweet peas. Hummingbirds are attracted to the yellow flowers. Leaves turn yellow-green in fall. This plant is native to Siberia and Mongolia. It can be used as a hedge, screen, or windbreak. It is very winter hardy and needs little water once established.

***Caragana pygmaea*—Pygmy Peashrub**—This deciduous shrub is a smaller version of *C. aborescens* (above). It is native to Siberia and withstands winds, heat, and cold. It needs little water.

***Caryopteris clandonensis*—Blue Mountain Spirea**—This deciduous shrub grows to 2 feet high and equally wide. It needs full sun. It produces blue flowers in July—August. After it flowers, the shrub should be cut back to encourage more blooming. It needs little water once established. Though the plant may freeze back in winter, the roots are hardy.

***Catalpa speciosa*—Western Catalpa**—This deciduous tree has a rounded crown and grows to 60—90 feet tall. It has dull green heart-shaped leaves. The 2-inch tubular flowers appear in late spring and produce long bean like fruit. The tree provides good shade, and should not be planted in the center of lawns and gardens. This tree tolerates heat, cold. It does best in drained soils and has moderate to low water needs. It adapts well to heat and cold extremes. It should be protected from the drying effects of wind by planting the tree downwind of sheltering buildings or other trees. The branches are brittle. Pruning when the tree is young will produce a tree with a tall

trunk and an umbrella-shaped crown. This tree is also recommended by the Santa Fe Xeriscape Council.

***Ceanothus fendleri*—Fendler’s Wild Lilac, Deerbrush**—The common name is misleading because this shrub does not resemble the lilac bush (*Syringia vulgaris*). This native plant has gray-green leaves with woolly hairs underneath. It grows between 3 and 6 feet tall. The flowers are bluish-white and bloom between April and June. It lives between 5 and 10 years. In the wild, it grows on rocky slopes which are well drained. It is susceptible to root rot and should not be planted near lawns or other plants which are watered. It has spines and should not be planted near areas where people walk or children play.

***Cedrus atlantica glauca*—Blue Atlas Cedar**—This is a cone shaped ornamental evergreen tree. It has pale blue-green or silvery clusters of needles and produces 2 inch cones which grow upright. It is slow growing to 60 feet high and 30 feet wide. It needs little water once established. The ends of branches may be pruned back to prevent them from getting too long or heavy.

***Cedrus deodara*—Deodar Cedar**—This large evergreen has a pyramidal shape with lower branches that droop down to the ground with the ends curving up. It is relatively fast growing to 80 feet tall, 40 feet wide. Foliage is blue-green, growing in bunches of up to 20 needles on short twigs. The upright cones are about 3 inches long. This tree needs little to moderate water once established. The side branches can be pruned in late spring to make the tree denser. This tree is sometimes used as a living Christmas tree.

***Celtis occidentalis*—Western Hackberry**—This hardy deciduous tree has a rounded crown with bright green finely toothed oval leaves. It has inconspicuous flowers. It can tolerate some semi-shade. It is a big tree, growing 50 feet high by 50 feet wide. It tolerates heat and alkaline soil and needs moderate to little water. It is good in windy locations (young trees may need to be staked until established.) It has deep roots, an advantage because the roots do not cause sidewalk heaving. The tree resists urban pollution and is attractive to birds. It is recommended that this tree be obtained in containers; bare-root plants do not grow well. This tree is also recommended by the Santa Fe Xeriscape Council.

***Cerocarpus breviflorus*—Littleleaf Mountain Mahogany**—This evergreen native is a small tree or shrub with an open crown and widely spreading branches that can reach 18 feet in height. Leaves are gray-green. Cone shaped petal-less flowers produce a small fruit with a 1-inch tail covered with white hairs in the fall. Native habitat is dry mountain slopes. It needs little water once established.

***Cerocarpus ledifolius*—Curl-leaf Mountain Mahogany**—This evergreen shrub grows in sun or part shade, to 10 feet. The leaves are curled at the edges. Funnel shaped yellow flowers appear in spring followed by feathery seed heads. It can be pruned into a hedge. Habitat is dry mountain slopes, and grassland areas in coniferous forests. It needs no water once established. Native Americans made a red dye by grinding the roots and mixing them with juniper ashes and powdered alder bark.

***Cerocarpus montanus***—**Mountain Mahogany**—Small, wedge-shaped dark green leaves grow in a dense branching pattern on this 6—20 foot tall deciduous shrub or small tree. Leaves are red-brown color and plumed tails come out of the seed heads in fall. It is hardy and needs little or no water once established.

***Chamaebatiaria millefolium***—**Fernbush**—This deciduous shrub grows 2—5 feet high and equally wide. Leaves are fern-like, aromatic, and olive-green. White showy flowers appear in mid to late summer. It tolerates most soils and does best when soils are well drained. It needs some watering for 2 years until established, and then it has no supplemental water needs. It can be used for screening and hedges. The natural habitat is rocky places. This shrub is also recommended by the Santa Fe Xeriscape Council.

***Chrysothamnus nauseosus***—**Chamisa, Rabbitbrush**—This native shrub has narrow gray-green leaves that fall off when pungent yellow flowers appear in late summer. The upright rounded shrub grows to 5 feet tall by 4 feet wide. It is recommended for use in low maintenance and native plant gardens. It helps control erosion. It is drought tolerant, and grows in alkaline soils in the high desert and intermountain ranges in New Mexico. It can be severely pruned: blooms develop on new growth. The slender branches, stripped of bark, were used for basket weaving. There is also a dwarf variety that is only knee high.

***Cotinus coggygria***—**Common Smoketree, Smokebush**—This is an upright spreading multi-stemmed deciduous shrub or small tree. It grows at a medium to rapid rate, depending on conditions. Mature height is 10—15 feet with a 10—15 foot spread. It has simple oval leaves that are bluish green and turn yellow-red in the fall. In June—August, flowers produce approximately 6-inch long fuzzy hairs, which are soft and smoke-like. This plant is adaptable to a wide variety of soils, but soils must be well drained. It tolerates some aridity and is somewhat drought resistant when established, but it does best with moderate water. The tree is native to south Europe and Asia. This tree is also recommended by the Santa Fe Xeriscape Council.

***Cotoneaster horizontalis***—**Rock Cotoneaster**—This deciduous shrub has wide stiff horizontal branches with many branchlets, growing 2—3 feet tall and up to 15 feet wide. It has small round bright green leaves that turn red-orange in the fall. It has attractive red fruit in the fall. It needs no water once established and does well in poor soils. Do not plant it near walkways because its shape will be ruined if the plant has to be pruned.

***Cotoneaster microphyllus***—**Rockspray Cotoneaster**—This evergreen shrub has small dark green leaves and grows in a natural fountain shape. It is 2—3 feet tall and 6—10 feet wide. There are many flowers in the spring. It grows well in rock gardens and on slopes. It does best in dry and well-drained soil, and also in poor soil. All Cotoneasters are vigorous, requiring little maintenance, though it is recommended that the oldest wood be pruned out each year.

***Cowania mexicana***—**Mexican Cliffrose**—This native multi-branched evergreen shrub or small tree grows from 6—10 feet high and wide. The trunk is crooked and the crown is open. The thick dark green leaves are small and resinous, with 3—7 deep lobes. In May, there are fragrant yellow-white flowers that produce fruit with long plumes. Native habitat is dry rocky hills and

plateaus. It tolerates drought, heat and cold. The shredded bark was used to make rope and sandals.

***Crataegus ambigua*—Russian Hawthorn**—This deciduous tree has dark green toothed leaves which turn yellow to yellow-orange in the fall. Growth is moderate to 15—25 feet tall. The branches are thorny. In the spring there are white flowers which produce small red fruit which attract birds. It tolerates a wide range of growing conditions and soils, and is extremely winter hardy. It is moderately drought resistant, but does best with some water, though it should not be over-watered; do not plant it near a watered lawn. It does well in city conditions where root development may be confined. Some pruning may be necessary to thin out branches. Because it is small, it may be planted under electric lines.

***Crataegus mollis*—Downy Hawthorne**—This deciduous tree has 3—4 inch simple lobed leaves covered with down. It has a round crown and can grow to 30 feet tall. In April—May there are showy white flowers which produce red fruit in the fall. This tree needs some water but it should not be over-watered and is moderately drought resistant. It can grow in areas where its roots are slightly confined.

***Elaeagnus angustifolia*—Russian Olive, Oleaster**—This tree is on the New Mexico Noxious Weed list. Please do not plant it.

***Eurotia lanata*—Winterfat**—This is a cottony-looking low deciduous shrub 1—3 feet tall. Leaves are threadlike, covered with white woolly hairs, and the leaf edges roll under. On male trees, the woolly white fruits are good for dried arrangements. Habitat is sandy alkaline soils. It needs little water once established. The dry leaves remain on the plant during winter and are eaten by sheep, hence the name ‘winterfat’.

***Fallugia paradoxa*—Apache Plume**—This native shrub grows to 4 feet tall and wide. The small lobed leaves are deep green on top and brown underneath. Branches are straw colored with flaky bark. Long blooming white 5 petal flowers make pink feathery plumes in May. The feather-tailed fruits are as beautiful as the flowers. Growth is moderate to rapid. It does best in well-drained soil; it grows naturally along sides of dry washes and hillsides. No water is needed once it is established. It is hardy, drought tolerant, and can tolerate alkaline soils.

***Forestiera neomexicana*—New Mexico Privet, New Mexico Olive, Palo Blanco**—This is a native deciduous shrub or small tree with erect spreading branches. It grows to about 8 feet tall and wide. It has smooth oblong medium green leaves. The small inconspicuous flowers produce seeds which look like black olives. It is a fairly fast-growing plant, depending on conditions. This is a good screening plant. It is drought tolerant, though it will grow faster with some water. According to PNM, this tree may be planted under power lines.

***Gleditsia triacanthos*—Honey Locust**—This is not the same locust as *Robinia pseudoacacia*, an example of why Latin names are used to avoid confusion. This is a deciduous tree with spreading arching branches and an oval crown. Depending on conditions, this tree can grow 2 feet or more per year over a 10 year period. It reaches 35—70 feet tall with a slightly smaller spread. The

trunk and branches are thorny so do not plant it where children play or near walkways. It is late to leaf out and the leaves turn yellow and drop in early fall. It produces fragrant flowers which develop into long pods. The pods attract wildlife. Once established, it is drought resistant, though it does best with moderate water in rich soil. It can be grown in a lawn. It is not a dense shade tree, allowing light through to plants growing under it. The roots of mature trees will heave paving. *Gleditsia triacanthos var. inermis* is thornless.

***Holodiscus dumosus*—Rock Spirea**—This deciduous native shrub grows from 3—10 feet tall, depending on conditions. Leaves are coarsely toothed, deep green on top with white hairs underneath. It produces 5 inch clusters of white flowers which fade to yellow-orange and stay on the shrub for a long time. This plant will grow in semi-shade (half day sun is needed). Prune after the flowers turn brown and wither. This plant is related to Spirea and is similar in appearance. Its natural habitat is shady canyons, rocky slopes, and at the bases of cliffs. It needs little water and is recommended for use in low maintenance gardens.

**Juniper species.** These evergreens come in many sizes and shapes and may be used as ground covers, windbreaks and ornamentals. Once established, Junipers need no watering; they grow in alkaline soils. Soils should be well drained. Wet soils will rot the roots, therefore Junipers should not be planted near watered lawns or gardens. The male trees produce pollen. Of the hundreds of Junipers, a few are listed below.

***Juniperus chinensis* ‘Pfitzerana’—Pfitzer Juniper**—This evergreen is commonly seen as a foundation planting, 5 feet high and 15 feet wide. The shrub is arching and it has feathery gray-green foliage. *J. chinensis* ‘*Pfitzerana Aurea*’ is a bit smaller with yellow growth at the ends.

***Juniperus communis*—Common Juniper**—This native evergreen has spreading branches, a crooked trunk, and an irregular crown. This slow-growing tree or shrub will become 5—10 feet tall with an 8—12 foot spread. The sharp pointed needles are at right angles to the stem, gray-green in the summer, tan-brownish in winter. The cones are like berries. It is drought tolerant once established and withstands drying winds. Some cultivars can be used as ground cover: *Juniper communis montana* or *J.c. sibirica* will be about 1 foot tall and 6 feet wide; these are native to alpine climates and should be mulched. *J. communis* ‘*Compressa*’ will grow to 2 feet tall, good for rock gardens. And *J. communis* ‘*Stricta*’ forms a narrow columnar tree, growing from 12—20 feet high.

***Juniperus deppeana*—Alligator Juniper**—This evergreen can become tall under good conditions, growing as tall as 50 feet high. Again, it is drought tolerant. It has bark which is square checked, said to resemble alligator hide.

***Juniperus horizontalis*—Creeping Juniper**—This evergreen is a low growing and spreading ground cover. There are many cultivars that are low growing and spreading: *J. horizontalis* ‘*Wiltoni*’—**Blue Carpet** or **Blue Rug Juniper**—grows to 4 inches high and 8 feet wide with silvery blue foliage; *J. horizontalis* ‘*Bar Harbor*’ is faster growing but the foliage in the center of the plant dies back with age, leaving a bare area.

***Juniperus monosperma*—One Seed Juniper**—This native evergreen shrub or small tree has spreading branches with gray-green foliage. It may reach 25 feet tall in well-drained rocky soils. It is drought tolerant and does not need watering when established. Colorado State says it is “among the most drought-enduring evergreens.” It has small dark blue berry-like cones. This is one of the most common trees in New Mexico. The fruit was ground into flour and made into bread; the bark was woven into mats and baskets.

***Juniperus sabina*—Savin Juniper**—This is a spreading evergreen shrub with stiff branches and dark green foliage that becomes yellow tipped in the winter. This shrub is slow growing to 4—6 feet high with a 5—10 foot spread. It grows best in limestone and well-drained soils. There are several groundcovers in this group:

*J.s.* ‘Acadia’ grows 1 foot high and 10 feet wide with bright green foliage.

*J.s.* ‘Broadmore’ grows 14 inches high and 10 feet wide and is more mounded.

*J.s.* ‘Calgary Carpet’ grows 6—9 inches high and 10 feet wide with soft green foliage; it is also extremely cold tolerant.

*J.s.* ‘Tam’ is 1 ½ feet tall and 10—20 feet wide with blue-green foliage and is widely used.

***Juniperus scopulorum*—Rocky Mountain Juniper, Western Red Cedar**—This native evergreen shrub or small tree has a short trunk and branches which eventually curve down. The berries are bright blue with a whitish coating. It grows at a moderate rate, reaching a height of 8—20 feet tall and a width of 6—15 feet, depending on conditions. It is drought resistant, but does best with some water. It is used for screens, hedges and the durable wood is often used as posts. *J. scopulorum* ‘Medora’ is columnar tree, growing to 10 feet tall by 2—3 feet wide. It could be used as a windbreak.

***Juniperus utahensis* or *Juniperus osteosperma*—Utah Juniper**—This native evergreen grows to 20—30 feet high. The twigs are greenish. Utah Juniper may have a more tree-like trunk than One Seed Juniper (*J. monosperma*, above) and the bluish berries are slightly larger. It will not tolerate water-logged roots; no supplemental water is needed after it is established.

***Juniperus virginiana*** ‘Skyrocket’ is one of the narrowest junipers. It grows 15 feet tall and about 6 feet wide and has blue green foliage.

***Koelreuteria paniculata*—Goldenrain Tree**—This is a deciduous tree with open branching. Growth is slow to moderate; the tree can grow to 10—12 feet in 5—7 years. The mature tree is 20—35 feet tall with a 10—35 foot spread. The many lobed leaflets grow 1—3 inches long. In summer, yellow flower clusters are 8—14 inches long and produce fruit which looks like Japanese lanterns. It will need watering for several years until it is established. It tolerates poor soils. This tree gives light shade, allowing other plants to grow under it. It is drought tolerant and needs little or no water once established. Dirr points out it is one of the few yellow-flowering trees and that it is a “choice specimen tree where space is limited.”

***Lonicera japonica*** ‘Halliana’—**Hall’s Honeysuckle**—This is a deciduous shrubby vine which climbs to 15 feet and can cover 100 square feet. It can crowd out other plants. Highly fragrant flowers are white, changing to yellow. Because the sweet scent of the flowers attracts bees, it should not be planted where people sit or walk. It also attracts hummingbirds. It tolerates poor

drainage and some drought once it is established but it does best with moderate watering. It needs support and can be used as a privacy screen on a fence. It has been used as ground cover on a hill. It needs heavy pruning each year to prevent undergrowth from building up and becoming a fire hazard. *Lonicera sempervirens*, **Coral Honeysuckle**, has attractive flowers and is heat and cold tolerant. *Lonicera tatarica*, **Tartarian Honeysuckle**, will also grow in Las Vegas.

*Maclura ponifera*—**Osage Orange**—This tree is native to Oklahoma and Texas and is naturalized in New Mexico. It grows 30 feet high and wide. If a male tree is present, the female tree produces a 4 inch 2-pound fruit; (plant this tree so the fruit will not hit people when it falls.) This tree tolerates heat, cold, wind, and alkaline and poor soils. It has thorns so do not plant it where children play. It is fast growing and needs no additional water when established.

*Mahonia aquafolium compacta*—**Oregon Grape Holly**—This evergreen shrub has 4—10 inch oval and spiny-toothed shiny leaves which become reddish in the fall and bronze colored in winter. It grows to 6 feet, but can get taller with a little water. It will need some water when dry. The holly-like plant can tolerate full shade, but will get scraggly. Yellow flowers in the spring are in 2—3 inch clusters and produce blue-black fruit which makes good (and tart) jelly. The fruit attracts birds. It can be used as a hedge or screen. Native Americans used the yellow roots and branches for dye.

*Mahonia repens*—**Creeping Oregon Grape, Creeping Mahonia**—This evergreen groundcover is similar to Oregon Grape Holly, above, but it grows to 1 foot in height, with lighter green and less spiny leaves. It has yellow flowers in the spring and blue berries in the fall. It is drought tolerant and can grow in part shade.

*Malus* species—**Flowering Crabapple**—This deciduous small tree has many varieties and cultivars. Leaves are deep green to nearly purple, depending on the variety. Trees flower in spring and produce crabapples in the fall. The fruit will attract birds. The size of the tree, 15—30 feet tall, depends on the type. All *Malus* species tolerate heat, and live in various well-drained soils. They need some water. There are over 200 kinds of ornamental crabapples, and if different cultivars are planted together, the flowering period will be extended. Crabapples should not be planted where people walk because the fruit will be stepped on. *Malus* sp. ‘Spring Snow’ is sterile and produces no fruit from the fragrant white flowers. Some fast growing types are: *Malus* ‘Hopa’, *M. purpurea* (or Aldenham Crabapple), *M. purpurea* ‘Eley’, *M.* ‘Radiant’, *M.* ‘Red Silver’.

*Malus baccata*—**Siberian Crabapple**—This small deciduous tree grows to 20 feet in sunny locations. There are white flowers in mid to late spring, followed by red or yellow crabapples. This tree attracts wildlife. Water needs are moderate. According to PNM, this tree can be planted under power lines.

*Morus alba* ‘Pendula’—**White Mulberry, Russian Mulberry**—This hardwood deciduous tree has olive-green leaves which turn yellow in fall. In moist fertile soil, growth is rapid, to 30—40 feet tall and 30 feet wide. In dry areas, it resembles a large fountain-shaped shrub. Branches are long and pendulous. It is the state flower of Idaho, due to the showy, fragrant flowers which

bloom in summer and produce small catkins and white fruit that can stain patios and clothes. This tough species tolerates poor soil, alkaline soil, heat, and drought. It can be grown in heavy clay soils. Birds are attracted to the fruit. It is recommended that the oldest wood and shoots be pruned to the ground after the blooms have faded. Native Americans used the straight stems for arrows. Recommended cultivars are 'Fruitless', and "Chaparral", a low growing weeping tree.

***Perovskia atriplicifolia*—Russian Sage**—This deciduous shrubby plant grows to 3 feet tall and needs very little water once established. It has gray-green leaves. Lavender clusters of flowers appear above the leaves in late summer. Cut off old flowers to increase blooming time.

***Philadelphus lewisii*—Lewis Mock Orange**—This is a native deciduous shrub which will grow about 8 feet tall. It has fragrant white flowers which bloom in June—July. It has low to moderate water needs and should be pruned after blooming.

***Philadelphus microcarpa*—Mock Orange**—This native deciduous shrub has a fountain-like form and medium green leaves. It grows 8—10 feet tall. Fragrant blooms appear in spring. It needs little water. It is recommended that some of the oldest wood be cut out at the base after blooming.

***Philadelphus microphyllus*—Little Leaf Mockorange**—This native deciduous shrub grows to 4 feet tall, has numerous small narrow leaves with a glossy green top and white hairs underneath. It has fragrant white flowers from June—August. Habitat is dry rocky slopes. It needs little water once established.

***Picea engelmannii*—Englemann Spruce**—This pyramid-shaped blue-green spruce can grow to 150 feet tall. This large native evergreen grows between 8,000—1,000, but it can grow at lower elevations. Needles are pointed with four sides. Its branches grow all the way to the ground. Plant it where it will have plenty of room when it matures.

***Picea glauca 'conica'*—Dwarf Alberta Spruce**—This evergreen has short fine needles and is pyramidal in shape, looking like a miniature Christmas tree. It is slow growing to 7 feet in 35 years. It should be sheltered from drying winds and planted in well drained soils. It will not do well on the south side of a building where it is too hot.

***Picea glauca densata*—Black Hills Spruce**—This pyramid-shaped spruce is slow growing and dense, reaching 20 feet in 35 years. This native needs moderate water and has no special soil needs. It can be grown in containers, can be used as a screen, and can be pruned to slow the growth. It attracts birds, as well as aphids and spider mites.

***Pinus aristata*—Bristlecone Pine**—This evergreen native tree is very slow growing to 50 feet high, under favorable conditions. The pyramid shape of the young tree becomes more irregular with age. The short dark green needles are dense and bushy, growing 5 to a bundle. Cones are prickly and 2--3 inches long with prickly bristles on the ends. 'Aristata' refers to the paint-brush-like bristles on the cones. It is cold and drought resistant and should have some protection from drying winds. It can be grown in a container and is also suitable for rock gardens. This is one of the oldest known living plants and there is a 4,700 year-old tree still living in Nevada.

***Pinus edulis*—Pinon Pine**—This is a slow growing evergreen reaching 20—30 feet tall and 15—20 feet wide. The tree is small, brushy, and compact with a rounded spreading crown. It is the New Mexico State Tree, and lives on dry rocky foothills and mesas. It is drought resistant and tolerates most soils, needing little supplemental water once established. It does not do well in wet heavy clay soil; soils should be well-drained. Edible nuts are produced once or twice in a 7-year period.

***Pinus heldreichi leucodermis*—Bosnia Pine**—This dense pine slowly grows to 60 feet tall. It has short dark green needles and gray bark. It is cold hardy, salt tolerant, and has low water needs. Well drained soil is recommended.

***Pinus mugo*—Mugho Pine**—This small evergreen shrub from the Eastern Alps and Balkans has dark green needles. It grows slowly to 4 feet and spreads with age. Although very hardy, it does not do well in desert heat. It prefers sunny locations, well drained soil, and uses little water. It makes a good container plant and does well in rock gardens. It can be pruned. In general, Pines are vulnerable to air pollution.

***Pinus nigra*—Austrian Black Pine**—This is a dense ornamental evergreen that becomes broad and flat-topped with age. Growth is moderate, depending on conditions, up to 40—60 feet tall. The needles are shiny dark green and 3—6 inches long, growing two to a bundle; the cones are 2—3 inches long. It is hardy, has low water needs, and adapts to winter cold and wind. It is tolerant of dust and dry soil and can live in fairly heavy clay and alkaline soils. It can be used as a screen or windbreak.

***Pinus ponderosa*—Ponderosa Pine**—This is the most common western pine which grows between 7,000—10,000 feet altitude. It lives a long time and grows to 100 feet tall or more. Dark green needles are about 2 inches long, growing two to a bundle; cones are 3—4 inches long. It has thick reddish scaly bark. Loggers have called this tree “yellow pine” because the bark becomes gold in color in old large trees. Habitat is mostly in mountainous dry sites; it will not do well in heat, warm winds, or soggy soils. Native Americans used the bark scales for small hot fires, and the wood for canoes.

***Pinus strobiformis*—Southwestern White Pine, White Pine**—This native evergreen has a straight trunk and a cone-like shape. The tree will grow between 50—80 feet tall, depending on conditions. It is found between 6,500 and 10,000 feet altitude. The long green needles are 2—3 inches long with a white line on the top; needles grow five to a bundle. Cones are 6—9 inches long. The seeds are similar to Pinon seeds and are edible. Like all trees, it needs water to establish itself. Once established, water needs are low unless it is hot and dry. It is tolerant of a wide range of soils.

***Pinus sylvestris*—Scotch Pine**—This is an irregularly pyramid-shaped evergreen which has a wide spreading rounded top when mature. Depending on conditions, it will become 30—60 feet tall and 30—40 feet wide. Plant this tree where there will be room for it. Growth is moderate when the tree is young and slows with age. It has blue-green twisted needles 1—3 inches long and produces 1—2 inch cones. This tree does not tolerate shade. It grows best in well-drained

acidic soils and tolerates some drought; water needs are low. To promote closer branching and denser crowns, remove the tips of all new shoots in the spring.

***Potentilla fruticosa*—Cinquefoil, Shrubby Potentilla**—This 3—4 foot tall very rugged native shrub has leaves divided into 3 to 7 leaflets with their edges curled under. The flowers have 5 petals and last all summer. Potentilla does best in full sun, but will also bloom in semi-shade. It prefers moderate water and well drained soil, though it tolerates poor soil and drought after it is established. *P. astrosanguinea* is an evergreen with red flowers and grows to 2 feet tall. Dirr lists 81 cultivars: most have yellow flowers; some have orange or red flowers.

***Prunus Besseyi*—Western Sand Cherry**—This many-branched ornamental shrub grows between 4—9 feet high. Leaves are silver-green. It has pink to white flowers which produce ½ inch sweet black edible cherries. It is tolerant of heat, cold, wind, and drought. Do not plant it in wet soils or near a watered lawn.

***Prunus cerasifera*—Purpleleaf Plum**—This tree has dense purplish foliage. Growth is moderately fast to 20 feet with a 10 foot spread. This small tree has a life span of about 20 years. The bark splits on old trees. The pink flowers produce a sweet and bland edible 1 inch fruit in August. It is heat and drought tolerant and does best in well-drained soil with moderate water. It does not do very in compacted soils. PNM indicates this tree may be planted under power lines.

***Prunus cistena*—Purple Leaf Sand Cherry**—is a cross between *P. cerasifera* and *P. pumila* and grows to 9—15 feet high. It is one of the hardiest purple leafed plants. The pinkish-white flowers produce purple fruit in July--August. Water needs are moderate but the plant does not do well in wet soil.

***Prunus tomentosa*—Nanking Cherry**—This fast growing deciduous shrub or small tree grows to 10 feet tall. The leaves resemble rose leaves. It flowers in late April and produces edible fruit in the fall. Wildlife is attracted to this tree. It is cold and drought tolerant and does best in soils which are not alkaline. It is susceptible to tent caterpillars. This shrub has been propagated by the New Mexico State Forestry Conservation Seedling Program.

***Prunus virginiana*—Western Chokecherry**—This shrub or small tree can grow between 12—20 feet tall. It is native to the northern Rocky Mountains, Sierra Nevadas, and Great Basin area. The dark green leaves turn maroon and gold in the fall. Tiny 3—6 inch clusters of white cone shaped flowers appear in spring, producing small red fruit in the fall. It has moderate to low water needs once established, and tolerates heat and drought. It grows best in sandy-loam soils and can form a dense barrier. It should not be planted over walkways where people will mash the fruit. It can be used as a windbreak, screen, or for riparian restoration because it will make a thicket.

***Ptelea trifoliata*—Wafer-Ash, Common Hoptree**—This shrub or small tree has a rounded crown and grows to 20 feet tall and 6 feet wide. It has shiny dark green oval leaves which turn yellow in fall. There are tiny green-white flowers in spring which produce disk-shaped seeds. Natural habitat is moist well-drained rocky soils. It tolerates some shade and needs little water

once established. The bitter fruit was used instead of hops for beer, giving it one of its common names, Hoptree.

***Purshia tridentata*—Antelope Bitterbrush**—This is a low evergreen shrub, with many spreading branches growing from 2—9 feet tall. It has stubby leaves with three notched tips. The shrub appears silvery because the leaves and wooly underneath. There are small yellow fragrant flowers in April through June which produce small hairy tapered capsules. The plant fixes nitrogen in the soil and needs no supplemental water once established.

***Quercus gambelii*—Gambel Oak, Rocky Mountain White Oak**—This native deciduous tree has a rounded crown and grows naturally in a thicket. The tree is slow growing and may reach 50 feet tall under ideal conditions. Leaves are shiny dark green with 7 to 11 deep lobes which turn yellow and red in the fall. Acorns are produced. It is drought tolerant once established and should not be watered. Do not dig up this tree because it does not transplant well; get it from a reputable nursery.

***Quercus macrocarpa*—Bur Oak**—This deciduous tree has heavy spreading limbs and a broad crown when mature. This is a slow growing tree, averaging 15 feet tall in 20 years and reaching 70—80 feet tall at maturity with a 40 foot spread. One tree in Urbana, Illinois is over 90 feet tall and about 300 years old. This tree eventually will become too large for the average yard, but does well in parks. Leaves are dark green, turning dull yellow in the fall. This tree is adaptable to many soils but does best in limestone soils with moderate water. It is able to grow in dry clay soils. This tree is difficult to transplant. ‘Macrocarpa’ refers to the large 1—2 inch long acorn.

***Quercus turbinella*—Shrub Live Oak, Scrub Oak**—This native deciduous shrub has a many branched spreading crown and grows between 5—15 feet tall. It forms a thicket. The holly-like sharp-pointed leaves are colored bluish-green and have a dull yellow to brownish red underside. Its native habitat is mountain slopes and dry plains. This shrub needs no water once established. ‘Turbinella’ means “like a little top” referring to the cap of the acorn.

***Rhus glabra*—Rocky Mountain Sumac, Smooth Sumac**—This is the only tree species which is native to all 48 contiguous states. It is a large deciduous shrub or small tree growing to 15 feet high. It has an open crown with a few stout spreading branches. This ornamental plant turns red for two months in the fall and has red berries which attract birds. Habitat is well-drained soils in open uplands, clearings, and roadsides. It does well in poor soils and needs little or no water when established. It spreads by underground roots and has been used as a windbreak.

***Rhus trilobata*—Three-Leaf Sumac, Skunkbush Sumac**—This native deciduous shrub grows up to 5 feet tall and wide. Growth is moderate to fast, depending on water. It has small yellow flowers in early spring, appearing before the leaves develop. The flowers produce tart lemon-flavored edible red berries. Leaves are divided into three leaflets that turn red-orange in the fall. Habitat is at the base of cliffs, canyons, ledges, dry hillsides and valley plains. It tolerates cold, drought, and poor soil and needs no water once established. It is not related to poison sumac. It can be used for privacy screening or windbreaks. The stems were once used for basket weaving.

**Ribes** species: This is a group of deciduous shrubs. Those without spines are called currants; those with spines are called gooseberries. They all grow in sun or part shade with moderate water. Two native *Ribes* are listed below:

***Ribes aureum*—Golden Currant**—This native shrub rapidly grows to 3—6 feet tall. It has light green maple-like leaves which have three lobes, are glossy green and turn yellow-red in the fall. It produces many fragrant yellow flowers in early spring. The currents ripen in summer and turn purple-black when completely ripe. Both flowers and fruit are edible. This cold-tolerant plant needs low to moderate water and tolerates a variety of soils. Natural habitat is plains, hillsides, and along creeks.

***Ribes cereum*—Wax Currant**—This native shrub grows to 4—6 feet tall. The bright green glossy leaves are divided into 11—23 lance shaped toothed leaflets that turn red in the fall. There are white flowers in upright clusters. The edible fruit is red, in conical clusters, and lasts into winter. It needs little supplemental water once it is established. Older canes and weak growth should be pruned out.

***Robinia x ambigua*—Flowering Locust**—This is a pink flowering locust, (a hybrid of *Robinia pseudoacacia* and *R. viscosa*). The best-know variety ‘Decaisneana’ grows to 40—50 feet tall and 20 feet wide. ‘Idahoensis’—Idaho Locust—grows moderately fast to 40 feet with bright pink flowers in an 8-inch cluster. ‘Purple Robe’ is similar to ‘Idahoensis’ but has purple-pink flowers that bloom 2 weeks earlier and for a longer time. These trees need no water once established. The bark, leaves, and seeds are poisonous and these locusts should not be planted where there are young children at play. All *Robinia* have brittle wood and aggressive roots which produce suckers; it should not be planted near a lawn or garden.

**Rosa** species: Different species of wild roses are native to every state in the union. Many produce suckers and can become invasive. Roses need full sun or partial shade and regular water. All wild roses have showy fragrant pink blossoms, thorns, and red “hips” (fruit). Insect pests include aphids, spider mites and thrips.

***Rosa arizonica*—Arizona Rose**—This native grows from 1—3 feet tall, has many branches and stout thorns. Habitat is shady stream banks and forest edges.

***Rosa fendleri*—Fendler Rose**—This native grows to 8 feet tall. The thorns are thin.

***Rosa rugosa*—Rugosa Rose**—This prickly shrub grows to 3—8 feet tall. It has glossy green leaves that look crinkled. There are large 3 inch fragrant flowers of various colors, depending on the hybrid. Large 1-inch edible rose hips are produced. This hardy shrub tolerates drought and wind. Water needs are moderate. It is relatively disease resistant and has been used as a hedge.

***Rosa woodsii*—Wood’s Rose**—This rose is native to northern New Mexico and north all the way to Minnesota. It has pink flowers, grows rapidly to 4 feet tall and tolerates alkaline soils. Water needs are moderate.

***Salix matsudana*—Corkscrew Hankow Willow**—This deciduous willow has contorted and twisted branches and bright green leaves. It grows between 30—50 feet tall. It needs some water, less than most willows and is a popular tree, often planted in high deserts. It is native to China and Korea.

***Sheperdia argentea*—Silver Buffaloberry**—This dense deciduous native shrub grows to 10 feet and is very hardy. It tolerates alkali soils, cold, and wind. The twigs, thorns, and narrow leaves are covered with shiny scales which make the plant seem silvery. It produces suckers and has been used for erosion control. The female plants produce bright red berries which are tart but edible and also attract birds. It needs no water once established, but grows better with moderate water. Do not over-water or plant near lawns or other plants which are watered.

***Sheperdia rorundifolia*—Roundleaf Buffaloberry**—This silvery gray-green deciduous shrub grows to 3—4 feet tall. It has thick, nearly round leaves with white woolly undersides. The petal-less gray-green flowers produce woolly olive shaped fruit on the female plant which attracts wildlife. Water needs are low.

***Sorbus scopulina*—Western Mountain Ash**—This small deciduous tree or large shrub grows 5—15 feet tall. It tolerates part shade. The green leaves turn brilliant orange and red in fall if it is planted in a sunny area. There are white flowers in rounded clusters, followed by red berries in summer.

***Symphoricarpos albus*—Common Snowball**—This deciduous shrub is fast growing to about 6 feet tall. It tolerates poor soil, polluted air, shade, neglect, and needs no water once established. It has oval light green leaves. The pink flowers in late spring produce white berries which last through the winter. Berries are poisonous to people (do not plant where young children are present), but not to birds.

***Symphoricarpos oreophilus*—Snowberry**—This native deciduous shrub has light blue-green leaves. It will grow to 5 feet tall. It has small pink bell-shaped flowers in the late spring which produce white berries which stay on the shrub a long time. It needs little water and can grow in partial light shade. It does best in well drained soil.

***Syringa vulgaris*—Common Lilac**—This is a large deciduous shrub which will grow 15—20 feet high and wide. It needs full sun. The green heart-shaped leaves turn yellow in fall. There are fragrant lavender colored flowers in May which develop where the leaves join the stems. It is native to Southern Europe. It does well in alkaline soils. It may take 2 years after planting to produce blooms. It has low water needs. After the flowers die back, it is recommended that dead and weak wood be pruned to the ground: do not over-prune or the following year's flowers will be lost. ***Syringia rothomagensis*—Chinese Lilac**—is smaller than Common Lilac and also needs little water once established.

***Tamarix chinensis*—Salt Cedar**—This plant is considered a noxious weed in the State of New Mexico because it is aggressive and displaces native vegetation. Efforts are being made to wipe it out. Please do not plant it.

***Tilia tomentosa*—Silver Linden**—This deciduous tree will grow to 40—50 feet tall and 20—30 feet wide. The light green leaves are silvery underneath. It does not need much water once established.

*Ulmus pumila*—**Siberian Elm** (also incorrectly called Chinese Elm)—This tree has been put on the New Mexico list of Noxious Weeds. It has weak and brittle wood, roots which heave sidewalks and get into the sewer lines and under building foundations. It is aggressive, crowding out many other plants. Please do not plant this tree.

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