

Xeriscaping: Trees and Shrubs

Fact Sheet No. 7.229

Gardening Series | Trees and Shrubs

by J.E. Klett and C.R. Wilson*

Plants that will prosper in Colorado's harsh climate without benefit of ample irrigation require careful selection. This is especially true of woody trees and shrubs that are more expensive investments than herbaceous plants, both in terms of money and time to grow.

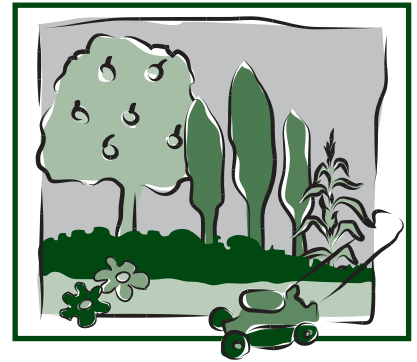
As a long-term investment, select and plant trees and shrubs only after careful evaluation of the site's soil, drainage and exposure. While some xeric plants tolerate reduced water, they may not function well in soils low in oxygen. Many of the state's dense clay soils have minimal room to accommodate enough water and oxygen to meet plant root needs. Preparing soils by adding organic amendments prior to planting can often overcome water-oxygen concerns during initial establishment. Reduced water using trees and shrubs are best planted in areas separate from lawns, unless lawns are also a reduced water use type. Regardless of how durable woody plants are for survival in xeric conditions, many plants

need at least two growing seasons to establish. Water during establishment, then gradually reduce irrigation.

Adequate soil drainage plays an important role in preventing soils from water logging, which leaves no room for oxygen. Conduct a subsoil drainage test by digging an 18 x 18 inch hole, filling it with water and timing how long it takes to drain. Water that stands in the hole for more than 30 minutes indicates poor drainage. If amending the soil doesn't solve drainage problems, drain tile or planting on berms (mounds) of well-drained soil brought to the site may be other solutions. Build berms to a minimum height of 24 inches.

Some trees and shrubs may perform poorly in hot south or windy west exposures and are better sited in cooler east or north exposure.

The following list of durable trees and shrubs will prosper in reduced water situations.



Quick Facts

- Select trees and shrubs for xeric landscapes based on both adaptation to Colorado's climate and the ability to prosper in reduced water situations.
- Assess site soil, drainage and exposure before selecting trees and shrubs.
- Apply adequate water during the first years of plant establishment, then gradually reduce irrigation.
- Woody plants are a long-term investment.

See Tables 1-3,
pages 2-3.

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Table 1. Large trees for xeriscapes.

Plant name	Height/ Spread (ft)	Growth Rate	Comments
<i>Acer negundo</i> Boxelder	40 x 30	F	Fast growing shade tree for harsh sites. 'Sensation' is a seedless male tree that doesn't attract boxelder bugs, yellow to red-orange fall color.
<i>Catalpa speciosa</i> Western catalpa	50 x 35	M	Large, heart-shaped leaves with fragrant white flowers in June followed by long, thin seed pods.
<i>Celtis occidentalis</i> Common hackberry	45 x 45	M	Irregular habit when young maturing to rounded crown. Distinctive knobby bark. Trees shed leaves during drought. Red-purple berries.
<i>Gleditsia triacanthos inermis</i> Thornless honeylocust	35 to 55 x 25 to 45	M	Many varieties available that vary in size. Thornless and many varieties podless. Fine textured foliage turns yellow in fall.
<i>Gymnocladus dioica</i> Kentucky coffeetree	55 x 35	S	Large compound leaves. Females bear seedpods that remain on trees through winter. Ridged bark, stout branches and coarse winter texture.
<i>Juniperus scopulorum</i> Rocky Mountain juniper	30 x 15	S	Native evergreen with blue-green foliage. Berry-like cones that are dark blue in the second year. Prefers full sun. Many varieties.
<i>Koelreuteria paniculata</i> Goldenrain tree	30 x 30	M	Compound leaves emerge red turn to green. Yellow clusters of flowers in summer are followed by lantern-like fruit.
<i>Pinus aristata</i> Bristlecone pine	35 x 20	S	Native evergreen with dark pine green needles bearing white flecks.
<i>Pinus ponderosa</i> Ponderosa pine	60 x 30	M	Native evergreen with long, yellow-green needles in clusters of two or three. Plate-like bark is cinnamon to dark brown.
<i>Quercus macrocarpa</i> Bur oak	70 x 60	M	Fiddle-shaped leaves borne on stout, corky-ridged branches. Adapts to alkaline soils. Distinctive fringed acorns.
<i>Robinia pseudoacacia</i> 'Purple Robe' locust	35 x 25	M	Compound leaves emerge with purple tint. Dark purple fragrant flowers in May to June. Very susceptible to locust borer.

Table 2. Small trees for xeriscapes.

Plant name	Height/ Spread (ft)	Growth Rate	Comments
<i>Acer grandidentatum</i> Bigtooth maple (Wasatch maple)	25 x 25	S	Small tree or large shrub. Tolerant of dry and alkaline soils. Dark green leaves turn red-yellow fall color.
<i>Acer tataricum</i> Tatarian maple	20 x 20	M	Single or multi-stemmed tree. Pink to red winged seeds in summer with yellow fall color. Tolerates alkaline soils. 'Hot Wings' is a newer variety with distinctive red fruits and reddish fall color.
<i>Crataegus ambigua</i> Russian hawthorn	20 x 15	M	Lightly thorned tree with finely cut, glossy green leaves. Clusters of white flowers followed by bright red fruits.
<i>Crataegus crus-galli inermis</i> Thornless cockspur hawthorn	15 x 15	M	Thornless horizontal branches bear glossy leaves, white flowers and persistent red fruit.
<i>Pinus edulis</i> Pinyon pine	25 x 15	S-M	Native, bushy evergreen with gray-green, stiff needles. Bears small, rounded cones with edible seeds.
<i>Prunus armeniaca</i> Apricot	20 x 20	M	Glossy, heart-shaped leaves cover a broad, spreading tree. Early, white-pink blossoms, rarely bares fruit due to spring frosts.
<i>Pyrus ussuriensis</i> Ussurian pear	25 x 20	M	White flower clusters produced before dark green leaves that turn yellow in fall. 'Prairie Gem' is a dense tree with an upright, oval form and strong branching.
<i>Quercus gambelii</i> Gambel oak	20 x 12	M	Native large shrub or small tree with irregular spreading branches dark green leaves and tan acorns.

Table 3. Shrubs for xeriscapes.

Plant name	Height Spread (ft)	Flower color/month	Comments
<i>Amorpha canescens</i> Leadplant	3 x 4	Purple/Jul-Aug	Silver-gray foliage, fine texture, fruit not important
<i>Artemisia cana</i> Silver artemesia	5 x 3	Yellow/Aug-Sept	Stiff, upright branches, slender gray leaves, native of Colorado mountain meadows
<i>Artemisia tridentata</i> Big sage	10 x 6	Yellow/Aug-Sept	Silver, aromatic foliage; bark shreds with age, native
<i>Atriplex canescens</i> Saltbush	5x 4	Yellow/Jul-Aug	Gray green leaves, upright spreading form, four winged fruit on female plants, tolerates alkaline soil
<i>Berberis thunbergii</i> Japanese barberry	3 x 5	Yellow/Apr-May	Dwarf and purple leafed forms available, site in good light, single spines, red persistent fruit
<i>Berberis x 'Tara' Emerald Carousel</i> ™ Emerald Carousel barberry	4 x 5	Yellow-Apr-May	Rounded form, arching branches, prefers sun, red persistent fruit, orange to red fall foliage color appears early and lasts long, good for alkaline soils
<i>Buddleia alternifolia</i> 'Argentea' - Silver Fountain butterflybush	10 x 8	Violet/May-Jun	Arching form, silver-gray foliage, fine texture, flowers on old wood, attracts butterflies, extremely hardy
<i>Caragana arborescens</i> Siberian peashrub	12 x 10	Yellow/May-Jun	Upright, olive-green branches, bears small spines, produces pea-like pods, tolerant of poor soils and windy sites
<i>Caryopteris x clandonensis</i> Blue mist spirea	4 x 4	Blue-violet to purple/Jul-Sept	Silver green foliage, upright branches, persistent dry tan fruit, attracts bees
<i>Cercocarpus ledifolius</i> Curleaf mountain-mahogany	20 x 12	Cream yellow/Apr not showy	Large shrub or small upright tree, evergreen foliage, seeds with twisted, feathery tails; Foothills native
<i>Cercocarpus montanus</i> Mountain-mahogany	8 x 6	Cream yellow/Apr - May, not showy	Open spreading growth habit, gray-green leaves, feathery twisted seed tails in late summer
<i>Chamaebatiaria millefolium</i> Fernbush	5 x 6	White/June-Jul	Fern-like gray green leaves, fine-textured and aromatic, rounded form
<i>Chrysothamnus</i> spp. Rabbitbrush	6 x 6	Yellow/Aug-Sep	Open, rounded form, green to white stems, silvery green leaves, reseeds
<i>Cowania mexicana</i> Cliff rose	6 x 6	Creamy Whiter Apr-May	Upright semi-evergreen shrub, gray-green leaves, feathery seed tails
<i>Elaeagnus umbellata</i> Autumn-olive	15 x 15	Silvery flowers Apr-May	Large spreading shrub, green leaves with silvery undersides, may sucker and spread
<i>Ephedra equisetina</i> Bluestem jointfir	4 x 5	Not important	Upright leafless stems are blue-green year round, red berries midsummer on female plants
<i>Fallugia paradoxa</i> Apache plume	5 x 5	White/May-Aug	Small leaves, fine-textured, whitish stems, rose-colored feathery-tailed seeds, some suckering
<i>Fendlera rupicola</i> Cliff fendlerbush	5 x 5	White/June	Glossy foliage, new reddish bark turns gray with age, upright irregular growth, fragrant flowers
<i>Forestiera neomexicana</i> New Mexican privet	12 x 10	Yellow/Apr	Erect arching branches, rounded form, blue-black fruit on female, yellow fall color
<i>Hippophae rhamnoides</i> Sea-buckthorn	18 x 12	Yellow/Mar-Apr	Upright, spreading shrub with slender thorns, narrow silvery leaves, orange fruit on females persists into winter
<i>Holodiscus dumosus</i> Rock spirea	4 x 4	White/May-Jun	Upright spreading habit, fine-textured foliage turns red in fall, rust colored seedheads in fall
<i>Juniperus</i> spp. Juniper	Many sizes	Not important	Available in many foliage colors, forms and textures, see Evergreen Shrubs fact sheet 7.414
<i>Ligustrum vulgare</i> 'Cheyenne', Cheyenne privet	10 x 6	White/June-Jul	Upright, rapid grower, dark green foliage, black fruit in late summer into winter, used for hedges, fragrant flowers
<i>Pinus mugo</i> Mugo pine	Many sizes 7.414	Not important	Many forms and growth habits, see Evergreen shrubs fact sheet
<i>Potentilla fruticosa</i> Cinquefoil (potentilla)	4 x 4	Yellow/White/Pink Jun-frost	Compact, spreading and upright forms, varied foliage color, full sun for best flowering
<i>Prunus besseyi</i> Sand cherry	6 x 6	White/Apr-May	Upright rounded form, gray green leaves, purplish black fruit, red fall color
<i>Rhus glabra cismontana</i> Smooth sumac	6 x 6	Yellow/June-Jul	Rounded, suckering shrub, red fall color, fuzzy maroon persistent fruit
<i>Rhus trilobata</i> Threeleaf sumac	6 x 6	Yellow, May	Dense rounded shrub, three-lobed leaves turn orange to red in fall, some red fruit
<i>Rosa woodsii</i> Native pink rose	6 x 6	Pink/June	Arching branches, red-brown stems with loose prickles, red hips persistent, orange to red fall color
<i>Rubus deliciosus</i> Boulder raspberry	6 x 6	White/May-Jun	Slender arching branches form vase-shaped habit, small purple fruit in late summer
<i>Shepherdia argentea</i> Silver buffaloberry	15 x 12	Yellow/Apr-May	Dense spreading branches with spines, silvery-green leaves, yellow to orange-red berries on female plants
<i>Symphoricarpos albus</i> Snowberry	4 x 4	White/June	Arching, spreading habit with blue-green foliage, white blue-green foliage, white berries persist, suckers
<i>Symphoricarpos x chenaultii</i> 'Hancock' Hancock coralberry	3 x 6	Pink/June	Spreading growth habit with blue-green fine textured foliage, red berries persist. excellent ground cover
<i>Syringa vulgaris</i> Common lilac	15 x 12	Purple/Apr-May	Upright vase-shaped form, heart-shaped blue-green leaves
<i>Viburnum lantana</i> Wayfaring tree viburnum	12 x 10	White/May	Broad rounded form, dark green, leathery foliage with deep set veins, crimson fruit turns black in fall, burgundy red fall color