

Suggested  
**Plant Palette**

For the Town of Camp Verde, Arizona  
*A Tree City USA Since 2014*



Second Edition  
2020

Compiled by  
The Camp Verde Tree Advisory Committee

Plant Palette for the Town of Camp Verde  
Second Edition- 2020

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# Introduction

The *Suggested Plant Palette for the Town of Camp Verde, Second Edition*, produced in 2020 by the Camp Verde Tree Advisory Committee (TAC) in collaboration with Town staff and various community groups, presents a list of perennial flowers, grasses, shrubs and trees selected to thrive in our desert community.

Compiled primarily to provide hardy, place-sensitive landscape choices for Town-owned properties, a principal goal of this document is to establish a cohesive landscape palette for municipally maintained areas throughout Camp Verde. Town residents are also welcome and encouraged to utilize this curated plant list when landscaping their own properties. This document is a starting point and is not meant to limit plant choices.

The Palette emphasizes low-maintenance, water-wise species and includes many plants native to the Camp Verde region. Additional considerations for inclusion were: ability to thrive in harsh conditions, such as right-of-ways; drought tolerance; wildlife habitat; suitability to high-traffic areas; evergreen and deciduous selections and aesthetic interest.

Happy planting!

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## The Right Plant in the Right Place

The foundation of a successful landscape is choosing the right plant for the right place.

- Before beginning a planting project, it is important to have all utilities marked by the professionals at Arizona811 Blue Stake, Inc. Dial 811 or submit a request through [www.arizona811.com](http://www.arizona811.com)
- Select a plant that will thrive in the conditions present at your unique site. Note **sun, water needs, plant hardiness, special features, and mature size.**
- Choose a plant that fits the site. Can the plant reach its mature size without conflict from other plants, structures, and utilities?
- All plants—especially large shrubs and trees—should not impede street signage visibility, line-of-sight, or right-of-ways.

### **Tree Planting Instructions from the Arbor Day Foundation<sup>1</sup>**

1. Dig a hole 3 to 4 times wider than the container. The hole should have sloping sides like a saucer to allow for proper root growth.

2. Carefully remove the tree from the container keeping the soil around the roots intact. It helps to tap the outside of the container to loosen the edge. Carefully slide the tree from the container.

4. Set the tree in the middle of the hole. Avoid planting the tree too deep. If the root collar sits below the top of the hole, compact some soil under the tree so that the root flare at the base of the trunk is slightly above ground level. Use soil to secure the tree in a straight position, then fill and firmly pack the hole with the original soil, making sure there are no air pockets. Keep backfilling until the soil is just below the root collar.

5. Create a water-holding basin around the hole and give the tree a good watering. After the water has soaked in, spread protective mulch 2 to 4 inches deep in a 3 foot diameter area around the base of the tree, but not touching the trunk.

6. The soil and mulch around your trees should be kept moist but not soggy. During dry weather, generously water the tree every 7 to 10 days during the first year.

\* Remove any banding, tags or labels from the tree as these will affect the tree as it grows.

\* Do not use fertilizer, potting soil, or chemicals on newly planted trees. Such products can kill trees.

\* It is rarely necessary to stake trees and, in fact, staking can cause serious harm to a tree if not used correctly. If staking is required, make sure to remove stakes and materials after 1 or 2 seasons.

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<sup>1</sup> Arbor Day Foundation, "How to Plant Containerized Trees," [www.arborday.org/trees/planting/containerized.cfm](http://www.arborday.org/trees/planting/containerized.cfm).

# Flowers

- Angelita Daisy (*Tetranneuris acaulis*)
- Baby's Breath (*Gypsophila paniculata*)
- Chocolate Flower (*Berlandiera lyrata*)
- Desert Globe Mallow (*Sphaeralcea ambigua*)
- Desert Marigold (*Baileya multiradiata*)
- Firewheel (*Gaillardia pulchella*)
- Golden Columbine (*Aquilegia chrysantha*)
- Gooding Verbena (*Glandularia gooddingii*)
- Mexican Evening Primrose (*Oenothera speciosa*)
- Firecracker Penstemon (*Penstemon eatonii*)
- Palmer's Pentemon (*Penstemon palmeri*)
- Parry's Penstemon (*Penstemon parryi*)
- Purple Cone Flower (*Echinacea purpurea*)
- Red Hot Poker (*Kniphia ssp.*)
- Rosemary (*Rosmarinus officinalis 'Prostratus'*)
- Sandpaper Verbena (*Verbena rigida*)
- Showy Milkweed (*Asclepias speciosus*)

Angelita Daisy  
*Tetranneuris acaulis*

**Mature Size:**

10 to 14 inches tall, 12 to 18 inches wide

**Water:**

Low to moderate

**Sun:**

Full sun; can tolerate light shade

**Hardiness: Native**

Tolerates heat, poor soils

**Special Features:**

- Cheerful yellow daisy-like flowers that begin in late spring and continue through fall
- Erect grass-like leaves form attractive mounds

**Suggestions for Use:**

- Great border plant
- Sidewalk plantings, roadway medians
- Wildflower, pollinator, and perennial gardens

**Maintenance Considerations:**

- Regular deadheading keeps plants tidy and promotes continuous blooming
- Spreads by seed
- Can thrive without supplemental water once established





**Baby's Breath**  
*Gypsophila paniculata*

**Mature Size:**

1-1.5 feet tall and 1-1.5 feet wide

**Water:**

Low to Moderate water requirements

**Sun:**

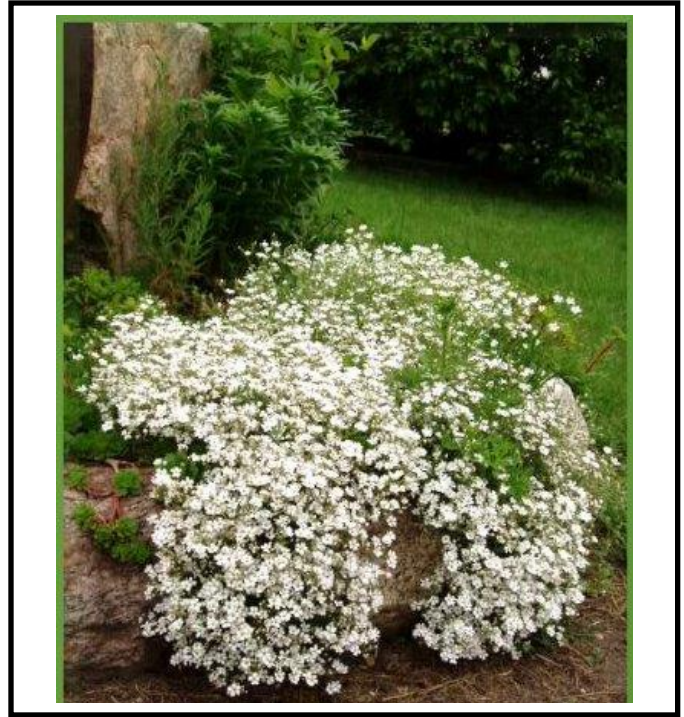
Full sun to partial shade

**Hardiness:**

USDA Hardiness Zones 3-8

**Suggestions for Use:**

Rock gardens  
Ground cover



**Description:** Baby's breath is an upright, herbaceous perennial that produces masses of small, star shaped white flowers. Blooms May – October. Prostrate, ground-cover varieties (*Gypsophila repens*) are available as are pink-blooming varieties.

**Special Features:**

- Cut or dried flower, bouquet filler
- Freely re-seeds
- Can tolerate alkaline and salty soils
- Deer resistant

**Maintenance considerations:**

- Water every 7-10 days
- Cut back to the ground in the fall leaving only bottom leaves
- Cut back spent flowers in the spring for a second bloom
- Requires chalky soils

**Resources:** [Plantopedia.com](http://Plantopedia.com)

## Chocolate Flower *Berlandiera lyrata*

**Mature Size:**

12-15 inches tall and 18-24 inch spread

**Water:**

Low to no water requirements once established

**Sun:**

Full sun

**Hardiness:**

USDA Hardiness Zones 4-9

**Suggestions for Use:**

- Xeriscapic native, natural landscapes
- Xeriscapic rock gardens

**Description:** Chocolate flower is a hardy, native, perennial wildflower and has a persistent daisy-like flower that blooms most of the summer. Extremely tolerant of drought and heat, it freely re-sows itself and can naturalize an area. The flower has a distinct chocolate aroma.

**Special Features:**

- Heat and drought tolerant
- Attracts butterflies, birds and bees
- Deer resistant

**Maintenance considerations:**

- Plant seeds in spring or fall
- Occasional deadheading encourages new flowers
- Cut back hard in early spring to 2-3 inches

**Resources:**

High Country Gardens  
Irish, Mary, *Arizona Gargener's Guide*

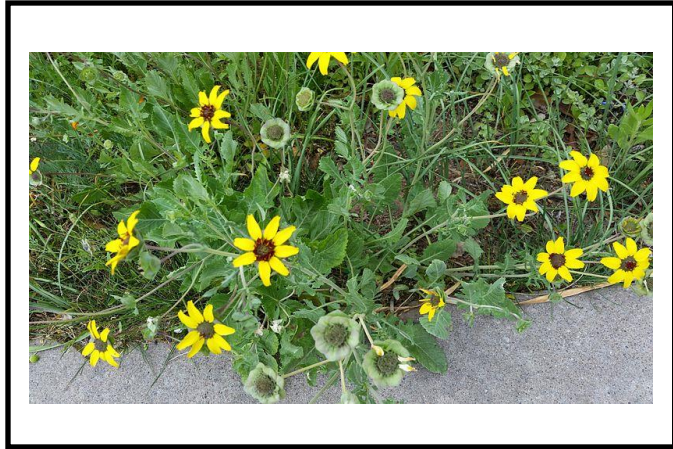


Photo by Susan Barnum, Courtesy of Desert Gardens Chihuahuan

**Desert Globe Mallow**  
*Sphaeralcea ambigua*

**Mature Size:**

1-3 feet tall and 1-2 feet wide

**Water:**

Low to no water requirements  
once established

**Sun:**

Full sun

**Hardiness:**

USDA Hardiness Zones 6-9



Photo courtesy of Krsysztof Ziarnik,  
hosted Wikimedia Commons

**Suggestions for Use:**

- Xeriscapic native, natural landscapes
- Xeriscapic rock gardens
- Mixed dry borders

**Description:** Globe Mallow is a shrubby perennial, native to Arizona. It has numerous, large orange flowers that grow in wand like clusters. The leaves are wooly and prominently veined.

**Special Features:**

- Tolerant of dry, rocky or sandy soils
- Heat and drought tolerant
- Attracts bees

**Maintenance considerations:**

- Plant seeds in the fall
- Cut back in the winter and after the spring bloom for a potential second fall bloom
- Little to no water keeps plants compact
- Re-seeds readily

**Resources:**

Dodge, Nate N., *Flowers of the Southwest Deserts*  
Irish, Mary, *Arizona Gardener's Guide*  
plantsUSDA.gov

Desert Marigold  
*Baileya multiradiata*

**Mature Size:**

Rounded 12 to 18 inches

**Water:**

Low; drought tolerant

**Sun:**

Full sun to part shade

**Hardiness: Native**

Tolerates heat, poor soils

**Special Features:**

- Long-lasting, golden yellow daisy-like flowers on tall stalks
- Woolly and deeply lobed grayish-green leaves
- Blooms from mid-summer into fall

**Suggestions for Use:**

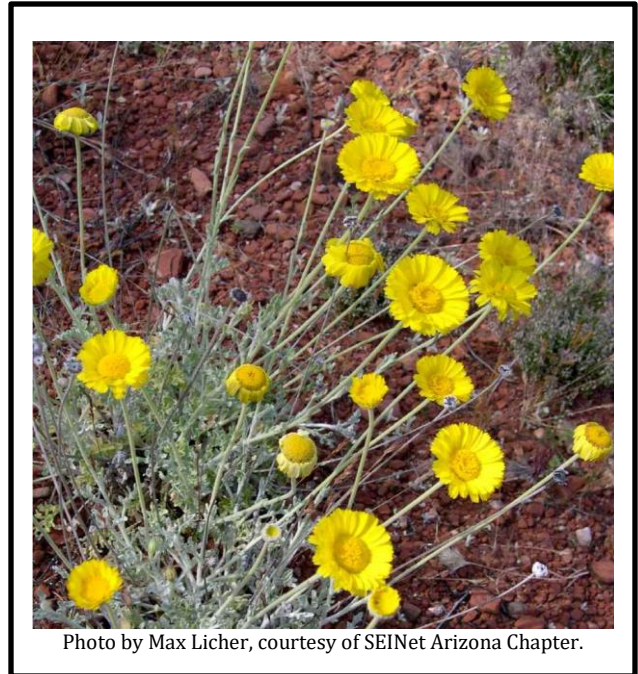
- Native flower gardens
- Roadsides
- Borders
- Pollinator and perennial gardens

**Maintenance Considerations:**

- Well-behaved plant that does well in a variety of poor soil conditions, extreme heat, and limited water
- Tends to form large, dense patches in areas with favorable conditions
- Thrives without supplemental water once established

**Additional Comments:**

- Biennial or short-lived perennial
- Pollinator-friendly flower



**Firewheel**  
*Gaillardia pulchella*

**Mature Size:**

2 feet tall, 1 foot wide

**Water:**

Dry to medium; Drought tolerant

**Sun:**

Full sun

**Hardiness: Native**

Heat tolerant, drought

**Special Features:**

- Showy flower heads up to 3 inches wide
- Pollinator-friendly plant

**Suggestions for Use:**

- Roadsides
- Wildflower gardens
- Naturalized areas
- Mixed perennial gardens

**Maintenance Considerations:**

- Spreads well by seed, but generally well-behaved plant
- Requires well-drained soils

**Additional Comments:**

- Usually an annual in Arizona, but may overwinter



## Golden Columbine *Aquilegia chrysantha*

### **Mature Size:**

Foliage 1-2 feet tall, flower stalks 2-3 feet tall, spreads to 2-3 feet.

### **Water:**

Moderate water requirements  
Flowers best with regular irrigation

### **Sun:**

Full sun to part shade

### **Hardiness:**

USDA Hardiness Zones 3-9

### **Suggestions for Use:**

- Specimen plants in rock gardens
- Looks great planted with roses



Photo courtesy of Krzysztof Ziaenek, hosted by  
Wikimedia Commons

**Description:** Golden columbine is a bushy, clump forming perennial, native to the southwestern US and northern Mexico. The plant has large, fragrant bright yellow flowers in April and May.

### **Special Features:**

- Good cut flower
- Re-seeds in optimum growing conditions
- Rabbit and deer resistant
- Attracts butterflies

### **Maintenance considerations:**

- Dead plant material should be cleaned out once or twice per year
- Deadhead flowers to prolong bloom time unless re-seeding is desired
- Overwatering can result in crown rot, underwatering in aphids

**Resources:** Lady Bird Johnson Wildflower Center

Goodding verbena  
*Glandularia gooddingii*

**Mature Size:**

8 inches tall, clumping habit up to 3 feet wide

**Water:**

Dry; drought tolerant but extended flowering dependent on moisture

**Sun:**

Full

**Hardiness: Native**

Tolerates hot temperatures and poor soils



**Special Features:**

- Cheerful light purple or pink flowers held above deeply divided, lobed woolly leaves
- Long blooming season, beginning in late spring and continuing through early fall

**Suggestions for Use:**

- Naturalized areas
- Pollinator gardens
- Borders
- Right-of-ways

**Maintenance Considerations:**

- Requires well-drained soils
- Short-lived perennial, but can reseed in good conditions
- Flowering season is dependent on moisture

## Mexican Evening Primrose

*Oenothera speciosa*

**Mature Size:**

Up to 2 feet tall, 1 to 1.5 feet wide but may spread via rhizomes into large clumps

**Water:**

Low to medium; drought tolerant

**Sun:**

Full, can tolerate very light shade

**Hardiness: Introduced**

Tolerates poor soil, heat, drought

**Special Features:**

- Large, 2 to 3 inch light-pink flowers that bloom May through July
- Easily grown and established
- Pollinator-friendly plant

**Suggestions for Use:**

- Informal naturalized areas
- Roadsides and right-of-ways

**Maintenance Considerations:**

- Requires well-drained soils
- Can spread aggressively by seed and rhizomes, forming large colonies. Site plants carefully so that they do not intrude other plants.





## Firecracker Penstemon

*Penstemon eatonii*

**Mature Size:**

2 to 4 feet high; 1 to 3 feet wide

**Water:**

Low water use

**Sun:**

Full sun to part shade

**Hardiness: Native**

Tolerates heat, dry soils

**Special Features:**

- Fast growing, drought tolerant perennial
- Early spring blooms of dark pink, tubular flowers
- Attracts hummingbirds

**Suggestions for Use:**

- Desert style gardens, borders and rock gardens

**Maintenance Considerations:**

- Requires well drained sandy soil
- Remove old flower stalks in fall

**Additional Comments:**

- Seeds can be surface sown in fall; Plants can be divided



## Palmer's Penstemon

*Penstemon palmeri*

**Mature Size:**

4 to 5 feet tall and 2 feet wide

**Water:**

Low water use

**Sun:**

Full sun

**Hardiness: Native**

Tolerates heat, dry soils

**Special Features:**

- Thrives in xeriscape gardens and is heat tolerant
- Attracts hummingbirds
- Drought tolerant/ drought resistant
- Blooms in early summer with tall spikes of fragrant, light pink flowers
- Distinctive grey foliage

**Suggestions for Use:**

- Informal wildflower garden

**Maintenance Considerations:**

- Re-seeds readily
- Requires pruning in fall
- Requires well drained soil, avoid or amend clay soils



## Parry's Penstemon

*Penstemon parryi*

### **Mature Size:**

Leave rosettes up to 10 inches tall; flower stalks up to 4 feet tall. Plant can reach up to 2 feet wide at maturity.

### **Water:**

Low water use; thrives on rainfall. Supplemental irrigation in summer will increase next year's bloom

### **Sun:**

Full, tolerates light filtered shade

### **Hardiness: Native**

Native to Arizona's low deserts. Tolerates multiple soil types but requires good drainage.



### **Special Features:**

- Dark grey-green leaves up to 4 inches long
- Early spring bloomer
- Distinctive showy flowers on long upright stalks in shades of pink and red that bloom

### **Suggestions for Use:**

- Pollinator gardens; attracts hummingbirds
- Native landscaping
- Perennial gardens
- Roadsides
- Xeriscape

### **Maintenance Considerations:**

- Short-lived perennial with a lifespan of 3 to 5 years
- Removal of flower stalks just as seeds are forming will promote blooming and prolong the life of the plant

### **Additional Comments:**

- Also known as Desert Penstemon
- Easily propagated by seed

## Purple Cone Flower

*Echinacea purpurea*

**Mature Size:**

2-5 feet wide and 1-2 feet wide

**Water:**

Low to moderate water requirements

**Sun:**

Full sun to partial shade

**Hardiness:**

USDA Hardiness Zones 3-9

**Suggestions for Use:**

- Native plant garden
- Massing in borders, often with Black-eyed Susans (rudbeckias)



**Description:** This is an herbaceous, perennial plant that is adapted to a variety of soil and climate conditions. The showy, daisy-like flowers bloom throughout the summer. Native to central and southeastern United States. The flowers are purple-pink but some cultivars are available in white.

**Special Features:**

- Attracts birds, butterflies and bees
- Good cut or dried flower
- Deer resistant
- Can tolerate clay and rocky soils

**Maintenance considerations:**

- Divide every 3-5 years
- Prompt removal of spent flowers improves blooming and appearance
- Freely re-seeds

**Resources:** Missouri Botanical Garden

## Red Hot Poker/Tritoma

*Kniphofia spp.*

### **Mature Size:**

Foliage 12-18 inches tall, flower stalk up to 3 feet. Plant spread 2-3 feet

### **Water:**

Moderate water requirements

### **Sun:**

Full sun, can tolerate light shade

### **Hardiness:**

USDA Hardiness Zones 5-9



Photo courtesy of Tam, hosted by Wikimedia Commons

### **Suggestions for Use:**

- Great specimen plant for small gardens.
- Mass in a perennial border.

**Description:** Upright, clump-forming rhizomatous perennial. Showy red/yellow blooms from May-June. Native to South Africa. Grows in average soil, but needs good drainage.

### **Special Features:**

- Showy bi-color flower stalks
- 60-70 known species, variety of colors

### **Maintenance considerations:**

- Clean around plants in early spring and fall.
- Remove flower stalk when dry.
- Plants will need dividing every few years.

**Resources:** Missouri Botanical Garden

## Rosemary

*Rosmarinus officinalis* 'Prostratus'

**Mature Size:**

1 to 2 feet tall, 4 to 6 feet wide

**Water:**

Low to medium water use; Drought tolerant.

**Sun:**

Full sun, Light Shade

**Hardiness: Introduced**

Tolerates intense sun

**Special Features:**

- Low maintenance
- Plants grow best in well-drained, infertile soil.
- Pollinator friendly
- Fragrant, leathery evergreen leaves with small blue flowers



**Suggestions for Use:**

- Low-growing prostrate forms are excellent when used in rock gardens planted at the top of masonry walls
- Use for informal edging

**Maintenance Considerations:**

- Though drought tolerant, the University of Arizona Extension office recommends giving plants frequent water (every 3 to 5 days) during the first growing season, and then decrease irrigation frequency once the root system has established and expanded.
- Excessively irrigated plants become very woody.
- Rosemary planted in native soil needs no fertilizer.
- Occasional pruning is needed to refine shape and promote blooming. Pruning is best done with hand clippers immediately after flowering in late spring. Do not shear.

**Additional Comments:**

*Rosmarinus officinalis* is a taller variety (3 to 6 feet tall) that makes an excellent hedge.

## Sandpaper verbena

*Verbena rigida*

**Mature Size:**

2' tall and 4' wide

**Water:**

Low water requirements

**Sun:**

Full sun

**Hardiness:**

USDA Hardiness Zone 7

**Suggestions for Use:**

- Borders
- Accent for small gardens
- Container plantings

**Description:** Sandpaper verbena is a hardy groundcover with vivid purple flowers in the spring and summer. Spreads from underground rhizomes.

**Special Features:**

- Heat and drought tolerant
- Attracts hummingbirds and butterflies
- Deer Tolerant

**Maintenance considerations:**

- Low maintenance
- Cut back in late winter or whenever it looks ragged

**Resources:** Missouri Botanical Garden



Photo courtesy of Dick Culbert, hosted by Wikimedia Commons

## Showy Milkweed

*Asclepias speciosa*

**Mature Size:**

Up to 2.5 feet tall and 2 feet wide

**Water:**

Moderate to high water use

**Sun:**

Full

**Hardiness: Native**

Tolerates dry soils but requires fertile soil

**Special Features:**

- Monarch butterfly food and habitat plant
- Attractive flowers

**Suggestions for Use:**

- Pollinator gardens
- Native landscaping

**Maintenance Considerations:**

- It is particularly well adapted to dry gardens.
- To control the plant's tendency to naturalize in parts of the yard where you don't want to grow it, simply snip off the seedpods before they ripen and pop open.

**Additional Comments:**

- Backyard gardeners can help preserve the Monarch Betterfly by growing plants, such as Showy Milkweed, which keep the Monarch migration alive and feed other species of butterflies as well.
- Other milkweed species to consider are *Asclepius nyctaginifolia* and *Asclepius viridian*.



Photo by J.D. Ripley, courtesy of Smithsonian Institution, Department of Botany

# Grasses

- **Beargrass** (*Nolina microcarpa*)
- **Blue Grama Grass** (*Bouteloua gracilis*)
- **Buffalograss** (*Bouteloua dactyloides*)
- **Deer Grass** (*Muhlenbergia rigens*)
- **Little Bluestem** (*Schizachyrium scoparium*)
- **Pink Muhlygrass** (*Mulenbergia capillaris*)
- **Purple Three Awn Grass** (*Aristida purpurea*)



Beargrass  
*Nolina microcarpa*

**Mature Size:**

Leaves up to 4 feet high and 4 to 6 feet wide; flower scape up to 6 feet high.

**Water:**

Low water use; drought tolerant

**Sun:**

Full sun

**Hardiness: Native**

Thrives with little water; tolerates clay and sandy soils.

**Special Features:**

- Evergreen
- Rigid, grass-like leaves with dry, loose fibers at leaf tips
- Produces creamy white, plume-like flowers in May through June; flower clusters may reach 3 feet long

**Suggestions for Use:**

- Xeriscape gardens
- Roadside medians
- Substitute for ornamental grass in hot, dry sites

**Maintenance Considerations:**

- Moderate litter
- No thorns or spines
- Do **NOT** shear- clip individual leaves down to the base of the plant
- Old plants may develop a dead zone in the plant center; these plants should be replaced if unsightly

**Additional Comments:**

- Not a true grass; a member of the asparagus family
- Not a fire-wise plant



Photo by Max Licher, courtesy of SEINet Arizona Chapter.

## Blue Grama Grass

*Bouteloua gracilis*

### **Mature Size:**

Foliage no more than 6 inches high;  
seed heads typically 1 to 2 feet

### **Water:**

Low/medium; Drought tolerant

### **Sun:**

Part to full sun

### **Hardiness: Native**

Fair salinity and moderate alkalinity tolerances; intolerant to dense shade, flooding, and acid soils.

### **Special Features:**

- Interesting seed head shape
- Food source for seed-eating birds
- Foliage turns golden-brown in autumn. Inflorescences of purplish-tinged flowers appear on arching stems above the foliage in early-to-midsummer.



Photo by Robert Soreng, courtesy of Institution, Department of Botany

### **Suggestions for Use:**

- Habitat restoration; native plantings
- Accent in perennial gardens
- Perennial sod former; used as turf

### **Maintenance Considerations:**

- Spreads by rhizome and seed

### **Additional Comments:**

- In low-water conditions, blue grama will grow in clumps similar to a bunch grass. In areas where it receives adequate water, it tends to form a solid mat by rhizomes.

## Buffalograss

*Bouteloua dactyloides*

**Mature Size:**

8 to 10 inches tall when not mown

**Water:**

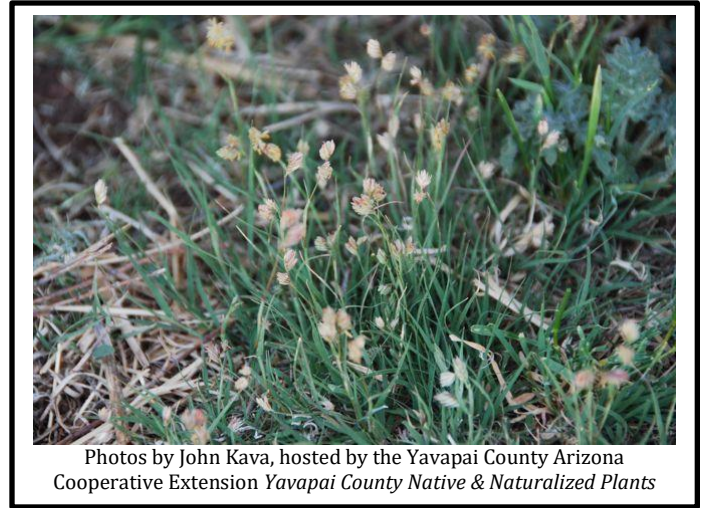
Low/medium; drought tolerant

**Sun:**

Full

**Hardiness: Native to areas of Arizona**

Can tolerate prolonged drought and extreme heat



**Special Features:**

- Water-wise, dense sod-forming grass; excellent alternative to thirsty lawn varieties
- Warm-season, low growing
- Well-adapted and spreads vigorously by stolons (above-ground runners)

**Suggestions for Use:**

- Perennial sod former; used as turf
- Low-traffic areas
- Erosion control



**Maintenance Considerations:**

- Spreads by stolons and seed; more easily controlled than Bermuda grass
- Will be dormant (brown color) from November to early May
- Can go into drought-induced dormancy (yellowing) in summer; supplemental irrigation can prevent this
- Mow to 2.5 to 3.5 inches with a rotary mower
- Seed at 1.5 to 2.0 lbs. of seed per 1000 square feet in June or early July
- Apply nitrogen at low rates, not to exceed 1.0 lb. of nitrogen per 1000 square feet in one year. Apply 0.5 lb. in June and 0.5 lb. in July.

**Additional Comments:**

- Several cultivars available
- Do **not** overseed with rye grass for winter cover
- Uses less water than Kentucky blue grass in the summer
- Buffalograss is dioecious; plants are either male or female
- Female spikelets in bony burs nestled among leaves

Deer Grass  
*Muhlenbergia rigens*

**Mature Size:**

Typically 3 to 4 feet tall with narrow flower spikes rising another 2 feet; up to 6 feet across.

**Water:**

Low; Drought tolerant  
Seasonally wet to dry soils

**Sun:**

Full

**Hardiness: Native**

Can withstand periodic flooding but cannot tolerate poorly-drained soils; shade intolerant.

**Special Features:**

- Seeds are a food source for birds and small mammals
- Finely textured leaves and erect flower spikes
- Large, airy form softens landscaping
- Color ranges from light silver green to bright green to purple
- Fast growing yet will not overwhelm landscaping

**Suggestions for Use:**

- Erosion control and soil stabilizer
- Habitat restoration; native plantings
- Group plantings

**Maintenance Considerations:**

- Clear away dead material by mowing, cutting, or burning every few years.
- Periodically raking out dead foliage with a fan rake will keep the plants neat and healthy.



**Little Bluestem**  
*Schizachyrium scoparium*

**Mature Size:**

1 to 3 feet tall; 1 to 3 feet wide

**Water:**

Low, drought tolerant

**Sun:**

Full, part shade

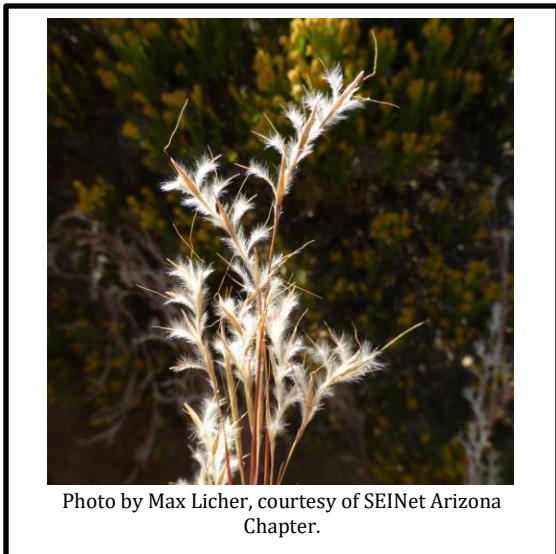
**Hardiness: Native to Midwest**

Tolerant of a wide range of soils; intolerant of wetlands or subirrigation

**Special Features:**

- Very ornamental bunchgrass
- Finely textured, blue-grey leaves
- Leaves and stems become mahogany-purple and tan in fall, retains color through winter
- Wildlife food source

**Suggestions for Use:**



- Mass plantings
- Wildflower gardens
- Rights-of-way

**Maintenance Considerations:**

- Readily reseeds; not recommended for manicured beds
- Not a fire-wise plant

**Additional Comments:**

- Attracts birds and butterflies
- Evolved in prairie ecosystem where fire plays an important part; not a fire-wise plant

## Pink Muhlygrass *Muhlenbergia capillaris*

**Mature Size:**

2-3' tall and 2-3' wide

**Water:**

Low water requirements

**Sun:**

Full sun

**Hardiness:**

USDA Hardiness Zones 5-9

**Suggestions for Use:**

- Native plant or cottage gardens
- Borders
- Naturalized areas



**Description:** Pink Muhlygrass is a clump-forming, warm-season, perennial grass noted for its attractive summer foliage and spectacular clouds of pink fall flowers. Native to west-central US.

**Special Features:**

- Heat and drought tolerant
- Tolerates poor soils
- Does not spread by rhizomes, easy to contain
- Deer Tolerant

**Maintenance considerations:**

- Low maintenance
- No serious insect or disease issues
- Seeds can be collected in November
- Trim the dead foliage back within a few inches of the ground in late winter

**Resources:** Missouri Botanical Garden

## Purple Three Awn

*Aristida purpurea*

### **Mature Size:**

The culms (stems) and leaf blades typically reach 12 to 20 inches tall.

### **Water:**

Low water use; Drought tolerant

### **Sun:**

Full

### **Hardiness: Native**

Drought tolerant, establishes quickly on disturbed sites. Can tolerate sandy soils, slopes.

### **Special Features:**

- Perennial bunchgrass
- Reddish-purple nodding, narrow panicles (flowers) appear spring through summer, turning gold and lasting for months.
- Food source for seed-eating birds
- Roots provide good matrix for many wildflower species

### **Suggestions for Use:**

- Erosion control
- Habitat restoration; native plantings
- **Not** suggested for high-traffic areas or groomed landscaping

### **Maintenance Considerations:**

- Can aggressively self-sow by seed
- Awns are sharp and can stick to clothing and animal fur

### **Additional Comments:**

- Colorful, lax seed heads and leaves catch the breeze and soften landscaping



Photo by Tony Frates courtesy of SEINet Arizona Chapter.

# Shrubs

- **Autumn Sage** (*Salvia greggii*)
- **Bush Dalea/Indego Bush** (*Dalea pulchra*)
- **Chihuahua Sage** (*Leucophyllum laevigatum*)
- **Desert Ceanothus** (*Ceanothus greggii*)
- **Desert Honeysuckle** (*Anisacanthus thurberi*)
- **Japanese Spirea** (*Spirea japonica*)
- **Joseph's Coat Rose** (*Rosa spp*)
- **Lady Banks Rose** (*Rosa banksiae*)
- **Orange Peel Cestrum** (*Cestrum aurantiacum*)
- **Pam's Pink Honeysuckle** (*Lonicera x americana*)
- **Parry's Agave** (*Agave parryi*)
- **Photinia** (*Photinia fraseri*)
- **Pink Fairy Duster** (*Calliandra eriophylla*)
- **Purple Smoke Bush** (*Cotinus coggygria*)
- **Red Yucca** (*Hesperaloe parviflora*)
- **Texas Mountain Laurel** (*Dermatophyllum secundiflorum*)
- **Three Leaf Sumac** (*Rhus trilobata*)
- **Trailing Indigo Bush** (*Dalea greggio*)
- **Turpentine Bush** (*Ericameria laricifolia*)
- **Yellow Bird of Paradise** (*Caesalpinia gillesii*)
- **Winterfat** (*Ceratoides lanata*)



## Autumn Sage

*Salvia greggii*

**Mature Size:**

Erect, bushy, up to 4 feet high and 2 feet wide

**Water:**

Low water requirements once established. Do not overwater.

**Sun:**

Full to partial shade

**Hardiness:**

Tolerates heat and rocky, alkaline soil

**Special Features:**

- Native to southwestern Texas and the Chihuahuan desert of Mexico
- Flowers in many colors, yellow to red to purple in the late spring and summer and fall
- Flowers attract hummingbirds, butterflies, and other pollinators
- Medium green, aromatic leaves
- Herbaceous, evergreen perennial that grows well in rocky alkaline soils



Photo by G.A. Cooper, courtesy of Smithsonian Institution, Department of Botany

**Suggestions for Use:**

- Xeriscape
- Pollinator gardens; Garden edging
- Roadway medians and roadside plantings
- Sidewalk/walkway friendly

**Maintenance Considerations:**

- Prune two times per year to control shape and encourage blooms: Cut back to 6 inches in late winter; cut back in August to promote fall blooms

**Additional Comments:**

- Highly variable plant with numerous named cultivars  
Other common names include Cherry Sage, Gregg's sage and Texas sage

## Bush Dalea/Indigo Bush

*Dalea pulchra*

**Mature Size:**

4 feet high and 5 feet wide

**Water:**

Low water use

**Sun:**

Full sun

**Hardiness: Native**

Thrives in reflected heat and intense sun

**Special Features:**

- Evergreen, silver-green foliage with fine texture
- Violet flower clusters winter to spring
- Winter color
- Rounded, airy growth form
- Moderate to fast growth rate

**Suggestions for Use:**

- Xeriscape gardens

**Maintenance Considerations:**

- Moderate litter
- No thorns
- Shear in early summer to improve shape and flowering
- Short-lived if overwatered

**Additional Comments:**

- Attracts bees and butterflies
- Do not overwater

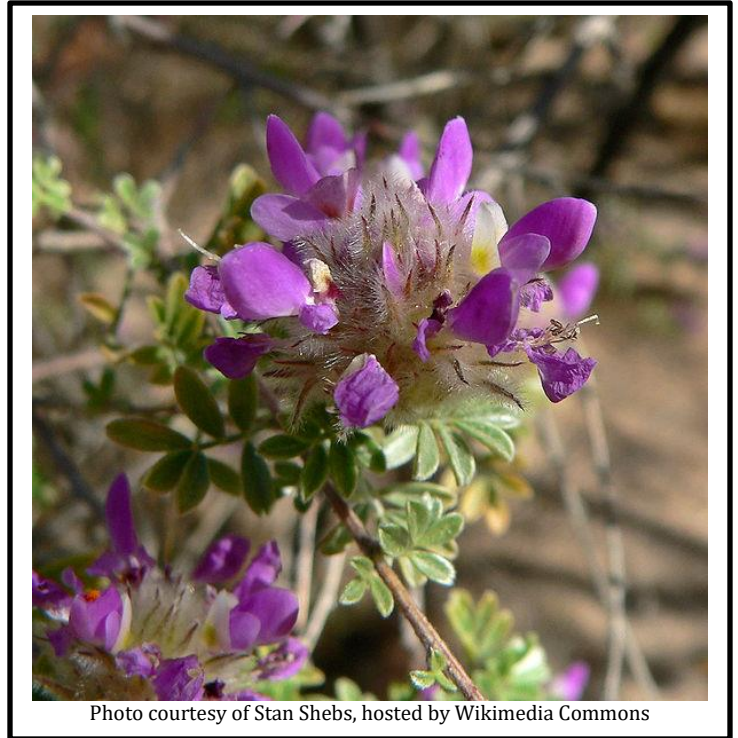


Photo courtesy of Stan Shebs, hosted by Wikimedia Commons

**Chihuahuan Sage**  
*Leucophyllum laevigatum*

**Mature Size:**

4 to 5 feet high; 5 to 6 feet wide

**Water:** Very low water requirements once established

**Sun:**

Full sun

**Hardiness:**

Tolerates alkaline soils, heat and wind.

**Special Features:**

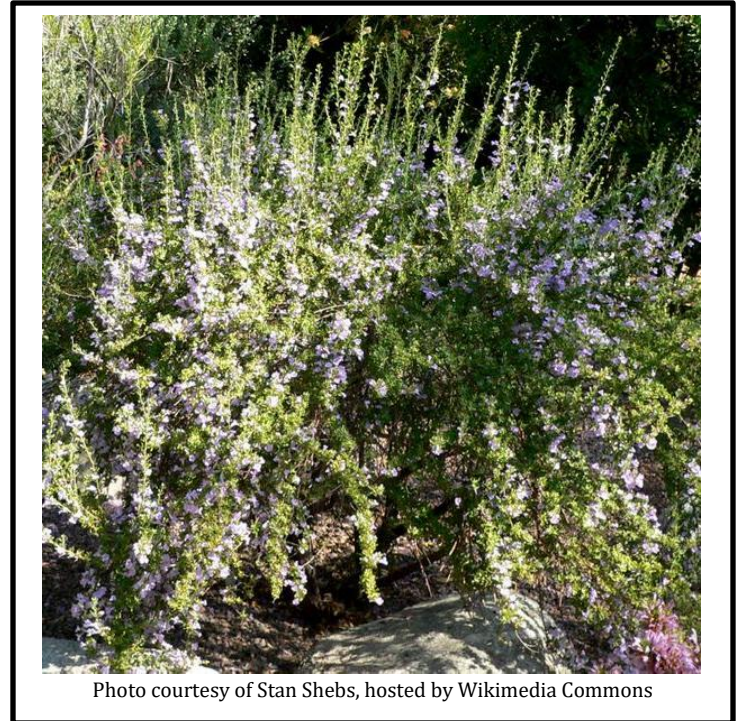
- Perennial native to Chihuahuan desert of Mexico
- Slow to moderate growth rate with a rounded, dense shape
- Evergreen foliage is bright olive-green and finely textured
- Fragrant blue-lavender flowers from summer to fall

**Suggestions for Use:**

- Informal hedges
- Roadway medians and roadside plantings
- Xeriscape
- Mass plantings

**Maintenance Considerations:**

- Low litter and no thorns
- Needs space to sprawl
- Head back annually to encourage dense growth habit; do not shear
- Feed in spring to encourage blooms



**Desert Ceanothus**  
*Ceanothus greggii* A. Gray

**Mature Size:**

3 to 6.5 feet high and 3 to 6 feet wide

**Water:**

Very low water requirements; drought tolerant

**Sun:**

Full Sun

**Hardiness: Native**

Very drought tolerant; tolerates poor soil.

**Special Features:**

- Semi-evergreen perennial
- Native to pinon-juniper woodlands
- Finely textured, leathery, grey-green leaves and bears crowded clusters of white flowers
- Blooms in late spring providing good bee forage

**Suggestions for Use:**

- Xeriscape gardens

**Maintenance Considerations:**

- Can be trimmed to ground annually to improve shape and increase bloom
- Avoid overwatering, especially during the first year

**Additional Comments:**

- Could be difficult to locate commercially
- Other common names are wild lilac, mountain lilac, coupleaf ceanothus and Mojave buckbrush



Photo courtesy of Max Licher, hosted by the SEINet Arizona Chapter.

Desert Honeysuckle  
*Anisacanthus thurberi*

**Mature Size:**

4 to 6 feet tall, 3 to 5 feet wide

**Water:**

Low to moderate water use

**Sun:**

Full sun to part shade; blooms best in full sun

**Hardiness: Native**

Tolerates reflected heat and intense sun

**Special Features:**

- Native to northern Mexico and southwestern U.S. at elevations between 2500-5500ft.
- Delicate yellow to red tubular blooms that attract hummingbirds and butterflies
- Dormant in winter

**Suggestions for Use:**

- Plant among evergreen shrubs for spots of color

**Maintenance Considerations:**

- Can be vigorously pruned in winter to control shape and size and to promote more blooms

**Additional Comments:**

- Also known as Chuparosa



Photo courtesy of Max Licher, hosted by the SEINet Arizona

## Japanese Spirea *Spirea japonica*

**Mature Size:** Varies between cultivars

**Water:** Low to moderate water use

**Sun:** Full sun to part shade

**Hardiness:** USDA Hardiness Zones 4-8

**Suggestions for Use:**

Due to the variation among cultivars, Spirea can be used as:

- Mass plantings
- Perennial borders
- Groundcovers
- Informal hedges
- Specimen plants



Photo courtesy of Kenpei, hosted by Wikimedia Commons

**Description:** This is multi-stemmed, compact, deciduous shrub available in a wide array of cultivars. Japanese Spirea offers the most variety in terms of size, flower color, and leaf color. It produces abundant clusters of white, light pink, rosy red, blue or purple flowers that adorn the branches in late spring and summer. Sizes range from dwarf types to larger shrubs that grow to 5 feet or taller. Most varieties have finely textured green or blue-green leaves, but some cultivars have yellow or chartreuse foliage that changes color throughout the season.

**Special Features:**

- Drought resistant once established
- Tolerates alkaline and clay soils
- Blooms attract pollinators
- Deer resistant

**Maintenance considerations:**

- Requires liberal pruning to 6 inches to maintain their shape and promote flowering. Spring-blooming varieties should be pruned after flowering and summer-blooming varieties should be pruned in winter or early spring when dormant.

**Resources:** Clemson.edu College of Agriculture, Forestry and Life Sciences

**Joseph's Coat Rose**  
*Rosa spp. "Joseph's Coat"*

**Mature Size:** 8-12 feet high and 4-8ft wide

**Water:** Moderate water requirements

**Sun:** Full sun for at least 6 hours/day

**Hardiness:** USDA Hardiness Zones 5-10



Photo Courtesy of Matt Lavin, hosted by Wikimedia Commons

**Suggestions for Use:**  
Plant on trellis, arbor or fence

**Description:** Joseph's coat is a floribunda type climbing rose with beautiful double 4 inch flowers of red, yellow, orange and pink from May-September.

**Special Features:**  
Mildly fragrant flowers  
Attracts birds, butterflies and bees  
Great for cut flowers

**Maintenance considerations:**

- Clean around plants in early spring and fall.
- Plants will need annual pruning to control size and promote blooming
- Deep water once a week and allow to dry between watering
- Deadhead spent flowers to increase blooming

**Resources:**  
DavesGarden.com

## Lady Banks' Rose

*Rosa banksiae*

**Mature Size:**

20 feet high and 15 feet wide, sprawling vine

**Water:** Moderate water use

**Sun:** Full

**Hardiness: Introduced**

Tolerates heat

**Special Features:**

- Fast growing semi-evergreen vine
- Leaves small and medium green
- White or pale yellow flowers in spring/early summer
- Thornless
- Evergreen

**Suggestions for Use:**

- Arbors
- Specimen plants
- Informal hedges

**Maintenance Considerations:**

- Low litter
- Require little maintenance besides something strong to climb on; can be grown as a large, mounded plant

**Additional Comments:**

- Plant only where there is adequate room



Photo courtesy of Cillas, hosted by Wikimedia Commons



## Orange Peel Cestrum

*Cestrum aurantiacum*

**Mature Size:** 5' tall and 5' wide

**Water:**

Low water requirements  
once established

**Sun:**

Full sun to partial shade

**Hardiness:**

USDA Hardiness Zones 6-8

**Suggestions for Use:**

- Background for perennial borders
- Specimen plant for patio area



Photo courtesy of Stan Shebs

**Description:** Orange peel Cestrum is a deciduous shrub in our area which dies back almost to the ground each winter. The plant has dark green tropical foliage with terminal clusters of fragrant yellow to orange flowers.

**Special Features:**

- Heat and drought tolerant
- Attracts hummingbirds and butterflies
- Deer resistant

**Maintenance considerations:**

- When stems die back in the fall, cut the plants back and apply a loose mulch layer
- Occasional deadheading encourages new flowers

**Resources:**

University of Arkansas Research and Extension

## Pam's Pink Honeysuckle

*Lonicera x americana*

**Mature Size:**

6 feet high and 10 feet wide

**Water:**

Light to moderate water use

**Sun:**

Full sun, can tolerate partial shade

**Hardiness:**

USDA Hardiness Zones 5-9

**Suggestions for Use:**

- Privacy screening
- Ground cover



Photo courtesy of Leonora Enking, hosted by Wikimedia Commons

**Description:** This is a tough, vining, evergreen shrub that produces pink and white blossoms, flowering from mid-spring to early summer. Not as invasive as other species of *Lonicera* and not prone to powdery mildew.

**Special Features:**

- Fast growing
- Fragrant flowers
- Attracts nectar-seeking insects and birds
- Tolerant to alkalinity, salinity, heat and drought when established

**Maintenance considerations:**

- Control shape and increase blooms by pruning vigorously after flowering.

**Resources:** Mountain States Wholesale Nursery

## Parry's Agave *Agave parryi*

### **Mature Size:**

Up to 3 feet high and 3 feet wide

### **Water:**

Very low water once established; Drought tolerant

### **Sun:**

Full sun

### **Hardiness: Native**

Tolerates extreme heat

### **Special Features:**

- A slow growing, evergreen succulent native to Arizona and the Chihuahuan desert
- Dense rosette of spined, grey-green leaves
- After 10 to 30 years, the plant sends up a 20 foot high flower stalk with multiple red buds that are yellow when opened

### **Suggestions for Use:**

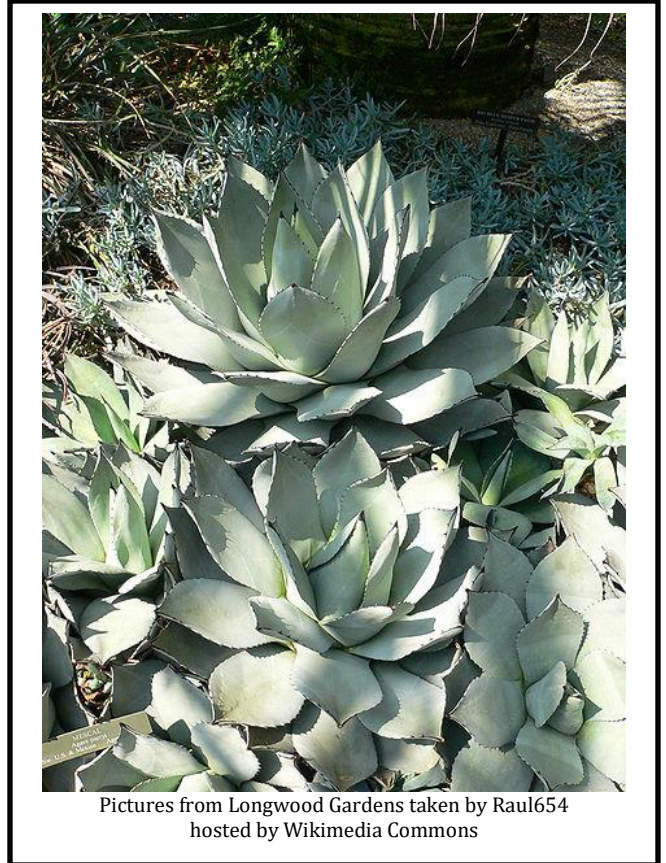
- Xeriscape and desert gardens
- Wide road medians and roadside plantings

### **Maintenance Considerations:**

- The plant dies after flowering but usually produces multiple vegetative off-shoots to replace itself

### **Additional Comments:**

- Spines and terminal leaf ends can be sharp and dangerous



**Photinia**  
*Photinia fraseri*

**Mature Size:**

10 to 15 feet high with equal width

**Water:**

Low to moderate; Drought tolerant

**Sun:**

Full sun to part shade

**Hardiness: Introduced**

Heat resistant, Adaptive to urban environments: compacted soils, poor drainage, alkaline clay soils and air pollution.



**Special Features:**

- Heat-resistant, evergreen shrub or small tree with a moderate growth rate
- Glossy dark green leaves with new leaf growth a bright bronze red
- White flower clusters in spring
- Drought tolerant once established

**Suggestions for Use:**

- Garden backdrop or hedge, espalier, or can be trimmed to small tree and good for residential street use.
- Also good by pools, sidewalks or patios, even tree cut-outs.

**Maintenance Considerations:**

- Prone to aphids. Prune for good airflow and plant in full sun to prevent leaf spot fungal disease. Prune to preferred size and shape.

**Additional Comments:**

- *Photinia serrulata* is an alternate choice. Coppery colored new growth, resistance to leaf spot, but prone to powdery mildew.

**Pink Fairy Duster**  
*Calliandra eriophylla*

**Mature Size:**

3 feet high and 4 feet wide

**Water:**

Very low water use

**Sun:**

Full sun

**Hardiness: Native**

Tolerates rocky, alkaline soils and is very drought tolerant.

**Special Features:**

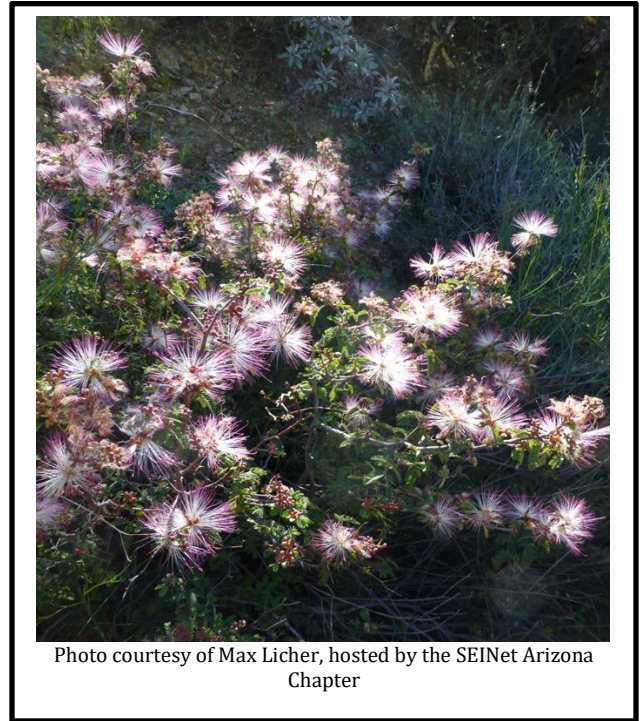
- Upright, airy semi-evergreen shrub, native to Arizona deserts
- Leaves are medium green and finely textured.
- Flowers are pink powderpuffs that bloom from spring to fall
- The plant produces low litter and is thornless
- Attracts butterflies and hummingbirds

**Suggestions for Use:**

- Informal hedges
- Xeriscape gardens
- Roadway medians and roadside plantings

**Maintenance Considerations:**

- Minimal to none



## Purple Smoke Bush

*Cotinus coggygria*

**Mature Size:**

15 feet high 12 to 15 feet wide

**Water:**

Medium water use

**Sun:**

Full sun to part shade

**Hardiness: Introduced**

**Special Features:**

- Deciduous shrub or small tree
- Reddish-purple foliage followed by long lasting, pinkish purple, smoke-like, airy seed clusters
- Blooms in spring
- Leaves turn scarlet in autumn.



**Suggestions for Use:**

- Trim to a specimen tree or use as hedge accent
- Can be used in large parking lot islands
- Residential street tree

**Maintenance Considerations:**

- Can be left un-pruned as a large shrub, or pruned to a small shrub or tree

**Additional Comments:**

- Foliage colors brighten with full sun exposures

**Red Yucca**  
*Hesperaloe parviflora*

**Mature Size:**

3 feet high and 5 feet wide

**Water:**

Very low water use

**Sun:**

Full sun

**Hardiness: Introduced**

Drought tolerant; adaptable to a variety of soils

**Special Features:**

- Not a yucca, evergreen perennial in the agave family
- The plant has 2 to 3 foot long narrow leaves from a woody base
- Produces 5 foot high flower stalks that produce showy, persistent, coral-red flowers from spring to summer
- Attracts hummingbirds

**Suggestions for Use:**

- Xeriscape gardens
- Rock gardens
- Roadway medians and roadside plantings

**Maintenance Considerations:**

- Minimal, can be divided every few years

**Additional Comments:**

- Yellow and pink blooming cultivar also available



Photo courtesy of Stan Shebs, hosted by Wikimedia Commons

**Texas Mountain Laurel**  
*Dermatophyllum secundiflorum*

**Mature Size:**

Up to 15 feet high and 10 feet wide crown diameter

**Water:**

Low water use once established

**Sun:**

Full sun

**Hardiness: Introduced**

The plant is adaptive to arid habitats and rocky, alkaline soils.

**Special Features:**

- Attractive evergreen shrub native to the southwestern US and Mexico
- Waxy leaves with very fragrant, large clusters of purple flowers that have a distinctive grape soda smell

**Suggestions for Use:**

- Privacy hedge
- Windbreak
- Background border plant or espalier

**Maintenance Considerations:**

- May require southern exposures and mulching in order to flower, but worth the effort.

**Additional Comments:**

- Avoid overwatering and poor drainage



Photo courtesy of Miwasatoshi, hosted by Wikimedia Commons



## Three Leaf Sumac

*Rhus trilobata*

**Mature Size:**

3 to 6 feet high and 3 to 6 feet wide

**Water:**

Low to medium water

**Sun:**

Full sun with afternoon shade

**Hardiness: Native**

Tolerates a wide range of growing conditions

**Special Features:**

- A tidy, tough deciduous shrub
- It has showy, yellow flowers followed by attractive red berries and yellow-red fall color
- Bee friendly plant

**Suggestions for Use:**

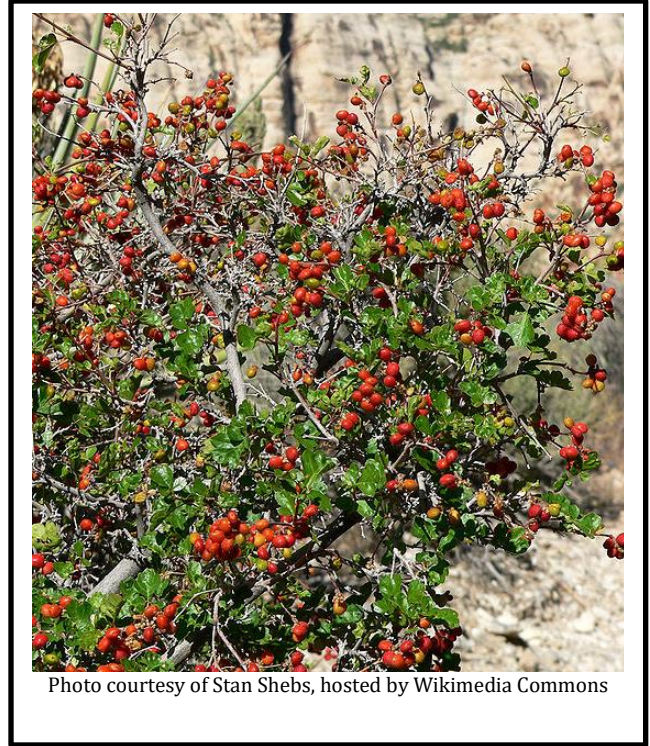
- Informal low hedge
- Xeriscape gardens
- Foundation plantings

**Maintenance Considerations:**

- Can be pruned to remain compact. Plant in fall, can be hard to establish in heat.

**Additional Comments:**

- Very heat tolerant, crushed leaves impart a smell, unpleasant to some people



## Trailing Indigo Bush

*Dalea greggii*

**Mature Size:**

1 to 2 feet high and 2 to 8 feet wide

**Water:**

Low water use once established; Drought tolerant

**Sun:** Full sun

**Hardiness:** Native

Tolerates heat and desert soils; drought tolerant, unpalatable to rabbits

**Special Features:**

- Fast growing, mounding evergreen shrub
- Clusters of tiny, purple flowers in spring and early summer
- Native to the Southwestern United States and Mexico

**Suggestions for Use:**

- Wall hanger
- Borders
- Groundcover under trees
- Roadway medians and roadside plantings

**Maintenance Considerations:**

- Minimal, not attractive when edged or sheared

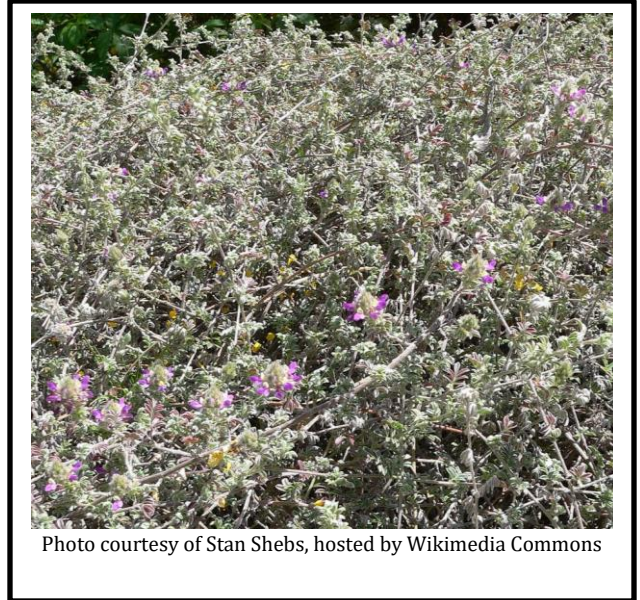


Photo courtesy of Stan Shebs, hosted by Wikimedia Commons

## Turpentine Bush *Ericameria laricifolia*

**Mature Size:**

2 feet high and 3 feet wide

**Water:**

Low water use

**Sun:**

Full sun

**Hardiness: Native**

Very heat tolerant and adapted to limestone soils

**Special Features:**

- Moderate growth rate
- Bright green, finely textured, fragrant leaves
- Yellow clusters of flowers in the fall
- Native to southwestern US and Mexico
- Attractive to bees and butterflies

**Suggestions for Use:**

- Knee-high groundcover in xeriscape and desert gardens
- Low hedge
- Rock gardens
- Roadway medians and roadside plantings

**Maintenance Considerations:**

- May grow out of control if over-watered or after rainy season
- Can be easily brought under control by pruning
- Tolerates severe pruning

**Additional Comments:**

- May also be sold as *Happlopappus laricifolius*
- Also consider the slightly smaller Dwarf Blue Rabbitbrush *Chrysothamnus nauseosus* var *nauseosus*

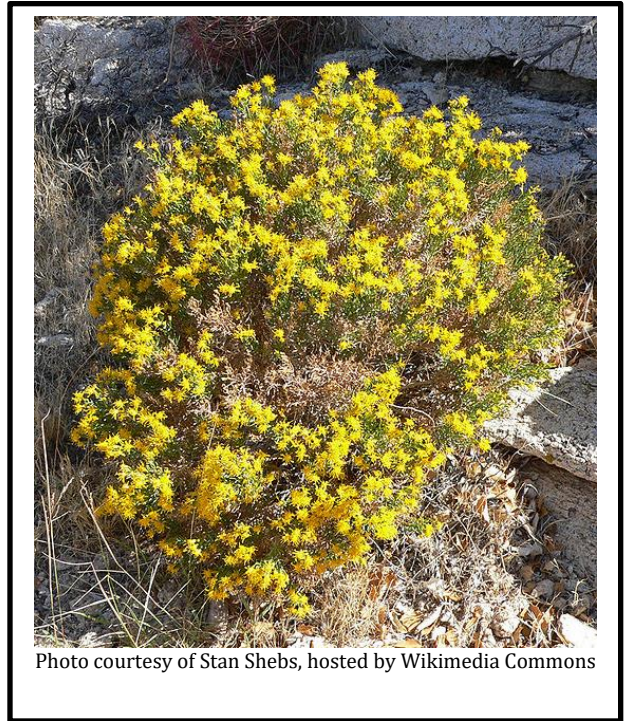


Photo courtesy of Stan Shebs, hosted by Wikimedia Commons

## Winterfat

*Krascheninnikovia lanata*

**Mature Size:**

1 to 3 feet high, 1 to 3 feet wide

**Water:**

Very low water use; Drought tolerant

**Sun:**

Full Sun

**Hardiness: Native**

Drought tolerant; tolerant to poor soils and excessive salts



Photo courtesy of Stan Shebs, hosted by Wikimedia Commons

**Special Features:**

- Perennial evergreen shrub with silver-grey foliage
- Inconspicuous flowers April through September with ornamental, woolly, white seed heads in the fall
- Tolerates sandy and clay alkaline soils
- Bee friendly

**Suggestions for Use:**

- Use in hot, xeriscape and desert gardens with poor soils

**Maintenance Considerations:**

- Can tolerate pruning of up to 50% in the winter to control size and shape

**Additional Comments:**

- May be propagated by sowing seeds in fall or early spring, also available in pots
- May be found as *Eurotia lanata* or *Krascheninnikovia lanata*

## Yellow Bird of Paradise

*Caesalpinia gilliesii*

**Mature Size:**

5-10 feet tall and 4-6 feet wide

**Water:**

Low water requirements

**Sun:**

Full sun

**Hardiness:**

USDA Hardiness Zones 8-11  
(Zone 7 in protected location)



**Suggestions for Use:**

- Good accent plant in a shrub border
- Native, natural landscapes
- Xeriscapic ornamental gardens

**Description:** Bird of Paradise is a deciduous shrub or small tree with fern-like green leaves and showy, yellow flowers with bright red stamens. Flowers appear in June-August and are long-lasting. Flowers produce 4-5 inch seed pods that provide some winter interest.

**Special Features:**

- Heat and drought tolerant once established
- Attracts hummingbirds

**Maintenance considerations:**

- Very low maintenance
- No serious insect or disease problems
- In Zone 7, plant in a protected southern exposure and mulch heavily to protect from hard frosts.

**Resources:**

Dodge, Nate N., *Flowers of the Southwest Deserts*  
Irish, Mary, *Arizona Gardener's Guide*  
Missouri Botanical Garden

# Small Trees

(Up to 25')

- Chaste Tree (*Vitex agnus-castus*)
- Chitalpa (*Chitalpa taskentensis*)
- Crepe Myrtle (*Lagerstroemia indica*)
- Desert Willow (*Chilopsis linearis*)
- Little Leaf Ash (*Fraxinus greggii*)
- Velvet Mesquite (*Prosopis velutina*)
- Western Redbud (*Cercis occidentalis*)

## Chaste Tree

*Vitex agnus-castus*

**Mature Size:**

15 to 20 feet high

**Water:**

Medium water use

**Sun:**

Full sun

**Hardiness: Introduced**

**Special Features:**

- Vase shaped deciduous shrub that develops into a single-trunk tree with time and training
- Showy, fragrant, violet-blue spikes of blossoms on new growth
- Fragrant leaves
- Flowers in July and August
- Attractive butterfly and hummingbird plant

**Suggestions for Use:**

- Shrub border if maintained with pruning
- Single-trunk form suitable for small spaces
- Ornamental focal point
- Pollinator garden

**Maintenance Considerations:**

- Will develop a classic tree shape with time; take this into consideration when planting

**Additional Comments:**

- Some litter, plant away from sidewalks or patios
- Plant leaves out late in the spring



Photo courtesy of Stan Shebs, hosted by Wikimedia Commons

## Chitalpa

### *Chitalpa tashkentensis*

**Mature Size:**

25-30 feet tall, with a 30 foot canopy

**Water:**

Moderate water requirements until established

**Sun:**

Full sun to part shade

**Hardiness:**

USDA Hardiness Zones 6-9

**Suggestions for Use:**

- Accent tree
- Good street tree

**Description:** Chitalpa is a deciduous, flowering hybrid tree (*Chilopsis linearis* desert willow and *Catalpa bignonioides catalpa*). The tree has pink to white, showy, trumpet-shaped flowers that bloom late spring to early fall and an open and airy form.

**Special Features:**

- Can tolerate highly alkaline soil
- Low litter
- Drought tolerant

**Maintenance considerations:**

- Prone to trunk scald so avoid western exposure with high reflected heat.
- Selectively prune lateral branches to increase canopy density
- Clean litter at base of tree to avoid fungal and pest issues

**Resources:**

Selecttree.calpoly.edu



Photo by Frau Siebenschlafer hosted by Wikimedia Commons



**Crepe Myrtle**  
*Lagerstroemia indica*

**Mature Size:**

Cultivar dependent; 2 to 25 feet height

**Water:**

Moderate water use until established

**Sun:**

Full sun

**Hardiness: Introduced**

Adaptable, but grows best in moist well-drained soils. Plant is drought tolerant when established.

**Special Features:**

- Evergreen shrub or tree
- Lustrous green leaves
- Smooth, exfoliating bark
- Showy flowers ranging from white through pink, purple and red
- Blooms from June-September

**Suggestions for Use:**

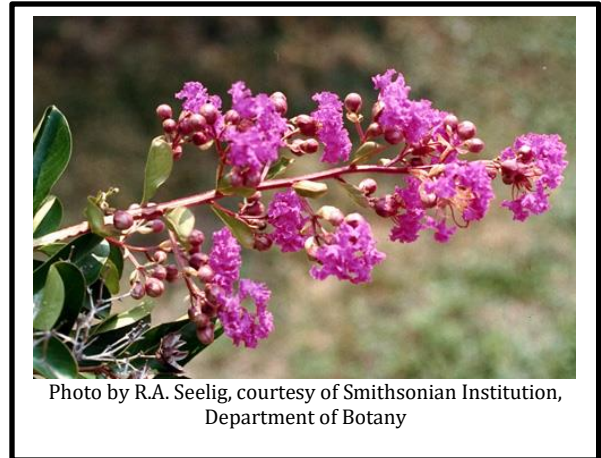
- Specimen plant
- Pair with ground covers and grasses
- Smaller varieties can be planted in groups or hedges; larger ones can be pruned to small trees.

**Maintenance Considerations:**

- Prone to aphids and some fungal infections, but can be mitigated by planting in full sun and adequate pruning to promote good air circulation through plant canopy
- Prune to control size and shape

**Additional Comments:**

- Over-fertilization and over-watering decrease flowering



## Desert Willow *Chilopsis linearis*

**Mature Size:**

20 to 25 feet high

**Water:**

Drought tolerant; Low water use

**Sun:**

Full Sun

**Hardiness: Native**

Tolerates alkaline clay or sand and seasonal flooding.

**Special Features:**

- Native to the southwestern US and Mexico
- Fast growing, deciduous small tree
- Medium green leaves with clusters of flowers spring to fall ranging from white and pink to purple
- Flowers attract hummingbirds
- Leafless in winter, but with prominent 4 to 9 inch pods that cling persistently to branches

**Suggestions for Use:**

- Xeriscape garden
- Specimen tree where space is limited

**Maintenance Considerations:**

- Seasonal litter; loses leaves in autumn; flowers in spring
- No thorns
- Multi stemmed, but can be trained to a single trunk

**Additional Comments:**

- Faster growing with supplemental water, but water deeply and infrequently
- Not a true willow
- Not recommended for planting next to water features or pools due to significant seasonal litter



**Little Leaf Ash**  
*Fraxinus greggii*

**Mature Size:**

15 feet high and 10 feet wide

**Water:**

Low water use

**Sun:**

Full sun

**Hardiness: Native**

Tolerates confined spaces such as sidewalk plantings and large containers.

**Special Features:**

- Multi-stemmed evergreen shrub, that can be pruned to a single stem small tree
- Native to Southeastern U.S. and Mexico
- Bright green leaves and smooth gray bark.



Photos courtesy Steve Ayers



**Suggestions for Use:**

- Very low litter
- Use around patios, pools or sidewalks
- May be used in large containers or planters

**Maintenance Considerations:**

- Prune and train to desired form
- Susceptible to trunk sunscald
- **Susceptible to Emerald Ash Borer-**  
maintain good tree diversity throughout  
the community to reduce landscape  
devastation if the beetle reaches  
Arizona.

**Additional Comments:**

- One of only a few low-litter, small-scale trees that thrive in the Southwest!
- Look for Arizona rosewood (*Vauquelinia californica*) as an alternative

## Pomegranate

*Punica granatum*  
var "Wonderful"

**Mature Size:**

10-18 feet tall and 5-12 feet wide

**Water:**

Low water requirements

**Sun:**

Full sun

**Hardiness:**

USDA Hardiness Zones 7-11

**Suggestions for Use:**

- Xeriscapic ornamental gardens
- Visual screen
- Espaliered against a wall or fence



Photo courtesy of Llez, hosted by Wikimedia Commons

**Description:** The pomegranate is a fruit-bearing deciduous shrub or small tree well suited to our desert environment. Pomegranates produce beautiful, long-lasting red blooms that produce 2-5 inch diameter fruits.

**Special Features:**

- Heat and drought tolerant once established
- Tolerates a wide variety of soils
- Self-fruitful, a second tree is unnecessary for fruit production
- Deer resistant

**Maintenance considerations:**

- Low water requirements but irrigate regularly for optimal fruit quality
- No serious insect or disease problems, Texas Root Rot resistant
- Remove basal suckers, can be pruned to a small tree
- Fertilize 2x/year, with 8-8-8 fertilizer November and March

**Resources:** Arizona Cooperative Extension, Yavapai County

**Velvet Mesquite**  
*Prosopis velutina*

**Mature Size:**

25 feet high with 25 feet wide canopy

**Water:**

Very low water use

**Sun:**

Full sun

**Hardiness: Native**

Tolerates poor soils, heat, and drought

**Special Features:**

- Deciduous, small tree with yellow flowers in spring
- 3 to 9 inch seed pods
- Native to the Sonoran and Chihuahuan deserts
- Excellent bee friendly tree
- Can tolerate extreme heat and cold

**Suggestions for Use:**

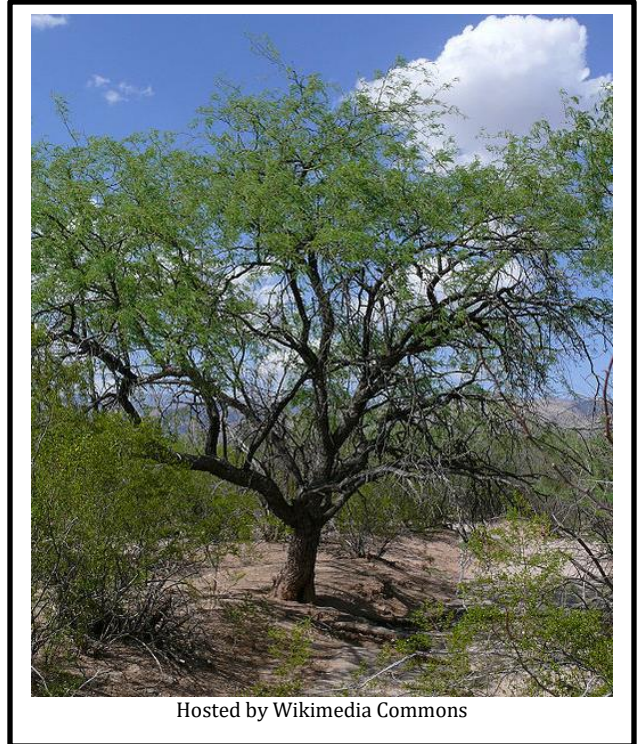
- Good in commercial and residential xeriscape gardens due to compact size

**Maintenance Considerations:**

- Seasonal litter; deciduous (loses leaves in autumn)
- Thorns
- Prune to shape when young
- Keep away from patios, pools and sidewalks due to litter

**Additional Comments:**

- Pollen is a moderate allergen
- Beans are edible
- Wood is excellent for aromatic firewood.



## Western Redbud

*Cercis occidentalis*

**Mature Size:**

10-20 feet tall with a 10-15 foot canopy

**Water:**

Low to moderate water use

**Sun:**

Full sun

**Hardiness:**

USDA Hardiness Zones 7-9



Photo credit: Stan Stubbs

**Suggestions for Use:**

- Spring specimen tree
- Good small garden tree
- Utility friendly tree due to low height

**Description:** Western redbud is a deciduous shrub or small tree with striking magenta flowers in May-April prior to leaf development. The reddish-purple seed pods hang on the tree in winter. The tree gets beautiful bright green heart-shaped leaves in the spring. Native to California, Arizona and Utah.

**Special Features:**

- Tolerant of clay soils
- Reliable once established
- Attracts hummingbirds and butterflies

**Maintenance considerations:**

- Can be trimmed to a single trunk
- Susceptible to caterpillars and scale

**Resources:** Cal Poly Urban Forest Ecosystems Institute

# Medium Trees

(30' – 50')

- Arizona Ash (*Fraxinus velutina*)
- Arizona Rosewood (*Vauquelinia californica*)
- Chinese Pistache (*Pistacia chinensis*)
- Globe Willow (*Salix matudana* spp. 'Navajo')
- Goodding's Willow (*Salix gooddingii*)
- Mimosa (*Albizia julibrissen*)
- Thornless Honeylocust (*Gleditsia triacanthos inermis*)

**Arizona Ash**  
*Fraxinus velutina*

**Mature Size:**

35 to 40 feet tall with equal spread

**Water:**

Regular water is best, heat and drought tolerant

**Sun:**

Full sun

**Hardiness: Native**

Heat tolerant

**Special Features:**

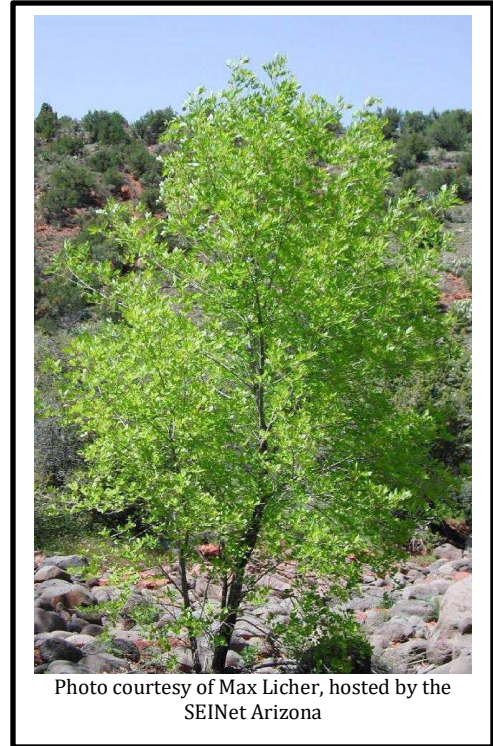
- Dense canopy
- Yellow fall color if temperatures cool down slowly
- Grey trunk
- Fast-growing shade tree

**Suggestions for Use:**

- Best ash for residential landscapes
- Park areas and gathering spots

**Maintenance Considerations:**

- Low maintenance
- Seasonal litter; deciduous (loses leaves in autumn)
- Requires good drainage
- Susceptible to trunk sunscald
- **Susceptible to Emerald Ash Borer- maintain good tree diversity throughout the community to reduce landscape devastation if the beetle reaches Arizona.**





## Arizona Rosewood *Vauquelinia californica*

**Mature Size:**

10 to 25 feet tall, 5 to 10 feet wide

**Water: Low**

Drought tolerant

**Sun:**

Full sun

**Hardiness: Native**

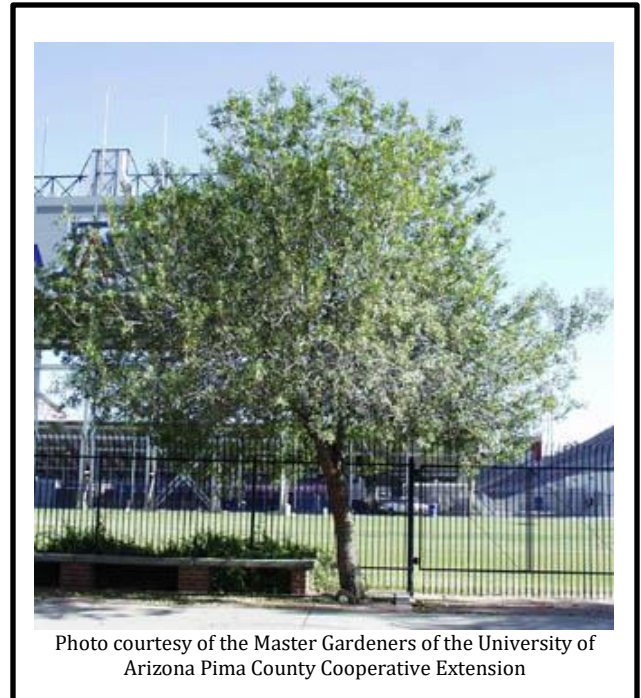
Drought tolerant; thrives in well-drained rocky soil; can experience heat stress and is not suitable for areas with high reflected heat.

**Special Features:**

- Evergreen
- Dense clusters of white flowers at branch tips in spring
- Shiny, dark green leaves with red leaf stems

**Suggestions for Use:**

- Small patio tree
- Privacy hedge
- Pollinator gardens



**Maintenance Considerations:**

- Slow growing; more expensive than other common shrubs
- Usually begins as bushy, vase-shaped shrub; may be trained into a multi-stemmed or single-stemmed tree
- Do not over water, excessively prune, or fertilize native shrubs; prune lightly only to shape
- Susceptible to Texas root rot

**Additional Comments:**

- Member of the rose family
- Important pollinator plant; host for the Two-Tailed Swallowtail butterfly
- Sometimes mistaken for Oleander or Photinia when in flower; Arizona Rosewood is more cold hardy and drought tolerant.

## Chinese Pistache

*Pistacia chinensis*

### **Mature Size:**

30 to 35 feet tall, 25 to 35 feet wide, larger growth possible

### **Water:**

Regular deep water one to two times monthly in hottest season

### **Sun:**

Full sun

### **Hardiness: Introduced**

Tolerates heat, drought, variety of soils

### **Special Features:**

- Yellow to red leaf color in late fall
- Fruit on female trees loved by birds; fruit turns from red to blue-purple
- Umbrella canopy
- Lovely trunk bark

### **Suggestions for Use:**

- Specimen tree
- Dense shade tree

### **Maintenance Considerations:**

- Seed litter on female trees
- Deciduous (loses leaves in autumn)

### **Additional Comments:**

- Heat and drought tolerant



## Globe Willow

*Salix matuadana* spp. 'Navajo'

**Mature Size:**

25-50 feet tall with a 25-35 foot canopy

**Water:**

Moderate water use

**Sun:**

Full sun to partial shade

**Hardiness:**

USDA Hardiness Zones 5-9

**Suggestions for Use:**

- Shade and accent tree



**Description:** Globe willow is a medium sized, deciduous tree with a beautiful rounded canopy of airy bright green leaves. This tree is the first to leaf out in the spring and the last to lose its leaves in the fall.

**Special Features:**

- Tolerant of all soils and soil pHs
- Drought resistant but can also tolerate moist soils
- Lifespan of 40-150 years

**Maintenance considerations:**

- Globe willows have extensive root systems. Avoid planting by buildings, plumbing or sewage systems
- Susceptible to aphids, caterpillars, beetle borers, spider mites and some fungal infections like anthracnose, rust and sooty mold.
- Staking can minimize wind damage
- Consider wrapping trunk with commercial tree wrap for the tree's first 2 winters to prevent sunscald. Remove when leaf canopy returns in the spring.

**Resources:**

Cal Poly San Luis Obispo

## Goodding's Willow

*Salix gooddingii*

**Mature Size:**

20 to 45 feet tall

**Water:**

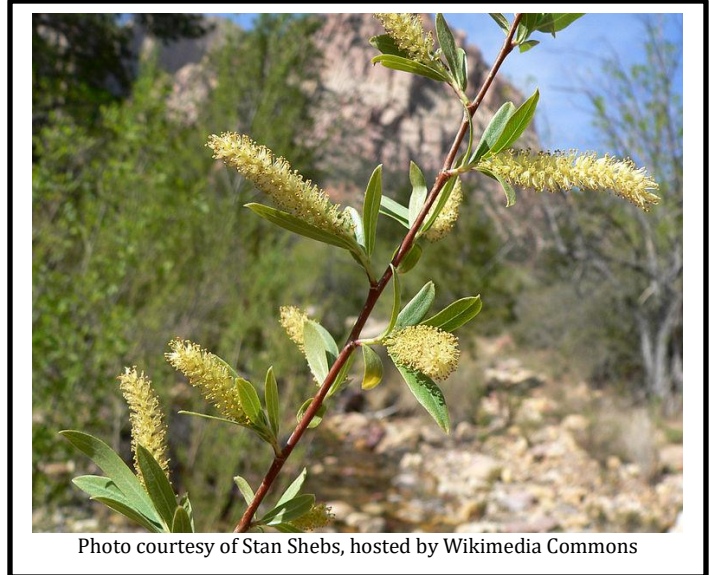
High water use until roots find water table

**Sun:**

Full to part sun

**Hardiness: Native**

Tolerates flooding, damp soil



**Special Features:**

- Tolerates alkaline, desert soils
- Deciduous, with yellow flowers in early spring
- Native to Arizona and southwestern riparian areas

**Suggestions for Use:**

- Tolerates flooding, good for stream bank or ditch bank stabilization
- Riparian landscapes in association with sycamore, mesquite and desert willow

**Maintenance Considerations:**

- Avoid planting around septic or underground pipes or lines. Roots depths of up to 7 feet.
- Moderate flower and leaf litter; Deciduous (loses leaves in autumn)

**Additional Comments:**

- Flowers attract bees
- Small branches used for basket weaving
- **Only appropriate for use in riparian areas**

## Mimosa

*Albizia julibrisen*

**Mature Size:**

20 to 40 feet tall

**Water:**

Moderate water use

**Sun:**

Full sun

**Hardiness:**

Zones 6-9

**Special Features:**

- Likes hot summer heat
- Good shade tree
- Distinctive pink flowers

**Suggestions for Use:**

- Shade tree
- Accent plant
- Dappled light provides for understory planting

**Maintenance Considerations:**

- Flowers and seed pods cause litter



## Thornless Honey Locust

*Gleditsia triacanthos*

### **Mature Size:**

25 to 40 feet high with equal spread; up to 70 feet elsewhere, but does not reach maximum size in Verde Valley.

### **Water:**

Moderate irrigation requirements

### **Sun:**

Full sun to part shade

### **Hardiness: Introduced**

Tolerates dry soil, air pollution

### **Special Features:**

- Showy yellow color in fall
- Yields large brown seed pods resembling twisted leather strap
- Seed pods attractive to animals
- Attractive lime-green foliage in spring

### **Suggestions for Use:**

- Can be used on hillsides to control erosion
- Street tree
- Parks and public areas
- Parking lot periphery

### **Maintenance Considerations:**

- Tolerates wet and dry sites
- Tolerates salty and alkaline soils
- Tolerates pollution and most urban stresses
- Deciduous (loses leaves in autumn)

### **Additional Comments:**

- Most attractive with dark green backdrop



# Large Trees (50' +)

- **Afghan Pine** (*Pinus elderica*)
- **Arizona Cypress** (*Cupressus arizonica*)
- **Arizona Sycamore** (*Platanus wrightii*)
- **Canyon Hackberry** (*Celtis reticulata*)
- **Deodar Cedar** (*Cedrus deodara*)
- **Fruitless White Mulberry** (*Morus Alba*)
- **London Plane Tree** (*Platanus acreifolia*)
- **Southern Live Oak** (*Quercus virginiana*)
- **Texas Red Oak** (*Quercus buckleyi*)

Afghan Pine  
*Pinus eldarica*

**Mature Size:**

30 to 50 feet tall, spreading with age dependent on watering

**Water:**

Moderate, best with infrequent, deep watering

**Sun:**

Full sun

**Hardiness: Introduced**

Tolerates heat, drought, and wind

**Special Features:**

- Symmetrical tree, casts light to moderate shade
- Stately form- true central trunk



**Suggestions for Use:**

- Specimen Tree
- Wind break
- Attractive in groups

**Maintenance Considerations:**

- Elevating canopy base may result in trunk sun-scald
- Needle litter in fall
- Naturally maintains a 'Christmas tree' shape with little pruning

**Additional Comments:**

- Although these trees can be very attractive in groups, they will require thinning out to maintain tree health and vigor as they grow. It is recommended that plant spacing be taken into consideration when these trees are used in landscapes and along rights-of-way corridors.



Arizona Cypress  
*Cupressus arizonica*

**Mature Size:**

30 to 50 feet tall, possibly taller; 10 to 20 feet wide

**Water:**

Low; drought tolerant

**Sun:**

Full sun

**Hardiness: Native**

High heat tolerance; withstands dry, sterile, rocky soils

**Special Features:**

- Conical crown
- Smooth. Reddish bark
- Blue-green foliage

**Suggestions for Use:**

- Privacy Screen
- Windbreak
- Erosion control

**Maintenance Considerations:**

- Low maintenance

**Additional Comments:**

- Only cypress native to the Southwest



## Arizona Sycamore

*Platanus wrightii*

**Mature Size:**

50 feet tall, less than 50 feet wide

**Water:**

Regular, supplemental irrigation

**Sun:**

Full sun

**Hardiness: Native**

Tolerates variety of soils, heat, air pollution

**Special Features:**

- Golden brown foliage in fall
- Exposed grey-white trunk and branches in winter
- Rugged, upright, stiff tree

**Suggestions for Use:**

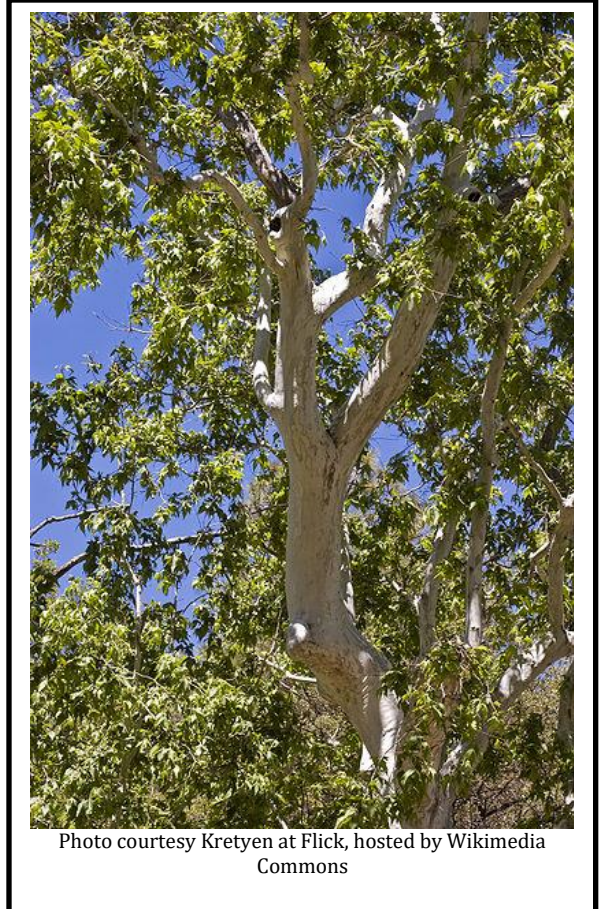
- Shade tree
- Stately specimen tree
- Striking in winter
- Not appropriate for dry sites

**Maintenance Considerations:**

- Do not prune for several years
- Elevate canopy base slowly over time to desired height
- Seasonal litter; Deciduous (loses leaves in autumn)

**Additional Comments:**

- Consider mature size when planting in residential setting
- Best when planted in riparian areas



Canyon Hackberry  
*Celtis reticulata*

**Mature Size:**

30 to 60 feet tall, near equal spread

**Water:**

Give infrequent, but deep regular irrigation during summer

**Sun:**

Full sun

**Hardiness: Native**

Very heat tolerant, low soil fertility, drought

**Special Features:**

- Tiny, orange berries attractive to birds
- Distinctive trunk
- Medium green leaves with coarse texture

**Suggestions for Use:**

- Transitional shade tree
- Use in expansive desert landscape

**Maintenance Considerations:**

- Seasonal litter; Deciduous (loses leaves in autumn)
- No thorns
- Allergenic

**Additional Comments:**

- This is a tough tree, tolerant of many soil types including alkaline soils
- Important wildlife food source



Photo by Sue Smith, hosted by the Yavapai County Arizona Cooperative Extension *Yavapai County Native & Naturalized Plants Database*

Deodar Cedar  
*Cedrus deodara*

**Mature Size**

40-80 feet tall with a 40 foot canopy

**Water:** Moderate

**Sun:** Full Sun

**Hardiness:** USDA Hardiness Zones 7-9

**Suggestions for Use:**

- Large specimen tree
- Large tree lines

**Description:** This is a large, pyramidal evergreen tree with an open branching system and blue-grey needle color. The top-most branch is known for its graceful, nodding tip. Native to the Himalayas, Kashmir and Afghanistan and resistant to insects and disease.

**Special Features**

- Drought tolerant once established
- Very large tree, consider carefully where you put it
- Grows best in acidic, loamy, sandy, or clay soils
- Once established, has good drought tolerance
- Needs good drainage

**Maintenance considerations:**

Branches can be left to touch the ground in a naturalized state or can be trimmed up for a more formal appearance.

**Resources:** Arbor Day Tree Guide



## Fruitless White Mulberry

*Morus alba*

**Mature Size:**

30 to 50 feet high with equal spread

**Water:**

Apply infrequent to regular water during summer

**Sun:**

Full Sun

**Hardiness: Introduced**

Tolerates high temperatures

**Special Features:**

- Fast growing
- Heat and Drought Tolerant
- Trunk bark smooth when young, turns gray and deeply fissured with age

**Suggestions for Use:**

- Excellent shade tree
- Picnic areas; community parks

**Maintenance Considerations:**

- Relatively short-lived
- Spreading roots may damage sidewalks, patios and sewer lines
- Leaf litter in fall, easy to clean up and excellent cattle food

**Additional Comments:**

- Highly allergenic
- Notable nursery varieties include:
  - “Kingman”- large, dark green leaves are heart-shaped
  - “Stribling”- deeply cut leaves



Photo by Anne Barber, courtesy of SEINet Arizona Chapter.

## London Plane Tree

*Platanus x acerifolia*  
‘Bloodgood’

### **Mature Size:**

50-80 feet tall with a 40-60 foot wide canopy

### **Water:**

Moderate to high water requirements until established than drought tolerant

### **Sun:**

Full sun, can tolerate light shade, but prefers a minimum of 4 hours of direct sun daily.



Photo courtesy of cultivar413,  
hosted by Wikimedia Commons

### **Hardiness:**

USDA Hardiness Zones 5-9

### **Suggestions for Use:**

- Dense shade trees, only suitable for large properties

**Description:** This is a large tree that provides good shade. It is a reliable, rapidly growing tree with beautiful maple shaped leaves that turn yellow in the fall. This tree is adapted to urban conditions. The ‘Bloodgood’ is a smaller variety, resistant to anthracnose and powdery mildew and tolerates poor soil and drought.

### **Special Features:**

- Regal appearance
- Rounded pyramidal growth habit
- White, gray, green mottled bark stands out beautifully in winter

### **Maintenance considerations:**

- Do not plant near buildings or sidewalks
- Considerable leaf-drop in the fall and litter from bark and seed balls throughout the year

**Resources:** The Morton Arboretum

## Southern Live Oak

*Quercus virginiana*

**Mature Size:**

40 to 60 feet high and with equal spread

**Water:**

Supplemental water: deep watering once a month or every few weeks

**Sun:**

Full sun

**Hardiness: Introduced**

Tolerates alkaline and compacted soils, air pollution; wind resistant



**Special Features:**

- Strong, rugged, stately character
- Irregular trunk, alligator-skin look when mature
- Small acorns

**Suggestions for Use:**

- Pleasing in desert or oasis landscapes
- Consider large adult size

**Maintenance Considerations:**

- Evergreen, but may drop leaves in cold years
- May occasionally produce basal suckers

**Texas Red Oak**  
*Quercus buckleyi*

**Mature Size:**

20 to 50 feet tall, 20-50 feet wide

**Water:**

Regular, deep and infrequent watering  
before monsoon season

**Sun:**

Full sun

**Hardiness: Introduced**

Tolerates alkaline, neutral and slightly  
acidic soil; cold and heat tolerant



**Special Features:**

- Consistent orange to dark red fall color
- Upright, open and stiff form

**Suggestions for Use:**

- Attractive in desert and oasis landscapes
- Accent tree

**Maintenance Considerations:**

- Best left un-pruned
- Produces acorns in the second year
- Deciduous (loses leaves in autumn)

**Additional Comments:**

- Prefers a somewhat alkaline soil



# Invasive Plants

## To avoid

- **Arundo** (*Arundo donax*)
- **Pampas Grass** (*Cortaderia selloana*)
- **Russian Olive** (*Elaeagnus angustifolia*)
- **Tamarisk** (*Tamarix*)
- **Tree of Heaven** (*Ailanthus altissima*)

Arundo  
*Arundo donax*

**Mature Size:**

Can grow over 20 feet in height and can exceed 33 feet in width

**Water:**

Low to medium

**Sun:**

Sun to part shade

**Environmental Concerns:**

- Listed as noxious weed in Texas and exotic plant pest in California
- Crowds out native plants species
- Reduces wildlife habitat
- Contributes to higher fire frequency and intensity
- Modifies river hydrology and overtakes sensitive riparian ecosystems

**Removal Techniques:**

- Careful use of systemic pesticides and glyphosate by a trained herbicide applicator
- Several biological controls (*Arundo* wasp, *Tetramesa romana*, and *Arundo* fly, *Cryptonevra*) may be available

**Additional Comments:**

- Also known as Giant Reed, Colorado River Reed, and Giant Cane
- Spreads via rhizomes and not readily by seed
- Foliage ignites easily and can create intense fires.
- Root and stem fragments can float downstream and may take root and initiate new infestations



## Pampas Grass *Cortaderia selloana*

**Mature Size:**

8 to 12 foot high with 4 to 6 foot width

**Water:**

Low to medium

**Sun:**

Full sun to light shade

**Environmental Concerns:**

- Invasive in California
- Spreads along ditch banks
- No serious disease or pest problems
- Competes with native plants
- Left un-pruned, excessive build-up of dry leaves and flower stalks create a fire hazard



**Removal Techniques:**

- No known biological control
- Pulling or hand grabbing small plants
- For larger plants remove top growth with a chainsaw or weed-eater and use a mattock or shovel to remove plant crown
- Fall applications of a glyphosate herbicide by a trained herbicide applicator
- Repeat for 1 to 2 years

Russian Olive  
*Elaeagnus angustifolia*

**Mature Size:**

Up to 35 feet high

**Water:**

Moderate to high

**Sun:**

Full; seedlings are tolerant of shade

**Environmental Concerns:**

- Spreads primarily by seed
- Disrupts riparian habitats
- Forms dense stands that outcompete native species
- Taxes underground and surface water resources

**Removal Techniques:**

- Mow down saplings and established hedges, then promptly remove cut material
- Herbicide treatment conducted by a trained herbicide applicator

**Additional Comments:**

- Often found in conjunction with *tamarix ramosissima*
- Thorny shrub or small tree with lance-shaped leaves. Leaves are covered in silvery or rusty scales.
- Begins fruiting at 3 years of age
- Fruits are plentiful and are a food source for native birds



Photo by W.L. Wagner, courtesy of Smithsonian Institution, Department of Botany

## Tamarisk

*Tamarix ramosissima*

### **Mature Size:**

12 to 15 feet high, forms dense thickets 15 feet wide

### **Water:**

Medium to high; long tap roots make it drought tolerant

### **Sun:**

Part to full

### **Environmental Concerns:**

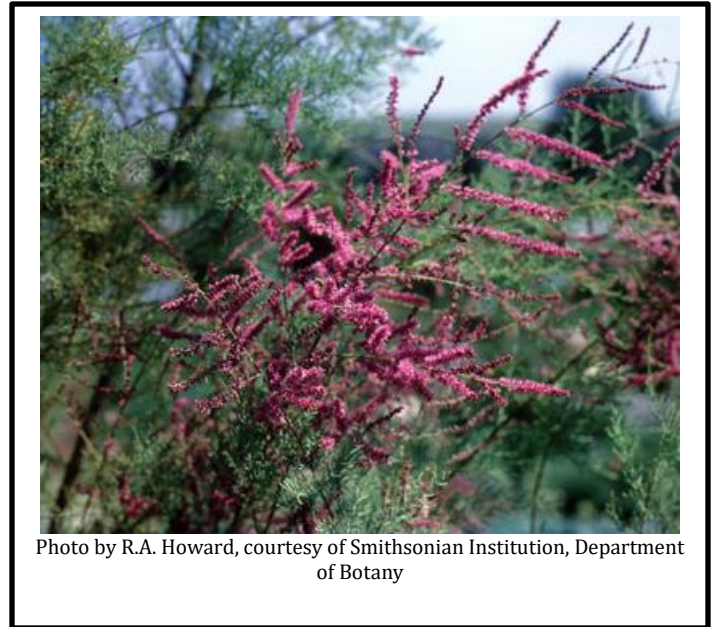
- Disrupts structure and stability of native riparian communities
- Outcompetes nutrient-rich native vegetation
- Flowers and foliage provide little food value to wildlife
- Foliage can add salt deposits to the soil, inhibiting growth of other species
- Long tap intercept deep water tables and interfere with natural water systems
- Narrows and channelizes streams and rivers
- Increases fire risk in sensitive riparian areas
- Spreads via roots or submerged stems, and sexually by seed

### **Removal Techniques:**

- Cut trunks two inches above grade; have a trained herbicide applicator treat stumps immediately
- Use of saltcedar leaf beetle, *Diorhabda elongate*, as a biological control

### **Additional Comments:**

- Also known as salt cedar
- Sapling bark is purplish or reddish-brown
- Leaves are scale-like, alternate, with salt-secreting glands.
- Seeds are dispersed by wind, water, and animals.



Tree of Heaven  
*Ailanthus altissima*

**Mature Size:**

80 feet high with 60 foot crown width

**Water:**

Drought tolerant, but prefers shady, riparian areas

**Sun:**

Can tolerate full sun and almost total shade

**Environmental Concerns:**

- Spreads invasively by aggressive root suckering and self-seeding
- Can damage sidewalks and parking lots
- Forms dense thickets that choke out native plants
- Branches are very brittle, especially in high winds



Photo courtesy of Kardelis, hosted by Wikimedia Commons

**Removal Techniques:**

- Cutting and girdling of large trees during the growing season, followed by a systemic herbicide (Glyphosate or Trilopyr) treatment of stump by a trained herbicide applicator
- Early detection and hand-pulling of small seedlings, removing as much root as possible
- Repeat as needed for 3 to 5 years

**Additional Comments:**

- Don't plant on your property! Especially if you live along the river or an irrigation ditch.
- Leaves and flowers "stink to high heaven"
- Similar leaf structure to walnut or pecan trees, but the leaves of *Ailanthus* are much larger (typically 1 to 3 feet in length)

## Bibliography and Additional Resources

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