

# **Trees and Shrubs** of New Mexico Junior College, Hobbs, NM



**COOPERATIVE EXTENSION SERVICE • GUIDE H-179**

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(Cover photo of Chinese photinia by Miranda L. Kersten.)

Trees planted in New Mexico landscapes offer a great deal of benefits, including shade, erosion control, wind breaks, aesthetics, cleaner air, and cooler temperatures. Identifying these trees and shrubs is important for pest and disease control, educational purposes, and recreational leisure. This guide provides key characteristics to help with identifying trees and shrubs at the New Mexico Junior College campus, located at 5317 N Lovington Hwy, Hobbs, NM.

## GUIDE LAYOUT

Each plant in this list is numbered according to its place on the map (Figure 1). Use this map for your self-guided tour, and look for identification signage along the trail. Some species may look similar to one another—for example, Arizona cypress (11) and smooth Arizona cypress (29)—and may be confused and misidentified. Take time to compare and contrast if you come across similar species.

### Common name (*Species identification*)

- **Leaf** – Description of leaf shape, color, and spacing
- **Fall color** – Color of foliage in the fall
- **Bloom color and season** – Flower color and season of blooming
- **Origin** – Historic range of the species
- **Key ID characteristics** – Characteristics of the species to help with identification

### 1. Screwbean mesquite (*Prosopis pubescens*)

- **Leaf** – Alternate, compound, small, five to eight pairs of leaflets, finely covered with gray hairs, blue-gray, 2–3 in. (5–8 cm) long
- **Fall color** – Blue-green
- **Bloom color and season** – Light yellow; spring to summer
- **Origin** – Southwestern United States and northern Mexico
- **Key ID characteristics** – Cylindrical flower spikes, twigs form in zigzag pattern, tiny buds, slender branches, small thorns solitary or in pairs, coiled seedpods form in clusters, fibrous bark, 12–15 ft (4–4.5 m) tall by 8–10 ft (2.5–3 m) wide

### 2. Ocotillo (*Fouquieria splendens*)

- **Leaf** – Simple, oval, fleshy, 0.5–1 in. (1.3–2.5 cm) long, generally on plant after rain event then drop when soil dries
- **Fall color** – Green to no fall color (depending on moisture level)
- **Bloom color and season** – Red to scarlet; spring to summer
- **Origin** – Southwestern United States and northern Mexico
- **Key ID characteristics** – Whip-like gray stems, 8–20 ft (2–6 m) tall by 8–12 ft (2–4 m) wide, densely thorned, may appear dead when no leaves present, flower clusters appear at top of unbranched stems, stems taper at tip, small buds above thorns, green streaks may appear on bark



*Figure 1. Tree locations within New Mexico Junior College, Hobbs, NM. Tree numbers are ordered as they appear in the guide. Aerial imagery from ESRI.*

**3. Bunny ears cactus (also known as polka dot cactus; *Opuntia microdasys*)**

- **Leaf** – Flat velvety green pads, 6 in. (15 cm) wide, spineless with minute white bristles (glochids)
- **Fall color** – Evergreen
- **Bloom color and season** – Bright yellow or bronzed; spring or early summer
- **Origin** – Mexico
- **Key ID characteristics** – Minute white bristles (glochids), erect to bushy habit, 2 ft (0.6 m) tall by 4–5 ft (1.2–1.5 m) wide

**4. Southern live oak (*Quercus virginiana*)**

- **Leaf** – Alternate, simple, glossy dark green above, gray-green beneath, 2–5 in. (5–13 cm) long
- **Fall color** – Evergreen
- **Bloom color and season** – Inconspicuous/yellowish; early spring
- **Origin** – Southeastern United States
- **Key ID characteristics** – Pointed leaves on young trees, evergreen, small football-shaped acorns (less than 1 in. [2.5 cm]), leaf margins generally curl under, dark and furrowed bark, 20–50 ft (6–15 m) tall in New Mexico

**5. Chinese pistache (*Pistacia chinensis*)**

- **Leaf** – Alternate (but appear opposite), pinnate, 10 to 16 narrow leaflets, dark green, strong peppery scent when crushed, 2–4 in. (5–10 cm) long
- **Fall color** – Red, orange, or yellow
- **Bloom color and season** – Green to red; spring
- **Origin** – China, Taiwan, and the Philippines
- **Key ID characteristics** – Small green berry-like fruit that ripen to blue in the fall, dioecious, exfoliating gray bark with shallow fissures that reveal salmon-colored inner bark, oval buds, 20–40 ft (6–12 m) tall

**6. Washington hawthorn (*Crataegus phaenopyrum*)**

- **Leaf** – Shallow lobes, glossy dark green, up to 2.5 in. (6.3 cm) long, serrate margins
- **Fall color** – Orange to red
- **Bloom color and season** – White; early summer
- **Origin** – Southeastern United States
- **Key ID characteristics** – Thorny branches, bright red fruits (pomes) persist into winter, low-branching, rounded crown, fragrant flowers with five petals appear in clusters (corymbs), up to 40 ft (12 m) tall

## **7. Rocky Mountain maple (*Acer glabrum*)**

- **Leaf** – Three to five lobes with small pointed teeth, 5 in. (1.3 cm) long, sometimes divided into three leaflets
- **Fall color** – Brilliant red or yellow
- **Bloom color and season** – Pale green; late spring to summer
- **Origin** – Western North America
- **Key ID characteristics** – Red-green leaf stalks, often with multiple trunks, 15–30 ft (4.5–9 m) tall, blunt buds, winged fruit (samaras) spread at 90° angles or less, clusters of green to red fruit turn brown when dried, reddish-brown twigs, smooth bark, dioecious

## **8. Ponderosa pine (*Pinus ponderosa*)**

- **Leaf** – Generally three needles per cluster, twisted slightly, 3–5 in. (7–13 cm) long
- **Fall color** – Evergreen
- **Bloom color and season** – Yellow (male) or red (female); spring to early summer
- **Origin** – Western United States
- **Key ID characteristics** – Dark brown to almost black bark with deep dark furrows, 4 in. (10 cm) long cones, can reach over 100 ft (30 m) in height at altitudes above 6,000 ft, butterscotch-scented bark, orange-brown twigs, resinous buds, sharp prickles on end of cone scales

## **9. Fruitless mulberry (*Morus alba* ‘Fruitless’)**

- **Leaf** – Alternate, simple, pointed tips, heart-shaped base, pubescent underneath, can vary in shape on same tree, 3–6 in. (8–15 cm) long, serrate margins
- **Fall color** – Yellow
- **Bloom color and season** – Inconspicuous/light green; early spring
- **Origin** – China
- **Key ID characteristics** – Light green catkins (male flowering structures) with large pollen load, rounded broad tree shape with low canopy, dimorphic (two different shapes) leaves, 30 ft (9 m) tall or more, dioecious (this cultivar is the male clone)

## **10. Japanese black pine (*Pinus thunbergii*)**

- **Leaf** – Two needles per fascicle, stiff, slightly twisted, dark green, 3–5 in. (8–13 cm) long
- **Fall color** – Evergreen
- **Bloom color and season** – Yellow; spring
- **Origin** – Japan and South Korea
- **Key ID characteristics** – Twisted shape to tree, silky white candle-like buds, dark brown to black bark, minute prickles on cone scales, 1–3 in. (2.5–8 cm) long cones, up to 30 ft (12 m) tall in New Mexico



### **11. Arizona cypress (*Hesperocyparis arizonica*)**

- **Leaf** – Opposite, simple, scale-like, blue-green to gray-green
- **Fall color** – Evergreen
- **Bloom color and season** – Green; spring
- **Origin** – Southwestern United States and Mexico
- **Key ID characteristics** – Leaves produce a cross shape when directly viewing top of leaf, exfoliating bark, reddish-brown inner bark, horizontal branching, 30–40 ft (9–12 m) tall

### **12. Rocky Mountain juniper (*Juniperus scopulorum*)**

- **Leaf** – Scale-like, pressed closely to branches, gray to blue-green, 0.1 in. (0.3 cm) long
- **Fall color** – Evergreen
- **Bloom color and season** – Yellowish to green; spring
- **Origin** – Western North America
- **Key ID characteristics** – Round waxy blue berry-like cones less than 0.5 in. (1.3 cm), more blue-green foliage when compared to other junipers, fibrous bark, dioecious, rounded habit, up to 40 ft (12 m) tall in New Mexico

### **13. Heavenly bamboo (*Nandina domestica*)**

- **Leaf** – Tri-pinnate (three leaflets per stem), alternate, ovate, bluish-green, 1–2 in. (2.5–5 cm) long leaflets, entire leaf is 10–20 in. (25–50 cm) long
- **Fall color** – Reddish
- **Bloom color and season** – White; spring
- **Origin** – East Asia
- **Key ID characteristics** – Woody shrub growing 6–8 ft (2–2.4 m) tall, sheath forms around stem at base of petiole, flower has yellow anthers

### **14. Chinese holly (*Ilex cornuta*)**

- **Leaf** – Rectangular-shaped, three large tapering spines at leaf tip, shiny deep green above, dull green beneath, 2–3 in. (5–8 cm) long by 1.5 in. (4 cm) wide
- **Fall color** – Evergreen
- **Bloom color and season** – Dull white; spring
- **Origin** – East Asia
- **Key ID characteristics** – Round bright red fruit, one of the first ornamental shrubs to flower in the spring, fragrant but inconspicuous flowers, dioecious, 8–15 ft (2–4.5 m) tall

### 15. Mugo pine (*Pinus mugo*)

- **Leaf** – Two needles per fascicle, bright to dark green with an often grayish tinge, straight to slightly twisted, gray foliar sheath, 1–3 in. (2.5–8 cm) long
- **Fall color** – Evergreen
- **Bloom color and season** – Yellow; late spring to early summer
- **Origin** – Central Europe
- **Key ID characteristics** – One or more curved trunks, gray-brown to blackish-gray bark, one node per shoot, buds are long red and very resinous, 10–18 ft (3–5.5 m) mature height

### 16. Piñon pine (*Pinus edulis*)

- **Leaf** – Needles in bundles of two, curved upward, needles generally pressed together, 1–1.5 in. (2.5–4 cm) long
- **Fall color** – Evergreen
- **Bloom color and season** – Yellow; spring
- **Origin** – Southwestern United States
- **Key ID characteristics** – Low bushy tree with irregularly rounded crown, short crooked trunk with crooked branches, up to 35 ft (10 m) in height, red-brown furrowed bark, resinous buds and bark, reddish-brown buds, yellowish to reddish-brown cones

### 17. Texas compact sage (*Leucophyllum frutescens* ‘Compacta’)

- **Leaf** – Can be alternate, opposite, or whorled, silvery to bluish-green, hairy, 0.5–1 in. (1.3–2.5 cm) long by 0.25–0.5 in. (0.6–1.3 cm) wide, smooth margins
- **Fall color** – Evergreen
- **Bloom color and season** – Purple; spring to summer
- **Origin** – Texas and northern Mexico
- **Key ID characteristics** – Flowers appear in clusters, hairy silvery-green foliage, thin twigs and stems, sporadic flowering periods (heavy bloomer following a rain event), upright erect habit

### 18. Afghan pine (*Pinus eldarica*)

- **Leaf** – Two needles per fascicle, thin, twisted, green to blue-green, stiff, soft, 5–6 in. (13–15 cm) long
- **Fall color** – Evergreen
- **Bloom color and season** – Yellow; spring
- **Origin** – Afghanistan and central Asia
- **Key ID characteristics** – Pyramidal shape, long needle length, 1–3 in. (2.5–8 cm) reddish-brown cones, wide spacing between branches (long internodes), 30–60 ft (9–18 m) tall, more open and airy habit compared to other pines



## 19. Fruiting mulberry (*Morus nigra*)

- **Leaf** – Upper surface rough, lower surface hairy, multiple shapes, blue-green, 2.75–5 in. (7–12.5 cm) long
- **Fall color** – Yellow
- **Bloom color and season** – Green; late spring to early summer
- **Origin** – Southwestern Asia
- **Key ID characteristics** – Scaly bark, 30 ft (9 m) tall, dioecious, dense canopy with multiple branches, blackish fruits shaped like blackberries

## 20. Spanish broom (*Spartium junceum*)

- **Leaf** – Mostly leafless but alternate and simple when present
- **Fall color** – Evergreen
- **Bloom color and season** – Bright yellow; summer to fall
- **Origin** – Mediterranean region
- **Key ID characteristics** – Upright habit, dark blue-green stems almost leafless, flowers grow at ends of photosynthetic stems, hairy seed pods, fragrant flowers

## 21. Honey mesquite (*Prosopis glandulosa*)

- **Leaf** – Bipinnate, smooth, linear, prominent veins underneath, bright green, six to 17 pairs of leaflets, leaflets are up to 2 in. (5 in.) long
- **Fall color** – None
- **Bloom color and season** – Yellow; spring to fall
- **Origin** – Southwestern United States
- **Key ID characteristics** – Thorny branches, branches are crooked and drooping, erect habit, up to 25 ft (8 m) tall, generally multi-stemmed but can be trained as a tree, elongated seed pods start yellow and turn brown with age, fragrant flowers

## 22. Yaupon holly (*Ilex vomitoria*)

- **Leaf** – Elliptical, leathery, glossy, dark green, purple-red veins on new leaves, 0.5–2 in. (1.3–5 cm) long, toothed margins
- **Fall color** – Evergreen
- **Bloom color and season** – Greenish-white; spring
- **Origin** – South-central and southeastern United States
- **Key ID characteristics** – Fragrant inconspicuous flowers, showy dark red berry-like fruit, dioecious, upright habit with an almost oval shape, 10–20 ft (3–6 m) tall by 8–12 ft (2.4–3.6 m) wide, irregularly branched, new stems are green turning light brown with maturity

### **23. New Mexico privet (*Forestiera neomexicana*)**

- **Leaf** – Opposite, simple, medium green to gray-green, 1.5 in. (3.8 cm) long by 0.25–0.75 in. (0.6–2 cm) wide, smooth to shallowly serrate margins
- **Fall color** – Bright yellow
- **Bloom color and season** – White; spring
- **Origin** – Southwestern United States
- **Key ID characteristics** – Gray to white bark often producing indentations in main stem, blue-black berry-like fruits (drupes) on female plants (dioecious), short overall stature, up to 18 ft (5.5 m) tall

### **24. Parneyi cotoneaster (*Cotoneaster parneyi*)**

- **Leaf** – Simple, alternate, dark green above, whitish-green below, 1–1.5 in. (2.5–4 cm) long by 0.25–0.75 in. (0.6–2 cm) wide
- **Fall color** – Evergreen
- **Bloom color and season** – White; spring
- **Origin** – China
- **Key ID characteristics** – Foliage turns dark purple-red in winter, flower clusters are 2–3 in. (5–8 cm) across and persist for a long time, bright red berries persist through the winter, multi-stemmed trunk, reddish-brown bark, arching habit, 8–10 ft (2–3 m) tall by 10–15 ft (3–4.5 m) wide

### **25. Mexican redbud (*Cercis canadensis* var. *mexicana*)**

- **Leaf** – Alternate, simple, dark green, leathery, glossy with age, heart-shaped, petiole swollen at base, 2–6 in. (5–15 cm) long, wavy margins
- **Fall color** – Golden yellow
- **Bloom color and season** – Pinkish-purple; early spring
- **Origin** – Southwestern United States and Mexico
- **Key ID characteristics** – Usually multi-stemmed, broadly rounded and compact habit, 15–25 ft (4.5–8 m) tall by 12–20 ft (4–6 m) wide, no terminal buds

### **26. Ash (*Fraxinus* sp.)**

- **Leaf** – Opposite, pinnate, five to nine leaflets, 8–12 in. (20–30.5 cm) long, finely toothed to smooth margins
- **Fall color** – Yellow
- **Bloom color and season** – Green; early spring
- **Origin** – North America (varies with species)
- **Key ID characteristics** – Twigs are stout and stiff and often squarish, fruit is a singular slender and papery winged seed, inconspicuous flowers, bark may display diamond-like pattern with maturity, dioecious, generally 30 ft (9 m) or taller

## **27. Red push pistache (*Pistacia atlantica* × *integerrima*)**

- **Leaf** – Dark green, reddish when new, compound leaves with 10 to 16 leaflets
- **Fall color** – Yellow, orange, or red
- **Bloom color and season** – Green; spring
- **Origin** – Parent species native to Asia, Africa, and southern Europe
- **Key ID characteristics** – Open canopy on younger trees, dense canopy with maturity, 25–40 ft (8–12 m) tall by 20–30 ft (6–9 m) wide, inconspicuous flowers, dioecious, new foliage is red and turns dark green with maturity

## **28. Cedar elm (*Ulmus crassifolia*)**

- **Leaf** – Alternate, simple, ovate, dark green, rough texture, uneven base, thick, 2 in. (5 cm) long, serrate margins
- **Fall color** – Yellow
- **Bloom color and season** – Green; late summer to fall
- **Origin** – South-central United States
- **Key ID characteristics** – Scaly bark, drooping branches with corky ridges, oval tree shape, up to 60 ft (18 m) tall in New Mexico, very small narrow leaves (smallest of all elms), hairy fruits (samaras) appear in clusters, reddish twigs with reddish-brown buds

## **29. Smooth Arizona cypress (*Hesperocyparis glabra*)**

- **Leaf** – Opposite, scale-like, three- to four-angled in cross-section, blue-green, dotted with small white flecks, 0.0625 in. (15 mm) long
- **Fall color** – Evergreen
- **Bloom color and season** – Yellow; late winter
- **Origin** – Arizona
- **Key ID characteristics** – Columnar habit, 20–40 ft (6–12 m) tall by less than 2 ft (0.6 m) wide, branches form upright and oval-shaped crown, exfoliating bark revealing a cherry-red inner bark, scaled cones are smooth or scattered, resin blisters may appear on bark

## **30. Pfitzer juniper (*Juniperus* × *pfitzeriana*)**

- **Leaf** – Scale-like, light green, awl-shaped juvenile leaves in whorls of four
- **Fall color** – Evergreen
- **Bloom color and season** – Male clone, no cones expected
- **Origin** – Parent species native to Asia
- **Key ID characteristics** – Branches arched at a 45° angle, drooping branch tips when young, 5–10 ft (1.5–3 m) tall

### 31. Red yucca (*Hesperaloe parviflora*)

- **Leaf** – Arching, gray-green, leathery, narrow, 2–4 ft (0.6–1.2 m) long by 1 in. (2.5 cm) wide, deep grooves with white fibers along margins
- **Fall color** – Evergreen
- **Bloom color and season** – Pink to rose red; spring to summer
- **Origin** – Texas and northeastern Mexico
- **Key ID characteristics** – Red arching 4–5 ft (1.2–1.5 m) tall flower stalks protrude from center of plant in summer, trunk absent, often produces off-shoots (clones) around central plant, blue-green dry fruit capsules, leaves may turn purplish-green, 2 ft (0.6 m) tall by 4 ft (1.2 m) wide

### 32. Purple leaf sand cherry (*Prunus × cistena*)

- **Leaf** – Alternate, red-brown to purple, 3 in. (8 cm) long, serrate margins
- **Fall color** – Bronze-green
- **Bloom color and season** – Whitish-pink; spring
- **Origin** – Parent species native to Europe and Asia
- **Key ID characteristics** – Twigs are red-brown and become dark gray with age, lenticels (pores) on branches, usually multi-stemmed, gray to gray-brown bark with fissures, showy and fragrant flowers, 0.75 in. (1.9 cm) purplish-black fruit (drupes), oval habit when young, 6–10 ft (2–3 m) tall by 6–10 ft (2–3 m) wide, unpruned trees arch with maturity

### 33. Northern red oak (*Quercus rubra*)

- **Leaf** – Alternate, simple, oval, seven to 11 deep lobes, pink to red in spring, green in summer, 4–8 in. (10–20 cm) long
- **Fall color** – Red
- **Bloom color and season** – Yellow-green; mid-spring
- **Origin** – Eastern North America
- **Key ID characteristics** – Smooth gray trunk when young, deeply ridged and brown to black with age, rounded habit, 50–60 ft (15–18 m) tall, acorn cap is flat and thick, large pointed terminal buds, smooth reddish-brown stems

### 34. Honey locust (*Gleditsia triacanthos*)

- **Leaf** – Alternate, odd-pinnate to bipinnate, 15 to 30 leaflets, yellow-green, 5–8 in. (12.7–20.3 cm) long
- **Fall color** – Golden yellow
- **Origin** – Central United States
- **Bloom color and season** – Greenish-yellow; late spring
- **Key ID characteristics** – Twisted seed pods in the fall are long and dark brown, long thorns protrude from branches and stems, open airy crown with oval shape, up to 40–50 ft (12–15 m) tall, dioecious, zig-zagging twigs, dark gray-brown bark

### **35. Tam juniper (*Juniperus sabina* 'Tamariscifolia')**

- **Leaf** – Scale-like, rich green to blue-green, sharp tips, unpleasant odor when crushed
- **Fall color** – Evergreen
- **Bloom color and season** – Inconspicuous; spring
- **Origin** – Southern and central Europe
- **Key ID characteristics** – Densely branched, low-growing, mound-forming to spreading habit, 18–30 in. (46–76 cm) tall by 10–15 ft (3–4.5 m) wide groundcover

### **36. Scarlet firethorn (*Pyracantha coccinea*)**

- **Leaf** – Alternate, simple, elliptical to lance-shaped, pointed leaf tip, 1–1.5 in. (2.5–4 cm) long, toothed margins
- **Fall color** – Evergreen
- **Bloom color and season** – White; spring
- **Origin** – Europe to southeast Asia
- **Key ID characteristics** – Thorny branches and spines on trunk, small buds, new twigs hairy, mature twigs smooth, twigs red-brown in color, showy orange-red berry-like fruit, 6–18 ft (2–5.5 m) tall

### **37. Italian cypress (*Cupressus sempervirens*)**

- **Leaf** – Dark green, scale-like, aromatic, oval, 0.07–0.2 in. (2–5 mm) long
- **Fall color** – Evergreen
- **Bloom color and season** – Yellow-green (male), light green (female); spring
- **Origin** – Southern Europe and western Asia
- **Key ID characteristics** – Narrow columnar shape, generally up to 40 ft (12 m) tall in New Mexico, 1 in. (2.5 cm) woody cones with points on cone scales, exfoliating bark, right-angle branching, aromatic foliage when bruised

### **38. Torulosa juniper (*Juniperus chinensis* 'Torulosa')**

- **Leaf** – Opposite, simple, green, scale-like, fragrant, less than 2 in. (5 cm) long, smooth margins
- **Fall color** – Evergreen
- **Bloom color and season** – Brown, yellow, or green; early spring
- **Origin** – East Asia
- **Key ID characteristics** – Contorted branches and trunk, spreading habit, upright branches, open airy crown, 15 ft (4.5 m) tall by 10 ft (3 m) wide, fragrant leaves, berry-like blue fleshy cones, thin green twigs, dioecious

### 39. Western red cedar (*Thuja plicata*)

- **Leaf** – Opposite, in four rows, scale-like, shiny dark green, usually has white markings on underside, aromatic when crushed, 0.05–0.1 in. (1.5–3 mm) long
- **Fall color** – Evergreen
- **Bloom color and season** – Red to purple; spring
- **Origin** – Western North America
- **Key ID characteristics** – Horizontal branching; 50–70 ft (15–21 m) tall by 15–25 ft (4.5–8 m) wide; bark is fibrous, aromatic, and reddish-brown; seed cones are clustered, sharply pointed, brown, small, and form upright, pyramidal habit, buttressed at trunk base

### 40. Apple (*Malus domestica*)

- **Leaf** – Alternate, simple, toothed margins
- **Fall color** – Yellow, red, or purple
- **Bloom color and season** – White to red; late spring to early summer
- **Origin** – Western Asia
- **Key ID characteristics** – Reddish bark, red/yellow fruits (pomes) in fall, smaller tree with broad habit, 15–30 ft (4.5–9 m) tall

### 41. Nuttall's oak (*Quercus texana*)

- **Leaf** – Alternate, simple, dark green above, lighter green beneath, oval-shaped, thin, deeply lobed with bristles on tips of some lobes, 4–8 in. (10–20 cm) long
- **Fall color** – Orange, red
- **Bloom color and season** – Brown; spring
- **Origin** – Southeastern United States
- **Key ID characteristics** – Oval to round (goblet-shaped) brown acorns 0.5–1 in. (1.3–2.5 cm) long, hair tufts on underside of leaf where veins meet, reddish-brown to gray twigs, drooping branches when mature, oval to round overall structure, moderately dense and symmetrical crown, up to 50 ft (15 m) tall

### 42. Weeping mulberry (*Morus alba* 'Pendula')

- **Leaf** – Alternate, simple, lobed to unlobed (dimorphic) on same plant, smooth leaf surface, dark green and shiny, serrate margins
- **Fall color** – None
- **Bloom color and season** – Green hanging catkins; spring
- **Origin** – China
- **Key ID characteristics** – Weeping form reaching a 20 ft by 20 ft (6 m by 6 m) size, white to purple fruit produced in summer, orange-brown buds pressed closely to reddish-orange twigs



#### **43. Blue Pfitzer juniper (*Juniperus chinensis* ‘Pfitzeriana Glauca’)**

- **Leaf** – Silver-blue, scale-like, new growth is awl-shaped and in whorls of four
- **Fall color** – Evergreen
- **Bloom color and season** – Male clone, no cones expected
- **Origin** – East Asia
- **Key ID characteristics** – Tiered and slightly arching (45° angle) branches, attractive blue-tinted foliage, wide-spreading and pom-pom-shaped habit, 6–8 ft (2–2.4 m) tall by 5–6 ft (1.5–2 m) wide

#### **44. Oregon grape holly (*Mahonia aquifolium*)**

- **Leaf** – Alternate, pinnate, five to nine leaflets, pointed, leathery, oval, new growth is bright red turning glossy dark green with maturity, toothed margins
- **Fall color** – Deep burgundy
- **Bloom color and season** – Brilliant yellow; spring
- **Origin** – Western North America
- **Key ID characteristics** – Clusters of dark blue-purplish berries, lightly fragrant flowers, upright to spreading habit, 3–6 ft (1–2 m) tall by 2–5 ft (0.6–1.5 m) wide

#### **45. Silverberry (*Elaeagnus commutata*)**

- **Leaf** – Alternate, rounded at base, covered in silvery-white scales on upper and lower surface, scatted rusty-brown scales on the lower surface, 1.25–2.5 in. (3–6 cm) long by 0.5–1.25 in. (1.3–3 cm) wide, smooth and wavy margins
- **Fall color** – None
- **Bloom color and season** – Silvery-yellow; early summer
- **Origin** – North America
- **Key ID characteristics** – Silvery-green foliage throughout the season, funnel-shaped flowers that are very fragrant, rusty-brown veins on new leaves, reddish-brown bark with paled lenticels, older bark is gray to gray-brown and rough or scaly, 12 ft (3.6 m) tall

#### **46. Desert willow (*Chilopsis linearis*)**

- **Leaf** – Opposite or alternate, simple, linear to lance-shaped, pointed at tip and at base, 4–12 in. (10–30.5 cm) long by 0.5 in. (1.3 cm) wide, willow-like
- **Fall color** – Yellow
- **Bloom color and season** – Purple, pink, or white; summer to fall
- **Origin** – Southwestern United States and Mexico
- **Key ID characteristics** – Large trumpet-shaped flowers, willow-like leaves, long seed pods, mature pods split open to release seeds, long white hairs attached to seeds, 20–25 ft (6–7.6 m) tall

#### **47. Modesto ash (*Fraxinus velutina* ‘Modesto’)**

- **Leaf** – Odd-pinnate with five leaflets, light green, glossy, velvety, 6 in. (15 cm) long
- **Fall color** – Golden yellow
- **Bloom color and season** – Does not produce flowers
- **Origin** – Southwestern United States
- **Key ID characteristics** – Seedless, light gray bark with diamond-shaped fissures, narrow and compact habit, velvety branches, 40 ft (12 m) tall by same width, dioecious (this cultivar is the male clone)

#### **48. Texas waxleaf privet (*Ligustrum japonicum* ‘Texanum’)**

- **Leaf** – Opposite, simple, dark green, waxy, rounded base, 2–3 in. (5–8 cm) long, smooth margins
- **Fall color** – Evergreen
- **Bloom color and season** – Creamy white; spring to summer
- **Origin** – East Asia
- **Key ID characteristics** – Compact shrub, black fruit in fall, smooth square stems, lenticels on stem and bark, 6–8 ft (2–2.4 m) tall

#### **49. Eastern red cedar (*Juniperus virginiana*)**

- **Leaf** – Opposite, dark green to blue-green, sharp, pointed, spreading, scale-like and needle-like leaves, 1/4 in. (0.6 cm) long
- **Fall color** – Evergreen
- **Bloom color and season** – Green, purple, or brown; spring
- **Origin** – Central to eastern United States
- **Key ID characteristics** – Single stem with upright or spreading branches, reddish-brown bark that is thin and exfoliating, smooth berry-like cones, dioecious, 30–65 ft (9–20 m) tall

#### **50. Chinese photinia (*Photinia serrulata*)**

- **Leaf** – Alternate, simple, oval to oblong shape, shiny, dark green, leaflets are 4–8 in. (10–20 cm) long, serrate margins
- **Fall color** – Evergreen
- **Bloom color and season** – White; spring to summer
- **Origin** – China
- **Key ID characteristics** – Multiple trunks with thin bark that is easily damaged, grows upright and does not droop, often 15–25 ft (4.5–8 m) tall, bright red fruit, pink-tinged new growth, red to red-brown younger twigs, showy flowers persist throughout the winter, unpleasant flower fragrance

### **51. Little leaf linden (*Tilia cordata*)**

- **Leaf** – Alternate, simple, heart-shaped, green above, paler green beneath, 2–4 in. (5–10 cm) long, serrate margins
- **Fall color** – Pale yellow-green
- **Flower color and season** – Creamy to pale yellow; summer
- **Origin** – Europe
- **Key ID characteristics** – Fragrant flowers, showy fruit (nut), pyramidal shape when young but rounds with age, dense and spreading branches, rarely taller than 40 ft (12 m) in New Mexico

### **52. Sweet gum ‘Slender Silhouette’ (*Liquidambar styraciflua* ‘Slender Silhouette’)**

- **Leaf** – Glossy, dark green, star-shaped
- **Fall color** – Yellow to orange, red, or burgundy
- **Bloom color and season** – White; spring
- **Origin** – Eastern North America
- **Key ID characteristics** – Columnar habit, 50 ft (15 m) tall by 5 ft (1.5 m) wide, seed balls with spiky texture are 1.5 in. (3.8 cm), deep furrows on mature bark

### **53. Pecan (*Carya illinoensis*)**

- **Leaf** – Alternate, odd-pinnate, asymmetrical, nine to 17 leaflets, dark green above, paler green beneath, 12–18 in. (30.5–46 cm) long, serrate margins
- **Fall color** – Yellow
- **Bloom color and season** – Greenish-yellow; spring
- **Origin** – Central United States
- **Key ID characteristics** – Produces pecan fruit (nut), can be over 70 ft (21 m) tall at maturity, hairy twigs, yellow to tan buds

### **54. Chinese wisteria (*Wisteria sinensis*)**

- **Leaf** – Alternate, pinnate, seven to 13 leaflets, light green, 10–12 in. (25–30.5 cm) long
- **Fall color** – Brilliant golden-yellow
- **Bloom color and season** – Purple; late spring
- **Origin** – China
- **Key ID characteristics** – Slender stems, fragrant flowers, flowers appear in clusters, vine-like habit, twines in counterclockwise pattern, velvety seed pod is 3–6 in. (8–15 cm) long, dark gray bark, up to 30 ft. (9 m) tall

### **55. Arizona ash (*Fraxinus velutina*)**

- **Leaf** – Opposite, odd-pinnate, three to nine (but usually five) leaflets, narrow to oval, medium to dark green, velvety feel, 3 in. (7.6 cm) long by 1–2 in. (2.5–5 cm) wide, serrate margins
- **Fall color** – Yellow
- **Bloom color and season** – Green; early spring
- **Origin** – Southwestern United States
- **Key ID characteristics** – Gray and furrowed bark with diamond-like fissures, hairy buds, gray twigs, male flowers (dioecious) often damaged by gall mites, fruit (samaras) occur in pairs, 40 ft (12 m) tall

### **56. Gopher plant (*Euphorbia rigida*)**

- **Leaf** – Long, narrow, pointed, fleshy, gray-green, 1.5 in. (3.8 cm) long, arranged in close spirals around stems
- **Fall color** – Red to bronze
- **Bloom color and season** – Greenish with chartreuse yellow bracts; late winter/early spring
- **Origin** – Mediterranean region
- **Key ID characteristics** – Outwardly angled fleshy stems, 2 ft (0.6 m) tall by 2–3 ft (0.6–0.9 m) wide, flowers fade to pinkish color with maturity, clumped habit, succulent-like

### **57. Green ash (*Fraxinus pennsylvanica*)**

- **Leaf** – Opposite, pinnate, three to seven leaflets, young leaves are pubescent, dark green above, paler green below, 1–1.5 in. (2.5–4 cm) long by 0.75–1 in. (2–2.5 cm) wide
- **Fall color** – Yellow
- **Bloom color and season** – Green to reddish-purple; spring
- **Origin** – North America
- **Key ID characteristics** – Rounded crown, gray to brown or reddish bark with diamond-shaped fissures, papery winged fruit is 0.75 in. (19 mm) long by 0.0625 in. (1.5 mm) wide and ripens in fall, opposite branch arrangement, new twigs can be hairy, dioecious, 30–50 ft (9–15 m) tall by 30–50 ft (9–15 m) wide

### **58. Escarpment live oak (also known as Texas live oak; *Quercus fusiformis*)**

- **Leaf** – Alternate, simple, dark green above, grayish-green beneath with dense hairs that rub off, pointed lobes on young leaves but no lobes with maturity, leathery, 1–3 in. (2.5–8 cm) long, margins slightly curled under
- **Fall color** – Evergreen
- **Bloom color and season** – Yellow catkins; spring
- **Origin** – Texas to Oklahoma

- **Key ID characteristics** – Slender and pointed 0.75–1 in. (19–25 mm) long acorns, spreading habit, usually under 40 ft (12 m) tall, short trunk with gnarled branches, dark brown bark with rough and scaly ridges, pubescent twigs

## 59. Juniper (*Juniperus* sp.)

- **Leaf** – Sharply pointed awl- or scale-like needles, opposite or whorled arrangement
- **Fall color** – Evergreen
- **Bloom color and season** – Brownish to yellowish; spring
- **Origin** – North America (varies by species)
- **Key ID characteristics** – Small blue or reddish-brown waxy fruits persist all year, immature fruit is green, strongly scented foliage, fibrous bark, aromatic wood, 15–30 ft (4.5–9 m) tall by 8–15 ft (2–4.5 m) wide

## 60. Spartan juniper (*Juniperus chinensis* ‘Spartan’)

- **Leaf** – Dark green, immature leaves are needle-like, mature leaves are scale-like
- **Fall color** – Evergreen
- **Bloom color and season** – Yellow; spring
- **Origin** – East Asia
- **Key ID characteristics** – Pyramidal to columnar habit, 15–20 ft (4.5–6 m) tall by 3–5 ft (0.9–1.5 m) wide, light brown exfoliating bark with ridges and furrows, cones are blue and ripen to dark brown, densely branched

## 61. Hardy red oleander (*Nerium oleander* ‘Hardy Red’)

- **Leaf** – Opposite or three to four whorled leaflets, simple, linear, short leaf stalk, narrow, glossy dark green, leathery, 3–5 in. (7–13 cm) long by 0.5–0.75 in. (13–19 mm) wide, smooth margins
- **Fall color** – Evergreen
- **Bloom color and season** – Red; summer
- **Origin** – Mediterranean region
- **Key ID characteristics** – Fragrant showy flowers, round to vase-shaped shrubby habit, 4–8 ft (1.2–2.4 m) tall by 4–5 ft (1.2–1.5 m) wide

## 62. One-seed juniper (*Juniperus monosperma*)

- **Leaf** – Green to dark green with white resin glands, fragrant, scale-like when mature, needle-like when young
- **Fall color** – Evergreen
- **Bloom color and season** – Orange; spring
- **Origin** – Southwestern United States to northern Mexico
- **Key ID characteristics** – Erect branchlets with four to six sides, thin fibrous bark, exfoliating bark strips on larger branches, reddish-blue to

brownish-blue smooth berry-like cones, 6–20 ft (2–6 m) tall large shrub to small tree, often with multiple gnarled trunks, dioecious

### 63. Sotol (*Dasyllirion wheeleri*)

- **Leaf** – Simple, blue-gray to dark green, narrow but widens at base, leathery, 3 ft (0.9 m) long by 1 in. (2.5 cm) wide, sharply curved serrate margins
- **Fall color** – Evergreen
- **Bloom color and season** – White to greenish-white; summer
- **Origin** – Southwestern United States to northwestern Mexico
- **Key ID characteristics** – Long flower spike (10–15 ft [3–4.5 m] tall) protrudes from center of plant in summer, flowers form in clusters at tip of flower spike, six petals per flower, small reddish-brown seed capsules, dense set of leaves, 4–6 ft (1.2–2 m) tall by 3–4 ft (0.9–1.2 m) wide, short trunk (almost absent)

### 64. Maverick mesquite (*Prosopis glandulosa* ‘Maverick’)

- **Leaf** – Bipinnate, wide spaces between leaflets, bright green,
- **Fall color** – None
- **Bloom color and season** – Yellow; spring
- **Origin** – Southwestern United States
- **Key ID characteristics** – Spreading habit, thornless, gray and smooth bark, twisted branches, 35 ft (10.6 m) tall by same width, fragrant flowers, long seed pods (over 3 in. [7.6 cm]) start yellow and turn brown

### 65. Black walnut (*Juglans nigra*)

- **Leaf** – Alternate, odd-pinnate, 10 to 24 leaflets, nearly oval to lance-shaped, terminal bud absent, 1–2 in. (2.5–5 cm) long
- **Fall color** – Yellow
- **Bloom color and season** – Yellow-green; late spring to early summer
- **Origin** – Eastern United States
- **Key ID characteristics** – Large hairy buds are light brown in color, dark brown to black bark with deep diamond-shaped fissures, walnut fruit is covered in green husk that turns black with maturity and has four lobes at base, 50 ft (15 m) tall

### 66. Lacebark elm (*Ulmus parvifolia*)

- **Leaf** – Alternate, simple, uneven leaf base, medium green, elliptical to oval, 1.5 in. (3.8 cm) long, serrate margins
- **Fall color** – Yellow
- **Bloom color and season** – Reddish-green to green; late summer to fall
- **Origin** – East Asia
- **Key ID characteristics** – Exfoliating bark, wire-like structure, small oval-shaped buds, light brown twigs, reddish-brown bark turning gray when mature, up to 50 ft (15 m) tall in New Mexico



### **67. Weeping willow (*Salix babylonica*)**

- **Leaf** – Alternate, simple, pointed tips, dark green above, grayish-white beneath, pubescent when young, 2.5–5 in. (6–13 cm) long by 0.25–0.5 in. (6–13 mm) wide, finely toothed margins
- **Fall color** – Greenish-yellow
- **Bloom color and season** – Greenish-silver; early spring
- **Origin** – China
- **Key ID characteristics** – Smooth gray-black bark that fissures with age, slender reddish-brown twigs, elongated buds, weeping habit, short trunk with broad and open canopy, off-shoots often protrude from trunk, irregular crown, 30–40 ft (9–12 m) tall by 30–50 ft (9–15 m) wide, dioecious

### **68. Kentucky coffee tree (*Gymnocladus dioica*)**

- **Leaf** – Bipinnate, three to seven pairs of oval-shaped leaflets, large, blue-green above, paler green beneath, pointed and angled tips, 1–3 in. (2.5–8 cm) long
- **Fall color** – Yellow
- **Bloom color and season** – Greenish-white; late spring to early summer
- **Origin** – Central and eastern North America
- **Key ID characteristics** – Showy and fragrant flowers, flattened reddish-brown seed pods turning blackish with maturity, greenish to orange twigs with tiny buds, rough and scaly gray-brown bark, irregular open crown, up to 50 ft (15 m) tall by 40–55 ft (12–17 m) wide in New Mexico, dioecious

### **69. Northern catalpa (*Catalpa speciosa*)**

- **Leaf** – Whorled to opposite, simple, oval, light green, hairy beneath, up to 1 ft (30 cm) long by 8 in. (20 cm) wide
- **Fall color** – Yellow
- **Bloom color and season** – White; spring
- **Origin** – Central and eastern United States
- **Key ID characteristics** – Wide-angled limbs, sweetly scented flowers, long seed pods that are thin and dark brown and persist into the winter, mature seed pods split open, irregularly shaped crown, 40–60 ft (12–18 m) tall

### **70. Rio Grande cottonwood (*Populus deltoides* ssp. *wislizeni*)**

- **Leaf** – Alternate, simple, flat petioles, triangular, brittle, 5 in. (13 cm) long, toothed margins
- **Fall color** – Yellow
- **Bloom color and season** – Green (female) and red (male); early spring
- **Origin** – Southwestern United States

- **Key ID characteristics** – Irregular crown, open airy habit, contorted branches, very short trunk that branches off early, 50–70 ft (15–21 m) tall, dioecious

## **71. Navajo globe willow (*Salix babylonica* ‘Navajo’)**

- **Leaf** – Narrow, lance-shaped, light green at first, darkening to a medium green, grayish-green beneath, up to 6 in. (15 cm) long by 0.75 in. (2 cm) wide, finely toothed margins
- **Fall color** – Yellow
- **Bloom color and season** – Green; spring
- **Origin** – China
- **Key ID characteristics** – Umbrella-shaped crown, yellow branches and bark when young, grayish-black bark, olive green bark with age, up to 70 ft (21 m) tall, dioecious

## **72. Crape myrtle (*Lagerstroemia indica*)**

- **Leaf** – Opposite (but may appear alternate), simple, short petioles, dark green, 1–2.5 in. (2.5–6 cm) long by 1–2 in. (2.5–5 cm) wide, smooth margins
- **Fall color** – Red, red-orange, or yellow
- **Bloom color and season** – White, pink, red, or purple; summer
- **Origin** – East Asia
- **Key ID characteristics** – Short stature, pie-shaped seed clusters with capsules that split into four sections, smooth gray or light brown exfoliating bark that reveals a pinkish inner bark, may reach 15 ft (4.5 m) in height

## **73. Callery pear (*Pyrus calleryana*)**

- **Leaf** – Alternate, simple, rounded to heart-shaped, dark green, leathery, 1.5–3 in. (4–8 cm) long
- **Fall color** – Red to maroon
- **Bloom color and season** – White; spring
- **Origin** – Asia
- **Key ID characteristics** – Rounded leathery leaves, white flowers, pungent flower scent, oval habit, lacks a central leader, lenticels on twigs, spotted tan fruit, large hairy buds, may reach 35 ft (10 m) tall in New Mexico

## **74. Arizona sycamore (*Platanus wrightii*)**

- **Leaf** – Alternate, simple, three to seven deep lobes, light green, pubescent, 4–10 in. (10–25 cm) long by same width, lobe margins smooth or with one to two teeth
- **Fall color** – Golden brown
- **Bloom color and season** – Green; spring
- **Origin** – Southwestern United States to northern Mexico

- **Key ID characteristics** – Fruits in clusters of one to four, smooth bark is mottled gray to white in color, large conical buds, irregularly shaped tree, 80 ft (24 m) tall when mature



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## GLOSSARY

**Alternate:** Leaves or flowers borne singly along a stem.

**Anther:** The part of the flower that produces pollen.

**Bipinnate:** A leaf that is twice pinnate, with each leaflet being subdivided into smaller leaflets.

**Catkin:** A slim, cylindrical, spike-like flower cluster.

**Central leader:** Main trunk of the tree from which the branches grow.

**Compound leaf:** Two or more leaflets attached to a single stem (Figure 2).

**Crown:** Branches, leaves, and reproductive structures extending from the trunk or main stems.

**Dimorphic:** Having two different shapes or forms.

**Dioecious:** Female and male flowers on separate plants.

**Entire:** Margins without teeth or serrations.

**Fascicle:** Cluster of leaves or flowers that are growing close together.

**Habit:** Growth form or appearance of a plant.

**Internode:** Portion of the stem between two nodes.

**Leaflet:** A single division of a compound leaf.

**Lenticel:** Raised pore on bark that assists with gas exchange.

**Lobes:** Rounded portions of a leaf margin.

**Margin:** Leaf area extending along the edge of the leaf.

**Monoecious:** Female and male flowers on the same plant.

**Node:** Location on the stem from which leaves and branches grow.

**Odd-pinnate:** A pinnately compound leaf with an odd number of leaflets and with a terminal leaflet at the end.

**Opposite:** Growing in pairs on either side of a stem.

**Ovate:** Oval- or egg-shaped.

**Petiole:** The stalk of a leaf that joins the leaf to the stem.

**Pinnate:** A compound leaf with several leaflets growing along an extended petiole, which may look like several small leaves (Figure 2).

**Pubescent:** Having a hairy texture.

**Serrate:** Having teeth- or saw-like notches.

**Simple:** Undivided or unsegmented, such as a leaf not divided into leaflets (Figure 2).

## ADDITIONAL RESOURCES

Check out the following resources to learn more about tree identification and tree species in your area.

Arbor Day Foundation. 2019.

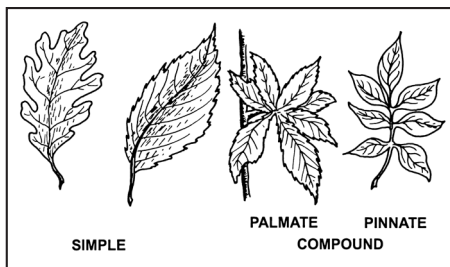
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1998. *A field guide to western trees: Western United States and Canada*, 2nd ed. Boston: Houghton Mifflin Company.

Tree Plotter. 2019. New Mexico Treeplotter Inventory [Online].

Available at <https://pg-cloud.com/NewMexico/>



**Figure 2.** Simple leaves are composed of one leaf (left), while compound leaves have two or more leaflets attached to a single stem (right). From left to right, a simple leaf with a lobed margin, a simple leaf with a serrate margin, a palmately compound leaf, and a pinnately compound leaf (photo by Pearson Scott Foresman, Wikimedia Commons).

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