

# New Mexico Forestry Division

## Spring 2025 Seedling List

SPECIES	HEIGHT	GROWTH RATE	COLD HARDINESS	WATER NEEDS	ALKALINITY TOLERANCE	ELEVATION	Size
<u>AFGHANISTAN PINE</u>	60 feet	Fast	Poor	Moderate	Moderate	3000- 5500	Small
<b>Pinus eldarica</b> A medium-sized tree native to southwest Asia. It forms a dense conical crown. An extensive root system gives this tree the ability to withstand drought. Plantings are best in southern New Mexico due to it not being cold hardy enough for the northern half of the state. Hardiness zone 7-10 below 5500 feet in elevation. It has a crown width of between 30 and 40 feet. The optimum soil pH is 7.0 to 8.5. <b>Pest Problems:</b> Nantucket pine tip moth, Ips bark beetle, and spider mites. <b>Suggested Uses:</b> windbreaks and Christmas trees.							
<u>APACHE PLUME</u>	4 - 6 feet	Fast	Good-Excellent	Low	Moderate-High	5000- 8000	Small
<b>Fallugia paradoxa</b> This native shrub occurs along the sides of dry washes and hillsides. The rose-like white flowers are showy in the early summer with feathery clusters of plume-like fruit in the fall and winter. Provides nesting sites and material for birds. It has high calcium carbonate tolerance and low salinity tolerance. The optimum soil pH is 7.0 to 8.0. It is shade intolerant. Hardiness zones are 3 through 10 below 8000 feet in elevation. The width is between 4 and 6 feet. <b>Pest Problems:</b> none serious. <b>Suggested Uses:</b> windbreaks, erosion control, and wildlife plantings.							
<u>APRICOT</u>	15- 20 feet	Fast	Excellent	Moderate	Moderate	2800- 7000	Bare
<b>Prunus armeniaca</b> Small fast-growing tree. Rounded, spreading form. It is winter-hardy and moderately drought tolerant. Hardiness zones are 5 through 8. Foliage is golden orange in the fall. It has pink blooms March to April. It is self-pollinating but is more likely to produce fruit with two or more plants. Is cold hardy to USDA hardiness zone 3 and can be grown in USDA hardiness zones 3 through 8 below 7000 feet in elevation. Fruit is golf-ball size. Crown width is 12 to 18 feet, bark is reddish-brown, and the root system is medium in depth and spread. Requires full sun, prefers loam soils and soils pH of 6.0 to 7.5. <b>Pest Problems:</b> No major pest problems. <b>Suggested Uses:</b> windbreaks, nesting sites							
<u>ARIZONA ASH</u>	25-50 feet	Moderate	Fair	Moderate	Moderate	3000- 7000	Small
<b>Fraxinus velutina</b> This native tree, also called Velvet Ash, is widely distributed through canyon bottoms in SW New Mexico. It is well adapted to the desert areas of NM and has moderate wildlife value for birds. Has no calcium carbonate tolerance and low salinity tolerance. It is shade intolerant. Hardiness zones are 7 through 10. The crown width averages 25 feet. It grows in soils that range from 5.8 to 7.5 pH. <b>Pest Problems:</b> no serious pests. <b>Suggested Uses:</b> riparian reclamation, windbreaks, erosion control, and wildlife plantings.							
<u>ARIZONA CYPRESS</u>	40-60 feet	Fast	Fair	Low	Moderate-High	3000- 8000	Small
<b>Cupressus arizonica</b> This native evergreen tree has a conical crown. It survives well in shallow, alkaline soils. It is a low maintenance tree once established. Its shape when young has suggested to some to be used for Christmas trees. It is an excellent choice for windbreak plantings. Has high calcium carbonate tolerance and low salinity tolerance. The optimum soil pH is 6.1 to 7.9. It is shade tolerant. Hardiness zones are 6 through 9. Crown width averages 20 feet. <b>Pest Problems:</b> western cedar borer, cypress bark beetle, and spider mites. <b>Suggested Uses:</b> windbreaks, energy conservation plantings, and Christmas trees.							
<u>ARIZONA ROSEWOOD</u>	10-18 feet	Slow-Moderate	Fair	Low	High	3000- 5000	Small
<b>Vauquelinia californica</b> A native to SW New Mexico this rare evergreen species has an upright rigid shape and is found on dry, rocky hillsides and canyons. It produces clusters of white flowers in June. It is shade intolerant and cold hardy to 15 degrees Fahrenheit and very heat tolerant, so it is suited for the southern part of New Mexico. Attracts bees, butterflies, and birds. Hardiness zones 8 through 10. It has a width of 10 to 15 feet. The optimum soil pH is 6.1 to 9.0. <b>Pest Problems:</b> None serious. <b>Suggested Uses:</b> windbreaks, erosion control and wildlife.							
<u>ASPEN</u>	60-80 feet	Fast	Excellent	Moderate-High	High	6500- 10000	Small
<b>Populus tremuloides</b> A native tree widely distributed above 7500 feet as a pioneer species after fire or other disturbances. Its bright fall colors light up the mountains where it is plentiful. Elk and deer browse the foliage when within reach. Fall colors are from bright yellow to gold and sometimes orange/red. It has high calcium carbonate tolerance and no salinity tolerance. The optimum soil pH is 4.3 to 9.0. It is shade intolerant. Hardiness zones are 2 through 8 above 6500 feet in elevation. The average crown width is 20 to 30 feet. <b>Pest Problems:</b> poplar borer, leaf miner, cytospora cankers, and tent caterpillar. <b>Suggested Uses:</b> wildlife plantings, reforestation, and reclamation above 6500 feet.							
<u>AUSTRIAN PINE</u>	up to 60 feet	Moderate-Fast	Good	Moderate	Moderate	3500- 7500	Small
<b>Pinus nigra</b> This fast-growing pine is native to Europe, but has proved to establish and grow well in the Southwest. It tolerates a variety of soils. It is an excellent choice for a windbreak planting. Many types of birds find cover in its branches, and some use the seed for food. It has high calcium carbonate tolerance and high salinity tolerance. Optimum soil pH is 5.5 to 7.5. It is shade intolerant. Hardiness zones are 4 through 8 below 7500 feet in elevation. The average width at maturity is 25 feet. <b>Pest Problems:</b> Ips bark beetle, twig beetles, and pine tip moth. <b>Suggested Uses:</b> wildlife plantings, windbreaks, and sound screens.							
<u>BLACK WILLOW</u>	up to 100 feet	Fast	Good-Excellent	High	Moderate	1500- 6000	Small
<b>Salix nigra</b> Black willow resembles Goodding's Black willow and the two species are sometimes considered to be varieties of the same species. It occurs along streambanks and in floodplain areas. It has massive trunks that usually lean and are often divided. The crown is broad and open. Birds eat the buds and flowering catkins, and deer eat the twigs and leaves. It is also commonly used as nesting habitat by small bird species. It has low calcium carbonate tolerance and medium salinity tolerance. The optimum soil pH is 4.8 to 8.0. It is shade intolerant. Hardiness zones are 4a through 9a below 6000 feet in elevation. <b>Pest Problems:</b> None serious. <b>Suggested Uses:</b> erosion control of streambanks, wildlife plantings							
<u>BLUE SPRUCE</u>	up to 80 feet	Slow	Excellent	High	Low-Moderate	5000- 10000	Small
<b>Picea pungens</b> A native conifer that has a conical shape and will require supplemental water and generally requires some shade protection when young. The color of the foliage is from green to blue and it is often used as a Christmas tree in New Mexico. It also has value to the wood products industry. It has high calcium carbonate tolerance and no salinity tolerance. The optimum soil pH is 5.5 to 7.8. It has intermediate shade tolerance. Hardiness zones are 2 through 7 above 5000 feet. The width is between 20 to 30 feet. <b>Pest Problems:</b> Douglas-fir tussock moth, needle scale, and spruce aphids. <b>Suggested Uses:</b> reforestation, Christmas trees, and windbreaks.							
<u>BLUESTEM WILLOW</u>	up to 12 feet	Fast	Excellent	High	Low-Moderate	5200- 8500	Small
<b>Salix irrorata</b> This native shrub is widespread over New Mexico and occurs in thickets along rivers, creeks, and intermittent streams. It has twigs that are a striking purplish-blue color and white flowers. It has no salinity tolerance. Hardiness zones are 2 through 8 above 5200 feet. Optimum soil pH is 5.5 to 7.5. The width averages 15 feet. <b>Pest Problems:</b> None serious. <b>Suggested Uses:</b> Riparian restoration, streambank stabilization and wildlife plantings.							
<u>BUR OAK</u>	70–80 feet	Slow-Moderate	Excellent	Moderate	Moderate	0- 7500	Bare
<b>Quercus macrocarpa</b> This majestic oak tree is very adaptable to various soils and tolerates alkaline soils as well. It produces a large burry acorn which is edible. The fruit matures in one year. It is drought tolerant and cold hardy; Has medium calcium carbonate tolerance and no salinity tolerance. It has intermediate shade tolerance. The average crown width is 40 feet. Optimum soil pH is 4.5 to 7.5. Hardiness zones are 4 through 8 at elevations under 7500 feet. <b>Pest Problems:</b> minor problems. <b>Suggested Uses:</b> windbreaks, wildlife plantings, and energy conservation plantings.							
<u>CHOCKECHERRY</u>	6-20 feet	Moderate-Fast	Excellent	Moderate-High	Low	5500- 9500	Bare, Small
<b>Prunus virginiana</b> A native shrub or small tree that forms dense barriers. It prefers deep and sandy loam soils. It is an important species for wildlife as bear, deer, and other animals use it for food. It is a species that minimizes stream bank erosion. Its fruit is widely used in jellies and jams. Chokecherry is self-pollinating. It has medium calcium carbonate and salinity tolerance. The optimum soil pH is 5.2 to 8.4. It has intermediate shade tolerance. Hardiness zones are 2 through 7 at elevations between 5500 and 9500 feet. The crown width is between 10 and 20 feet. <b>Pest Problems:</b> borers, pear slugs, and tent caterpillar. <b>Suggested Uses:</b> windbreaks, riparian restoration, and wildlife plantings.							
<u>COYOTE WILLOW</u>	10 feet	Fast	Good	High	High	3500- 7500	Small
<b>Salix exigua</b> This is one of the most common and widespread willows in New Mexico. It commonly forms thickets along streams, roadside ditches and is an important species to riparian areas. It is adapted to sandy soils in stream, river, and shoreline sites. It is heavily browsed by deer year-round. Cattle will browse it in the summer and early fall. It has low saline tolerance, intermediate shade intolerance and prefers a pH between 6 and 8.5. Hardiness zones are 4 through 9. <b>Pest Problems:</b> No major pests. <b>Suggested Uses:</b> Riparian restoration, erosion control in riparian sites and wildlife habitat							
<u>DESERT WILLOW</u>	25 feet	Fast	Fair-Good	Low	High	3000- 6000	Small
<b>Chilopsis linearis</b> A native shrub or small tree found in washes and along roadsides. This species is tolerant of poor soils and considerable drought. This deciduous plant is classified as a phreatophyte, and is an indicator that water is not too far below the surface during part of the year. The wood is often used for fence posts. It has medium calcium carbonate tolerance and low salinity tolerance. The optimum soil pH is 6.6 to 10.0. Hardiness zones are 7 through 11 at elevations below 6000 feet. It has intermediate shade tolerance. The crown width averages 20 feet. <b>Pest Problems:</b> no major pests. <b>Suggested Uses:</b> windbreaks, erosion control, screens, and wildlife plantings.							
<u>DOUGLAS-FIR</u>	80+ feet	Moderate	Excellent	High	Moderate	4500- 10000	Small

**Pseudotsuga menziesii** A large, native tree with a dense, conical crown. The wood is one of the strongest of the soft woods. It has significant value to the wood products industry and is used extensively as a Christmas tree. This species can live for hundreds of years. It has moderate calcium carbonate tolerance and no salinity tolerance. The optimum soil pH is 5.0 to 7.5. It has intermediate shade tolerance. Hardiness zones are 4 through 6 above 4500 feet in elevation. The width is between 20 and 30 feet. **Pest Problems:** Douglas-fir tussock moth, spruce budworm, and wooly aphids. **Suggested Uses:** reforestation (important timber species in western US), wildlife plantings, and Christmas trees.

ENGELMANN SPRUCE	up to 120 feet	Slow	Excellent	Moderate	Moderate	5000- 11500	Small
------------------	----------------	------	-----------	----------	----------	-------------	-------

**Picea engelmannii** This native spruce is long-lived, and strongly resembles blue spruce. It grows on drier sites than blue spruce and has moderate watering needs. It is conical in form and has a narrow spire-like crown. Small birds and mammals use the seed as a food source. It has high calcium carbonate tolerance and no salinity tolerance. Optimum soil pH is 6.0 to 8.0. It is shade tolerant. Hardiness zones are 1 through 8 above 5000 feet. The crown width averages 30 feet. **Pest Problems:** western spruce budworm and spruce beetle. **Suggested Uses:** reforestation, Christmas trees, and windbreaks.

FALSE INDIGO BUSH	6-10 feet	Moderate	Good-Excellent	Moderate	Moderate	3000- 7000	Small
-------------------	-----------	----------	----------------	----------	----------	------------	-------

**Amorpha fruticosa** False indigo bush is a native shrub that grows in dense stands along streambanks, irrigation ditches, irrigated pastures, and the edges of woodlands. It has purple spire-like flowers that bloom from May to July. The nectar from the flowers attracts birds and butterflies. The leaves are pinnately compound with 11 to 15 leaflets per stem. The average width of the plant is 5 feet. It has medium calcium carbonate tolerance and low salinity tolerance. The optimum soil pH is 5.0 to 8.5. Hardiness zones are 4 to 9 below 7000 feet in elevation. It is shade intolerant. **Pest Problems:** insect gall. **Suggested Uses:** erosion control and wildlife plantings.

FIRECRACKER PENSTEMON	up to 3 feet	Slow	Excellent	Low	Moderate	3000- 11000	Small
-----------------------	--------------	------	-----------	-----	----------	-------------	-------

**Penstemon eatonii** Native plant that has bright red flowers that bloom May through August, is adaptable to various soil types. It provides forage for deer, antelope and birds. It has intermediate shade tolerance, has high calcium carbonate tolerance, and no salinity tolerance. Hardiness zones are 4 through 9. It is a pollinator for native bees. **Pest Problems:** none serious **Suggested Uses:** erosion control, reclamation, wildlife forage

FOUR-WING SALTBUSH	4-6 feet	Fast	Good	Low	High	3000- 8000	Small
--------------------	----------	------	------	-----	------	------------	-------

**Atriplex canescens** This native shrub grows across a wide variety of soils including saline soils and is highly prized plant by the Navajos as forage for their cattle, sheep, and goats; especially in early spring when other forage is scarce. It is also an excellent wildlife species. It has high calcium carbonate tolerance and high salinity tolerance. Optimum soil pH is 6.5 to 9.5. It is shade intolerant. Hardiness zones are 4 through 9 up to 8000 feet in elevation. The width is between 4 and 8 feet. **Pest Problems:** no major pests. **Suggested Uses:** windbreaks, wildlife plantings, erosion control, and reclamation of severely disturbed sites.

FRINGED SAGE	2 feet	Fast	Excellent	Low	Moderate	5500- 8000	Small
--------------	--------	------	-----------	-----	----------	------------	-------

**Artemisia frigida** Is native to most counties in New Mexico. It is drought tolerant and browsed by elk, deer, bighorn sheep, and pronghorn. It is also important to small game and nongame animals. It is also as a food plant for butterfly and moth species. It has medium saline tolerance, intermediate shade tolerance, and prefers a pH of 7.0 to 9.0. Hardiness zones are 3 through 10 at elevations between 5500 and 8000 feet. **Pest Problems:** none known **Suggested Uses:** soil stabilization and wildlife habitat

GOLDEN CURRANT	4-6 Feet	Fast	Good	Low	Low	3000- 9000	Small
----------------	----------	------	------	-----	-----	------------	-------

**Ribes aureum** A native to New Mexico in the spring the golden currant richly deserves its name - golden yellow clusters of long, trumpet-shaped, spicy fragrant flowers, adorn the shrub in abundance. The edible fruit is made into jellies and jams, and delicious pies. Golden currant is self-pollinating. It has high calcium carbonate tolerance and no salinity tolerance. Optimum soil pH is 6.0 to 8.0. Hardiness zones are 5 through 8 at elevations between 3000 and 9000 feet. Its shade tolerance is intermediate. The width is between 3 and 6 feet. **Pest Problems:** leaf rust fungus, alternate host of White Pine blister rust. **Suggested Uses:** windbreaks, revegetation, erosion control (in it's native range), and wildlife plantings.

HACKBERRY	40-60 Feet	Slow-Moderate	Good	Low-Moderate	Moderate	4500- 7000	Bare
-----------	------------	---------------	------	--------------	----------	------------	------

**Celtis occidentalis** A hardy, drought tolerant tree adapted to the hot, dry climate of New Mexico and thought to be native to northeastern New Mexico. This spreading tree produces fruit that is popular with birds. It also produces sweet nectar that attracts many species of butterflies. This tree can be used in windbreaks and wildlife plantings. It has medium calcium carbonate tolerance and no salinity tolerance. The optimum soil pH is 6.0 to 7.8. It is shade tolerant. The crown width is 40 feet. **Pest Problems:** leaf gall psylids and nipple gall. **Suggested Uses:** windbreaks and wildlife plantings.

HONEY LOCUST	30 - 50 feet	Fast	Good	Low	Moderate	0- 0	Bare
--------------	--------------	------	------	-----	----------	------	------

**Gleditsia triacanthos** Honey locust is widely cultivated as an ornamental and shade tree. This tree is tolerant of drought, low temperatures and alkaline soils. It is used in windbreaks and erosion control. **Pest Problems:** Mimosa web worm. **Suggested Uses:** windbreaks and erosion control.

HOPTREE	up to 25 feet	Slow-Moderate	Excellent	Low-Moderate	Moderate	4000- 9000	Small
---------	---------------	---------------	-----------	--------------	----------	------------	-------

**Ptelea trifoliata** This native tree also known as wafer ash reaches up to 25 feet with a crown spread of 10 to 15 feet. The leaves are trifoliolate and are four to six inches in length and turn yellow in the fall. Their flowers are inconspicuous greenish-white and have an orange blossom-like perfume. Its fruit attracts bird, squirrels and other mammals. Grows on dry, rocky slopes to valley bottoms. It has medium salinity tolerance, medium calcium carbonate tolerance, and intermediate shade tolerance. The optimum soil pH is 4.8 to 7.0. Hardiness zone is 4 through 9. **Pest Problems:** none serious **Suggested Uses:** wildlife habitat, windbreaks

LACEBARK ELM	50 feet	Fast	Good-Excellent	Low-Moderate	Moderate	4500- 8000	Small
--------------	---------	------	----------------	--------------	----------	------------	-------

**Ulmus parvifolia** Lacebark Elm, or true Chinese Elm, should not be confused for the notoriously spreading Siberian Elm. Siberian Elm is often and mistakenly called Chinese Elm. Lacebark Elm is a medium sized tree with a round to oval crown. It is a gentleman as it doesn't spread like the Siberian Elm. It is an excellent drought tolerant species for use in windbreaks. It can grow as much as 3 feet per year. It is adaptable to most soil conditions. It has low calcium carbonate tolerance and no salinity tolerance. The optimum soil pH is 4.8 to 7.0. Hardiness zones are 5 through 9 at elevations between 4500 and 8000 feet. It is shade intolerant. The crown width is between 30 and 40 feet. **Pest Problems:** none serious. Resistant to elm leaf beetle and Dutch elm disease. **Suggested Uses:** windbreaks and firewood.

LIMBER PINE	up to 60 feet	Slow	Excellent	Low	Low	7500- 12000	Small
-------------	---------------	------	-----------	-----	-----	-------------	-------

**Pinus flexilis** This native 5-needled pine is very long-lived. It is pyramidal in shape during youth, becoming more flat-topped at maturity. The crown width is between 15 and 30 feet. The pine seeds are an excellent source of food for birds and small mammals. It has medium calcium carbonate tolerance and no salinity tolerance. The optimum soil pH is 5.7 to 6.5. It has intermediate shade tolerance. Hardiness zones are 4 through 7. **Pest Problems:** bark beetle, twig beetle, dwarf mistletoe and White Pine blister rust. **Suggested Uses:** windbreaks, Christmas trees, and reforestation.

NARROWLEAF COTTONWOOD	up to 70 feet	Fast	Good-Excellent	Moderate-High	Moderate	5000- 10000	Small
-----------------------	---------------	------	----------------	---------------	----------	-------------	-------

**Populus angustifolia** This is a native tree with willow-like leaves, common along streams in the mountains of New Mexico. It represents the principal mountain Cottonwood species. It provides cover for wildlife and is a good browse species. It has high tolerance for calcium carbonate and low tolerance for salinity. The optimum soil pH is 6.0 to 7.5. It is shade intolerant. Hardiness zones are 3 to 8 above 5000 feet. The crown width is between 30 and 40 feet. **Pest Problems:** Leaf rust, fall webworm, poplar borers **Suggested Uses:** Windbreaks, Wildlife plantings, erosion control and riparian restoration

NATIVE PLUM	6-8 feet	Moderate	Excellent	Moderate	Low	4500- 8000	Bare
-------------	----------	----------	-----------	----------	-----	------------	------

**Prunus americana** This is a small native tree adapted to a wide range of soils and requires supplemental watering on dry sites until established. It produces very fragrant clusters of showy white flowers in the spring and produces a sweet edible fruit. The leaves turn an orange-red in the fall. It needs cross-pollination to produce a good fruit crop. It is cold hardy and drought tolerant once established. It is an excellent choice for wildlife plantings. It has high calcium carbonate tolerance and low salinity tolerance. Optimum soil pH is 5.0 to 7.0. It is shade intolerant. Hardiness zones are 3 through 8 at elevations between 4500 and 8000 feet. The crown width is between 10 and 15 feet. **Pest Problems:** pear slug, aphids, and powdery mildew. **Suggested Uses:** windbreaks and wildlife plantings.

PALMER'S PENSTEMON	up to 5 feet	Moderate	Excellent	Low	Low	2600- 8200	Small
--------------------	--------------	----------	-----------	-----	-----	------------	-------

**Pestemon palmeri** Native to New Mexico. It is a perennial herb to slightly wood subshrub. Has fleshy leaves and has white to pink flowers that are fragrant. It is found in dry washes, grasslands, pinon-juniper and ponderosa pine communities. It is very drought and heat tolerant. It is shade intolerant, pH tolerance is 6.0 to 7.9, saline intolerant and prefers precipitation between 6 and 14 inches per year. Hardiness zones are 4 through 9 at elevations below 8200 feet. Adapted to coarse and medium textured, well-drained soils. **Pest Problems:** **Suggested Uses:** wildlife plantings and erosion control

PEACHLEAF WILLOW	30 feet +	Fast	Good-Excellent	High	Moderate	4500- 7400	Small
------------------	-----------	------	----------------	------	----------	------------	-------

**Salix amygdaloides** This native tree is found along rivers and streams in rich alluvial soils. It is readily identified by its gleaming leaves and pendulous branchlets, which gives it a weeping appearance. It is an excellent species for streambank stabilization. It has medium calcium carbonate tolerance and no salinity tolerance. The optimum soil pH is 6.0 to 8.0. It is shade intolerant. Hardiness zones are 2 through 8 at elevations between 4500 and 7400 feet. The width is up to 40 feet. **Pest Problems:** None serious **Suggested Uses:** Riparian restoration, streambank stabilization and wildlife plantings.

PECAN	70 to 100 feet	Moderate	Good	High	Moderate-High	0- 5000	Small
-------	----------------	----------	------	------	---------------	---------	-------

**Carya illinoensis** Ungrafted, oval crowned deciduous tree, has a spread of 40 to 75 feet. Fruit is an oblong nut. The nuts be used by deer, wild turkeys, various bird species, and various small mammals. It is also used by butterflies. It grows in moist, well-drained soils such as sandy, sandy loam, medium load, clay loam, clay and caliche. These seedlings are not cultivars, so nut quality varies. If you are a commercial grower you will need to find cultivars. Is shade intolerant, has low calcium carbonate tolerance, and has a preferred pH range of 4.5 to 7.5. Is salt intolerant. Grow well in the southern half of New Mexico if soil is kept moist. USDA hardiness zones are 6 to 9, but probably won't produce nuts in the colder zones since it requires consistent warm night temperatures to produce nuts. **Pest Problems:** none major - aphids, borers, tent caterpillars, webworms **Suggested Uses:** wildlife habitat, furniture wood

PIÑON	up to 40 feet	Slow	Good-Excellent	Low	Moderate-High	3500- 8500	Small
-------	---------------	------	----------------	-----	---------------	------------	-------

**Pinus edulis** The New Mexico state tree is an aromatic pine which grows across a wide variety of soils and does well under cultivation. It is popular for the edible nuts it produces. Under most conditions it is self-pollinating. It has high value for upland game and song birds. It is very drought tolerant, but slow growing. Has low calcium carbonate tolerance and medium salinity tolerance. Hardiness zones are 6 through 8. Optimum soil pH is 6.5 to 8.5. The crown width is between 20 and 30 feet. **Pest Problems:** Ips bark beetle, piñon needle scale, needle miner, twig beetle, and pitch moth. **Suggested Uses:** windbreaks, reforestation, and Christmas trees.

<u>PLAINS COTTONWOOD</u>	up to 85 feet	Fast	Excellent	High	Low-Moderate	3500- 9000	Small
--------------------------	---------------	------	-----------	------	--------------	------------	-------

**Populus deltoides ssp. monilifera** This cottonwood is native to the eastern plains of New Mexico and is found in moist areas and near stream banks. It is also highly drought tolerant. It is appropriate for planting east of the Pecos River. Rio Grande Cottonwood should be planted west of the Pecos River. The crown spread is 50-60 feet and the leaves are wide and triangular in shape, 3-6 inches long. They turn golden yellow in the fall. It has medium tolerance for calcium carbonate and no salinity tolerance. Hardiness zones are 3 through 9 at elevations below 9000 feet. The optimum soil pH is 5.0 to 7.0. It is shade intolerant. The crown width is between 30 and 40 feet. **Pest Problems:** None serious. **Suggested Uses:** riparian restoration, stream bank stabilization, and wildlife plantings.

<u>PONDEROSA PINE</u>	up to 80 feet	Moderate	Excellent	Moderate	Moderate-High	4500- 9000	Small
-----------------------	---------------	----------	-----------	----------	---------------	------------	-------

**Pinus ponderosa** This is a large, native conifer. It is the primary commercial tree species in New Mexico. It has a pyramidal shape when young and becomes conical with age. Squirrels clip the cones and store them in caches and extract the seeds for winter consumption. The tree grows best on well-drained soils. It has low calcium carbonate tolerance and no salinity tolerance. The optimum soil pH is 5.0 to 9.0. It is shade intolerant. Hardiness zones are 3 through 9 at elevations above 4500 feet. The crown width is between 25 and 30 feet. **Pest Problems:** bark beetle, twig beetle, sawflies and dwarf mistletoe. **Suggested Uses:** windbreaks and reforestation.

<u>REDOSIER DOGWOOD</u>	6-9 feet	Moderate	Good	High	Moderate	5500- 9000	Small
-------------------------	----------	----------	------	------	----------	------------	-------

**Cornus stolonifera** Redosier prefers moist sites along streams and around swampy or boggy land. This native species is readily noticed due to its red twigs and white berries in the fall. The flowers grow in clusters and are tiny and white. It has no calcium carbonate tolerance and low salinity tolerance. Optimum soil pH is 4.8 to 7.5. It is shade intolerant. Hardiness zones are 2 through 7 at elevations between 5500 and 9000 feet. The width is between 8 and 10 feet. **Pest Problems:** No major pests **Suggested Uses:** Riparian or wetland plantings.

<u>RIO GRANDE COTTONWOOD</u>	60+ feet	Fast	Good	High	Low-Moderate	2500- 7500	Small
------------------------------	----------	------	------	------	--------------	------------	-------

**Populus deltoides ssp. Wislizeni** One of New Mexico's most beloved trees, this cottonwood grows chiefly along the lower valleys and along slower waters. It is an excellent species for stabilizing streams. Birds also use it for nesting purposes. Beavers use it for dams. The leaves turn a golden yellow just before the leaves fall. It has medium calcium carbonate tolerance and no salinity tolerance. The optimum soil pH is 5.0 to 7.0. It is shade intolerant. Hardiness zones are 3 through 9 at elevations below 7500. The average crown width is 40 feet. **Pest Problems:** no major pests. **Suggested Uses:** riparian restoration, stream bank stabilization, and wildlife plantings.

<u>ROCKY MOUNTAIN JUNIPER</u>	up to 40 feet	Moderate	Excellent	Low	Moderate-High	3500- 9000	Small
-------------------------------	---------------	----------	-----------	-----	---------------	------------	-------

**Juniperus scopulorum** This is a hardy native tree that grows across a wide variety of soils. It is the fastest growing of southwestern junipers and can be found along mountain streams and dry, rocky slopes. The pea size blue-berries are an important source of food for birds and small mammals. It has high calcium carbonate tolerance and low salinity tolerance. Optimum soil pH is 5.0 to 8.5. It is shade intolerant. Hardiness zones are 3 through 9 at elevations between 3500 and 9000 feet. It has a crown width of between 10 and 20 feet. **Pest Problems:** juniper bark beetle, spider mites, western cedar borer, and juniper mistletoe. **Suggested Uses:** windbreaks, reforestation, and erosion control.

<u>ROCKY MOUNTAIN PENSTEMON</u>	up to 3 feet	Moderate	Excellent	Low	Low	6000- 11000	Small
---------------------------------	--------------	----------	-----------	-----	-----	-------------	-------

**Penstemon strictus** Is a native perennial herb with deep blue to purple flowers. It is used for erosion control and forage for deer, antelope and birds. It is shade intolerant, prefers well-drained soils, and blooms May through July. The preferred pH is 6.0-8.0. It has low calcium carbonate tolerance, no salinity tolerance, and has moderate drought tolerance. Hardiness zones are 4 through 9 at elevations 6000 feet and above. **Pest Problems:** None noted. **Suggested Uses:** erosion control, wildlife forage

<u>RUBBER RABBITBRUSH (CHAM</u>	4-6 feet	Fast	Good-Excellent	Low	Low	3000- 7500	Small
---------------------------------	----------	------	----------------	-----	-----	------------	-------

**Chrysothamnus nauseosus** This is a native shrub which grows well on disturbed sites and in alkaline soils. In the fall Chamisa becomes very conspicuous. Its yellow flower clusters brighten up the roadside and other disturbed areas. The foliage and seeds are eaten by browsing animals and rabbits. It has medium calcium carbonate and salinity tolerance. The optimum soil pH is 5.6 to 8.6. It is shade intolerant. Hardiness zones are 3 through 10 at elevations lower than 7500 feet. The width is between 2 and 4 feet. **Pest Problems:** Leaf beetle, no other major pests. **Suggested Uses:** windbreaks, erosion control and reclamation.

<u>SAND CHERRY</u>	4 feet	Fast	Good-Excellent	Low	Moderate	3000- 8000	Small
--------------------	--------	------	----------------	-----	----------	------------	-------

**Prunus besseyi** Sand Cherry is a small fast growing shrub readily used by song birds. It produces clusters of white flowers in the spring followed by sweet black cherries nearly 3/4" in diameter. Sand cherry requires cross-pollination to produce fruit. It has high calcium carbonate tolerance and low salinity tolerance. The optimum soil pH is 5.3 to 7.5. It is shade intolerant. Hardiness zones are 3 through 8 at elevations between 3000 and 8000 feet. The width is between 3 and 6 feet. **Pest Problems:** aphids. **Suggested Uses:** wildlife plantings and erosion control.

<u>SCOTS PINE (SCOTCH PINE)</u>	up to 50 feet	Moderate-Fast	Good-Excellent	Moderate	Moderate	3000- 7500	Small
---------------------------------	---------------	---------------	----------------	----------	----------	------------	-------

**Pinus sylvestris** A native of Europe, the irregular pyramidal crown develops into a broad crown with age. The crown width is between 20 and 35 feet. It is widely planted for Christmas trees in many parts of the U.S. It is considered a good tree for reclamation because it often seeds itself into the site. It has low calcium carbonate tolerance and no salinity tolerance. Hardiness zones are 3 through 8 at elevations lower than 7500 feet. The optimum pH is 5.0 to 7.5. It is shade intolerant. **Pest Problems:** Ips bark beetle and pine needle scale. **Suggested Uses:** windbreaks, Christmas trees, and energy conservation plantings.

<u>SKUNKBUSH SUMAC</u>	4-6 feet	Moderate	Excellent	Low	Moderate-High	4500- 8000	Small
------------------------	----------	----------	-----------	-----	---------------	------------	-------

**Rhus trilobata** Skunkbush sumac is a deciduous, multi-branched and spreading shrub. It occurs along stream banks and forest openings but is most common and abundant on dry, rocky slopes throughout Arizona and New Mexico at elevations from 3500 to 8000 feet. This shrub is very winter hardy and tolerant of drought and high alkali soils. The fruits are red-orange and the flowers are yellowish and conspicuously in clusters. Besides having brilliant orange-red fall colors it is an important fall and winter food for songbirds and emergency food for game birds. This species is also an important browse species for mule deer. Clusters of small yellow flowers bloom in late May and produce a small red edible fruit. It has low calcium carbonate tolerance and no salinity tolerance. Optimum soil pH is 6.5 to 8.2. It has intermediate shade tolerance. Hardiness zones are 4 through 8 at elevations between 4500 and 8000 feet. The width is between 6 and 8 feet. **Pest Problems:** no serious pests. **Suggested Uses:** windbreaks, wildlife plantings, and erosion control.

<u>SMOOTH SUMAC</u>	10 feet	Moderate	Good-Excellent	Low	Moderate	5000- 8000	Small
---------------------	---------	----------	----------------	-----	----------	------------	-------

**Rhus glabra** This native shrub is extremely drought resistant and the leaves turn a bright red in the fall. More than thirty bird species and deer use the fruit as winter food. It serves as good ground cover for small mammals. It has low calcium carbonate tolerance and no salinity tolerance. The optimum soil pH is 5.3 to 7.5. It is shade intolerant. Hardiness zones are 5 through 8 at elevations between 5000 and 8000 feet. The width is between 10 and 15 feet. **Pest Problems:** None serious. **Suggested Uses:** reclamation, erosion control and wildlife plantings.

<u>SOUTHERN LIVE OAK</u>	50 ft	Moderate	Fair	Moderate	Moderate	0- 0	Small
--------------------------	-------	----------	------	----------	----------	------	-------

**Quercus virginiana** Southern live oak is native to the southeastern United States from Virginia through Texas. It has been planted for decades in the warmer areas of the southwestern US. The average height and crown width at maturity is at 50 feet. It has intermediate shade tolerance and a pH range of 4.3 to 7.5. Southern live oak can grow in hardiness zones 7-10 and is cold hardy to 5-10 degrees Fahrenheit. It is relatively drought tolerant, but it does require watering. Although it appears to be evergreen, it is deciduous, it drops its old leaves just as new ones emerge. It grows in dry to moist soils, whether gravelly, sandy, loamy or clay, but does best in neutral or slightly acidic clay loams, poor drainage okay. It is saline tolerant and tolerant of compaction. **Pest Problems:** oak wilt **Suggested Uses:** wildlife food -acorns, attracts butterflies and birds

<u>SOUTHWESTERN WHITE PINE</u>	up to 80 feet	Moderate	Excellent	Moderate	Low	4500- 10000	Small
--------------------------------	---------------	----------	-----------	----------	-----	-------------	-------

**Pinus strobiformis** A large native tree, that grows well in a forest environment. It has edible seeds, similar though smaller than those of piñon. It is very graceful and the needles are soft and wispy. Its blue-green foliage makes it a formal-looking tree when young. The width is between 20 and 30 feet. The optimum soil pH is 4.5 to 6.8. Hardiness zones are 5 through 9 at elevations above 4500 feet. NOT RECOMMENED FOR SOUTHEAST NEW MEXICO (CAPITANS, SACRAMENTO AND WHITE MOUNTAINS) DUE TO WHITE PINE BLISTER RUST. **Pest Problems:** bark beetle, twig beetle, dwarf mistletoe and White Pine blister rust. **Suggested Uses:** windbreaks, Christmas trees, and reforestation.

<u>SUPERB PENSTEMON</u>	2 feet	Moderate	Good-Excellent	Low	Moderate	3500- 5500	Small
-------------------------	--------	----------	----------------	-----	----------	------------	-------

**Penstemon superbus** Native to extreme southwestern New Mexico and southern Arizona. Grows in sandy or gravelly soils in canyons and washes. Has coral-colored blooms in April and May. Is a pollinator for native bees. Hardy in USDA hardiness zones 6-9. **Pest Problems:** none known **Suggested Uses:** pollinator for native bees

<u>THINLEAF ALDER</u>	20-25 feet	Moderate-Fast	Excellent	Moderate-High	Low-Moderate	5000- 10000	Small
-----------------------	------------	---------------	-----------	---------------	--------------	-------------	-------

**Alnus tenuifolia** This native species is common along creeks and canyons from 5000 to 10000 feet in elevation. Alder bark is rich in tannin and very puckery if chewed. The bark is used for tanning, giving skins a red color. Beavers, deer and rabbits eat the bark despite its puckery taste. It is good cover for wildlife and browse for deer. It has no calcium carbonate tolerance and no salinity tolerance. The optimum soil pH is 5.5 to 7.0. It has intermediate shade tolerance. Hardiness zones are 1 through 7 at elevations above 5000 feet. The width is between 12 and 20 feet. **Pest Problems:** Tent caterpillars. **Suggested Uses:** Wildlife plantings, streambank stabilization and erosion control.

TURPENTINE BUSH                      1-3 feet                      Moderate-Fast                      Good-Excellent                      Low                      Moderate                      3000- 6500                      Small

**Ericameria laricifolia** Is a native New Mexico shrub that is 1-3 feet tall and wide with small golden-yellow flowers and dense narrow leaves. It prefers full sun to part shade, is cold and heat tolerant and grows in dry, well-drained granitic, sand, clay loam or limestone soils. Hardiness zones are 7 through 10 at lower than 6500 feet elevation. It flowers in late summer and fall. **Pest Problems:** None serious **Suggested Uses:** wildlife browse, attracts butterflies and birds

WAX CURRANT                      4-6 feet                      Slow-Moderate                      Good-Excellent                      Low                      Moderate                      5000- 13000                      Small

**Ribes cereum** This attractive fragrant native shrub produces pink flowers in the spring and red fruit in the late summer. This plant is abundant over rocky slopes and in dry and open woods. It does well in areas of limited precipitation. It has high calcium carbonate tolerance and no salinity tolerance. The optimum soil pH is 6.5-7.5. It is shade intolerant. Hardiness zones are 5 through 8 at elevations above 5000 feet. The width is between 3 and 5 feet. **Pest Problems:** None serious. **Suggested Uses:** Wildlife habitat and erosion control

WESTERN SOAPBERRY                      up to 50 feet                      Moderate                      Good                      Low                      Moderate                      3500- 6500                      Small

**Sapindus drummondii** This native tree is found in eastern and southern New Mexico. It has white flowers in April and May. Its berries are round and amber colored. They can be used to make soap, buttons and beads for jewelry. However they are not edible as they are toxic to humans. Western soapberry is tolerant of poor soils, has high drought tolerance, grows in part shade to full sun, has high calcium carbonate tolerance, high heat tolerance, is deer resistant, but has no tolerance to salinity. The optimum soil pH is 7.0 to 8.5. It is shade intolerant. Hardiness zones are 6 through 9 at elevations below 6500 feet. It is used in windbreaks and is used for hiding cover by game species and as nesting sites for doves and many songbirds. **Pest Problems:** none serious **Suggested Uses:** wildlife habitat, windbreaks

WHITE FIR                      up to 80 feet                      Slow-Moderate                      Excellent                      Moderate-High                      Low                      5000- 10000                      Small

**Abies concolor** This native conifer, is widely used as a Christmas tree in New Mexico. It has a conical shape which becomes irregular with age. It is also a notable commercial species for the wood products industry in New Mexico. The needles are silvery blue and cones are olive-green to purple. It has low calcium carbonate tolerance and no salinity tolerance. The optimum soil pH is 5.5 to 7.8. It is shade tolerant. Hardiness zones are 4 through 7 at elevations above 5000 feet. The width is between 15 and 30 feet. **Pest Problems:** spruce budworm, Douglas-fir tussock moth, bark beetles, aphids and dwarf mistletoe. **Suggested Uses:** Christmas trees and reforestation.

WOODS ROSE                      4-6 feet                      Fast                      Good-Excellent                      Moderate                      Moderate                      5000- 9000                      Bare

**Rosa woodsii** This hardy shrub produces showy pink flowers in the spring and has beautiful orange-red fall color. It is excellent cover for grouse and other fowl. Big game animals readily graze them when present in winter range. It is a good soil stabilizer. It has low calcium carbonate and salinity tolerance. Optimum soil pH is 5.0-8.0. Its shade tolerance is intermediate. Hardiness zones are 3 through 8 at elevations between 5000 and 9000 feet. The width is between 3 and 4 feet. **Pest Problems:** leaf cutter bees. **Suggested Uses:** erosion control, wildlife plantings, and windbreaks.