

New Mexico Forestry Division
Spring 2024 Seedling List

SPECIES	HEIGHT	GROWTH RATE	COLD HARDINESS	WATER NEEDS	ALKALINITY TOLERANCE	ELEVATION	Size
<u>*FLOWERING SHRUB PACKAGE</u>	varied	Slow-Moderate	Good-Excellent	Low-Moderate	Low-Moderate	6500- 10000	Small
Penstemon strictus, Ribes cereum, etc. Package contains 14 Shrubby Cinquefoil, 14 Golden currant, 7 Rocky Mountain Penstemon, and 14 Mountain Snowberry. See individual species for more information. Pest Problems: None serious Suggested Uses: erosion control, wildlife plantings							
<u>*MIXED CONIFER TREE PACKAGE</u>	up to 80 feet	Moderate	Excellent	Moderate	Low-Moderate	5000- 9000	Small
Pinus ponderosa, Psuedotsuga menziesii, Abies concolor This package is designed for the Mixed conifer forest type. It contains 21 Ponderosa pine, 14 Douglas-fir and 14 White fir. Check the individual species descriptions on the seedling list for more information on each species. Shrub package 1 contains shrub species that grow in this forest type. Pest Problems: see individual tree descriptions on seedling list Suggested Uses: reforestation, wildlife plantings, Christmas trees							
<u>*PINON PACKAGE 1</u>	up to 40 feet	Slow-Moderate	Good-Excellent	Low-Moderate	Moderate-High	3500- 8500	Small
Pinus edulis. Quercus gambelii, etc. This package is for the Pinon woodland areas. It contains 14 Pinon, 7 Gambel oak, 14 Skunkbush sumac, and 14 Mountain mahogany. For characteristics of the individual species please look at the individual species descriptions on the seedling list. Pest Problems: various - see individual description for Pinon Suggested Uses: windbreaks, erosion control, reforestation							
<u>*RIPARIAN PACKAGE 1</u>	varies	Fast	Good-Excellent	Moderate-High	Moderate	5000- 8500	Small
Populus angustifolia, Alnus tenuifolia, etc. This riparian package is for the cooler higher elevation riparian areas. It contains 14 Narrowleaf cottonwood, 14 Thinleaf alder, 14 Red osier dogwood and 7 Bluestem willow. For individual species description refer to the seedling list. Pest Problems: see individual tree descriptions on seedling list Suggested Uses: wildlife plantings, erosion control, riparian restoration.							
<u>*RIPARIAN PACKAGE 2</u>	varies	Fast	Good-Excellent	Moderate-High	Moderate	3500- 7500	Small
Populus deltoides, Amorpha fruticosa, etc. This package is designed for riparian areas between 3500 and 7500 feet. It contains 21 Rio Grande Cottonwood, 7 False indigo bush, 14 Peachleaf willow, and 14 Goodding's Black willow. Refer to the seedling list for descriptions of individual species. Pest Problems: see individual tree descriptions on seedling list Suggested Uses: streambank stabilization, wildlife plantings, riparian restoration							
<u>AFGHANISTAN PINE</u>	60 feet	Fast	Poor	Moderate	Moderate	3000- 5500	Small
Pinus eldarica 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. It has a crown width of between 30 and 40 feet. The optimum soil pH is 7.0 to 8.5. Pest Problems: Nantucket pine tip moth, Ips bark beetle, and spider mites. Suggested Uses: windbreaks and Christmas trees.							
<u>AMERICAN SYCAMORE</u>	75-100 feet	Fast	Good-Excellent	High	Low	0- 6000	Small
Platanus occidentalis It is a wide-canopied, deciduous tree that is native to the U.S. and ranges from the east coast to as far west as Kansas, Oklahoma, and Texas. It is has been planted successfully in eastern NM. It has dark-green, maple-shaped leaves and the bark on mature trees comes off in plates to leave a smooth, whitish inner bark. It is cold tolerant and has intermediate shade tolerance. It has autumn foliage and attracts birds and is an excellent shade tree. It is adapted to coarse and medium textured soils and prefers a soil pH between 4.9 and 6.5. Pest Problems: None serious Suggested Uses: bird habitat, shade, mine reclamation							
<u>APACHE PLUME</u>	4 - 6 feet	Fast	Good-Excellent	Low	Moderate-High	5000- 8000	Small
Fallugia paradoxa 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. The width is between 4 and 6 feet. Pest Problems: none serious. Suggested Uses: windbreaks, erosion control, and wildlife plantings.							
<u>APRICOT</u>	15- 20 feet	Fast	Excellent	Moderate	Moderate	2800- 7000	Bare
Prunus armeniaca Small fast-growing tree. Rounded, spreading form. It is winter-hardy and moderately drought tolerant. 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. 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. Pest Problems: No major pest problems. Suggested Uses: windbreaks, nesting sites							
<u>ARIZONA ASH</u>	25-50 feet	Moderate	Fair	Moderate	Moderate	3000- 7000	Small
Fraxinus velutina 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. The crown width averages 25 feet. It grows in soils that range from 5.8 to 7.5 pH. Pest Problems: no serious pests. Suggested Uses: riparian reclamation, windbreaks, erosion control, and wildlife plantings.							
<u>ARIZONA CYPRESS</u>	40-60 feet	Fast	Fair	Low	Moderate-High	3000- 8000	Small
Cupressus arizonica 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. Crown width averages 20 feet. Pest Problems: western cedar borer, cypress bark beetle, and spider mites. Suggested Uses: windbreaks, energy conservation plantings, and Christmas trees.							
<u>ARIZONA SYCAMORE</u>	50 - 80 feet	Fast	Fair	Moderate	Moderate	4500- 6000	Small
Platanus wrightii This attractive native tree will grow best in southern New Mexico riparian areas and was once abundant in southwest New Mexico but appears to be less common today. The bark is shaggy and white/ green. The leaves are large and maple-like in shape. It is fast growing and has a pleasing fragrance after a rain. The crown width averages 35 feet. It has moderate calcium carbonate tolerance and no salinity tolerance. The optimum soil pH is 5.8 to 7.5. Pest Problems: no major pests. Suggested Uses: soil stabilization, riparian restoration, and wildlife plantings.							
<u>ASPEN</u>	60-80 feet	Fast	Excellent	Moderate-High	High	6500- 10000	Small
Populus tremuloides 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. The average crown width is 20 to 30 feet. Pest Problems: poplar borer, leaf miner, cytospora cankers, and tent caterpillar. Suggested Uses: wildlife plantings, reforestation, and reclamation above 6500 feet.							
<u>AUSTRIAN PINE</u>	up to 60 feet	Moderate-Fast	Good	Moderate	Moderate	3500- 7500	Small
Pinus nigra 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. The average width at maturity is 25 feet. Pest Problems: Ips bark beetle, twig beetles, and pine tip moth. Suggested Uses: wildlife plantings, windbreaks, and sound screens.							
<u>BIG SAGEBRUSH</u>	2 to 15 feet	Moderate	Excellent	Low	Moderate	4500- 8500	Small
Artemisia tridentata This native evergreen shrub is an important food source for deer, elk, pronghorn antelope, and bighorn sheep. It is also important to many bird species especially sage grouse. The average width is 3 to 6 feet. It is an important species for reclamation and revegetation due to its broad range and ease of establishment. It has high calcium carbonate tolerance, moderate salinity tolerance, and it is shade intolerant. Pest Problems: No serious pests. Suggested Uses: Wildlife habitat and revegetation.							
<u>BLACK WILLOW</u>	up to 100 feet	Fast	Good-Excellent	High	Moderate	1500- 6000	Small
Salix nigra 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. Pest Problems: None serious. Suggested Uses: erosion control of streambanks, wildlife plantings							
<u>BLUE SPRUCE</u>	up to 80 feet	Slow	Excellent	High	Low-Moderate	5000- 10000	Small

Picea pungens 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. The width is between 20 to 30 feet. **Pest Problems:** Douglas-fir tussock moth, needle scale, and spruce aphids. **Suggested Uses:** reforestation, Christmas trees, and windbreaks.

<u>BLUESTEM WILLOW</u>	up to 12 feet	Fast	Excellent	High	Low-Moderate	5200- 8500	Small
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Salix irrorata 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. Optimum soil pH is 5.5 to 7.5. The width averages 15 feet. **Pest Problems:** None serious. **Suggested Uses:** Riparian restoration, streambank stabilization and wildlife plantings.

<u>BRISTLECONE PINE</u>	up to 40 feet	Slow	Excellent	Low	Moderate	7500- 11500	Small
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Pinus aristata This native pine grows in high elevation windy places and can live to be thousands of years old. Although it grows at high elevations it has been successfully planted at elevations as low as 6000 feet. Its branches are covered with dense needles and resemble a foxtail. The pine seeds are a 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 7.5. It is shade intolerant. The average width is 15 feet. **Pest Problems:** white pine blister rust. **Suggested Uses:** Reforestation, reclamation, and windbreaks.

<u>BUR OAK</u>	70–80 feet	Slow-Moderate	Excellent	Moderate	Moderate	0- 7500	Bare
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Quercus macrocarpa 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. **Pest Problems:** minor problems. **Suggested Uses:** windbreaks, wildlife plantings, and energy conservation plantings.

<u>CHOCKECHERRY</u>	6-20 feet	Moderate-Fast	Excellent	Moderate-High	Low	5500- 9500	Bare, Small
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Prunus virginiana 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. The crown width is between 10 and 20 feet. **Pest Problems:** borers, pear slugs, and tent caterpillar. **Suggested Uses:** windbreaks, riparian restoration, and wildlife plantings.

<u>COYOTE WILLOW</u>	10 feet	Fast	Good	High	High	3500- 7500	Small
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Salix exigua 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. **Pest Problems:** No major pests. **Suggested Uses:** Riparian restoration, erosion control in riparian sites and wildlife habitat

<u>DESERT WILLOW</u>	25 feet	Fast	Fair-Good	Low	High	3000- 6000	Small
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Chilopsis linearis 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. It has intermediate shade tolerance. The crown width averages 20 feet. **Pest Problems:** no major pests. **Suggested Uses:** windbreaks, erosion control, screens, and wildlife plantings.

<u>DOUGLAS-FIR</u>	80+ feet	Moderate	Excellent	High	Moderate	4500- 10000	Small
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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. 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.

<u>ENGELMANN SPRUCE</u>	up to 120 feet	Slow	Excellent	Moderate	Moderate	5000- 11500	Small
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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. The crown width averages 30 feet. **Pest Problems:** western spruce budworm and spruce beetle. **Suggested Uses:** reforestation, Christmas trees, and windbreaks.

<u>FALSE INDIGO BUSH</u>	6-10 feet	Moderate	Good-Excellent	Moderate	Moderate	3000- 7000	Small
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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. It is shade intolerant. **Pest Problems:** insect gall. **Suggested Uses:** erosion control and wildlife plantings.

<u>FOUR-WING SALTBUSH</u>	4-6 feet	Fast	Good	Low	High	3000- 8000	Small
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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. 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.

<u>FRINGED SAGE</u>	2 feet	Fast	Excellent	Low	Moderate	5500- 8000	Small
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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. **Pest Problems:** none known **Suggested Uses:** soil stabilization and wildlife habitat

<u>GAMBEL OAK</u>	up to 30 feet	Moderate	Good-Excellent	Moderate	Moderate	5000- 8500	Small
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Quercus gambellii A native tree or large shrub recognized by the deeply lobed leaves, which are larger than those of other Southwestern oaks. This is the only common tree oak in northern New Mexico. It is considered as good browse for deer and other wildlife. It has high calcium carbonate tolerance and no salinity tolerance. The optimum soil pH is 6.5 to 8.0. It is shade intolerant. The width is between 12 and 20 feet. **Pest Problems:** no major pests. **Suggested Uses:** reclamation, wood products, erosion control, and wildlife plantings.

<u>GOLDEN CURRANT</u>	4-6 Feet	Fast	Good	Low	Low	3000- 9000	Small
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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. 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 its native range), and wildlife plantings.

<u>GOODDING'S BLACK WILLOW</u>	45-80 feet	Fast	Good-Excellent	High	Moderate	3500- 7500	Small
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Salix gooddingii This relatively abundant tree is found throughout New Mexico and is found along arroyos, streams, and rivers. Black Willow serves to minimize erosion and lessen flood damage. This species tolerates a wide range of soils as long as moisture is present. Native Americans chewed willow branches as a pain killer. Birds feed on the buds and flowers and deer eat the twigs and leaves. The tree gets its name from the dark colored bark. It has low calcium carbonate tolerance and no salinity tolerance. Optimum soil pH is 6.0 to 7.0. It is shade intolerant. The width is up to 40 feet. **Pest Problems:** none serious. **Suggested Uses:** streambank stabilization and riparian restoration.

<u>HACKBERRY</u>	40-60 Feet	Slow-Moderate	Good	Low-Moderate	Moderate	4500- 7000	Bare, Small
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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 psyllids and nipple gall. **Suggested Uses:** windbreaks and wildlife plantings.

<u>LACEBARK ELM</u>	50 feet	Fast	Good-Excellent	Low-Moderate	Moderate	4500- 8000	Small
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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. 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.

<u>LILAC</u>	Up to 12 Feet	Moderate-Fast	Excellent	Moderate	Moderate	4500- 8000	Bare
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Syringa vulgaris This violet fragrant flowered shrub grows across a wide variety of soils. Due to its growth habit, it is suitable in single or multi-row windbreaks and has high quality cover for wildlife. It has high calcium carbonate tolerance, low salinity tolerance, and has intermediate shade tolerance. The optimum soil pH is 5.8 to 7.8. The width is between 6 and 12 feet. **Pest Problems:** minor problems with lilac borer, and leaf miners. **Suggested Uses:** windbreaks and wildlife plantings.

<u>MOUNTAIN MAHOGANY</u>	15 feet	Moderate	Good-Excellent	Moderate	Moderate	4500- 8000	Small
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Cercocarpus montanus Mountain Mahogany is beautiful in late summer and fall, when the white tails of the fruit look like a threaded needle or a narrow delicate feather. It is a native shrub found on the limestone soils of the rolling plains and northern Trans-Pecos on rocky uplands. The leaves and twigs are browsed by elk and deer. It is an excellent species for reclamation of disturbed areas. It has high calcium carbonate tolerance and no salinity tolerance. The optimum soil pH is 6.0 to 8.0. It has intermediate shade tolerance. The width is between 8 and 15 feet. **Pest Problems:** no serious pest problems. **Suggested Uses:** wildlife habitat, and erosion control.

<u>NARROWLEAF COTTONWOOD</u>	up to 70 feet	Fast	Good-Excellent	Moderate-High	Moderate	5000- 10000	Small
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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. 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

<u>NATIVE PLUM</u>	6-8 feet	Moderate	Excellent	Moderate	Low	4500- 8000	Bare, Small
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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. The crown width is between 10 and 15 feet. **Pest Problems:** pear slug, aphids, and powdery mildew. **Suggested Uses:** windbreaks and wildlife plantings.

<u>NETLEAF HACKBERRY</u>	20 feet	Slow-Moderate	Good-Excellent	Low-Moderate	Moderate	2500- 6600	Small
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Celtis reticulata It is a deciduous shrub to small tree with a growth form that varies from single to multiple stems. It has gray, moderately thick bark. It provides cover and food for a variety of wildlife species. Its small orange/red fruits are an important food source for birds during the winter and its leaves and twigs are browsed by bighorn sheep, mule deer, and elk. It is drought tolerant and can be used to aid in soil stabilization on various types of disturbed sites. It commonly grows in washes, ravines, arroyos, rocky canyons and occurs in desert shrubland and semidesert grasslands. It is highly tolerant to calcium carbonate but has low salt tolerance. The optimum soil pH is 5.9 to 8.3. It is shade intolerant. The crown width is between 20 and 30 feet. **Pest Problems:** None serious. **Suggested Uses:** erosion control, wildlife plantings, and windbreaks.

<u>NEW MEXICO ELDERBERRY</u>	up to 25 feet	Moderate-Fast	Good	Low	Low-Moderate	6500- 9500	Small
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Sambucus cerulea var. neomexicana This is a small native tree that is common in the central and southern parts of New Mexico. The leaves are pinnately compound and opposite. It has white flowers and produces purple-black berries that can be used for jellies, pies, winemaking, etc. It provides cover, nesting sites, and food for many bird species. It is also used as browse by mule deer. It is highly drought tolerant, has medium calcium carbonate tolerance, and no salinity tolerance. It has intermediate shade tolerance. The crown width is up to 20 feet. The optimum soil pH is 4.9 to 7.5. **Pest Problems:** **Suggested Uses:** wildlife habitat, erosion control

<u>NEW MEXICO LOCUST</u>	15-25 feet	Fast	Good-Excellent	Moderate	Moderate-High	4500- 8500	Small
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Robinia neomexicana This is a native tree especially useful for erosion control due to its rapid growth and thicket forming tendencies. The legumes incorporate nitrogen into the soil improving the quality of the soil. It produces showy purple flowers in the spring. It has high calcium carbonate tolerance and low salinity tolerance. Optimum soil pH is 7.0 to 8.5. It is shade intolerant. The average crown width is 15 feet. **Pest Problems:** minor problem with locust borer. **Suggested Uses:** windbreaks, reclamation, wildlife plantings, and erosion control.

<u>OSAGE ORANGE</u>	25-30 feet	Moderate-Fast	Good-Excellent	Moderate	High	0- 0	Small
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Maclura pomifera Osage orange is native to the Arkansas and Red River valleys in southern Oklahoma and northern Texas. It is naturalized over a large part of the lower 48 states including New Mexico. It was traditionally used by the Osage tribe to make hunting bows. Before barbed wire it was used to construct thousands of miles of hedge rows due to its thorns and longevity. The wood is extremely dense and very resistant to rot, so it makes excellent firewood and posts. It is multi-stemmed when planted alone or when planted with other trees it is single stemmed. The leaves are green and glossy in spring and summer and turn golden yellow in the fall. It can grow in a variety of soils and is drought tolerant. The average height is between 25 and 30 feet and the crown width is about the same. It is has high calcium carbonate tolerance, prefers full sun, and dry soil. It is heat tolerant and cold hardy to zone 5. The fruit is not edible except by squirrels and deer which break open the fruit to eat the seeds. It is dioecious (plants are either male or female) and is wind pollinated. **Pest Problems:** None serious **Suggested Uses:** Windbreaks, mine reclamation, posts, fuel wood

<u>PALMER'S PENSTEMON</u>	up to 5 feet	Moderate	Excellent	Low	Low	2600- 8200	Small
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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. Adapted to coarse and medium textured, well-drained soils. **Pest Problems:** **Suggested Uses:** wildlife plantings and erosion control

<u>PIÑON</u>	up to 40 feet	Slow	Good-Excellent	Low	Moderate-High	3500- 8500	Small
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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 songbirds. It is very drought tolerant, but slow growing. Has low calcium carbonate tolerance and medium salinity tolerance. 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
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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, 3-6 inches long. They turn golden yellow in the fall. It has medium tolerance for calcium carbonate and no salinity tolerance. 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
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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. 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>PRAIRIE SKY POPLAR</u>	50 - 80 feet	Fast	Excellent	High	Moderate	4000- 8000	X-Large
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Populus x. canadensis This is a tall, narrow crowned tree with a crown spread of 8 to 10 feet with deep green foliage that is an alternative to Lombardy poplar. It has a lifespan of 40+ years and is suggested for use in windbreaks. It has a very fast growth rate that can be up to 4 feet per year. It is disease resistant and has yellow fall color. The optimum soil pH is 5.5 to 7.5. **Pest Problems:** **Suggested Uses:** windbreaks.

<u>REDOSIER DOGWOOD</u>	6-9 feet	Moderate	Good	High	Moderate	5500- 9000	Small
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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. The width is between 8 and 10 feet. **Pest Problems:** No major pests **Suggested Uses:** Riparian or wetland plantings.

<u>ROCKY MOUNTAIN JUNIPER</u>	up to 40 feet	Moderate	Excellent	Low	Moderate-High	3500- 9000	Small, Large
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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. 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
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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. **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
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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. 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
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Prunus besseyi Sand Cherry is a small fast-growing shrub readily used by songbirds. 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. 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
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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. 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>SHRUBBY CINQUEFOIL</u>	up to 4 feet	Slow	Good-Excellent	Low	Moderate	6500- 11500	Small
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Potentilla fruticosa Native drought tolerant shrub that has small yellow 5-petalled blossoms that are present from June through September It is attractive to butterflies and is also forage for mule deer. This shrub is also known by the name Potentilla. The bark is brown and shreddy in color. It has medium calcium carbonate tolerance and no salinity tolerance. The optimum soil pH is 5.0 to 8.0. It has intermediate shade tolerance but prefers full sun. The width is between 2 and 4 feet. **Pest Problems:** none serious. **Suggested Uses:** erosion control, wildlife plantings, and windbreaks.

<u>SKUNKBUSH SUMAC</u>	4-6 feet	Moderate	Excellent	Low	Moderate-High	4500- 8000	Small
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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. 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
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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. The width is between 10 and 15 feet. **Pest Problems:** None serious. **Suggested Uses:** reclamation, erosion control and wildlife plantings.

<u>SOUTHWESTERN WHITE PINE</u>	up to 80 feet	Moderate	Excellent	Moderate	Low	4500- 10000	Small
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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. 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
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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>TEXAS RED OAK</u>	up to 50 feet	Moderate	Good	Low	Moderate	0- 7000	
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Quercus buckleyi It is a small to medium tree with spreading branches. It can grow up to 50 feet in height and has a spread of between 30 to 50 feet. Is native to Kansas, Oklahoma, and Texas. The leaves are shiny green and turn red and orange in the fall. Wildlife use the acorns for food. It is shade intolerant, drought tolerant, grows in clay, loam, or sandy soils. It has high heat tolerance and is tolerant of alkaline soils such as limestone. USDA Hardiness Zones 6-11. **Pest Problems:** None major **Suggested Uses:** wildlife habitat

<u>THINLEAF ALDER</u>	20-25 feet	Moderate-Fast	Excellent	Moderate-High	Low-Moderate	5000- 10000	Small
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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. The width is between 12 and 20 feet. **Pest Problems:** Tent caterpillars. **Suggested Uses:** Wildlife plantings, streambank stabilization and erosion control.

<u>TORREY'S WOLFBERRY</u>	up to 10 feet	Moderate	Good-Excellent	Low	Moderate-High	3500- 5500	Small
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Lycium torreyi Native shrub that is found in the major river drainages at lower elevations. It has dark reddish-brown stems with thorns and flowers are light purple. It has bright red berries. It can grow in sandy soils, is tolerant of saline soils and has high calcium carbonate tolerance. It is a source of food for small birds and mammals. **Pest Problems:** none serious **Suggested Uses:** wildlife habitat and browse, erosion control

<u>TURPENTINE BUSH</u>	1-3 feet	Moderate-Fast	Good-Excellent	Low	Moderate	3000- 6500	Small
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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. It flowers in late summer and fall. **Pest Problems:** None serious **Suggested Uses:** wildlife browse, attracts butterflies and birds

<u>WAX CURRANT</u>	4-6 feet	Slow-Moderate	Good-Excellent	Low	Moderate	5000- 13000	Small
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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. The width is between 3 and 5 feet. **Pest Problems:** None serious. **Suggested Uses:** Wildlife habitat and erosion control

<u>WINTERFAT</u>	3–4 feet	Fast	Good-Excellent	Low	Moderate-High	3000- 8000	Small
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Ceratoides lanata Winterfat is a hardy, native half-shrub with a wide range throughout New Mexico. It grows on dry, well-drained soils, 3000 - 8000 feet in elevation, and can tolerate saline or alkaline soils. It is superior winter forage for livestock and used extensively by wildlife. The seed heads in the fall give the plant a pleasing silvery appearance. The long white fuzzy plumes give it another name: "Lambs Tail". It has high calcium carbonate and salinity tolerance. The optimum soil pH is 6.6 to 8.5. It is shade intolerant. The average width is 3 feet. **Pest Problems:** no major pests. **Suggested Uses:** erosion control, range improvement, and wildlife plantings.

<u>WOODS ROSE</u>	4-6 feet	Fast	Good-Excellent	Moderate	Moderate	5000- 9000	Bare
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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. The width is between 3 and 4 feet. **Pest Problems:** leaf cutter bees. **Suggested Uses:** erosion control, wildlife plantings, and windbreaks.

