New Mexico Forestry Division
Seedling Catalog

*FLOWERING SHRUB PACKAGE
*Penstemon strictus, Ribes cereum, etc.*

Mature Height: varied
Growth Rate: Slow-Moderate
Water Requirements: Low-Moderate
Alkalinity Tolerance: Low-Moderate
Preferred Elevation: 6500 - 10000
Possible Pest Problems: None serious
Suggested Uses: erosion control, wildlife plantings
Color Description: green
Seedling Type: Small
Comments: Package contains 14 Shrubby Cinquefoil, 14 Wax currant, 14 Mountain Snowberry, and 7 Rocky Mountain Penstemon. See individual species for more information.
Cold Hardiness: Good-Excellent

*MIXED CONIFER TREE PACKAGE
*Pinus ponderosa, Psuedotsuga menziesii, Abies conc*

Mature Height: up to 80 feet
Growth Rate: Moderate
Water Requirements: Moderate
Alkalinity Tolerance: Low-Moderate
Preferred Elevation: 5000 - 9000
Possible Pest Problems: see individual tree descriptions on seedling list
Suggested Uses: reforestation, wildlife plantings, Christmas trees
Color Description: green
Seedling Type: Small
Comments: 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.
Cold Hardiness: Excellent
**NATIVE POLLINATOR PLANTS PACKAGE**
*Forestiera neomexicana, Rhus trilobata, etc.*

**Mature Height:** varied  
**Growth Rate:** Moderate-Fast  
**Water Requirements:** Low  
**Alkalinity Tolerance:** Low-Moderate  
**Preferred Elevation:** 5500 - 7500  
**Possible Pest Problems:** no serious pests  
**Suggested Uses:** pollinators, erosion control, wildlife plantings  
**Color Description:** green  
**Seeding Type:**  
**Comments:** Package contains 7 New Mexico Forestiera, 14 Apache Plume, 14 Skunkbush sumac, and 14 Rocky Mountain Penstemon. For specific species characteristics see individual seedling descriptions. This package plants that are preferred by our native pollinators.  
**Cold Hardiness:** Good-Excellent

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**PINON/JUNIPER PACKAGE 1**
*Pinus edulis/Juniperus Scopulorum etc.*

**Mature Height:** up to 40 feet  
**Growth Rate:** Slow-Moderate  
**Water Requirements:** Low-Moderate  
**Alkalinity Tolerance:** Moderate-High  
**Preferred Elevation:** 3500 - 8500  
**Possible Pest Problems:** various - see individual description for Pinon and Rocky Mtn. Juniper  
**Suggested Uses:** windbreaks, erosion control, reforestation  
**Color Description:** green  
**Seeding Type:** Small  
**Comments:** This package is for the Pinon/Juniper woodland areas. It contains 14 Pinon, 14 Rocky Mountain Juniper, 7 Gambel oak, 7 Skunkbush sumac, and 7 Mountain mahogany. For characteristics of the individual species please look at the individual species descriptions on the seedling list.  
**Cold Hardiness:** Good-Excellent

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**PINON/JUNIPER PACKAGE 2**
*Pinus edulis, Juniperus scopulorum, etc.*
**Mature Height:** varied  
**Growth Rate:** Slow-Moderate  
**Water Requirements:** Low-Moderate  
**Alkalinity Tolerance:** Moderate-High  
**Preferred Elevation:** 4500 - 7000  
**Possible Pest Problems:** see individual species descriptions  
**Suggested Uses:** Erosion control, wildlife plantings, reforestation  
**Color Description:** green, gray green  
**Seedling Type:** Small  
**Comments:** Package contains 14 Pinon, 14 Rocky Mountain juniper, 7 Apache plume, 7 Mountain mahogany, and 7 Buffaloberry. For more information on individual species please see individual seedling descriptions.  
**Cold Hardiness:** Good-Excellent

*PONDEROSA PINE PACKAGE  
*Pinus ponderosa, etc.*  
**Mature Height:** varies  
**Growth Rate:** Moderate  
**Water Requirements:** Moderate  
**Alkalinity Tolerance:** Moderate  
**Preferred Elevation:** 5000 - 8500  
**Possible Pest Problems:** see individual tree descriptions on seedling list  
**Suggested Uses:** windbreaks, reforestation, wildlife plantings  
**Color Description:** green  
**Seedling Type:** Small  
**Comments:** This package is for Ponderosa pine forest type. It contains 21 Ponderosa pine, 7 Gambel oak, 7 Mountain Mahogany, 7 Skunkbush sumac, and 7 Mountain snowberry. Refer to the seedling list for information on individual species.  
**Cold Hardiness:** Good-Excellent

*RIPARIAN PACKAGE 1  
*Populus angustifolia, Alnus tenufolia, etc.*  
**Mature Height:** varies  
**Growth Rate:** Fast  
**Water Requirements:** Moderate-High  
**Alkalinity Tolerance:** Moderate
**Preferred Elevation:** 5000 - 8500

**Possible Pest Problems:** see individual tree descriptions on seedling list

**Suggested Uses:** wildlife plantings, erosion control, riparian restoration.

**Color Description:** green

**Seedling Type:** Small

**Comments:** This riparian package is for the cooler higher elevation riparian areas. It contains 14 Narrowleaf cottonwood, 14 Redosier dogwood, 14 Thinleaf alder, and 7 Bluestem willow. For individual species description refer to the seedling list.

**Cold Hardiness:** Good-Excellent

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**SHRUB PACKAGE 1**

*Rhus trilobata, Cercocarpus montanus, etc.*

**Mature Height:** varies

**Growth Rate:** Moderate

**Water Requirements:** Low-Moderate

**Alkalinity Tolerance:** Moderate

**Preferred Elevation:** 4500 - 8000

**Possible Pest Problems:** none serious

**Suggested Uses:** wildlife habitat, erosion control, reclamation, windbreaks

**Color Description:** green

**Seedling Type:**

**Comments:** This shrub package contains 14 Skunkbush sumac, 14 Mountain mahogany, 14 Wax currant and 7 Gambel oak. These species occur in the areas with Pinon/Juniper, Ponderosa pine and dry mixed conifer. See individual species descriptions on seedling list for more information on each species.

**Cold Hardiness:** Good-Excellent

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**SHRUB PACKAGE 2**

*Atriplex canescens, Chrysothamnus nauseosus, Certo*

**Mature Height:** varies

**Growth Rate:** Moderate-Fast

**Water Requirements:** Low

**Alkalinity Tolerance:** Moderate-High

**Preferred Elevation:** 3000 - 7500

**Possible Pest Problems:** none serious
**Suggested Uses:** erosion control, wildlife plantings, windbreaks.

**Color Description:** green and gray green

**Seedling Type:** Small

**Comments:** This shrub package contains shrubs that are low water and drought tolerant. It contains 14 Winterfat, 14 Four-wing saltbush, 14 Chamisa (rubber rabbitbrush), and 7 Smooth sumac. For more information on the individual species please refer to each species on the seedling list.

**Cold Hardiness:** Good

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**SHRUB PACKAGE 3**

* Atriplex canescens, Krascheninnikovia lanata, etc.

**Mature Height:** varied

**Growth Rate:** Moderate-Fast

**Water Requirements:** Low

**Alkalinity Tolerance:** Low

**Preferred Elevation:** 3000 - 7500

**Possible Pest Problems:** none serious

**Suggested Uses:** erosion control, wildlife plantings, reclamation

**Color Description:** green, gray green

**Seedling Type:** Small

**Comments:** Package includes 14 winterfat, 14 four-wing saltbrush, 14 Chamisa, and 7 Mormon tea (Green ephedra). For individual species characteristics see individual seedling descriptions.

**Cold Hardiness:** Good-Excellent

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**WINDBREAK PACKAGE**

* Pinus nigra, Forestiera neomexicana, Ulmus parvifo

**Mature Height:** varied

**Growth Rate:** Moderate-Fast

**Water Requirements:** Moderate

**Alkalinity Tolerance:** Moderate

**Preferred Elevation:** 4500 - 7500

**Possible Pest Problems:** none serious

**Suggested Uses:** windbreaks

**Color Description:** green

**Seedling Type:** Small
**Comments:** Package contains 14 Austrian pine, 14 Lacebark elm, and 21 New Mexico Forestiera. They are ideal species for windbreaks. See individual seedlings descriptions for characteristics.

**Cold Hardiness:** Good-Excellent

<table>
<thead>
<tr>
<th><strong>AFGHANISTAN PINE</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Pinus eldarica</em></td>
</tr>
<tr>
<td><strong>Mature Height:</strong> 60 feet</td>
</tr>
<tr>
<td><strong>Growth Rate:</strong> Fast</td>
</tr>
<tr>
<td><strong>Water Requirements:</strong> Moderate</td>
</tr>
<tr>
<td><strong>Alkalinity Tolerance:</strong> Moderate</td>
</tr>
<tr>
<td><strong>Preferred Elevation:</strong> 3000 - 5500</td>
</tr>
<tr>
<td><strong>Possible Pest Problems:</strong> Nantucket pine tip moth, Ips bark beetle, and spider mites.</td>
</tr>
<tr>
<td><strong>Suggested Uses:</strong> windbreaks and Christmas trees.</td>
</tr>
<tr>
<td><strong>Color Description:</strong> The foliage is green</td>
</tr>
<tr>
<td><strong>Seedling Type:</strong> Small</td>
</tr>
<tr>
<td><strong>Comments:</strong> 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.</td>
</tr>
<tr>
<td><strong>Cold Hardiness:</strong> Poor</td>
</tr>
</tbody>
</table>
ANTELOPE BITTERBRUSH

*Purshia tridentata*

**Mature Height:** up to 6 feet  
**Growth Rate:** Moderate  
**Water Requirements:** Low  
**Alkalinity Tolerance:** Low-Moderate  
**Preferred Elevation:** 4000 - 9000  
**Possible Pest Problems:** defoliators such as western tussock moth and mountain mahoghany loper  

**Suggested Uses:** wildlife browse, mine reclamation, wildlife habitat, snow fence  

**Color Description:** green  
**Seedling Type:** Small  
**Comments:** Is an important native browse shrub that is adapted to a wide range of soils. It flowers in late spring to early summer and blossoms are yellow to white. It provides cover for small animals and birds and is used as browse by big game and livestock. It is also used for reclamation of mine sites. Calcium carbonate tolerance is high, has no salinity tolerance, and shade tolerance is intermediate. Preferred pH is 5.6 to 8.4. It is adapted to medium to coarse soils.  

**Cold Hardiness:** Excellent
**APACHE PLUME**  
*Fallugia paradoxa*

**Mature Height:** 4 - 6 feet  
**Growth Rate:** Fast  
**Water Requirements:** Low  
**Alkalinity Tolerance:** Moderate-High  
**Preferred Elevation:** 5000 - 8000  
**Possible Pest Problems:** none serious.  
**Suggested Uses:** windbreaks, erosion control, and wildlife plantings.  
**Color Description:** Green leaves and white flowers.  
**Seedling Type:** Small  
**Comments:** 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.

**Cold Hardiness:** Good-

**ARIZONA ASH**

*Fraxinus velutina*

**Mature Height:** 25-50 feet

**Growth Rate:** Moderate

**Water Requirements:** Moderate

**Alkalinity Tolerance:** Moderate

**Preferred Elevation:** 3000 - 7000

**Possible Pest Problems:** no serious pests.

**Suggested Uses:** riparian reclamation, windbreaks, erosion control, and wildlife plantings.
Color Description: green
Seedling Type: Small
Comments: 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.

Cold Hardiness: Fair

ARIZONA CYPRESS
*Cupressus arizonica*
Mature Height: 40-60 feet
Growth Rate: Fast
Water Requirements: Low
Alkalinity Tolerance: Moderate-High
Preferred Elevation: 3000 - 8000
Possible Pest Problems: western cedar borer, cypress bark beetle, and spider mites.

Suggested Uses: windbreaks, energy conservation plantings, and Christmas trees.

Color Description: Foilage is pale green.
Seedling Type: Small
Comments: 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.

**Cold Hardiness:** Fair

**ARIZONA ROSEWOOD**  
*Vauquelinia californica*

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mature Height:</strong></td>
<td>10'-18'</td>
</tr>
<tr>
<td><strong>Growth Rate:</strong></td>
<td>Slow-Moderate</td>
</tr>
<tr>
<td><strong>Water Requirements:</strong></td>
<td>Low</td>
</tr>
<tr>
<td><strong>Alkalinity Tolerance:</strong></td>
<td>High</td>
</tr>
<tr>
<td><strong>Preferred Elevation:</strong></td>
<td>3000 - 5000</td>
</tr>
<tr>
<td><strong>Possible Pest Problems:</strong></td>
<td>None serious</td>
</tr>
<tr>
<td><strong>Suggested Uses:</strong></td>
<td>windbreaks, erosion control and wildlife.</td>
</tr>
<tr>
<td><strong>Color Description:</strong></td>
<td>Green</td>
</tr>
<tr>
<td><strong>Seedling Type:</strong></td>
<td>Small</td>
</tr>
<tr>
<td><strong>Comments:</strong></td>
<td>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 degree Fahrenheit and very heat tolerant so it is suited for the southern part of New Mexico. Attracts bees, butterflies, and birds. It has a width of 10 to 15 feet. The optimum soil pH is 6.1 to 9.0.</td>
</tr>
<tr>
<td><strong>Cold Hardiness:</strong></td>
<td>Fair</td>
</tr>
</tbody>
</table>

**ARIZONA SYCAMORE**  
*Platanus wrightii*

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mature Height:</strong></td>
<td>50 - 80 feet</td>
</tr>
<tr>
<td><strong>Growth Rate:</strong></td>
<td>Fast</td>
</tr>
<tr>
<td><strong>Water Requirements:</strong></td>
<td>Moderate</td>
</tr>
<tr>
<td><strong>Alkalinity Tolerance:</strong></td>
<td>Moderate</td>
</tr>
<tr>
<td><strong>Preferred Elevation:</strong></td>
<td>4500 - 6000</td>
</tr>
</tbody>
</table>
**Possible Pest Problems:** no major pests.

**Suggested Uses:** soil stabilization, riparian restoration, and wildlife plantings.

**Color Description:** The leaves are green and has yellow to russet fall colors and the bark is white/green

**Seedling Type:** Small

**Comments:** 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.

**Cold Hardiness:** Fair

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**ARIZONA WALNUT**  
*Juglans major*

<table>
<thead>
<tr>
<th>Mature Height:</th>
<th>up to 50 feet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Growth Rate:</td>
<td>Slow-Moderate</td>
</tr>
<tr>
<td>Water Requirements:</td>
<td>Moderate</td>
</tr>
<tr>
<td>Alkalinity Tolerance:</td>
<td>Moderate</td>
</tr>
<tr>
<td>Preferred Elevation:</td>
<td>2500 - 7000</td>
</tr>
<tr>
<td>Possible Pest Problems:</td>
<td>none serious</td>
</tr>
</tbody>
</table>

**Suggested Uses:** Wildlife habitat.

**Color Description:** yellow green

**Seedling Type:** Small

**Comments:** Arizona walnut is native to SW New Mexico. It grows up to 50 feet and has a wide spreading crown that averages 30 feet. It occurs in a variety of areas from the deserts to the mountains, but grows best near streams and in canyons. It produces large amounts of fruit every 2-3 years and is self-fertile. The walnuts are 1 to 1.5 inches in diameter with a husk and hard shell. It can live up to 400 years. It has low calcium carbonate tolerance and no salinity tolerance. The optimum soil pH is 6.0 to 7.0. It is shade intolerant.

**Cold Hardiness:** Good
ASPEN
*Populus tremuloides*

**Mature Height:** 60-80 feet

**Growth Rate:** Fast

**Water Requirements:** Moderate-High

**Alkalinity Tolerance:** High

**Preferred Elevation:** 6500 - 10000

**Possible Pest Problems:** poplar borer, leaf miner, cytospora cankers, and tent caterpillar.

**Suggested Uses:** wildlife plantings, reforestation, and reclamation above 6500 feet.

**Color Description:** The leaves are green and turn a majestic bright yellow or gold and sometimes orange/red in the fall. The bark is white often with black spots.

**Seedling Type:** Small

**Comments:** 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.

**Cold Hardiness:** Excellent
AUSTRIAN PINE  
*Pinus nigra*

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mature Height:</td>
<td>up to 60 feet</td>
</tr>
<tr>
<td>Growth Rate:</td>
<td>Moderate-Fast</td>
</tr>
<tr>
<td>Water Requirements:</td>
<td>Moderate</td>
</tr>
<tr>
<td>Alkalinity Tolerance:</td>
<td>Moderate</td>
</tr>
<tr>
<td>Preferred Elevation:</td>
<td>3500 - 7500</td>
</tr>
<tr>
<td>Possible Pest Problems:</td>
<td>Ips bark beetle, twig beetles, and pine tip moth.</td>
</tr>
<tr>
<td>Suggested Uses:</td>
<td>wildlife plantings, windbreaks, and sound screens.</td>
</tr>
<tr>
<td>Color Description:</td>
<td>This tree has green needles.</td>
</tr>
<tr>
<td>Seedling Type:</td>
<td>Small</td>
</tr>
<tr>
<td>Comments:</td>
<td>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.</td>
</tr>
<tr>
<td>Cold Hardiness:</td>
<td>Good</td>
</tr>
</tbody>
</table>
BIG SAGEBRUSH
*Artemisia tridentata*

**Mature Height:** 2 to 15 feet  
**Growth Rate:** Moderate  
**Water Requirements:** Low  
**Alkalinity Tolerance:** Moderate  
**Preferred Elevation:** 4500 - 8500  
**Possible Pest Problems:** No serious pests.  
**Suggested Uses:** Wildlife habitat and revegetation.  
**Color Description:** blue-green to blue-green  
**Seedling Type:** Small  
**Comments:** 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.

**Cold Hardiness:** Excellent

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**BLACK WILLOW**  
*Salix nigra*

- **Mature Height:** up to 100 feet  
- **Growth Rate:** Fast  
- **Water Requirements:** High  
- **Alkalinity Tolerance:** Moderate  
- **Preferred Elevation:** 1500 - 6000  
- **Possible Pest Problems:** None serious.  
- **Suggested Uses:** erosion control of streambanks, wildlife plantings  
- **Color Description:** green  
- **Seedling Type:** Small  
- **Comments:** 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.

**Cold Hardiness:** Good-Excellent

<table>
<thead>
<tr>
<th>BLUE SPRUCE</th>
<th>Picea pungens</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mature Height:</strong></td>
<td>up to 80 feet</td>
</tr>
<tr>
<td><strong>Growth Rate:</strong></td>
<td>Slow</td>
</tr>
<tr>
<td><strong>Water Requirements:</strong></td>
<td>High</td>
</tr>
<tr>
<td><strong>Alkalinity Tolerance:</strong></td>
<td>Low-Moderate</td>
</tr>
<tr>
<td><strong>Preferred Elevation:</strong></td>
<td>5000 - 10000</td>
</tr>
<tr>
<td><strong>Possible Pest Problems:</strong></td>
<td>Douglas-fir tussock moth, needle scale, and spruce aphids.</td>
</tr>
<tr>
<td><strong>Suggested Uses:</strong></td>
<td>reforestation, Christmas trees, and windbreaks.</td>
</tr>
<tr>
<td><strong>Color Description:</strong></td>
<td>The needles are blue but may also retain a green color.</td>
</tr>
<tr>
<td><strong>Seedling Type:</strong></td>
<td>Small</td>
</tr>
<tr>
<td><strong>Comments:</strong></td>
<td>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...</td>
</tr>
</tbody>
</table>
shade tolerance. The width is between 20 to 30 feet.

**Cold Hardiness:** Excellent

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**BLUESTEM WILLOW**  
*Salix irrorata*

- **Mature Height:** up to 12 feet
- **Growth Rate:** Fast
- **Water Requirements:** High
- **Alkalinity Tolerance:** Low-Moderate
- **Preferred Elevation:** 5200 - 8500
- **Possible Pest Problems:** None serious.
- **Suggested Uses:** Riparian restoration, streambank stabilization and wildlife plantings.
- **Color Description:** green broadly linear leaves
- **Seedling Type:** Small
- **Comments:** 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.

**Cold Hardiness:** Excellent

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**BRISTLECONE PINE**

*Pinus aristata*

- **Mature Height:** up to 40 feet
- **Growth Rate:** Slow
- **Water Requirements:** Low
- **Alkalinity Tolerance:** Moderate
- **Preferred Elevation:** 7500 - 11500
- **Possible Pest Problems:** white pine blister rust.
- **Suggested Uses:** Reforestation, reclamation and windbreaks.
- **Color Description:** dark green
- **Seedling Type:** Small
- **Comments:** 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
BUFFALOBERRY
Shepherdia argentea

<table>
<thead>
<tr>
<th>Feature</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mature Height:</td>
<td>12 feet</td>
</tr>
<tr>
<td>Growth Rate:</td>
<td>Slow-Moderate</td>
</tr>
<tr>
<td>Water Requirements:</td>
<td>Low-Moderate</td>
</tr>
<tr>
<td>Alkalinity Tolerance:</td>
<td>High</td>
</tr>
<tr>
<td>Preferred Elevation:</td>
<td>4500 - 7000</td>
</tr>
<tr>
<td>Possible Pest Problems:</td>
<td>none serious.</td>
</tr>
<tr>
<td>Suggested Uses:</td>
<td>wildlife plantings, jellies and jams, windbreaks, and erosion control.</td>
</tr>
<tr>
<td>Color Description:</td>
<td>This plant has green leaves/red fruit</td>
</tr>
<tr>
<td>Seedling Type:</td>
<td>Small</td>
</tr>
<tr>
<td>Comments:</td>
<td>This native species is found along the banks of streams or on eroded dry hillsides in northwestern New Mexico. The plant is highly important for mule deer browse and cover for nesting birds. It is a good late winter source of food for birds. The tart red fruit of this plant is used for jellies and jams. Buffaloberry needs both male and female plants to produce fruit. It has high calcium carbonate and salinity tolerance. It has intermediate shade tolerance.</td>
</tr>
</tbody>
</table>
Optimum soil pH is 5.3-8.0.
The width is 10 to 12 feet.

**Cold Hardiness:** Good-Excellent

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**CHOKECHERRY**  
*Prunus virginiana*

<table>
<thead>
<tr>
<th><strong>Mature Height:</strong></th>
<th>6-20 feet</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Growth Rate:</strong></td>
<td>Moderate-Fast</td>
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<tr>
<td><strong>Water Requirements:</strong></td>
<td>Moderate-High</td>
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<tr>
<td><strong>Alkalinity Tolerance:</strong></td>
<td>Low</td>
</tr>
<tr>
<td><strong>Preferred Elevation:</strong></td>
<td>5500 - 9500</td>
</tr>
<tr>
<td><strong>Possible Pest Problems:</strong></td>
<td>borers, pear slugs, and tent caterpillar.</td>
</tr>
<tr>
<td><strong>Suggested Uses:</strong></td>
<td>windbreaks, riparian restoration, and wildlife plantings.</td>
</tr>
<tr>
<td><strong>Color Description:</strong></td>
<td>It has a dark green leaf with red fruit. It produces beautiful white flowers in the spring.</td>
</tr>
<tr>
<td><strong>Seedling Type:</strong></td>
<td>Small</td>
</tr>
<tr>
<td><strong>Comments:</strong></td>
<td>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</td>
</tr>
</tbody>
</table>
width is between 10 and 20 feet.

**Cold Hardiness:** Excellent

<table>
<thead>
<tr>
<th><strong>CLIFFROSE</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Purshia stansburiana</em></td>
<td></td>
</tr>
<tr>
<td><strong>Mature Height:</strong></td>
<td>3-10 feet</td>
</tr>
<tr>
<td><strong>Growth Rate:</strong></td>
<td>Moderate</td>
</tr>
<tr>
<td><strong>Water Requirements:</strong></td>
<td>Low</td>
</tr>
<tr>
<td><strong>Alkalinity Tolerance:</strong></td>
<td>Low-Moderate</td>
</tr>
<tr>
<td><strong>Preferred Elevation:</strong></td>
<td>3000 - 8000</td>
</tr>
<tr>
<td><strong>Possible Pest Problems:</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Suggested Uses:</strong></td>
<td>erosion control, wildlife browse</td>
</tr>
<tr>
<td><strong>Color Description:</strong></td>
<td>green</td>
</tr>
<tr>
<td><strong>Seedling Type:</strong></td>
<td>Small</td>
</tr>
<tr>
<td><strong>Comments:</strong></td>
<td>A native shrub found on cliffs, mesas, and in washes. Usually grows on hot, dry south and west aspects. It is drought resistant. Found on rocky, limestone soils. Is an important browse species for mule deer, elk, and various bird species. Flowers are cream to yellow in color, extremely fragrant, and blooms occur from April to June. It has high calcium carbonate tolerance, is drought tolerant, has low saline tolerance, and is shade intolerant. Preferred pH is 7.0 to 8.5. It is adapted to medium to coarse soils.</td>
</tr>
<tr>
<td><strong>Cold Hardiness:</strong></td>
<td>Good-Excellent</td>
</tr>
</tbody>
</table>
**DESERT MOUNTAIN MAHOGANY**  
*Cercocarpus breviflorus*

**Mature Height:** up to 15 feet  
**Growth Rate:** Moderate  
**Water Requirements:** Low  
**Alkalinity Tolerance:** Moderate-High  
**Preferred Elevation:** 5000 - 7500

**Possible Pest Problems:** no serious pest problems.

**Suggested Uses:** wildlife habitat and erosion control.

**Color Description:** green

**Seedling Type:** Small

**Comments:** It is a native evergreen shrub that grows in rocky soils on dry slopes and mesas. It has small narrow leaves that are covered with hairs hence its other common name - hairy mountain mahogany; and tiny yellow flowers. The fruit is brown, slender, and leathery with a whitish plume-like tail at the tip. It is found in the southern and western two-thirds of the state and ranges from eastern Arizona to the Trans-Pecos of Texas. It has intermediate shade tolerance and high heat tolerance. It can grow up to fifteen feet in height and five feet in width.

**Cold Hardiness:** Good

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**DESERT WILLOW**  
*Chilopsis linearis*

**Mature Height:** 25 feet  
**Growth Rate:** Fast  
**Water Requirements:** Low  
**Alkalinity Tolerance:** High  
**Preferred Elevation:** 3000 - 6000

**Possible Pest Problems:** no major pests.
**Suggested Uses:** windbreaks, erosion control, screens, and wildlife plantings.

**Color Description:** It has showy white and pink flowers

**Seedling Type:** Small

**Comments:** 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.

**Cold Hardiness:** Fair-Good

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**DOUGLAS-FIR**

*Pseudotsuga menziesii*

**Mature Height:** 80+ feet

**Growth Rate:** Moderate

**Water Requirements:** High

**Alkalinity Tolerance:** Moderate

**Preferred Elevation:** 4500 - 10000

**Possible 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.

**Color Description:** It has dark green foliage.
Seedling Type: Small
Comments: 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.

Cold Hardiness: Excellent

**EASTERN REDCEDAR**
*Juniperus virginiana*

Mature Height: up to 40 feet
Growth Rate: Moderate
Water Requirements: Low-Moderate
Alkalinity Tolerance: Moderate
Preferred Elevation: 3000 - 7000
Possible Pest Problems: spider mites and western cedar borer.
Suggested Uses: windbreaks, living snow fences, and energy conservation plantings.

Color Description: The foliage is light green in color.
Seedling Type: Small
Comments: Native to the eastern and plains states, it forms a dense, pyramidal crown. It grows across a wide variety of soils, including those with a high water table. It is used extensively in windbreaks and in living snow fence plantings. This tree is best known for its fruit. Cones are eaten by many birds and mammals including Mourning dove, robins, turkey, squirrels, and raccoons and many other types of wildlife. It is a rugged tree and a good survivor. It has high calcium carbonate tolerance and low salinity tolerance. The optimum
soil pH is 4.7 to 8.0. It has intermediate shade tolerance. The width is between 10 and 20 feet.

**Cold Hardiness:** Good-Excellent

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**ENGELMANN SPRUCE**

*Picea engelmannii*

- **Mature Height:** up to 120 feet
- **Growth Rate:** Slow
- **Water Requirements:** Moderate
- **Alkalinity Tolerance:** Moderate
- **Preferred Elevation:** 5000 - 11500
- **Possible Pest Problems:** western spruce budworm and spruce beetle.
- **Suggested Uses:** reforestation, Christmas trees, and windbreaks.
- **Color Description:** bluish green
- **Seedling Type:** Small
- **Comments:** 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.

**Cold Hardiness:** Excellent

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**FERNBUSH**

*Chamaebatiaria millefolium*

- **Mature Height:** 6-8 feet
- **Growth Rate:** Moderate
- **Water Requirements:** Low
- **Alkalinity Tolerance:** Moderate
- **Preferred Elevation:** 3000 - 7000
- **Possible Pest Problems:** no major pests.
- **Suggested Uses:** windbreaks, wildlife plantings, and erosion control.
**Color Description:** It has white flowers in mid-summer.

**Seedling Type:** Small

**Comments:** This shrub has fragrant fern-like leaves. It produces an array of white flowers in the spring. The plant remains an evergreen in warm climates and becomes deciduous in colder climates. It is also very drought tolerant once established. It has high calcium carbonate tolerance and no salinity tolerance. Optimum soil pH is 7.0 to 8.0. It is shade intolerant. The width is 5 feet.

**Cold Hardiness:** Good

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**FIRECRACKER PENSTEMON**  
*Penstemon eatonii*

**Mature Height:** up to 3 feet  
**Growth Rate:** Slow  
**Water Requirements:** Low  
**Alkalinity Tolerance:** Moderate  
**Preferred Elevation:** 3000 - 11000  
**Possible Pest Problems:** none serious  
**Suggested Uses:** erosion control, reclamation, wildlife forage  
**Color Description:** green  
**Seedling Type:**

**Comments:** Native plant that has bright red flowers that bloom May through August, is adaptable to various soil types. It is provides forage for deer, antelope and birds. It is has intermediate shade tolerance, has
high calcium carbonate tolerance, and no salinity tolerance. It is a pollinator for native bees.

Cold Hardiness: Excellent

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FOUR-WING SALTBUSH

*Atriplex canescens*

**Mature Height:** 4-6 feet

**Growth Rate:** Fast

**Water Requirements:** Low

**Alkalinity Tolerance:** High

**Preferred Elevation:** 3000 - 8000

**Possible Pest Problems:** no major pests.

**Suggested Uses:** windbreaks, wildlife plantings, erosion control, and reclamation of severely disturbed sites.

**Color Description:** Its foliage is light green in color.

**Seedling Type:** Small

**Comments:** 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.

**Cold Hardiness:** Good
GAMBEL OAK  
*Quercus gambelii*

**Mature Height:** up to 30 feet  
**Growth Rate:** Moderate  
**Water Requirements:** Moderate  
**Alkalinity Tolerance:** Moderate  
**Preferred Elevation:** 5000 - 8500  
**Possible Pest Problems:** no major pests.

**Suggested Uses:** reclamation, wood products, erosion control, and wildlife plantings.

**Color Description:** foliage turns gold in the fall.

**Seedling Type:** Small  
**Comments:** 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.

Cold Hardiness: Good-Excellent

GODDING'S BLACK WILLOW
Salix gooddingii
Mature Height: 45-80 feet
Growth Rate: Fast
Water Requirements: High
Alkalinity Tolerance: Moderate
Preferred Elevation: 3500 - 7500
Possible Pest Problems: none serious.
Suggested Uses: streambank stabilization and riparian restoration.
Color Description: The leaves are green and the bark is dark grey.
Seedling Type: Small
Comments: 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.

**Cold Hardiness:** Good-Excellent

**HOPTREE**  
*Ptelea trifoliata*

- **Mature Height:** up to 25 feet  
- **Growth Rate:** Slow-Moderate  
- **Water Requirements:** Low-Moderate  
- **Alkalinity Tolerance:** Moderate  
- **Preferred Elevation:** 4000 - 9000  
- **Possible Pest Problems:** none serious  
- **Suggested Uses:** wildlife habitat, windbreaks  
- **Color Description:** Dark green  
- **Seedling Type:** Small  
- **Comments:** 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 trifoliate 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.

Cold Hardiness: Excellent

LACEBARK ELM
_Ulmus parvifolia_

Mature Height: 50 feet
Growth Rate: Fast
Water Requirements: Low-Moderate
Alkalinity Tolerance: Moderate
Preferred Elevation: 4500 - 8000
Possible Pest Problems: none serious. Resistant to elm leaf beetle and Dutch elm disease.

Suggested Uses: windbreaks and firewood.

Color Description: Green leaves and dark bark

Seedling Type: Small
Comments: 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.

Cold Hardiness: Good-Excellent
LIMBER PINE
Pinus flexilis

**Mature Height:** up to 60 feet  
**Growth Rate:** Slow  
**Water Requirements:** Low  
**Alkalinity Tolerance:** Low  
**Preferred Elevation:** 7500 - 12000  
**Possible Pest Problems:** bark beetle, twig beetle, dwarf mistletoe and White Pine blister rust.  
**Suggested Uses:** windbreaks, Christmas trees, and reforestation.  
**Color Description:** bluish green  
**Seedling Type:** Small  
**Comments:** 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.  
**Cold Hardiness:** Excellent
MORMON TEA (GREEN EPHEDRA)
Ephedra viridis
Mature Height: up to 5 feet
Growth Rate: Moderate
Water Requirements: Low
Alkalinity Tolerance: Moderate
Preferred Elevation: 3000 - 7500
Possible Pest Problems: None serious.
Suggested Uses: Wildlife habitat and erosion control.
Color Description: green
Seedling Type: Small
Comments: This native evergreen shrub is important browse for big game. Its seeds and stem parts are used as food by many small animals and birds. It is used to restore disturbed land due to its ability to reduce erosion on both clay and sandy soils. Plants are drought tolerant and cold hardy. It has high calcium carbonate tolerance, high salinity tolerance and has intermediate shade tolerance. The width is between 2 and 4 feet.
Cold Hardiness: Excellent

MOUNTAIN MAHOGANY
Cercocarpus montanus
Mature Height: 15 feet
Growth Rate: Moderate
Water Requirements: Moderate
Alkalinity Tolerance: Moderate
Preferred Elevation: 4500 - 8000
Possible Pest Problems: No serious pest problems.
Suggested Uses: Wildlife habitat, and erosion control.
Color Description: Green leaves and feathery white fruit.
Seedling Type: Small
Comments: 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.

**Cold Hardiness:** Good-Excellent

**MOUNTAIN SNOWBERRY**  
*Symphoricarpos oreophilus*

- **Mature Height:** 2-5 feet  
- **Growth Rate:** Moderate  
- **Water Requirements:** Moderate  
- **Alkalinity Tolerance:** Moderate  
- **Preferred Elevation:** 6000 - 10000  
- **Possible Pest Problems:** no major pests.  
- **Suggested Uses:** erosion control, wildlife plantings, and slope stabilization.  
- **Color Description:** The mountain snowberry has a rose colored flower and the fruit is snow white when ripe.  
- **Seedling Type:** Small  
- **Comments:** Mountain snowberry has smooth twigs that turn brown and shreddy with age. The leaves are light gray green. It has pink flowers and white berries. This native shrub is drought and fire tolerant. It has low calcium carbonate tolerance and low salinity tolerance. The optimum soil pH is 5.2 to
7.5. It has intermediate shade tolerance. The width averages 4 feet.

**Cold Hardiness:** Good-Excellent

### NARROWLEAF COTTONWOOD
*Populus angustifolia*

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mature Height:</strong></td>
<td>up to 70 feet</td>
</tr>
<tr>
<td><strong>Growth Rate:</strong></td>
<td>Fast</td>
</tr>
<tr>
<td><strong>Water Requirements:</strong></td>
<td>Moderate-High</td>
</tr>
<tr>
<td><strong>Alkalinity Tolerance:</strong></td>
<td>Moderate</td>
</tr>
<tr>
<td><strong>Preferred Elevation:</strong></td>
<td>5000 - 10000</td>
</tr>
<tr>
<td><strong>Possible Pest Problems:</strong></td>
<td>Leaf rust, fall webworm, poplar borers</td>
</tr>
<tr>
<td><strong>Suggested Uses:</strong></td>
<td>Windbreaks, Wildlife plantings, erosion control and riparian restoration</td>
</tr>
<tr>
<td><strong>Color Description:</strong></td>
<td>Fall foliage color is yellow to gold</td>
</tr>
<tr>
<td><strong>Seedling Type:</strong></td>
<td>Small</td>
</tr>
<tr>
<td><strong>Comments:</strong></td>
<td>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.</td>
</tr>
<tr>
<td><strong>Cold Hardiness:</strong></td>
<td>Good-Excellent</td>
</tr>
</tbody>
</table>

### NETLEAF HACKBERRY
*Celtis reticulata*

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mature Height:</strong></td>
<td>20 feet</td>
</tr>
<tr>
<td><strong>Growth Rate:</strong></td>
<td>Slow-Moderate</td>
</tr>
<tr>
<td><strong>Water Requirements:</strong></td>
<td>Low-Moderate</td>
</tr>
<tr>
<td><strong>Alkalinity Tolerance:</strong></td>
<td>Moderate</td>
</tr>
<tr>
<td><strong>Preferred Elevation:</strong></td>
<td>2500 - 6600</td>
</tr>
</tbody>
</table>
Possible Pest Problems: None serious.
Suggested Uses: erosion control, wildlife plantings, and windbreaks.
Color Description: green
Seedling Type: Small
Comments: 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.

Cold Hardiness: Good-Excellent

NEW MEXICO FORESTIERA
Forestiera neomexicana
Mature Height: 8-10 feet
Growth Rate: Moderate
Water Requirements: Low
Alkalinity Tolerance: Moderate
Preferred Elevation: 4000 - 7500
Possible Pest Problems: no serious pests.
Suggested Uses: windbreaks, wildlife plantings, and erosion control.
Color Description: The small, yellow flowers on the female plants produce a small bluish-black berry
Seedling Type: 
Comments: Also called NM Olive or Privet, this native shrub has a broad range in New Mexico. It is widely used
by birds due to the small black olive-shaped fruit it produces. It forms a dense thicket or small tree and is excellent for controlling erosion. It has high calcium carbonate tolerance and medium salinity tolerance. Optimum soil pH is 7.0 to 8.5. It is shade intolerant. The width is between 8 and 12 feet.

Cold Hardiness:  Good

NEW MEXICO LOCUST  
*Robinia neomexicana*

**Mature Height:**  15-25 feet  
**Growth Rate:**  Fast  
**Water Requirements:**  Moderate  
**Alkalinity Tolerance:**  Moderate-High  
**Preferred Elevation:**  4500 - 8500  
**Possible Pest Problems:** minor problem with locust borer.  
**Suggested Uses:** windbreaks, reclamation, wildlife plantings, and erosion control.  
**Color Description:** It produces showy clusters of purplish flowers in the spring  
**Seedling Type:**  Small  
**Comments:** 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.  

Cold Hardiness:  Good-Excellent
PIÑON  
*Pinus edulis*

**Mature Height:** up to 40 feet  
**Growth Rate:** Slow  
**Water Requirements:** Low  
**Alkalinity Tolerance:** Moderate-High  
**Preferred Elevation:** 3500 - 8500  
**Possible Pest Problems:** Ips bark beetle, piñon needle scale, needle miner, twig beetle, and pitch moth.  
**Suggested Uses:** windbreaks, reforestation, and Christmas trees.  
**Color Description:** It has green needles and dark bark.  
**Seedling Type:** Small  
**Comments:** 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. Optimum soil pH is 6.5 to 8.5. The crown width is between 20 and 30 feet.  
**Cold Hardiness:** Good-Excellent

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PLAINS COTTONWOOD  
*Populus deltoides ssp. monilifera*

**Mature Height:** up to 85 feet  
**Growth Rate:** Fast  
**Water Requirements:** High  
**Alkalinity Tolerance:** Low-Moderate  
**Preferred Elevation:** 3500 - 9000  
**Possible Pest Problems:** None serious.  
**Suggested Uses:** riparian restoration, stream bank stabilization, and wildlife plantings.  
**Color Description:** light green  
**Seedling Type:** Small  
**Comments:** 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. The optimum soil pH is 5.0 to 7.0. It is shade intolerant. The crown width is between 30 and 40 feet.

**Cold Hardiness:** Excellent

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**PONDEROSA PINE**
*Pinus ponderosa*

- **Mature Height:** up to 80 feet
- **Growth Rate:** Moderate
- **Water Requirements:** Moderate
- **Alkalinity Tolerance:** Moderate-High
- **Preferred Elevation:** 4500 - 9000
- **Possible Pest Problems:** bark beetle, twig beetle, sawflies and dwarf mistletoe.

- **Suggested Uses:** windbreaks and reforestation.
- **Color Description:** It has long green needles and orange/redish bark when mature.
- **Seedling Type:** Small
- **Comments:** 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.

**Cold Hardiness:** Excellent

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**REDOSIER DOGWOOD**  
*Cornus stolonifera*

**Mature Height:** 6-9 feet  
**Growth Rate:** Moderate  
**Water Requirements:** High  
**Alkalinity Tolerance:** Moderate  
**Preferred Elevation:** 5500 - 9000  
**Possible Pest Problems:** No major pests  
**Suggested Uses:** Riparian or wetland plantings.  
**Color Description:** A native species that is readily noticed due to the red twigs and white berries in the fall.  
**Seedling Type:** Small  
**Comments:** 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.

Cold Hardiness: Good

RIO GRANDE COTTONWOOD
*Populus deltoides ssp. Wislizeni*

Mature Height: 60+ feet
Growth Rate: Fast
Water Requirements: High
Alkalinity Tolerance: Low-Moderate
Preferred Elevation: 2500 - 7500
Possible Pest Problems: no major pests.

Suggested Uses: riparian restoration, stream bank stabilization, and wildlife plantings.

Color Description: Light green leaves and whitish bark
Seedling Type: Small
Comments: 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. The average crown width is 40 feet.

**Cold Hardiness:** Good

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**ROCKY MOUNTAIN JUNIPER**  
*Juniperus scopulorum*

<table>
<thead>
<tr>
<th>characteristic</th>
<th>description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mature Height:</strong></td>
<td>up to 40 feet</td>
</tr>
<tr>
<td><strong>Growth Rate:</strong></td>
<td>Moderate</td>
</tr>
<tr>
<td><strong>Water Requirements:</strong></td>
<td>Low</td>
</tr>
<tr>
<td><strong>Alkalinity Tolerance:</strong></td>
<td>Moderate-High</td>
</tr>
<tr>
<td><strong>Preferred Elevation:</strong></td>
<td>3500 - 9000</td>
</tr>
<tr>
<td><strong>Possible Pest Problems:</strong></td>
<td>juniper bark beetle, spider mites, western cedar borer, and juniper mistletoe.</td>
</tr>
<tr>
<td><strong>Suggested Uses:</strong></td>
<td>windbreaks, reforestation, and erosion control.</td>
</tr>
<tr>
<td><strong>Color Description:</strong></td>
<td>Pale green foliage</td>
</tr>
<tr>
<td><strong>Seedling Type:</strong></td>
<td>Small</td>
</tr>
<tr>
<td><strong>Comments:</strong></td>
<td>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-berry 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.</td>
</tr>
<tr>
<td><strong>Cold Hardiness:</strong></td>
<td>Excellent</td>
</tr>
</tbody>
</table>
ROCKY MOUNTAIN PENSTEMON
Penstemon strictus

Mature Height: up to 3 feet
Growth Rate: Moderate
Water Requirements: Low
Alkalinity Tolerance: Low
Preferred Elevation: 6000 - 11000
Possible Pest Problems: None noted.
Suggested Uses: erosion control, wildlife forage
Color Description: green
Seedling Type: Small
Comments: 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.

Cold Hardiness: Excellent
**RUBBER RABBITBRUSH (CHAMISA)**

*Chrysothamnus nauseosus*

**Mature Height:** 4-6 feet  
**Growth Rate:** Fast  
**Water Requirements:** Low  
**Alkalinity Tolerance:** Low  
**Preferred Elevation:** 3000 - 7500  
**Possible Pest Problems:** Leaf beetle, no other major pests.  
**Suggested Uses:** windbreaks, erosion control and reclamation.  
**Color Description:** It produces a yellow flower in the fall.  
**Seedling Type:** Small  
**Comments:** 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.  
**Cold Hardiness:** Good-Excellent

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**SCOTS PINE (SCOTCH PINE)**

*Pinus sylvestris*

**Mature Height:** up to 50 feet  
**Growth Rate:** Moderate-Fast  
**Water Requirements:** Moderate  
**Alkalinity Tolerance:** Moderate  
**Preferred Elevation:** 3000 - 7500  
**Possible Pest Problems:** Ips bark beetle and pine needle scale.  
**Suggested Uses:** windbreaks, Christmas trees, and energy conservation plantings.  
**Color Description:** Pale green foliage and redish bark  
**Seedling Type:** Small
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.

Cold Hardiness: Good-Excellent

SERVICEBERRY
Amelanchier alnifolia

Mature Height: 6 feet
Growth Rate: Moderate
Water Requirements: Moderate
Alkalinity Tolerance: Moderate-High
Preferred Elevation: 5000 - 9000
Possible Pest Problems: None known to be serious.
Suggested Uses: Erosion control and wildlife plantings
Color Description: It has dark green leaves and showy white flowers
Seedling Type: Large
Comments: This native species is a medium to tall deciduous shrub. The stems are maroon in color and it produces showy white flowers in the spring. Fall colors are yellow and orange/red. The fruit is purple-black when ripe, edible and very tasty. Serviceberry is self-pollinating. It is an excellent wildlife species. It inhabits banks, slopes, and mountains in mesic areas. Has high calcium carbonate tolerance and no salinity tolerance. Optimum soil pH is 4.8 to 8.4. The width is 15 feet.

Cold Hardiness: Good-Excellent
**SHRUBBY CINQUEFOIL**

*Potentilla fruticosa*

**Mature Height:** up to 4 feet

**Growth Rate:** Slow

**Water Requirements:** Low

**Alkalinity Tolerance:** Moderate

**Preferred Elevation:** 6500 - 11500

**Possible Pest Problems:** none serious.

**Suggested Uses:** erosion control, wildlife plantings, and windbreaks.

**Color Description:** green with yellow flowers

**Seedling Type:** Small

**Comments:** 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.

**Cold Hardiness:** Good-Excellent
SKUNKBUSH SUMAC  
*Rhus trilobata*

**Mature Height:** 4-6 feet

**Growth Rate:** Moderate

**Water Requirements:** Low

**Alkalinity Tolerance:** Moderate-High

**Preferred Elevation:** 4500 - 8000 feet

**Possible Pest Problems:** no serious pests.

**Suggested Uses:** windbreaks, wildlife plantings, and erosion control.

**Color Description:** Green leaves, white showy flowers and red fall colors.

**Seedling Type:** Small

**Comments:** 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.

**Cold Hardiness:** Excellent
SMOOTH SUMAC
*Rhus glabra*

**Mature Height:** 10 feet  
**Growth Rate:** Moderate  
**Water Requirements:** Low  
**Alkalinity Tolerance:** Moderate  
**Preferred Elevation:** 5000 - 8000  
**Possible Pest Problems:** None serious.  
**Suggested Uses:** reclamation, erosion control and wildlife plantings.  
**Color Description:** dark green lives with red fruit  
**Seedling Type:** Small  
**Comments:** 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.  
**Cold Hardiness:** Good-Excellent

SOUTHWESTERN WHITE PINE
*Pinus strobiformis*

**Mature Height:** up to 80 feet  
**Growth Rate:** Moderate  
**Water Requirements:** Moderate  
**Alkalinity Tolerance:** Low  
**Preferred Elevation:** 4500 - 10000  
**Possible Pest Problems:** bark beetle, twig beetle, dwarf mistletoe and White Pine blister rust.  
**Suggested Uses:** windbreaks, Christmas trees, and reforestation.  
**Color Description:** Dark bluish green needles  
**Seedling Type:** Small  
**Comments:** 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 RECOMMENDED FOR SOUTHEAST NEW MEXICO (CAPITANS, SACRAMENTO AND WHITE MOUNTAINS) DUE TO WHITE PINE BLISTER RUST.

Cold Hardiness: Excellent

THINLEAF ALDER
*Alnus tenuifolia*

**Mature Height:** 20-25 feet

**Growth Rate:** Moderate-Fast

**Water Requirements:** Moderate-High

**Alkalinity Tolerance:** Low-Moderate

**Preferred Elevation:** 5000 - 10000

**Possible Pest Problems:** Tent caterpillars.

**Suggested Uses:** Wildlife plantings, streambank stabilization and erosion control.

**Color Description:** Green leaves

**Seedling Type:** Small

**Comments:** 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.

Cold Hardiness: Excellent

**WAX CURRANT**
*Ribes cereum*

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<table>
<thead>
<tr>
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<tbody>
<tr>
<td><strong>Mature Height:</strong></td>
<td>4-6</td>
</tr>
<tr>
<td><strong>Growth Rate:</strong></td>
<td>Slow-Moderate</td>
</tr>
<tr>
<td><strong>Water Requirements:</strong></td>
<td>Low</td>
</tr>
<tr>
<td><strong>Alkalinity Tolerance:</strong></td>
<td>Moderate</td>
</tr>
<tr>
<td><strong>Preferred Elevation:</strong></td>
<td>5000 - 13000</td>
</tr>
<tr>
<td><strong>Possible Pest Problems:</strong></td>
<td>None serious.</td>
</tr>
<tr>
<td><strong>Suggested Uses:</strong></td>
<td>Wildlife habitat and erosion control</td>
</tr>
<tr>
<td><strong>Color Description:</strong></td>
<td>Green</td>
</tr>
<tr>
<td><strong>Seedling Type:</strong></td>
<td>Small</td>
</tr>
<tr>
<td><strong>Comments:</strong></td>
<td>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.</td>
</tr>
</tbody>
</table>

**Cold Hardiness:** Good-Excellent

![Image](https://www.flora.com/photos/attm2az9joqos54798837-657)
WHITE FIR
*Abies concolor*

**Mature Height:** up to 80 feet  
**Growth Rate:** Slow-Moderate  
**Water Requirements:** Moderate-High  
**Alkalinity Tolerance:** Low  
**Preferred Elevation:** 5000 - 10000

**Possible Pest Problems:** spruce budworm, Douglas-fir tussock moth, bark beetles, aphids and dwarf mistletoe.

**Suggested Uses:** Christmas trees and reforestation.

**Color Description:** Needles are silvery blue/green.

**Seedling Type:** Small

**Comments:** 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. The width is between 15 and 30 feet.

**Cold Hardiness:** Excellent

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WINTERFAT
*Ceratoides lanata*

**Mature Height:** 3–4 feet  
**Growth Rate:** Fast  
**Water Requirements:** Low  
**Alkalinity Tolerance:** Moderate-High  
**Preferred Elevation:** 3000 - 8000

**Possible Pest Problems:** no major pests.

**Suggested Uses:** erosion control, range improvement, and wildlife plantings.

**Color Description:** The leaves are pale green.

**Seedling Type:** Small

**Comments:** 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.

**Cold Hardiness:** Good-Excellent