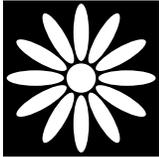


Common Conifers in New Mexico Landscapes

Bob Cain, Extension Forest Entomologist



One-Seed Juniper (*Juniperus monosperma*)

Description: One-seed juniper grows 20-30 feet high and is multistemmed. Its leaves are scalelike with finely toothed margins. One-seed cones are 1/4-1/2 inch long berrylike structures with a reddish brown to bluish hue. The cones or “berries” mature in one year and occur only on female trees. Male trees produce pollen and appear brown in the late winter and spring compared to female trees.



Other Characteristics:

- Scattered distribution through the southern Rockies (mostly Arizona and New Mexico)
- Usually a bushy appearance
- Likes semiarid, rocky slopes

Uses:

- Birds use the berries of the one-seed juniper as a source of winter food, while wildlife browse its foliage. The trees have little commercial value outside their occasional use as firewood, potpourri, and fence posts.

Pests:

- Spider mites
- “Cedar” bark beetles
- Western cedar borer
- Tiger moth (occasionally)
- *Gymnosporangium* rusts
- True mistletoes



Alligator Juniper (*Juniperus deppeana*)

Description: The alligator juniper can grow up to 65 feet tall, and may grow to 5 feet in diameter. It resembles the one-seed juniper with its 1/4-1/2 inch long, berrylike structures and typical juniper foliage. Its most distinguishing feature is its bark, which is divided into squares that resemble alligator skin.

Other Characteristics:

- Ranges throughout the semiarid regions of the southern two-thirds of New Mexico, southeastern and central Arizona, and south into Mexico.
- An American Forestry Association Champion recently burned in Tonto National Forest, Arizona. It was 29 feet 7 inches in circumference, 57 feet tall, and had a 57-foot crown.
- If cut down, this juniper can sprout from the stump.

Uses:

- Alligator juniper is valuable to wildlife, but has only localized commercial value. Dense alligator juniper populations are thinned to improve wildlife habitats.

Pests:

- The alligator juniper pests are the same as the one-seed juniper.



Rocky Mountain Juniper (*Juniperus scopulorum*)

Description: The Rocky Mountain juniper is a small, evergreen tree that grows up to 35 feet in height. A native of western North America, it occurs in mixed or pure stands of open woodland in New Mexico and Arizona at elevations of 5,000-8,000 feet. It also often occurs on dry, rocky ridges. It does well in cultivation, adapting to a wide range of soils and moisture conditions. It is winter-hardy, slow-growing, and very long-lived.

The fruits are blue with a whitish bloom-fleshy berries (cones) about 1/4 inch in diameter. They ripen in the second season. The flowers are small and conelike. They are borne separately on male and female plants. The leaves are opposite, scalelike and pale blue-green to dark green. On new shoots, the leaves are awl-shaped, sharp-pointed and spreading. Stems often divide near the ground with thick and ascending branches. The bark is red to gray-brown, furrowed, thin and shredded. The roots are wide-spreading.

A closely related species is the Utah juniper—a smaller plant with bluish, one-seeded fruit. A common and typical tree of Great Basin ranges, it is little known in cultivation.

Other Characteristics:

- It is tolerant of droughty and moist sites. However, the moist sites must be well-drained.

Uses:

- The Rocky Mountain juniper can be used as a windbreak in the outer rows of multirow plantings, where it will not be overtopped by taller trees. It also can be used in single-row windbreaks, when a dense, medium-height barrier is desired.
- This species of juniper provides food and cover for numerous birds and mammals; winter food and protection is particularly important for pheasant, mule deer, and whitetail deer.
- The Rocky Mountain juniper's yearlong coloration and attractiveness to wildlife makes it useful for recreational plantings.

Pests: Insects and diseases are usually not serious problems on well-cared-for trees. Pests include:

- Spider mites
- Bark beetles
- Western cedar borer
- Spittlebugs
- Juniper twig pruner
- True mistletoe
- *Gymnosporangium* rusts.



Eastern Red Cedar (*Juniperus virginiana*)

Description: The eastern red cedar is a medium evergreen tree, commonly 10-40 feet, having a pyramidal shape that becomes rounded with age. Like most junipers, it is very slow-growing and moderately long-lived. The fruits are pale blue with a whitish bloom-fleshy berries (cones) about 1/4 inch across. They ripen in the second season. The flowers are small and conelike. They are borne separately on male and female plants. The pale to dark green leaves are opposite and scalelike, covering older twigs closely in alternating pairs. On new shoots, the leaves are awl-shaped, sharp-pointed and spreading. New stems are short, often dividing near ground with thick and ascending branches. The bark is red to gray-brown, furrowed, thin and shredded. The roots are wide-spreading. The eastern red cedar has many intergrading varieties, differing in color and growth form.

Other Characteristics:

- Native to eastern North America, but cultivated in New Mexico.
- Planted most successfully at elevations below 7,000 feet.
- Is very winter-hardy and tolerant of droughty and salty soils.

Uses:

- For cultivation, the eastern red cedar requires dry soils and full sunlight. This species offers great hardiness for some planting sites.

- For use as a windbreak, plant this species in the outer rows of multirow plantings, where it will not be overtopped by taller trees. It can be used in single-row windbreaks when a dense, medium-height barrier is desired.
- The eastern red cedar provides food and cover for numerous birds and mammals, especially in winter.
- It is suitable for screen plantings.

Pests:

- Same as Rocky Mountain juniper.

**Arizona Cypress (*Cupressus arizonica*)**

Description: The Arizona cypress is an evergreen tree growing to a height of 35-50 feet with a spread of 10-15 feet at the base. The foliage is scalelike and blue-green in color. The bark is cherry red to gray. The fruit is a globular cone about 1-1 1/4 inches in diameter.

Other Characteristics:

- Best planted at elevations of 6,500 feet or lower.
- Possesses drought tolerance as well as an ability to withstand considerable heat.

Uses:

- For cultivation, the Arizona cypress does best on well-drained soils. It also does well in low precipitation areas with irrigation. Container-grown stock is recommended. Bare rootstock also may be used. However, more care in planting and early maintenance is required, and poorer survival rates can be expected. Trees grown from seed vary considerably in form, density, and foliage color. Improved varieties have been introduced, which are propagated vegetatively, assuring uniformity of appearance.
- The Arizona cypress can serve as a windward row in a multirow windbreak and as a dense single-row windbreak. It will make an attractive hedgerow, if pruned annually, but will not sprout from older branches.

- This cypress makes an excellent nesting habitat for small birds and cover for small game.

Pests:

- Bark beetles
- Flat headed borers, the western cedar borer
- Spider mites
- Twig pruners
- Cypress scale

**Giant Sequoia (*Sequoiadendron giganteum*)**

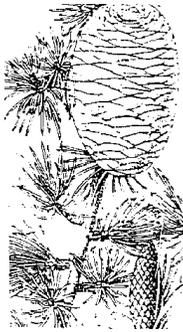
Description: The species includes the largest living beings. They potentially can grow to 150 feet when cultivated and to 250 feet in the wild. The crown is conic and becomes broader with old age or when the top is lost in lightning strikes. The bark is thick red brown or dark brown. It often is fluted, fissured, and strongly ridged, thick, and moderately soft. The shoots are green, becoming red-brown during the second season. The foliage occurs in rather wiry sprays set all around the shoot. The cones are green ripening to brown or green in the second year. After the second year, they are woody and ovoid, persisting on the tree.

Other Characteristics:

- Native to the western slopes of the Sierra Nevada in California. The trees are most common in about six dozen groves in the southern part of its range.
- The giant sequoia is very tolerant of cold and dry sites. It has been recorded to live as long as 3,500 years.
- Some of the nicest examples in New Mexico are in Santa Fe and Los Alamos.

Pests:

- Giant sequoia is relatively free of serious insect and disease problems in landscape settings. Due to size, older specimens are prone to damage from lightning. Lack of water can stunt the tree and cause browned foliage.



True Cedars, Atlas Cedar (*Cedrus Atlantica*)

Description: The Atlas cedar is native to the Atlas Mountains of Morocco and Algeria and can grow to a height of 60 feet in cultivation. In the wild, the trees vary in the development of the wax associated with stomatal bands, resulting in very blue trees and less attractive gray-green ones. The trees generally are grown in the warmer parts of New Mexico but also have performed well up to 7,000 feet in elevation.

Other Characteristics:

- The plants in cultivation are derived mainly from the bluer forms.
- The Atlas cedar survives on a variety of soils; it is very tolerant of alkali and dry sites.
- The Cedar of Lebanon is a closely related species.

Pests:

- No serious pest problems have been noted.



Deodar Cedar *Cedrus deodara*

Description: The Deodar cedar can reach a height of 80 feet in cultivation. Young trees have weeping leaders and branch tips. This species has longer, sharper and greener needles than the Atlas cedar, and broader cones with wider scales. As a young tree, it is graceful, never having the open spikiness of Atlas cedar. When mature, it tends to lose the lower branches and develop a high crown at the end of a fat bole.

Other Characteristics:

- Deodar cedar is native to the drier western Himalayas from west Nepal to eastern Afghanistan. It does well in New Mexico at elevations of 6,000 feet or below. Because of its range of habitats in the Himalayas, it shows variation in ability to withstand winter cold. The plants from the west of the range in Pakista province, Afghanistan generally are more hardy. The ‘Cashmere’ variety appears to be hardy in Santa Fe (7,000 feet). The ‘Shalamar’ variety reportedly is also hardy in Santa Fe, but has been less available.
- Deodar is tolerant of dry sites and is very hardy, although the needles may be damaged at the tips during some winters.

Pests:

- No significant pests have been noted.



Oriental Arborvitae (*Platycladus orientalis* *Thuja orientalis*)

Description: Oriental arborvitae is an evergreen shrub or tree that can grow to a height of 25-30 feet. Dwarf forms, which stay under 10 feet tall, are also available. Its leaves are scalelike on twigs, which are arranged in a flat, vertical plane. Male and female flowers are borne on the same tree. The cones are small and fleshy when young, becoming woody when ripe. The cones are 1/2-1 inch long with 6-8 scales per cone. The seeds are wingless and red-purple in color. The fruit ripens in the fall, and seeds drop when the cone opens. The bark is reddish brown and rough in appearance.

Other Characteristics:

- The Oriental arborvitae is native to China and Korea.
- It is tolerant of heat and low humidity.
- It does best at elevations of 7,000 feet or below.

Uses:

- The Oriental arborvitae is a desirable plant for windbreaks, but also can also be used in landscaping. Supplemental water at planting time and during periods of drought is beneficial. Many species of wildlife are attracted to this tree because of its low branching habit, which affords good ground cover protection.

Pests:

- Insect pests are not serious, although aphids, spider mites, and the tiger moth frequently attack the tree.

Piñon Pine (*Pinus edulis*)

Description: The piñon pine is a small to medium evergreen tree that grows up to 40 feet in height. A native of New Mexico, it occurs in mixed or pure stands at elevations of 4,000-9,000 feet, often on dry, rocky ridges or on shallow soils. The cone is reddish to yellow-brown, oval to globular and 1-3 inches in length. The scales are thick and resinous with oval-shaped seed. The seeds are edible; they are 1/2-3/4 inches long and brown to black in color. The needles are stout, persistent, slightly curved, bluish green in color, and 3/4-1 3/4 inches long. The stem is symmetrical with spreading branches. The bark is dark brown or black. The piñon is wind-firm, as a result of its wide-spreading root system.

Other Characteristics:

- The piñon pine has adapted to a wide range of soils and moisture conditions. However, it is more tolerant of droughty conditions than high moisture conditions. It is winter-hardy, slow-growing, and very long-lived.
- Piñon does well as a landscape tree statewide at elevations below 8,000 feet.

Uses:

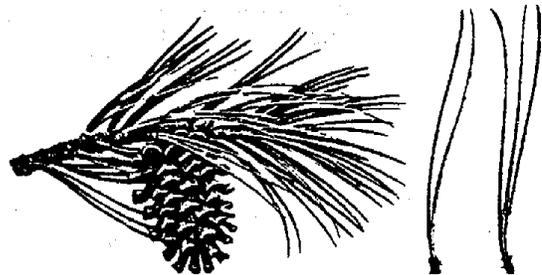
- The piñon pine works as a windbreak, both single-row and multirow. It also is suitable for ornamental and recreational planting screens in landscapes. It provides food and cover for man, birds, and small mammals. The piñon also is used extensively for fuelwood and Christmas trees.

Pests:

- Piñon needle scale
- Piñon tip moth
- Sawflies
- Pine needle scale
- Pitch nodule moth
- Piñon spindle gall midge
- Pitch moth
- Piñon needle miner
- Bark beetles
- Tiger moth
- Twig beetles

Diseases:

- Dwarf mistletoe
- Needle casts

**Ponderosa Pine (*Pinus ponderosa*)**

Description: The ponderosa pine is an evergreen, open-branched tree that can grow more than 50 feet in urban landscapes and much taller in the wild. It forms an open pyramid when young. The tree is native to western North America. It is adapted to well-drained soils in New Mexico at elevations up to 9,000 feet. It occurs as a dominant tree in mixed coniferous forests or in open pure stands. It is moderately slow growing, especially in the early years, and is very long-lived.

Cones are 3-8 inches long with a sharp point at the apex of each scale. Needles are dark to yellowish green 5-10 inches long, occurring in fascicles of three (sometimes two to five). The bark is brown-black and deeply furrowed when young. With age, the bark

becomes cinnamon red-brown and divides into flat, irregular plates.

Uses:

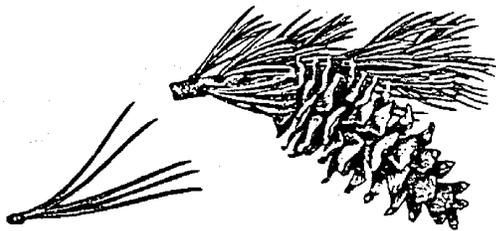
- The ponderosa's adaptability and drought tolerance allow for wide use in shelterbelts, recreational plantings, and ornamental plantings. They work well as screens or specimen plants in landscapes. Plant the pines in the central rows of multirow windbreaks. They also can be used as single-row windbreaks. Ponderosa pines are of some importance as food and cover for many birds and small mammals. Although whitetail and mule deer browse the plant, it is not a preferred forage.

Pests:

- Mountain pine beetle
- Bark beetle
- Pine tip moth
- Twig beetle
- Pine needle scale
- Saw flies
- Ponderosa needle miner
- Pitch moth
- Tiger moth
- Bark moth
- Conifer aphids

Diseases:

- Minor needle casts
- Dwarf mistletoe
- Root rots



Limber Pine and Southwestern White Pine
(*Pinus flexilis* and *Pinus strobiformis*)

Description: These two types of pines are difficult to distinguish. The limber pine grows from the upper end of the ponderosa pine zone up to the highest forested elevations. It is more common in northern New Mexico. The southwestern white pine grows with ponderosa pine and mixed conifers and is the more common white pine in southern New Mexico.

The bark of old trunks is thick, dark brown or almost black in color, and covered with thin, irregular scales. The bark of younger stems is whitish gray and smooth. The needles occur in bundles of five. They

are 1 1/2 -3 inches long, and dark yellow-green to blue in color. The needles are shiny, densely tufted, and point outward toward branch ends. The cones are 3-10 inches long and short-stalked with thick unarmed scales. They open at maturity to release wingless light brown seed, which is edible.

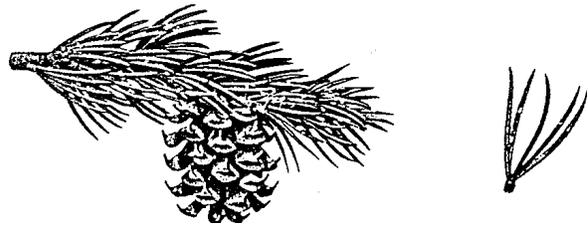
Other Characteristics:

- White pines are hardy and tolerant as ornamentals in urban conditions, if they receive adequate water.

Pests:

- Bark beetles
- Twig beetles
- Dwarf mistletoe
- White pine blister rust*

*Limber pines or southwestern white pines should not be planted in the Sacramento Mountains of south central New Mexico due to potential infection by the white pine blister rust.



Bristlecone Pine (*Pinus aristata*)

Description: The Bristlecone pine occurs at high altitudes throughout New Mexico's Sangre de Cristo Mountains. It can grow to a height of 45 feet. The crown has upturned dense branches. The bark is dark gray and smooth, becoming reddish brown and fissured with age. The needles, covered with flecks of white resin, occur in fascicles of five and are very dense on the shoot. They curve along the shoot in the first year and spread later. The brown cones are 2-4 inches long, cylindrical ovoids. The scales terminate in a narrow, bristlelike point.

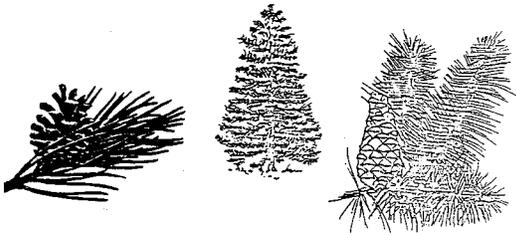
Other Characteristics and Uses:

- The Bristlecone pine is long-lived and slowly makes a gnarled specimen when growing in harsh, windy and exposed locations.

- It is a very hardy pine. In cultivation, it makes for a slow-growing ornamental tree.

Pests:

- Bark beetles
- This tree also is a potential host for white pine blister rust, but the disease has not become established where Bristlecone pine grows.



Austrian Pine (*Pinus nigra*)

Description: In favorable soils, the Austrian pine may reach heights of 40 feet or more. As a young tree, it has pyramidal form. In maturity, it becomes rounder and flat-topped. The stiff, dark green needles occur in fascicles of two and are usually 3-6 1/2 inches long. The brown cone is oval with an axis of 2-3 1/2 inches in length. The bark is dark gray and deeply fissured on older trees.

Other Characteristics:

- The Austrian pine is native to Europe and Western Asia. It is long-lived, winter-hardy, and somewhat drought-resistant.
- It grows well on a wide variety of soils.
- It can be planted between altitudes of 3,500 and 8,000 feet.

Uses:

- This pine works well as a windbreak tree and is a suitable tree for ornamental and screen plantings.
- The Austrian pine provides cover and nesting sites for birds and is a preferred nesting site for doves.

Pests:

- Bark beetles
- Twig beetles
- Pine tip moth
- Conifer aphids

Diseases:

- Pine needle scale
- Road salts
- Environmental stresses



Scotch Pine (Scots Pine) (*Pinus sylvestris*)

Description: The Scotch pine is a spreading, ever-green tree that can potentially grow to more than 50 feet on good sites. It is pyramidal when young, becoming round-topped and irregular with age. The oblong cones are tawny-yellow, symmetrical and 1-2 inches in length. The stout needles usually are twisted and occur in fascicles of two. They are bluish green and 1-3 inches long. In the pine's early years, the stem often is crooked with red-brown bark. The bark is thin and smooth on the upper trunk and often orange-brown. But on the lower trunk, it is dark and fissured. The root system is moderately deep and widespread, making the tree wind-firm. It can be planted at elevations below 7,500 feet.

Other Characteristics:

- The Scotch pine was introduced from Eurasia and has become naturalized in eastern North America.
- It does best on rich, moist soils, but its winter hardiness and moderate drought tolerance enables it to do well on other soils.
- The pine is moderately slow-growing but long-lived.

Uses:

- In New Mexico, the Scotch pine is cultivated for windbreaks and landscape trees below 7,500 feet. For use as a windbreak, plant Scotch pines in the central or leeward rows of multirow plantings. The pine also is recommended for planting in single-row windbreaks. Scotch pine is of some importance as food and cover for many birds and small mammals. Although the plant is browsed by whitetail and mule deer, it is not a preferred forage. It is suitable for ornamental and screen plantings. Scotch pine may turn yellow in winter.

Pests:

- Bark beetles
- Twig beetles
- Pine tip moth (possibly)
- Conifer aphids
- Pine needle scale



Afghan Pine (*Pinus eldarica*)

Description: The Afghanistan pine is an evergreen tree growing to a height of 50-80 feet. The width varies between 10 and 20 feet. The needles are two to three per fascicle and dark green in color. The cones are 5-6 1/2 inches long. The pine is similar to the Aleppo and Brutia pines, but with a better form. It is a very fast-growing tree under ideal conditions (up to 7 feet in 2 years).

Other Characteristics:

- This tree is not recommended north of Socorro.
- It is best planted at elevations below 5,000 feet, although there are successful plantings in the Albuquerque area.
- It is drought-tolerant and can withstand considerable heat. The pine also is well-suited to desert conditions. Ideal soils are sandy to sandy loam with a pH of 6 to 8.5.

Uses:

- The Afghanistan pine will serve as an evergreen in multirow windbreaks and single-row windbreaks. For cultivation, use bare root or container-grown planting stock. Cultivation or chemical weed control to reduce competing vegetation will improve planting survival and growth. Trees should not be overwatered, and soils should be allowed to dry between irrigations. This pine also makes an excellent nesting habitat for small birds.

Pests:

- Pine tip moth
- Bark beetles
- Pine needle scale



Douglas-Fir (*Pseudotsuga menziesii*)

Description: One of the largest native evergreen trees in New Mexico, the Douglas-fir can grow to 100 feet tall in the forest. It bears a strong resemblance to spruce and true firs, as well as hemlock and yew, and has been described as a “false hemlock with a yewlike leaf.”

The needles are soft, flat, slightly pointed, dark green, 1/2 -1 1/2 inches long, and grow around the twig, giving it a full, rounded appearance. The cones are 1 3/4-2 3/4 inches long with reddish brown, thin-rounded scales. They have distinctive three-point bracts that are especially noticeable during the blossom stage. The bark is rough, very thick, deeply furrowed into broad ridges, and sometimes very corky. It is dark, reddish brown or gray.

Other Characteristics:

- Grows at elevations between 7,500 and 10,000 feet.
- Trees can be planted successfully below this range to 5,500 feet but will require supplemental irrigation.

Uses:

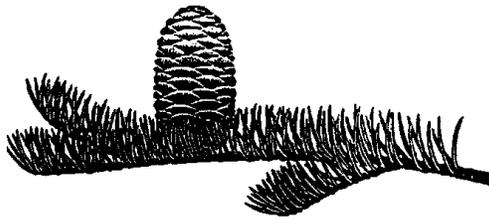
- Douglas-fir is one of New Mexico’s commercial forest species. For a windbreak, it is usually planted in the central rows or between central rows and outside rows of multirow windbreaks. Young Douglas-firs are very attractive for ornamental planting in higher elevation communities.

Pests:

- | | |
|----------------------------|------------------------------|
| • Western spruce budworm | • Pine needle scale |
| • Douglas-fir tussock moth | • Tiger moth |
| • Bark beetle | • Cooley spruce gall adelgid |
| • Conifer aphids | |
| • Twig beetle | |

Diseases:

- Dwarf mistletoe
- Needle casts



White Fir (*Abies concolor*)

Description: White fir is a native evergreen species of New Mexico and Arizona. The flat, plump, blunt-pointed leaves are pale blue-green to silvery and usually 1 1/2-2 1/2 inches long. The cones, like those of other true firs, maintain an erect position. They are 3-5 inches long, usually grayish green, with scales falling apart at maturity. Young trees have smooth pale bark. With age, the bark thickens to 4-6 inches, takes on a distinctly ashy-gray color, and breaks into deep furrows. The white fir occurs at elevations between 7,500 and 10,000 feet. Landscape plantings have been successful as low as 5,500 feet in elevation on good sites with irrigation.

Other Characteristics:

- While thriving best on fairly deep, rich, moist loams, white firs do well on all moderately moist soils, except heavy clays, and frequently grow on dry, coarse, disintegrated granite.
- This fir has a low resistance to drought and alkalinity, but a high resistance to cold.
- Growth rates are slow.

Uses:

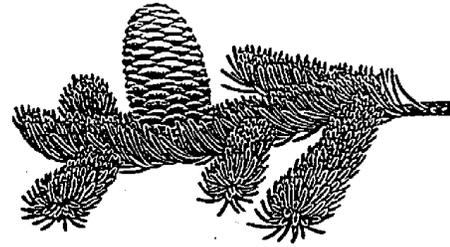
- The white fir is useful as a high-elevation windbreak and usually can be planted in central rows or between central rows and outside rows of multirow windbreaks.
- The white fir is a good nesting habitat for songbirds and is suitable for ornamental plantings.

Pests:

- Conifer aphids
- Armored scale
- Douglas-fir tussock moth
- Western spruce budworm
- Bark beetles

Diseases:

- Dwarf mistletoe
- Broom rust
- Root rots



Cork Bark Fir (*Abies lasiocarpa var. arizonica*)

Description: The needles of the cork bark fir are dark green, clustered closely on the branchlets and only about 1 inch long. The inconspicuous flowers, born in the spring, are dark blue. The cones are two to four inches long and are deciduous. This tree's name identifies its distinguishing characteristic-the bark has a soft, corky feel.

Other Characteristics:

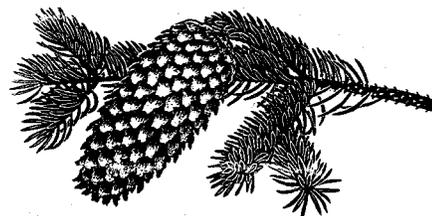
- The cork bark fir occurs in the southern Rocky Mountains between the elevations of 8,000 and 10,000 feet.
- It inhabits thin gravelly or rocky soils in moist areas.

Uses:

- The wood of the cork bark is mixed in with that of other fir species. It sometimes can be distinguished from other firs by its lighter color, weight, and softness.

Pests:

- Same as white fir.



Blue Spruce (*Picea pungens*)

Description: The blue spruce is an evergreen that is native to the central and southern Rocky Mountains. Its shape varies between densely conical and openly pyramidal, and it can grow more than 50 feet tall. The straw-colored fruits are cylindrical and 2-6 inches long. The scales of the cones are thin and flexible with winged seeds. The sharp, pointed needles are rigid, blue-green, frequently glaucous,

1 1/4 inches in length, and at right angles to the twig. The stem is symmetrical and tapers with stout, horizontal branches. The bark is pale gray, thin and scaly when young, becoming thicker and more furrowed with age.

Other Characteristics:

- The blue spruce naturally inhabits rich, moist soils, typically on stream banks, moist valley bottoms and the edges of mountain parks.
- It occurs at elevations of 7,000 to 10,000 feet in New Mexico.
- It occurs as a single plant or in scattered groves but is rarely abundant.
- Where sufficient moisture is available, the tree is tolerant of temperature extremes, wind, and shade.
- The blue spruce is long-lived and slow-growing, especially in the early years.
- This spruce has several intergrading varieties that differ chiefly in leaf color and growth form. It is, perhaps, the best of the spruces for dry climates, but it must have supplemental water when precipitation is less than 20 inches.

Uses:

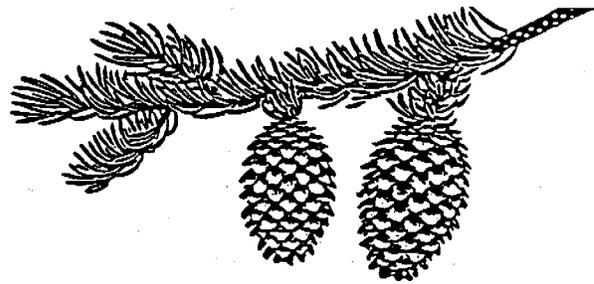
- The blue spruce is a good windbreak tree. Plant it in any row of a multirow windbreak, if adequate distance is provided to prevent overtopping by deciduous trees. It also is suitable for planting in single-row windbreaks, when adequate moisture is available. This spruce provides excellent nesting, roosting, and winter cover for numerous small birds. Deer will browse on this species, although it is not a preferred forage plant. The blue spruce is highly recommended and widely used for ornamental and screen plantings.

Pests:

- | | |
|----------------------------|--------------------------|
| • Spruce aphid | • Western spruce budworm |
| • Cooley spruce gall | • Pine needle scale |
| • Douglas-fir tussock moth | • Spider mites |
| • Bark beetle | |

Diseases:

- Shoot blights
- Needle casts
- Broom rust



Engelmann Spruce (*Picea engelmanni*)

Description: The Engelmann spruce grows at higher elevations and can get quite large both in height and diameter. Its needles are square in cross section, 1/2 -1 inch in length, and tend to point toward the end of the branch. Like all other spruce trees, the needles sit on peglike structures. The cones are 1 1/2-2 1/2 inches in length and have scales with eroded ends. The loosely attached bark scales are purplish brown to russet red.

Other Characteristics:

- The Engelmann spruce is found between between 9,000 and 12,000 feet in New Mexico. The spruce occurs in pure and mixed stands, most commonly with cork bark fir. Shade tolerant.

Uses:

- Valued as a commercial timber source, Engelmann spruce has various uses, including framing and sheathing. Wildlife value this tree as a food source, but it is more important as a cover for deer, elk, and bighorn sheep. It also forms one of the chief homes for the dusky grouse, which uses the buds for food and the trees for protection and roosting.

Pests:

- Same as blue spruce.

