



Tri-Community Tree Nursery

We would like to thank the New Mexico Department of Agriculture for helping us start the Tree Nursery with one of their Specialty Crop Block Grants.

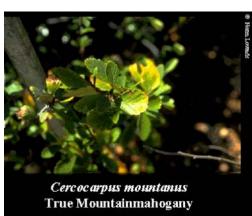
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### Mountain Mahogany

Cercocarpus, commonly known as mountain mahogany, is a small genus of five or six species of nitrogen-fixing flowering plants in the rose family, Rosaceae. They are native to the western United States and northern Mexico, where they grow in chaparral and semidesert habitats and climates, often at high altitudes.

Mountain mahohany is a semi-evergreen tree with reddish bark and white plume seed pods which make it an attractive ornamental for dry areas. It is also good for erosion control. Plant it in full to part sun, in any soil type with moderately good drainage.

It is drought tolerant but will grow faster if given regular water. Members of the genus are deciduous shrubs or small trees, typically reaching heights of 9–18 feet tall, but exceptionally up to 40 feet high. *C. montanus* usually remains under 3 feet though, because of incessant browsing by elk and deer.





### Cottonwood (available 2018)

Cottonwoods (*Populus deltoids*) are massive shade trees that can grow to well over 100 feet tall. The canopy of a mature tree spreads about 75 feet wide. You can recognize them at a distance by their broad, white trunks and lustrous, bright green foliage in summer that changes to brilliant yellow in fall.

Cottonwoods were important to Native Americans who used all parts of the tree: trunks were used as dugout canoes; the bark provided forage for horses and a bitter, medicinal tea for their owners; sweet sprouts and inner bark were food for both humans and animals.

Cottonwoods need a location with full sun and lots of moisture. They grow particularly well along lakes and rivers. The trees prefer sandy or silty soil, but will tolerate most anything but heavy clay. Planting cottonwood trees at home leads to problems as they have weak wood and are prone to disease.

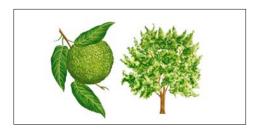
Cottonwood trees are the fastest growing trees in North America. A young tree can add 6 feet or more in height each year. Cottonwoods provide excellent shade. Their rapid growth makes them well-suited to use as a windbreak tree.

### Osage Orange

Maclura pomifera: Osage orange is a deciduous fast-growing tree that can reach 40 feet with spreading open habit and thorny branches. Female trees bear inedible yellow 4 inch fruit. It can stand heat, cold, wind, drought, and alkalinity. But it needs monthly deep watering. It is good in any soil, in full sun.

It is especially good for wind breaks and borders. The fruit has been used as a bug repellent.

Osage orange has a long and interesting history of use by both Native Americans and early pioneers. Its wood was once in demand for making hubs and wheel rims for horse drawn wagons, mine support timbers, posts and many other uses where decay resistance was important. By the 1850's Osage orange hedges made the fencing of entire farms possible. The French found the Osage Indians making bows from the wood. Recently, Osage orange has been studied for the chemical properties it contains that may be of economic importance.





## Russian Mulberry

The Russian Mulberry is a round-topped, densely branched tree which can reach 30 to 50 feet in height. The highly interwoven twiggy branches can give it an untidy appearance. It is fast growing, often seen in abandoned areas. The bark is a light orange-brown, the foliage varies from yellow-green to dark green in summer, yellow in fall.

The early spring flowers are not showy; small greenish catkins 1/2 inches long on the females, the males slightly longer. The mulberries are pinkish white to violet, quite sweet, and birds love them. They fruit in early summer. They withstand drought, salt, but prefer a well-drained moist soil. They are subject to a variety of diseases and pests. Native to China, it was originally imported for the silkworm industry, but it has now escaped and naturalized in many areas.



### Skunkbush Sumac

This *Rhus* species closely resembles other members of the genus that have leaves with three "leaflets." The shape of the leaflets and the habit of the shrub make this species, like some other *Rhus*, resemble small-leafed oaks.

The Rhus trilobata leaves have a very strong scent when crushed, disagreeable enough to some to have gained the plant the name "skunkbush." The leaves are green when new and turn orange and brown in the fall. The twigs are fuzzy when new, and sleek with age.

The flowers, borne on small short shoots, are white or light yellow. The plant yields hairy and slightly sticky red berries which have an aroma similar to limes and a very sour taste, which comes from tannic and gallic acids. The flowers are animal-pollinated and the seeds are dispersed by animals that eat the berries. The shrub also reproduces vegetatively, sending up sprouts several meters away and forming thickets.

The skunkbush sumac has historically been used for medicinal and other purposes. The bark has been chewed or brewed into a drink for cold symptoms,

the berries eaten for gastrointestinal complaints and toothache. The flexible branches were sought after for twisting into basketry and rugs. It is sometimes planted for erosion control and landscaping, and is a plant used for reclaiming barren land stripped by mining.

### Smooth Sumac



Rhus glabra: Smooth sumac is a deciduous large, loose, open-spreading shrub that grows from 3-7 feet with compound leaves and a dark red seed head that persists after the leaves fall, making it excellent for Fall color.

Birds and wildlife eat the berries and use it as escape and nesting ground cover. It provides fast cover for bank stabilization, and it is an excellent shrub for farm windbreaks and riparian plantings. Its leaves and roots are used in dyeing and tanning leather. Berries can be eaten fresh or processed into a lemonade drink. Extracts can be used as a tonic, astringent, and antiseptic.

It likes afternoon shade, amended well-drained soil, and periodic deep water. It is moderately drought tolerant. Available water determines mature plant height.



### New Mexico Olive

Forestiera neomexicana: The Mexico olive tree is a large deciduous shrub that grows well in hot, dry areas. It works well in hedges or as an ornamental specimen, offering fragrant yellow flowers and showy, berry-like fruit. It is a good tree for windbreaks or foundation planting.

The New Mexico olive is also known as the desert olive tree because it thrives in hot, sunny regions. New Mexico olive usually grows many spiny branches. The bark is an interesting shade of white. Tiny but very fragrant yellow flowers appear on the shrub in clusters in spring even before the leaves. They are an important nectar source for bees.

Later in summer, the plant produces attractive blue-black fruit. The fruit are shaped like eggs but only the size of berries. These attract birds that enjoy eating the fruit. Forestiera desert 6 olives grow rapidly to their full height,

which can be as tall as 15 feet. Their spread is about the same.

Growing New Mexico olive trees is not difficult in the right location, and the species has a reputation for being easy to maintain.

The shrubs prefer all-day sun but will grow in a site with ample morning sun and afternoon shade. Another reason New Mexico olive tree care is easy is that the plant is not picky about soil. You can start growing New

Mexico olive trees in clay soil, sandy soil or average soil.

All plants, including desert olives, require irrigation when they are first transplanted. This enables them to build up strong root systems. Once established, however, desert olive doesn't require much water. Still, the shrubs grow faster if you give them a drink from time to time in dry weather.

If you enjoy pruning and shaping your bushes, you'll love growing New Mexico olive trees. New Mexico olive tree care can include trimming the shrub to increase the number of branches. This works especially well if you are using the shrub in a hedge. Alternatively, once you start growing New Mexico olive trees, you can remove all branches but one to force the shrub into a tree shape.

We hope to have more varieties of trees next year!

# How to Plant Your Tree

#### Step 1. Dig a Large Hole.

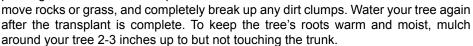
The general rule is that the hole's diameter (from one side of the hole to the other) should be three times the width of the root system when it is spread apart. This hole again should be several feet deep, at least 10 inches deeper than the plant's roots go. Place some dirt back into the bottom of your hole. (This helps loosen some soil for your plants roots to grow down into.) If your tree arrived in a container, remove it and loosen the soil so that the roots spread out.

#### Step 2. Place Your Tree in the Hole.

The top of the root flare, where the roots end and the trunk begins, should be about an inch above the surrounding soil. Then make sure the tree is exactly vertical in the hole.

#### Step 3. Backfill Your Hole.

As you put dirt back in the hole, water your planting site to remove air pockets. Re-

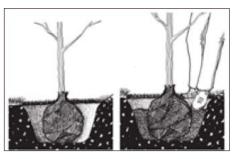


#### Watering:

Most new trees/shrubs need general watering the first weeks/months they are in your yard. Be careful not to over water. During a dry spell, be sure to deeply water your tree and the surrounding soil once a week. Take extra care when watering fruit trees.

#### Mulch:

Mulch is a garden's best friend. It holds down grasses and weeds that will compete with your new plants roots for water, and also helps the soil retain water. It keeps the soil from becoming overly compacted and acts as an insulator during the winter months. Create a mulch bed around your tree that is 2-3 inches thick, while encircling your tree with a several foot diameter. It is also recommended to leave a slight area mulch free just where your trunk reaches the ground.



## Black Elderberry

Sambucas nigra ssp. cerulea: Mexican elderberry (formerly Sambucas mexicana). This 20 foot tree has thick wide-spreading branches with pale-green compound leaves. White flower clusters in spring produce an edible blue-black fruit. It is drought tolerant when established. Plant it in well-drained soil, in sun to part shade. It may die back to the ground in colder climates, but will re-sprout from the roots in spring.

Sambucus nigra flowers are edible raw and the berries are edible when black and cooked, but no other part of the plant is safe to eat.

Before planting amend the soil with compost. On heavy clay soils, consider building a raised bed to provide proper water drainage. Set shrubs out in spring, spacing plants 6 to 10 feet apart depending on the variety.

The prize for growing elderberries is the fragrant, edible flowers and the delicious fruits. The dark purple berries contain vitamins A and B, and more vitamin C than oranges. They are also high in cancer-fighting antioxidants. In fact, elderberry fruits have historically been used to treat many ailments, such as respi-



ratory problems, colds, and flus. Plus, they are tasty when used in juices, jellies, jams, teas, pies, and wine.



### Wolf Willow

Elaeagnus commutata, the silverberry or wolf-willow, is a species of Elaeagnus native to western North America. It typically grows on dry to moist sandy and gravel soils in steppes, meadows, or woodland edges. Silverberry is an important food for wildlife such as deer and elk.

These plants are shrubs or small trees growing to 3-13 feet tall. The leaves are broad and shaped like the head of a lance, 5–17 inches long, silvery on both sides with dense small white scales. The fragrant flowers are yellow, with a four-lobed corolla 1/4–1/2 inch long. The fruits are ovoid berries 1/3–1/2 inch long, also covered in silvery scales. The fruit pulp is floury in texture, and surrounds the single seed.

Both the fruit and seeds of this plant are edible either cooked or raw but are not recommended for human consumption. This plant is a member of the olive tree family and like legumes, able to fix nitrogen. When grown in orchards as a companion plant, it has been documented to increase fruit production by 10%.

### Siberian Pea Shrub

Caragana arborescens: Siberian peashrub is a deciduous shrub that can grow to a small tree. It has fragrant yellow flowers in late spring. It is excellent for windbreaks, hedges and wild life cover. Nitrogen fixing, drought tolerant, it can be grown in full sun in any soil. Hummingbirds love the flowers.

The Caragana species are in the Legume Family, and they really do produce edible pods and peas. They can be used as a pioneer plant, a windbreak, and a hedge, are used to stabilize erosion-prone soil, can feed livestock, and are pretty with fragrant flowers.

Its many uses include:

•Edible Pods – Young pods are eaten raw or cooked in Summer.

•Edible Seeds – Historically, Pea Shrubs were used for food much more than they are now. The pods form 3-4 "peas" each, and these peas can be eaten raw or cooked when young. The seeds may also be dried and then used like dried peas.

•General insect (especially bees) nectar plant.

•Pioneer Plant – helps re-establish overused or damaged land.

•Windbreak Plant – fast growing, but not very tall.

•Hedge Plant – the thorns on this plant will likely make it a worthwhile food-producing, living fence for livestock.

•Wildlife Food – many animals will eat the seeds and hummingbirds enjoy the nectar.

Bird Shelter.

•Erosion Control Species – the extensive root system helps stabilize soils prone to erosion.

•Fodder Crop – chickens particularly enjoy this plant's pods and seed, but there is also research supporting its use as fodder for sheep, goats, cattle, deer, reindeer, and camels!

•Dye Plant – a blue dye can be made from the leaves.



# Red Elderberry

Sambucas racemosa: Red Elderberry is a woody perennial forming bushes that are 12-20 feet tall. Young stems grow quickly, often 1-2 feet per year and have hairless to sparsely hairy green bark with white warts in the early season that darkens to tan-purple with grey-orange warts by fruiting time. Small white flowers are born in upright to drooping cone shaped clusters in April and early May. The fruit changes from green to orange, ripening to a bright red in Junly and August. Berries are about 3/16 inch wide, spherical to egg-shaped, with 2-5 seeds that are up to 1/8 inch long and 1/16 inch wide.

It grows in moist sites: shady or open forests, streambanks, and moist clearings. Red Elderberry is used for revegetation, erosion control, and wildlife plantings. Red elderberry can be planted on streamsides to control erosion. It may be relatively tolerant of heavy metal contamination, so may be useful in restoring habitats around mining and smelting sites.

Birds and mammals (such as bears, raccoons, and mice) favor the juicy fruits and disperse them widely. The leaves are bitter and contain a cyanogenic glycoside chemical, which is toxic to humans but does not deter deer and other ungulates. Red elderberries should, however, be treated as poisonous to humans.



## Goji or Wolfberry

The goji or wolfberry has been gaining popularity in the West in recent years due to its numerous health benefits. Although this plant is endemic in the Himalayan regions of Asia, it can actually be grown almost anywhere. For hardy plants, pay extra attention to the soil and weather conditions.

Goji berries can withstand both hot summers and cold winters. However, this type of plant does not like too much water. The plants do best in full sun, so pick a spot in your garden that





Goji (con't)

receives sun all day. Your plant needs at least 8 hours of sunlight daily for it to be healthy and strong. This will ensure that the plant yields the maximum number of berries.

Organic soil is best for this plant. Prepare soil with biological compost, some sand and worm castings. This will be helpful particularly during the germination process. Loam-based, medium soil, perlite, vermiculite or peatbased compost mixes are also ideal. Remember not to use soil that is wet or holds a lot of water because it can kill your plant.

Mix some amount of sand to the compost soil in which you plant. Sand will help drain excess water that can harm your plant.

Gleditsia triancanthos: The Honey locust is a deciduous tree that can grow can reach a height of 66-98 feet, with fast growth in full sun, and is relatively short-lived; their life spans are typically about 120 years. They are prone to losing large branches in windstorms. The leaflets are 5/8-1 inch and bright green. They turn yellow in the fall (autumn). Honey locusts leaf out relatively late in spring. The strongly scented cream-colored flowers appear in late spring, in clusters emerging from the base of the leaf axils.

The fruit of the honey locust is a flat legume (pod) that matures in early autumn. The pods are generally between 6-8 inches. The pulp on the insides of the pods is edible. Despite its name, the honey locust is not a significant honey plant. The name derives from the sweet taste of the legume pulp, which was used for food by Native American people, and can also be fermented to make beer.

The long pods, which eventually dry and ripen to brown or maroon, are surrounded in a tough, leathery skin that adheres very strongly to the pulp within. The pulp—bright green in unripe pods—is strongly sweet, crisp and succulent in ripe pods. Dark brown tannin-rich beans are found in slots within the pulp.

It tolerates compacted soil, road salt, alkaline soil, heat, and drought. Its popularity is in part due to the fact that it transplants so easily. The fast growth rate and tolerance of poor site conditions make it valued in areas where shade is wanted quickly, and in disturbed and reclaimed environments.



### Río Puerco Alliance

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The Río Puerco Alliance is a 501c3 organization whose mission is to restore the Río Puerco Watershed for present and future generations through outreach, education, and collaborative action.

Trees may be purchased at the
Tri-Community Farmers Market on Tuesdays and
Thursdays, at the Tri-Community Tree Nursery, or
online at
www.riopuercoalliance.com
4 inch pots = \$5
1 gallon pots = \$10
For more information, contact
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or Eugene Mace (505-582-1291)