New Mexico Forestry Division Fall 2023 Seedling List

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SPECIES	HEIGHT	GROWTH RATE	COLD HARDINESS	WATER NEEDS	ALKALINITY TOLERANCE	ELEVATION	Size
*MIXED CONIFER TREE PACKAGE	up to 80 feet	Moderate	Excellent	Moderate	Low-Moderate	5000- 9000	Small
and 14 White fir. Check the	he individual speci	es descriptions on th	ne seedling list for more in	nformation on eacl	rest type. It contains 21 Porn n species. Shrub package 1 c forestation, wildlife planting	contains shrub species	
*SHRUB PACKAGE 2	varies	Moderate-Fast	Good	Low	Moderate-High	3000- 7500	Small
	a (rubber rabbitbr	ush), and 7 littleleaf	sumac. For more informa	ation on the individ	r and drought tolerant. It collual species please refer to ϵ		
*SHRUB PACKAGE 3	varied	Moderate-Fast	Good-Excellent	Low	Low	3000- 7500	Small
individual species charact	teristics see individ	dual seedling descrip	tions. Pest Problems: nor	ne serious Suggest	14 Chamisa, and 7 Mormon ed Uses: erosion control, wi	ldlife plantings, reclan	nation
AFGHANISTAN PINE	60 feet	Fast	Poor	Moderate	Moderate	3000- 5500	Small
drought. Plantings are be	st in southern Nev	w Mexico due to it no	ot being cold hardy enoug	gh for the northern	root system gives this tree t half of the state. It has a cred der mites. Suggested Uses:	own width of betweer	n 30 and
AMERICAN SYCAMORE	75-100 feet	Fast	Good-Excellent	High	Low	0- 6000	Small
is has been planted suces inner bark. It is cold toler and medium textured soi	sfully in eastern N ant and has intern Is and prefers a so	M. It has dark-green nediate shade tolera il pH between 4.9 ar	, maple-shaped leaves an nce. It has autumn foliage nd 6.5. Pest Problems: No	nd the bark on mat e and attracts birds one serious Sugges	ast coast to as far west as Ka ure trees comes off in plates and is an excellent shade to ted Uses: bird habitat, shade	s to leave a smooth, we ree. It is adapted to co e, mine reclamation	vhitish parse
APACHE PLUME	4 - 6 feet	Fast	Good-Excellent	Low	Moderate-High	5000-8000	Small
clusters of plume-like frui	it in the fall and w	inter. Provides nestir	ng sites and material for b	oirds. It has high ca	lowers are showy in the ear lcium carbonate tolerance a e serious. Suggested Uses: v	and low salinity tolera	nce. The
<u>ARIZONA ASH</u>	25-50 feet	Moderate	Fair	Moderate	Moderate	3000- 7000	Small
NM and has moderate wi	ldlife value for bir	ds. Has no calcium ca	arbonate tolerance and lo	ow salinity tolerand	W New Mexico. It is well ad se. It is shade intolerant. The an reclamation, windbreaks	crown width average	es 25
be less common today. The	he bark is shaggy a s 35 feet. It has m	and white/ green. Th oderate calcium cark	e leaves are large and ma conate tolerance and no	aple-like in shape. I salinity tolerance. T	Moderate once abundant in southwest t is fast growing and has a p The optimum soil pH is 5.8 to	leasing fragrance afte	r a rain.
AUSTRIAN PINE	up to 60 feet	Moderate-Fast	Good	Moderate	Moderate	3500- 7500	Small
choice for a windbreak pl	anting. Many type um soil pH is 5.5 to	es of birds find cover 7.5. It is shade intol	in its branches, and some erant. The average width	e use the seed for f	hwest. It tolerates a variety lood. It has high calcium carl eet. Pest Problems: Ips barl	bonate tolerance and	high
BIG SAGEBRUSH	2 to 15 feet	Moderate	Excellent	Low	Moderate	4500- 8500	Small
species especially sage gr	ouse. The average a calcium carbona	width is 3 to 6 feet.	It is an important species	s for reclamation a	lope, and bighorn sheep. It in drevegetation due to its bient. Pest Problems: No serion	road range and ease c	•
BLUE SPRUCE	up to 80 feet	Slow	Excellent	High	Low-Moderate	5000-10000	Small
the foliage is from green carbonate tolerance and	to blue and it is of no salinity toleran	ten used as a Christn ce. The optimum soi	nas tree in New Mexico. I I pH is 5.5 to 7.8. It has in	It also has value to termediate shade	requires some shade protect the wood products industry tolerance. The width is betw mas trees, and windbreaks.	v. It has high calcium veen 20 to 30 feet. Pe	
CHOKECHERRY	6-20 feet	Moderate-Fast	Excellent	Moderate-High	Low	5500- 9500	Small
and other animals use it f medium calcium carbona	or food. It is a spe te and salinity tole	cies that minimizes serance. The optimum	stream bank erosion. Its f n soil pH is 5.2 to 8.4. It ha	ruit is widely used as intermediate sha	ils. It is an important specie: in jellies and jams. Chokecha ade tolerance. The crown wi on, and wildlife plantings.	erry is self-pollinating.	. It has
CLIFFROSE	3-10 feet	Moderate	Good-Excellent	Low	Low-Moderate	3000-8000	Small
limestone soils. Is an imp	ortant browse spe It has high calciun	cies for mule deer, e n carbonate toleranc	lk, and various bird speci e, is drought tolerant, ha	es. Flowers are cre s low saline tolerar	and west aspects. It is droug am to yellow in color, extre ace, and is shade intolerant.	mely fragrant, and blo	ooms
COYOTE WILLOW	10 feet	Fast	Good	High	High	3500- 7500	Small
important species to ripa	rian areas. It is ada I. It has low saline	apted to sandy soils i tolerance, intermed	n stream, river, and shore at the shade intolerance an	eline sites. It is hea od prefers a pH bet	ickets along streams, roads vily browsed by deer year-r ween 6 and 8.5. Pest Proble	ound. Cattle will brow	se it in
DESERT WILLOW	25 feet	Fast	Fair-Good	Low	High	3000- 6000	Small
plant is classified as a phr	eatophyte and is a conste tolerance a	an indicator that wat nd low salinity tolera	er is not too far below th ance. The optimum soil pl	e surface during pa H is 6.6 to 10.0. It h	of poor soils and considerab art of the year. The wood is ass intermediate shade toler d wildlife plantings	often used for fence p	osts. It

DOUGLAS-FIR 80+ feet Moderate Excellent High Moderate 4500-10000 Small Pseudotsuga menziesii A large, native tree with a dense, conical crown. The wood is one of the strongest of the soft woods. It has significant value to the wood products industry and is used extensively as a Christmas tree. This species can live for hundreds of years. It has moderate calcium carbonate tolerance and no salinity tolerance. The optimum soil pH is 5.0 to 7.5. It has intermediate shade tolerance. The width is between 20 and 30 feet. Pest Problems: Douglas-fir tussock moth, spruce budworm, and wooly aphids. Suggested Uses: reforestation (important timber species in western US), wildlife plantings, and Christmas trees.

averages 20 feet. Pest Problems: no major pests. Suggested Uses: windbreaks, erosion control, screens, and wildlife plantings.

ENGELMANN SPRUCE up to 120 feet Slow Excellent Moderate Moderate 5000-11500 Small Picea engelmannii This native spruce is long-lived, and strongly resembles blue spruce. It grows on drier sites than blue spruce and has moderate watering needs. It is conical in form and has a narrow spire-like crown. Small birds and mammals use the seed as a food source. It has high calcium carbonate tolerance and no salinity tolerance. Optimum soil pH is 6.0 to 8.0. It is shade tolerant. The crown width averages 30 feet. **Pest Problems:** western spruce budworm and spruce beetle. Suggested Uses: reforestation, Christmas trees, and windbreaks. 6-8 feet Chamaebatiaria millefolium 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. Pest Problems: no major pests. Suggested Uses: windbreaks, wildlife plantings, and erosion control. **FIRECRACKER** Excellent up to 3 feet Slow Moderate 3000-11000 **PENSTEMON** Penstemon eatonii 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. Pest Problems: none serious Suggested Uses: erosion control, reclamation, wildlife forage 4-6 feet Fast Good Low Small Atriplex canescens This native shrub grows across a wide variety of soils including saline soils and is highly prized plant by the Navajos as forage for their cattle, sheep, and goats; especially in early spring when other forage is scarce. It is also an excellent wildlife species. It has high calcium carbonate tolerance and high salinity tolerance. Optimum soil pH is 6.5 to 9.5. It is shade intolerant. The width is between 4 and 8 feet. Pest Problems: no major pests. Suggested Uses: windbreaks, wildlife plantings, erosion control, and reclamation of severely disturbed sites. Artemisia frigida Is native to most counties in New Mexico. It is drought tolerant and browsed by elk, deer, bighorn sheep, and pronghorn. It is also important to small game and nongame animals. It is also as a food plant for butterfly and moth species. It has medium saline tolerance, intermediate shade tolerance, and prefers a pH of 7.0 to 9.0. Pest Problems: none known Suggested Uses: soil stabilization and wildlife habitat up to 30 feet Moderate Good-Excellent Moderate 5000-8500 Small Quercus gambelii A native tree or large shrub recognized by the deeply lobed leaves, which are larger than those of other Southwestern oaks. This is the only common tree oak in northern New Mexico. It is considered as good browse for deer and other wildlife. It has high calcium carbonate tolerance and no salinity tolerance. The optimum soil pH is 6.5 to 8.0. It is shade intolerant. The width is between 12 and 20 feet. Pest Problems: no major pests. Suggested Uses: reclamation, wood products, erosion control, and wildlife plantings. Low-Moderate 50 feet Fast Good-Excellent 4500-8000 Small Ulmus parvifolia Lacebark Elm, or true Chinese Elm, should not be confused for the notoriously spreading Siberian Elm. Siberian Elm is often and mistakenly called Chinese Elm. Lacebark Elm is a medium sized tree with a round to oval crown. It is a gentleman as it doesn't spread like the Siberian Elm. It is an excellent drought tolerant species for use in windbreaks. It can grow as much as 3 feet per year. It is adaptable to most soil conditions. It has low calcium carbonate tolerance and no salinity tolerance. The optimum soil pH is 4.8 to 7.0. It is shade intolerant. The crown width is between 30 and 40 feet. Pest Problems: none serious. Resistant to elm leaf beetle and Dutch elm disease. Suggested Uses: windbreaks and firewood. 8-10 feet Moderate Moderate-High Rhus microphyllum A native shrub of the desert washes and valleys of New Mexico that has clusters of orange-red berries that provide winter food for many birds and mammals. It is found as far north as Sabinoso in San Miguel county. The leaves turn a beautiful orange red in the fall. Basket weaving was a common use of sumac branches by Native Americans. It has high calcium carbonate tolerance and low salinity tolerance. The optimum soil pH is 7.0 to 8.5. It is shade intolerant. The width is between 6 and 10 feet. Pest Problems: no major pests. Suggested Uses: erosion control, windbreaks, and slope stabilization. **MORMON TEA (GREEN** up to 5 feet Moderate Excellent Moderate 3000-7500 Small EPHEDRA) Ephedra viridis 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. Pest Problems: None serious. Suggested Uses: Wildlife habitat and erosion control. **MOUNTAIN MAHOGANY** 15 feet Moderate Good-Excellent Moderate Moderate 4500-8000 Small Cercocarpus montanus Mountain Mahogany is beautiful in late summer and fall, when the white tails of the fruit look like a threaded needle or a narrow delicate feather. It is a native shrub found on the limestone soils of the rolling plains and northern Trans-Pecos on rocky uplands. The leaves and twigs are browsed by elk and deer. It is an excellent species for reclamation of disturbed areas. It has high calcium carbonate tolerance and no salinity tolerance. The optimum soil pH is 6.0 to 8.0. It has intermediate shade tolerance. The width is between 8 and 15 feet. Pest Problems: no serious pest problems. Suggested Uses: wildlife habitat, and erosion control. 25-30 feet Moderate-Fast Good-Excellent Moderate Maclura pomifera Osage orange is native to the Arkansas and Red River valleys in southern Oklahoma and northern Texas. It is naturalized over a large part of the lower 48 states including New Mexico. It was traditionally used by the Osage tribe to make hunting bows. Before barbed wire it was used to construct thousands of miles of hedge rows due to its thorns and longevity. The wood is extremely dense and very resistant to rot, so it makes excellent firewood and posts. It is multistemmed when planted alone or when planted with other trees it is single stemmed. The leaves are green and glossy in spring and summer and turn golden yellow in the fall. It can grow in a variety of soils and is drought tolerant. The average height is between 25 and 30 feet and the crown width is about the same. It has high calcium carbonate tolerance, prefers full sun, and dry soil. It is heat tolerant and cold hardy to zone 5. The fruit is not edible except by squirrels and deer which break open the fruit to eat the seeds. It is diecious (plants are either male or female) and is wind pollinated. Pest Problems: None serious Suggested Uses: Windbreaks, mine reclamation, posts, fuel wood PALMER'S PENSTEMON Excellent 2600-8200 Small up to 5 feet Penstemon palmeri Native to New Mexico. It is a perennial herb to slightly wood subshrub. Has fleshy leaves and has white to pink flowers that are fragrant. It is found in dry washes, grasslands, pinon-juniper and ponderosa pine communities. It is very drought and heat tolerant. It is shade intolerant, pH tolerance is 6.0 to 7.9, saline intolerant and prefers precipitation between 6 and 14 inches per year. Adapted to coarse and medium textured, well-drained soils. Pest Problems: Suggested Uses: wildlife plantings and erosion control Moderate-High High Carya illnoinensis Ungrafted, oval crowned deciduous tree, has a spread of 40 to 75 feet. Fruit is an oblong nut. The nuts be used by deer, wild turkeys, various bird species, and various small mammals. It is also used by butterflies. It grows in moist, well-drained soils such as sandy, sandy loam, medium load, clay loam, clay and caliche. These seedlings are not cultivars so nut quality varies. If you are a commercial grower you will need to find cultivars. Is shade intolerant, has low calcium carbonate tolerance, and has a preferred pH range of 4.5 to 7.5. Is salt intolerant. Grow well in the southern half of New Mexico if soil is kept moist. USDA hardiness zones are 6 to 9, but probably won't produce nuts since it requires consistent warm night temperatures to produce nuts. Pest Problems: none major - aphids, borers, tent caterpillars, webworms Suggested Uses: wildlife habitat, furniture wood **PONDEROSA PINE** up to 80 feet Moderate Excellent Moderate Moderate-High 4500-9000 Pinus ponderosa This is a large, native conifer. It is the primary commercial tree species in New Mexico. It has a pyramidal shape when young and becomes conical with age. Squirrels clip the cones and store them in caches and extract the seeds for winter consumption. The tree grows best on well-drained soils. It has low calcium carbonate tolerance and no salinity tolerance. The optimum soil pH is 5.0 to 9.0. It is shade intolerant. The crown width is between 25 and 30 feet. Pest Problems: bark beetle, twig beetle, sawflies and dwarf mistletoe. Suggested Uses: windbreaks and reforestation. **ROCKY MOUNTAIN** 6000-11000 up to 3 feet Moderate Excellent Low Small PENSTEMON Penstemon strictus is a native perennial herb with deep blue to purple flowers. It is used for erosion control and forage for deer, antelope and birds. It is shade intolerant, prefers well-drained soils, and blooms May through July. The preferred pH is 6.0-8.0, it has low calcium carbonate tolerance, no salinity tolerance, and has moderate drought tolerance. Pest Problems: None noted. Suggested Uses: erosion control, wildlife forage RUBBER RABBITBRUSH 4-6 feet Fast Good-Excellent 3000-7500 Small Low (CHAM

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

Small

SCOTS PINE (SCOTCH

PINE) up to 50 feet Moderate-Fast Good-Excellent Moderate Moderate 3000-7500

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

SKUNKBUSH SUMAC 4-6 feet Moderate Excellent Low Moderate-High 4500- 8000 Small

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

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

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

SOUTHWESTERN WHITE
DINE up to 80 feet Moderate Excellent Moderate Low 4500-10000 Small

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

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

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

THINLEAF ALDER 20-25 feet Moderate-Fast Excellent Moderate-High Low-Moderate 5000- 10000 Small

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

TORREY'S WOLFBERRY up to 10 feet Moderate Good-Excellent Low Moderate-High 3500- 5500 Small Lycium torreyi Native shrub that is found in the major river drainages at lower elevations. It has dark reddish-brown stems with thorns and flowers are light purple.

Lycium torrey: Native shrub that is found in the major river drainages at lower elevations. It has dark reddish-brown stems with thorns and flowers are light purple It has bright red berries. It can grow in sandy soils, is tolerant of saline soils and has high calcium carbonate tolerance. It is a source of food for small birds and mammals. Pest Problems: none serious Suggested Uses: wildlife habitat and browse, erosion control

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

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

<u>WINTERFAT</u> 3–4 feet Fast Good-Excellent Low Moderate-High 3000-8000 Small

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