Trees for Conservation



a buyer's guide



Knowledge to Go Places

The Colorado State Forest Service tree program enables farmers, ranchers and rural landowners to obtain trees at nominal cost. The program's aim is to encourage landowners to plant new forests; establish effective windbreaks to reduce erosion, protect homes, cropland, livestock and highways; and enhance wildlife habitat. Our trees and shrubs are grown for their conservation benefits only. Ornamental qualities such as color, degree of flowering, fruit production and others are not guaranteed.

To participate, landowners must have at least two acres of land and must agree not to use the trees for ornamental or landscaping purposes. These trees and shrubs cannot be resold as living plants (the roots must be severed). Contact your local nursery for ornamental needs.

For information on ordering trees and application forms, contact your local soil conservation district, your local Cooperative Extension county office, your district Colorado State Forest Service office (inside back cover), or the Colorado State Forest Service nursery.



Way, all of the Colorado State Forest Service, for the fine photographs in this publication.

This publication was developed by the Colorado State Forest Service, Colorado State University, Fort Collins, CO 80523.

Many thanks to Dennis Will, Vince Urbina, Randy Moench and Mike

Trees for Conservation a buyer's guide

a catalog of conservation tree and shrub species grown at the Colorado State Forest Service Nursery

Revised September, 2001

Contents

Caragana
Cotoneaster
Honeysuckle
Chokecherry
Lilac
Native plum3
Sumac (skunkbush)4
Sand cherry4
Nanking cherry5
European sage5
Wild rose6
Buffaloberry6
Four-wing saltbush7
Golden currant
Serviceberry
Mountain mahogany8
Red-osier dogwood9
New Mexico forestiera (privet)9
Snowberry
Green ash
Siberian elm
Hybrid cottonwood
Native willow mix
Golden willow
Hackberry

Honeylocust	13
Lombardy poplar	14
Lacebark elm	14
Bur oak	15
Black locust	15
Coyote willow	16
Peachleaf willow	16
Aspen	17
Austrian pine	17
Colorado blue spruce	18
Douglas-fir	18
Engelmann spruce	
Eastern redcedar	19
Lodgepole pine	20
Pinon pine	20
Ponderosa pine	21
Rocky mountain juniper	21
Scotch pine	22
White fir	22
Bristlecone pine	23
Narrowleaf cottonwood	
Limber pine	24
Subalpine fir	24
Colorado State Forest Service Offices	inside back cover

Caragana

Caragana arborescens

Growth Form: irregular or hedgelike

Crown Density: dense Size: 8-12 feet high 5-8 foot spread

Drought Resistance: excellent
Cold Hardiness: excellent
Countle British and its

Growth Rate: rapid Life Span: moderate

Elevational Range: to 9,500 feet

Soil Conditions: good salt and alkaline tolerance **Possible Insect Problems:** aphids and grasshoppers

Possible Disease Problems: very resistant

Wildlife Value: good: songbirds
Seasonal Color: yellow spring flowers
Miscellany: does well in poor soils







Cotoneaster

 $Cotone a ster\ a cutifolia$

Growth Form: ovoid to irregular

Crown Density: dense Size: 6-8 feet high 3-5 foot spread

Drought Resistance: very good Cold Hardiness: excellent

Growth Rate: rapid Life Span: moderate

Elevational Range: to 9,500 feet

Soil Conditions: good alkaline tolerance **Possible Insect Problems:** oyster shell scale

Possible Disease Problems: fireblight; fairly resistant

Wildlife Value: high: song and game birdsSeasonal Color: brilliant red-orange foliageMiscellany: can be clipped to a hedge







Honeysuckle

Lonicera spp.

Growth Form: irregular Crown Density: moderate

Size: to 8 feet high to 8 foot spread

Drought Resistance: good Cold Hardiness: excellent Growth Rate: rapid

Life Span: moderate

Elevational Range: to 8,000 feet *Soil Conditions:* good alkaline tolerance

Possible Insect Problems: aphids

Possible Disease Problems: honeysuckle witch's broom

Wildlife Value: good: song and ground birds
Seasonal Color: pink flowers in spring

Miscellany: good for mass plantings and hedges







Chokecherry

Prunus virginiana

Growth Form: ovoid to irregular

Crown Density: moderate

Size: 6-20 feet high 6-20 foot spread

Drought Resistance: good

Cold Hardiness: excellent

Growth Rate: rapid Life Span: moderate

Elevational Range: to 9,000 feet *Soil Conditions:* good alkaline tolerance

Possible Insect Problems: borers, pear-slug sawflyPossible Disease Problems: black knot, fireblightWildlife Value: high: song and ground birds; good: small

mammals, and browse for deer

Seasonal Color: golden yellow to orange fall foliage **Miscellany:** delicious edible fruit for jellies and pies; native;

can be poisonous to livestock







var. villosa lilac

Lilac
Syringa spp.

Growth Form: round to irregular

Crown Density: dense Size: 8-12 feet high 8-12 foot spread

Drought Resistance: very good Cold Hardiness: excellent

Growth Rate: rapid Life Span: moderate

Elevational Range: to 8,000 feet Soil Conditions: good alkaline tolerance

Possible Insect Problems: lilac borer, leaf miners, oyster

shell scale

Possible Disease Problems: lilac leaf blotch, powdery

mildew, some leaf spots

Wildlife Value: moderately high: songbirds; cover value **Seasonal Color:** fragrant purple or white spring flowers

Miscellany: develops into a dense barrier









Native plum

Prunus americana

Growth Form: irregular
Crown Density: open
Size: to 8 feet high
to 8 foot spread

Drought Resistance: good
Cold Hardiness: excellent

Growth Rate: rapid Life Span: moderate

Elevational Range: to 8,000 feet Soil Conditions: good alkaline tolerance Possible Insect Problems: pear-slug sawfly

Possible Disease Problems: fireblight, powdery mildew **Wildlife Value:** excellent: hoofed browsers; nesting cover

and food value

Seasonal Color: large white flowers in May

Miscellany: native; delicious edible fruit for jellies and

canning; forms a thicket







Sumac (skunkbush)

Rhus trilobata

Growth Form: irregular
Crown Density: dense
Size: to 4 feet high
to 8 foot spread

Drought Resistance: excellent Cold Hardiness: excellent Growth Rate: rapid to moderate

Life Span: moderate

Elevational Range: to 8,000 feet

Soil Conditions: excellent alkaline tolerance Possible Insect Problems: fairly resistant Possible Disease Problems: Fusarium wilt Wildlife Value: excellent: many birds Seasonal Color: red-orange fall foliage

Miscellany: native; berries have slight lemon taste when

rolled under tongue





Sand cherry

Prunus besseyi

Growth Form: spreading Crown Density: moderate

Size: 3 feet high 4 foot spread

Drought Resistance: good Cold Hardiness: good Growth Rate: rapid Life Span: short

Elevational Range: to 7,500 feet

Soil Conditions: best on sandy to loamy soils
Possible Insect Problems: pear slug; fall web worm
Possible Disease Problems: powdery mildew
Wildlife Value: excellent: browse and food value

Seasonal Color: pink flowers **Miscellany:** native; edible fruit





Nanking cherry

Prunus tomentosa

Growth Form: round to irregular

Crown Density: moderate

Size: to 8 feet high

to 8 foot spread

Drought Resistance: good Cold Hardiness excellent Growth Rate: rapid

Life Span: moderate

Elevational Range: to 8,000 feet

Soil Conditions: good alkaline tolerance

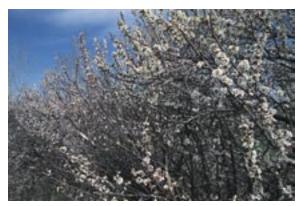
Possible Insect Problems: tent caterpillars, bark beetles
Possible Disease Problems: shot-hole leaf spot, black knot

Wildlife Value: high: song and game birds Seasonal Color: white flowers in spring

Miscellany: delicious edible fruit for jellies; blooms early







European sage

Artemesia abrotanum

Growth Form: round to irregular

Crown Density: open
Size: to 8 feet high
to 8 foot spread

Drought Resistance: very good

Cold Hardiness: good Growth Rate: rapid Life Span: moderate

Elevational Range: to 6,000 feet Soil Conditions: good alkaline tolerance Possible Insect Problems: fairly resistant Possible Disease Problems: fairly resistant Wildlife Value: fair: cover and browse value





Wild rose

Rosa spp.

Growth Form: irregular
Crown Density: open
Size 4 feet high, spreading
Drought Resistance: good
Cold Hardiness: excellent
Growth Rate: rapid

Life Span: moderate

Elevational Range: to 10,000 feet

Soil Conditions: moist

Possible Insect Problems: leaf cutter bees

Wildlife Value: excellent: big game browse and food value;

relished by grouse, turkey and pheasant

Seasonal Color: not conspicuous

Miscellany: native; showy flowers; suckers and spreads

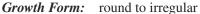






Buffaloberry

Shepherdia argentea



Crown Density: dense
Size: 10 feet high; spreading
Drought Resistance: good
Cold Hardiness: excellent
Growth Rate: moderate

Life Span: long

Elevational Range: to 7,500 feet Soil Conditions: tolerates alkaline Possible Insect Problems: unimportant Possible Disease Problems: unimportant

Wildlife Value: good: food value; excellent: cover for small

game and songbird nesting *Seasonal Color:* not conspicuous

Miscellany: native; edible fruit for jellies; forms thickets





Four-wing saltbush

Atriplex canascens

Growth Form: round to irregular

Crown Density: moderate

Size: 3 feet high 5 foot spread

Drought Resistance: excellent

Cold Hardiness: good Growth Rate: moderate

Life Span: long

Elevational Range: to 8,500 feet

Soil Conditions: excellent alkali and salt tolerance

Possible Insect Problems: grasshoppers Wildlife Value: good: forage value

Seasonal Color: mature seed makes fine contrast

Miscellany: native



Golden currant

Ribes aureum

Growth Form: round to irregular

Crown Density: moderate

Size: 7 feet high 3 foot spread

Drought Resistance: good Cold Hardiness: good Growth Rate: rapid Life Span: moderate

Elevational Range: to 8,000 feet

Soil Conditions: moist

Possible Insect Problems: imported currant worm, oyster

shell scale

Possible Disease Problems blister rust

Wildlife Value: good: food and browse value; nesting cover Seasonal Color: red to orange fall color; showy yellow

flowers

Miscellany: native; edible fruit







Serviceberry

Amelanchier spp.

Growth Form: ovoid to irregular

Crown Density: moderate

Size: 6 feet high; 5 foot spread Drought Resistance: fair

Cold Hardiness: excellent Growth Rate: moderate

Life Span: long

Elevational Range: to 9,000 feet

Soil Conditions: moist

Possible Insect Problems: pear slug

Possible Disease Problems: leaf spots and rust

Wildlife Value: excellent: big game browse; food value for

upland game

Seasonal Color: showy white flowers

Miscellany: native; edible fruit; showy flowers







Mountain mahogany

Cercocarpus montanus

Growth Form: irregular
Crown Density dense
Size: 6 feet high
5 foot spread

Drought Resistance: excellent

Cold Hardiness: good Growth Rate: moderate Life Span: moderate

Elevational Range: to 9,000 feet

Soil Conditions: tolerates alkaline; well-drained Possible Insect Problems: tent caterpillars
Possible Disease Problems: unimportant

Wildlife Value: high: big game browse; cover for small

game birds and mammals

Seasonal Color: not conspicuous

Miscellany: native; seed showy in fall





Red-osier dogwood

Cornus serica

Growth Form: irregular
Crown Density: open
Size: to 8 feet high
to 6 foot spread

Drought Resistance: fair
Cold Hardiness: excellent
Growth Rate: rapid
Life Span: moderate

Elevational Range: to 11,000 feet

Soil Conditions: not suited for dense clays

Possible Insect Problems: dogwood sawfly, polyphemus

moth, oystershell scale

Possible Disease Problems: cytospora canker

Wildlife Value: excellent: grouse, pheasant, turkey, gros-

beak, robin, cedar waxwing

Seasonal Color: vivid red fall foliage and stems. Showy

white flowers and berries

Miscellany: for moist sites such as streamside riparian areas

Dogwood close-up courtesy Natural Resources Conservation Service





New Mexico forestiera (privet)

Forestiera neomexicana

Growth Form: irregular Crown Density: dense Size: 10 feet high

Drought Resistance: excellent

Cold Hardiness: good Growth Rate: moderate

Life Span: long

Elevational Range: to 7,500 feet

Soil Conditions: moist; alkaline tolerance Possible Insect Problems: unimportant Possible Disease Problems: unimportant

Wildlife Value: good: fruit valuable to quail, songbirds;

excellent: cover

Seasonal Color: not conspicuous

Miscellany: native; bluish-black fruit; yellow flowers







Snowberry

Symphoricarpos spp.

Growth Form: irregular Crown Density: open Size: 3 feet high

Drought Resistance: fair Cold Hardiness: excellent Growth Rate: moderate Life Span: moderate

Elevational Range: to 9,500 feet Soil Conditions: good alkaline tolerance Possible Insect Problems: aphids

Possible Disease Problems: leaf spot, anthracnose, rust,

powdery mildew

Wildlife Value: good: food and cover for turkey, grouse, and

other small game **Seasonal Color:** white fruit

Miscellany: native



Green ash

Fraxinus pennsylvanica

Growth Form: irregular to elliptical

Crown Density: moderate
Size: 35-75 feet high
15-35 foot spread

Drought Resistance: excellent Cold Hardiness: excellent

Growth Rate: rapid Life Span: long

Elevational Range: to 6,000 feet *Soil Conditions:* good alkaline tolerance

Possible Insect Problems: ash borer, oyster shell scale, ash

sawfly

Possible Disease Problems: occasional powdery mildew

Wildlife Value: fair: game and songbirdsSeasonal Color: golden-yellow fall foliageMiscellany: native; does best in sandy, loam soils





Siberian elm

Ulmus pumila

Growth Form: irregular
Crown Density: moderate
Size: to 40 feet high
30-40 foot spread

Drought Resistance: excellent Cold Hardiness: excellent Growth Rate: rapid

Life Span: moderate

Elevational Range: to 8,000 feet
Soil Conditions: tolerates alkaline well
Possible Insect Problems: elm leaf beetle
Possible Disease Problems: bacterial wetwood

Wildlife Value: moderate: song and game birds (seeds and

buds)

Seasonal Color: not conspicuous

Miscellany: hardiest of all elms; can be weedy





Hybrid cottonwood (poplar)

Populus spp.

Growth Form: globular to irregular

Crown Density: moderate Size: 75-100 feet high 50-75 foot spread

Drought Resistance: poor Cold Hardiness: excellent Growth Rate: rapid Life Span: moderate

Elevational Range: to 6,500 feet

Possible Insect Problems: leaf miners, fall webworm,

poplar borers, oyster shell scale

Possible Disease Problems: cytospora canker; bacterial

wetwood, Marssonina leaf blight

Wildlife Value: fair: nesting and roosting cover

Miscellany: "Norway" male clone, will produce male flowers. No guarantee on degree of "cotton"

production







Native willow mix

Salix spp.

Growth Form: irregular Crown Density: dense

Size: to 12 feet high; spreading Drought Resistance: poor Cold Hardiness: excellent Growth Rate: rapid

Life Span: moderate

Elevational range: to 9,500 feet

Soil Conditions: moist

Possible Insect Problems: willow and poplar borers; sawfly

galls

Possible Disease Problems: leaf rust

Wildlife Value: high: food and cover for birds, browse value

for deer, elk and moose **Seasonal Color:** not conspicuous

Miscellany: a mix of whiplash (Pacific), strapleaf, and coyote willows, native, suckers and spreads, species

mix may vary from year to year



Golden willow

Salix alba vitellina

Growth Form: globular to spreading

Crown Density: moderate Size: to 35 feet high to 35 foot spread

Drought Resistance: poor **Cold Hardiness:** excellent

Growth Rate: rapid Life Span: moderate

Elevational Range: to 8,000 feet

Soil Conditions: tolerates alkaline and salts well

Possible Insect Problems: aphids

Possible Disease Problems: cytospora canker; bacterial

wetwood

Wildlife Value: moderate: song and game birds; food value

for buds and twigs

Seasonal Color: orange-yellow bark on young growth in

winter

Miscellany: requires moist soil





Hackberry

Celtis occidentalis

Growth Form: globular
Crown Density: moderate
Size: 40-60 feet high
40-60 foot spread

Drought Resistance: very good
Cold Hardiness: very good
Growth Rate: rapid to moderate

Life Span: long

Elevational Range: to 7,000 feet

Soil Conditions: tolerates alkaline well; moderately salt tol-

erant

Possible Insect Problems: leaf gall psyllids; spiny elm cat-

erpillar; nipple gall always present

Possible Disease Problems: hackberry witches' broom Wildlife Value: high: songbirds and small mammals Seasonal Color: pale lemon-yellow foliage in fall Miscellany: native; wood of commercial value





Honeylocust

Gleditsia triacanthos inermis

Growth Form: irregular, spreading Crown Density: open, fine-textured

Size: 35-75 feet high 15-50 foot spread

Drought Resistance: very good Cold Hardiness: very good

Growth Rate: rapid

Life Span: moderate to long Elevational Range: to 7,500 feet

Possible Insect Problems: pod gall midge; scale insects **Possible Disease Problems:** thyronectria canker; sunscald;

cytospora canker *Wildlife Value:* low

Miscellany: usually thornless





Lombardy poplar *Populus nigra 'Italica'*



Growth Form: columnar to ovoid

Crown Density: moderate Size: to 40 feet high 10-15 foot spread

Drought Resistance: poor Cold Hardiness: excellent Growth Rate: rapid

Life Span: short

Elevational Range: to 8,000 feet Possible Insect Problems: fall webworm

Possible Disease Problems: bacterial wetwood; cytospora

canker

Wildlife Value: low

Miscellany: best for temporary protection only

Lacebark elm

Ulmus parvifolia

Growth Form: irregular Crown Density: moderate Size: to 40 feet high to 30 foot spreading

Drought Resistance: good **Cold Hardiness:** poor Growth Rate: moderate Life Span: moderate

Elevational Range: to 5,000 feet Soil Conditions: tolerates alkaline well Possible Insect Problems: elm bark beetle Possible Disease Problems: unimportant

Wildlife Value: moderate: upland song and game birds

(seeds and buds)

Seasonal Color: not conspicuous Miscellany: attractive bark



Bur oak

Quercus macrocarpa

Growth Form: globular Crown Density: moderate Size: to 75 feet high

Drought Resistance: excellent Cold Hardiness: excellent

Growth Rate: slow
Life Span: very long

Elevational Range: to 7,000 feet *Soil Conditions:* tolerates alkaline well *Possible Insect Problems:* scales, gall wasps

Wildlife Value: excellent: acorn food value for birds and

mammals

Seasonal Color: not conspicuous

Miscellany: can live more than 200 years







Black locust

Robinia pseudoacacia



Growth Form: irregular
Crown Density: open
Size: to 40 feet high
Drought Resistance: good
Cold Hardiness: fair
Growth Rate: rapid
Life Span: moderate

Elevational Range: to 6,000 feet

Soil Conditions: well-drained; tolerates alkaline

Possible Insect Problems: locust borer **Possible Disease Problems:** infrequent

Wildlife Value: low: some food value from seed

Seasonal Color: not conspicuous



Coyote willow

Salix exigua

Growth Form: irregular Crown Density: dense

Size: to 10 feet high; spreading Drought Resistance: poor Cold Hardiness: excellent Growth Rate: rapid

Life Span: short

Elevational Range: to 9,500 feet

Soil Conditions: moist

Possible Insect Problems: willow and poplar borers; sawfly

galls

Possible Disease Problems: leaf rust

Wildlife Value: high: food and cover for birds; browse value

for deer, elk and moose

Seasonal Color: not conspicuous

Miscellany: native; suckers and spreads





Peachleaf willow

 $Salix\ amygdaloides$

Growth Form: irregular
Crown Density: open
Size: to 40 feet high
Drought Resistance: poor
Cold Hardiness: excellent
Growth Rate: rapid
Life Span: moderate

Elevational range: to 9,500 feet

Soil Conditions: moist

Possible Insect Problems: willow and poplar borersPossible Disease Problems: cytospora canker, leaf rustWildlife Value: high: food and cover for birds, browse value

for deer, elk & moose **Seasonal Color:** not conspicuous







Aspen

Populus tremuloides

Growth Form: ovoid to columnar

Crown Density: open
Size: 35-50 feet high
20-35 foot spread
Drought Resistance: poor

Cold Hardiness: excellent Growth Rate: rapid Life Span: moderate

Elevational Range: to 11,000 feet

Possible Insect Problems: poplar borer, scale, tent caterpil-

lar, twig gall fly

Possible Disease Problems: cytospora canker, leaf spot **Wildlife Value:** high: buds and catkins for food value for

grouse and browsers **Seasonal Color:** yellow fall color

Miscellany: native





Austrian pine

Pinus nigra

Growth Form: pyramidal
Crown Density open
Size: to 40 feet high
to 30 foot spread

Drought Resistance: excellent

Cold Hardiness: fair Growth Rate: slow Life Span: long

Elevational Range: to 7,000 feet Soil Conditions: tolerates alkaline well Possible Insect Problems: pine tip moth Possible Disease Problems: fairly resistant

Wildlife Value: high: song and ground birds, food value

from seeds

Seasonal Color: evergreen **Miscellany:** forms a good screen





Colorado blue spruce

Picea pungens

Growth Form: conical Crown Density: dense Size: 60-100 feet high 15-35 foot spread

Drought Resistance: fair Cold Hardiness: excellent

Growth Rate: slow Life Span: long

Elevational Range: to 9,500 feet *Soil Conditions:* fair alkaline tolerance

Possible Insect Problems: pine needle scale, tussock moth,

terminal weevil, gall aphids

Possible Disease Problems: Valsa canker, spruce witches'

broom

Wildlife Value: high: song and ground birds and grouse;

hoofed and small browsers **Seasonal Color:** bluish evergreen

Miscellany: native; Colorado's state tree; high ornamental

value





Douglas-fir

Pseudotsuga menziesii

Growth Form: conical to pyramidal

Crown Density: dense Size: 70-100 feet high 20-35 foot spread

Drought Resistance: good Cold Hardiness: excellent

Growth Rate slow Life Span: long

Elevational Range: 6,000 to 9,000 feet *Possible Insect Problems:* spruce budworm

Possible Disease Problems: shoestring root rot; Douglas-fir

mistletoe, bacterial gall

Wildlife Value: high: food value for grouse, songbirds and

small mammals; browse for deer and elk

Seasonal Color: evergreen





Engelmann spruce

Picea engelmannii

Growth Form: conical to spirelike

Crown Density: dense Size: 70-90 feet high 15-30 foot spread

Drought Resistance: very good
Cold Hardiness: excellent

Growth Rate: slow
Life Span: long

Elevational Range: 8,000 to 11,000 feet

Possible Insect Problems: spruce bark beetle, spruce bud-

worm

Possible Disease Problems: root rot, spruce broom rust **Wildlife Value:** high: food value for grouse and songbirds;

browse for deer and elk **Seasonal Color:** evergreen

Miscellany: native; intolerant of direct sun, requires shade





Eastern redcedar

Juniperus virginiana

Growth Form: pyramidal to irregular

Crown Density: dense
Size: 15-20 feet high
10-20 foot spread

Drought Resistance: excellent Cold Hardiness: excellent

Growth Rate: slow
Life Span: long

Elevational Range: to 7,500 feet

Soil Conditions: tolerates alkaline and salts well

Possible Insect Problems: spider mites **Possible Disease Problems:** rust

Wildlife Value: high: song and game birds; hoofed brows-

ers, good cover **Seasonal Color:** rusty red

Miscellany: very adaptable to site conditions





Lodgepole pine

Pinus contorta

Growth Form: conical to spirelike

Crown Density: open
Size: 35-70 feet high
15-30 foot spread

Drought Resistance: excellent Cold Hardiness: excellent

Growth Rate: slow
Life Span: long

Elevational Range: 6,000 to 11,000 feet

Possible Insect Problems: mountain pine beetle

Possible Disease Problems: mistletoe, western gall rust **Wildlife Value:** high: food value from seeds for upland

game and songbirds **Seasonal Color:** evergreen

Miscellany: native; good conifer for high altitude

windbreaks





Pinon pine

Pinus edulis

Growth Form: rounded to irregular

Crown Density: dense
Size: 15-30 feet high
15-30 foot spread

Drought Resistance: excellent **Cold Hardiness:** excellent

Growth Rate: slow Life Span long

Elevational Range: to 7,500 feet

Possible Insect Problems: pinon pitch borer, ips, spindle

gall midge

Possible Disease Problems: black stain root disease, mistle-

toe

Wildlife Value: high: food value from seeds for upland

game and songbirds **Seasonal Color:** evergreen





Ponderosa pine

Pinus ponderosa

Growth Form: conical to ovoid Crown Density: moderately dense

Size: 40-100 feet high 15-60 foot spread

Drought Resistance: excellent Cold Hardiness: excellent Growth Rate: rapid to moderate

Life Span: long

Elevational Range: to 9,000 feet *Soil Conditions:* tolerates alkaline well

Possible Insect Problems: sawflies, bark beetle, tip moth **Possible Disease Problems:** western gall rust; dwarf mistle-

toe, shoestring root rot

Wildlife Value: high: song and ground birds, small mam-

mals, browsers **Seasonal Color:** evergreen

Miscellany: native; needs well-drained soils





Rocky Mountain juniper

Juniperus scopulorum

Growth Form: pyramidal to irregular

Crown Density: dense Size: 15-50 feet high 10-35 foot spread

Drought Resistance: excellent **Cold Hardiness:** excellent

Growth Rate: slow
Life Span: long

Elevational Range: to 9,000 feet

Soil Conditions: excellent alkaline tolerance
Possible Insect Problems: spider mites, bark beetles
Possible Disease Problems: juniper broom rust, juniper gall

rusts, juniper true mistletoe

Wildlife Value: high: song and ground birds, large browsing

mammals

Seasonal Color: evergreen





Scotch pine

Pinus sylvestris

Growth Form: pyramidal to ovoid

Crown Density: open
Size: 40-65 feet high
20-40 foot spread

Drought Resistance: very good Cold Hardiness: very good

Growth Rate: rapid Life Span: long

Elevational Range: to 7,000 feet *Soil Conditions:* tolerates alkaline

Possible Insect Problems: tip moths, ips beetles **Possible Disease Problems:** fairly resistant

Wildlife Value: high: food value for upland game and song

birds

Seasonal Color: evergreen

Miscellany: makes an excellent Christmas tree





White fir

Abies concolor

Growth Form: conical
Crown Density: dense
Size: 60-100 feet high
20-35 foot spread

Drought Resistance: very good
Cold Hardiness: excellent

Growth Rate: slow Life Span: long

Elevational Range: 6,000 to 9,000 feet

Possible Insect Problems: spruce budworm, Douglas-fir

tussock moth

Possible Disease Problems: needlecast, root rot

Wildlife Value: moderate: food source and winter cover for

grouse and songbirds

Seasonal Color: bluish evergreen





Bristlecone pine

Pinus aristata

Growth Form: irregular
Crown Density: open
Size: 20-40 feet high
Drought Resistance: fair
Cold Hardiness: excellent

Growth Rate: slow Life Span: long

Elevational Range: to 11,000 feet Possible Insect Problems: bark beetles Possible Disease Problems: few

Wildlife Value: high: food value from seeds for upland

game and songbirds **Seasonal Color:** evergreen

Miscellany: native





Narrowleaf cottonwood

Populus angustifolia

Growth Form: ovoid to irregular

Crown Density: moderate
Size: to 50 feet high
to 30 foot spread

Drought Resistance: fair Cold Hardiness: excellent

Growth Rate: rapid Life Span: moderate

Elevational Range: 5,000 to 9,500 feet Soil Conditions: tolerates alkaline well Possible Insect Problems: blotchmine beetle

Possible Disease Problems: cytospora canker; bacterial

wetwood

Wildlife Value: moderate: nesting and roosting cover; buds

catkins and twigs for food value

Seasonal Color: yellow

Miscellany: native; very weak wood





Limber pine

Pinus flexilis





Growth Form: conical to ovoid

Crown Density: open
Size: to 35 feet high
Drought Resistance: good
Cold Hardiness: excellent

Growth Rate: slow
Life Span: long

Elevational Range: to 11,000 feet *Soil Conditions:* well-drained

Possible Insect Problems: bark beetles **Possible Disease Problems:** mistletoe

Wildlife Value: high: food value from seeds for upland game

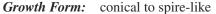
and songbirds

Seasonal Color: evergreen

Miscellany: native

Subalpine fir

Abies lasiocarpa



Crown Density: moderate
Size: 60-100 feet high
10 to 20 foot spread

Drought Resistance: poor **Cold Hardiness:** excellent

Growth Rate: slow Life Span: long

Elevational Range: 8,000 to 11,000 feet

Possible Insect Problems: balsam bark beetle, western

spruce budworm, fir engraver

Possible Disease Problems: armillaria root disease,

annosus root rot

Wildlife Value: fair: grouse, nutcracker, sapsucker, deer, elk,

moose

Seasonal Color: distinctive black/purple cones

Miscellany: native, not suited to lower elevations, requires

shade





Colorado State Forest Service

James E. Hubbard, State Forester Colorado State University Fort Collins, Colorado 80523-5060 (970) 491-6303

Alamosa District

Colorado State Forest Service P. O. Box 1137 401 Santa Fe Alamosa, CO 81101-1137 (719) 589-2271

Boulder District

Colorado State Forest Service 5625 Ute Highway Longmont, CO 80503-9130 (303) 823-5774

Canon City District

Colorado State Forest Service 515 McDaniel Blvd., Industrial Park Canon City, CO 81212-4164 (719) 275-6865

Durango District

Colorado State Forest Service P. O. Box 7233 Fort Lewis College Campus Durango, CO 81301-3908 (970) 247-5250

Fort Collins District

Colorado State Forest Service Building #1052, Foothills Campus Colorado State University Fort Collins, CO 80523-5075 (970) 491-8660

Fort Morgan District

Colorado State Forest Service 801 East Burlington Fort Morgan, CO 80701-3638 (970) 867-5610

Franktown District

Colorado State Forest Service 2068 North State Highway 83 P. O. Box 485 Franktown, CO 80116-0485 (303) 660-9625

Golden District

Colorado State Forest Service 1504 Quaker Street Golden, CO 80401-2956 (303) 279-9757

Granby District

Colorado State Forest Service P. O. Box 69 201 E Jasper Granby, CO 80446-0069 (970) 887-3121

Grand Junction District

Colorado State Forest Service State Services Building 222 South 6th Street, Room 416 Grand Junction, CO 81501-2771 (970) 248-7325

Gunnison District

Colorado State Forest Service P. O. Box 1390 Gunnison, CO 81230-1390 (970) 641-6852

La Junta District

Colorado State Forest Service 208 Santa Fe Avenue, Suite 21 La Junta, CO 81050-0977 (719) 384-9087

La Veta District

Colorado State Forest Service P. O. Box 81 Moore & Poplar Streets La Veta, CO 81055-0081 (719) 742-3588

Montrose District

Colorado State Forest Service 102 Par Place, Suite 3 Montrose, CO 81401-4196 (970) 249-9051

Salida District

Colorado State Forest Service 7980 West Highway 50 Salida, CO 81201-9571 (719) 539-2579

Steamboat Springs District

Colorado State Forest Service P. O. Box 773657 1475 Pine Grove Road, Suite 202A Steamboat Springs, CO 80477-3657 (970) 879-0475

Woodland Park District

Colorado State Forest Service P. O. Box 9024 113 South Boundary Woodland Park, CO 80866-9024 (719) 687-2921

CSFS Nursery

Colorado State Forest Service Building 1060, Foothills Campus Colorado State University Fort Collins, CO 80523 (970) 491-8429