

Recommended Tree List

Urban Forestry Division

Rapid City Parks and Recreation

The following tree list was created by the efforts of the Urban Forestry Division and the Parks and Recreation Department. Information was collected from Trees!, an illustrated field guide by John Ball, Professor of Forestry, South Dakota State University.

A variety of trees have been identified as trees that are recommended for the Rapid City region. Not all trees that grow in this region are on the list. Please use this as a reference. This brochure provides the names of several species, their common and scientific name, hardiness, soil, tree height and growth rate.

Planting and care instructions should be obtained when purchasing trees. Questions can be directed to any nursery, arborist or a forester.



Recommended Tree List

Large Shade Trees

Common Name and Scientific Name	Hardiness	Soils	Height	Growth Rate	Notes
Freeman Maple <i>Acer x freemanii</i> Murray	Zone 4	Well-drained	30' to 50'	Fast, 2" or more per year	Hybrid between a Red and Silver Maple. Varieties: Autumn Blaze and Sienna Glen.
Boxelder <i>Acer negundo</i>	Zone 3a	Performs well on a wide range of soil, from wet to dry	30' to 50', rounded form	Fast, perhaps 2' per year	Tough to find in nurseries. Sensation variety is available.
Silver Maple <i>Acer saccharinum</i> L.	Zone 3b	Well-drained	50' to 60'	Fast, perhaps 2' or more per year	May suffer wind damage when mature.
Northern Catalpa <i>Catalpa speciosa</i>	Zone 4b	Moist, well-drained	50' to 60'	Growth rate of 1' per year is most common	Long panicles of white flowers may surface. Large elephant ear like leaves. May suffer winter dieback.
Hackberry <i>Celtis occidentalis</i> L.	Zone 3b	Moist soils, can tolerate drier sites.	40' to 60'	Moderate to fast, 2' per year, slows as it ages	Native tree. Unique curly bark. Small purple fruit. Open branching habit. Late to leaf out. Drops leaves early.
Honey Locust <i>Gleditsia triacanthos</i> L.	Zone 4b	Tolerant of moist and dry sites	30' to 60'	Moderate to fast, 2' per year	Delicate foliage. Adaptable to most areas of region.
Kentucky Coffee Tree <i>Gymnocladus dioica</i> L.	Zone 4b	Moist, well-drained	40' to 60'	Slow to moderate, 6" to 9" per year	Can tolerate dry sites. Open branching habit. Late to leaf out. Drops leaves early.
Laurel White Willow <i>Salix Pendantra</i> .	Zone 3b	Moist soils, will adapt to neutral soils	30' spread often equal to 2/3 of height	Fast, more than 2' per year	Dark green leaves. Better branching structure than most Willows.
Peach Willow <i>Salix amygdaloides</i>	Zone 3b	Moist soils, will adapt to slightly alkaline soils	40' upright form with a spread 2/3 of height	Fast, more than 2' per year	Native tree. Difficult to find in nurseries. Easy to plant from cuttings.
Black Walnut <i>Juglans nigra</i> L.	Zone 4a	Moist, well-drained	50' Oval form	Slow to moderate, 1' per year	Edible nut produced. Do not plant near gardens.
American Sycamore <i>Platanus occidentalis</i> L.	Zone 4b	Performs best on deep, fertile, well-drained, slightly acid soils	60' to 70', spread equal to height	Moderate to fast, 2' per year	Interesting scaly white bark. Sycamore pollen may be an allergen to some people.
Balsam Poplar <i>Populus balsamifera</i> L.	Zone 2b	Moist soils, though not wet, and adapted to slightly alkaline soils	50' , spread less than 1/2 of height	Fast, more than 2' per year	Native tree. Pyramid form.

Recommended Tree List

Large Shade Trees - Continued

Common Name and Scientific Name	Hardiness	Soils	Height	Growth Rate	Notes
Narrow Leaf Cottonwood <i>Populus angustifolia James</i>	Zone 3b	Moist soils, adaptable to slightly alkaline soils	60' upright in youth but becoming broad with age	Fast, more than 2' per year	Adaptable, native tree. May sucker. Similar disease problems as Plains Cottonwood.
Plains Cottonwood <i>Populus deltoides</i>	Zone 3a	Extremely adaptable, moist and dry soils	110' possible, 70' to 80' more likely	Fast, more than 2' per year	Native tree. Suffers from canker disease. May produce large amounts of "cotton" from female trees.
Swamp White Oak <i>Quercus bicolor</i>	Zone 4b	Moist, well-drained soils that are slightly acid	40' rounded with age, spread equal to height	Moderate, about 1' or more a year	Exfoliating bark. Waxy green leaves. Appears hardy to region.
Bur Oak <i>Quercus macrocarpa Michx</i>	Zone 2b	Adaptable to a wide range of soils from moist to clay to sandy	60' rounded form with a spread equal the height	Moderate, usually between 1' and 2' a year	Native tree. Hardy. A few pest problems.
Northern Red Oak <i>Quercus rubra L.</i>	Zone 4b	Needs moist, well-drained soils that are slightly acid	40' oval form with a spread about 2/3 the height	Moderate, often 18" or more per year on good sites	Needs moist, well drained soil. Not planted often. Worth a try.
Black Locust <i>Robina pseudocacia L.</i>	Zone 4b	Adaptable to a wide range of soil conditions except wet sites	40' oblong with a spread about 1/2 the height	Moderate, about 1' to 2' per year	Hanging rows of white flowers. May suffer from locust borers.
American Linden <i>Tilia americana L.</i>	Zone 3b	Moist, deep, well-drained soils	50' to 60' tall, pyramidal to ovate shape	Moderate, usually 12" to 18" per year	Sentry and Redmond varieties.
American Elm <i>Ulmus americana L.</i>	Zone 3b	Moist, well-drained soils, adaptable to moist to dry	70', vase-shaped, spread about 2/3 the height	Fast, slightly more than 2' per year	Use Dutch Elm resistant varieties: St. Croix, Valley Forge, Princeton Prairie Expedition.
Norway Maple <i>Acer platanoides L.</i>	Zone 4b	Well-drained, tolerates drier sites, adaptable to at least slightly alkaline soils	30' to 50', spread equal to height	Moderate, more than 1' per year	May produce nice fall color. Plant only in protected locations. May suffer winter dieback or death.

Recommended Tree List

Large Shade Trees - Continued

Common Name and Scientific Name	Hardiness	Soils	Height	Growth Rate	Notes
Hybrid Elms	Varies	Variable	40' to 60'	Fast	Varieties: Accolade, Triumph, Cathedral, Cool Shade, Vanguard

Recommended Tree List

Medium Shade Trees

Common Name and Scientific Name	Hardiness	Soils	Height	Growth Rate	Notes
Ohio Buckeye <i>Aesculus glabra</i>	Zone 4a	Moist, well-drained soils that are slightly acid, tolerates neutral soils	30' to 40', spread to equal height	Slow to moderate, about 1' per year	Likes irrigation. Nut is considered poisonous to humans and livestock.
Homestead Buckeye <i>Aesculus x "Homestead"</i>	Zone 4a	Best suited to moist, well-drained soils that are slightly acid, can perform well on even slightly alkaline sites	25' to 30', spread to equal height	Slow, slightly less than 1' per year	Nice red autumn color. Hybrid between Yellow and Ohio Buckeye.
River Birch <i>Betula nigra</i>	Zone 4b	Performs best on moist, slightly acid soils.	30' to 40', often grown as a multi-stem tree	It can be a moderate to fast growing tree, almost 2' per year on excellent sites	Brownish peeling bark when young. Does not like dry sites.
Paper Birch <i>Betula papyrifera</i>	Zone 2b	Moist well-drained soils are best	40', oval form	Moderate to fast, 1' to 2' per year	Native tree. Attractive white bark. Does not like dry and hot sites.
Ginkgo <i>Ginkgo biloba</i>	Zone 4b	Moist, well-drained soils that have not been disturbed	35', spread about 1/2 the height	Slow, perhaps 6" per year	Plant only male variety. May suffer with dieback. Unique fan shaped leaf.
Ironwood American Hophornbeam <i>Ostrya virginiana</i>	Zone 3a	Moist, well-drained soils, often found thriving on rocky or sandy soils	25', pyramidal shape	Slow, less than 1' per year	Native tree. Does well in light shade.
Amur Maackia <i>Maackia amurensis</i>	Zone 4a	Best on sandier soils, will thrive on sandier soils with adequate drainage	25', upright form with a spread about 2/3 of height	Slow, about 6" to 9" per year	Racemes of white flowers. Few pest problems.
Amur Cork tree <i>Phellodendron amurense</i>	Zone 4a	Adaptable to wide range of soils	45", broad spreading form, spread about equal the height	Moderate, slightly more than 1' per year	Attractive corky bark. Be selective about location.
Quaking Aspen <i>Populus tremuloides</i>	Zone 2a	Wide range of soils from shallow gravelly sites to heavy clay	40' oval form, spread to about 1/2 the height	Moderate to fast, about 2' per year	Native tree. Leaves rustle in light wind. Nice fall color.

Recommended Tree List

Medium Shade Trees - Continued

Common Name and Scientific Name	Hardiness	Soils	Height	Growth Rate	Notes
Big tooth Aspen <i>Populus grandidentata</i>	Zone 3b	Best performance on moist sites, can tolerate dry sandy soils as well	50', oval form with a spread about 1/2 the height	Moderate, slightly more than 1' per year	Good ornamental tree. Will root sucker.
Manchurian Apricot <i>Prunus armeniaca</i>	Zone 4a	Adaptable to most soils except wet, poorly drained or highly compacted soils	30' rounded form, spread about equal to height	Moderate, more than 1' per year	Can have nice fall color. Fruit production is seldom.
Ussurian Pear <i>Pyrus ussuriensis</i>	Zone 3b	Performs best on moist, loam soils. Will tolerate a slightly alkaline soil.	30' to 35'	Slow to moderate, about 1' per year	Hardy tree. Fruit is hard and gritty.
Little Leaf Linden <i>Tilia cordata</i>	Zone 3b	Moist, well-drained soils, but grows reasonably well on clay soils.	40'; Pyramidal, rounded form	Moderate, a little more than 1' per year	Hardy tree. Nice specimen tree.

Recommended Tree List

Small Shade Trees and Shrubs

Common Name and Scientific Name	Hardiness	Soils	Height	Growth Rate	Notes
Amur Maple <i>Acer tataricum</i>	Zone 3b	Well-drained soils, tolerant of dry soils	15' to 20' at maturity	Slow to moderate, perhaps 1' per year	Cultivators, Hot Wings, Ventura Embers
Service Berry <i>Amelanchier x grandiflora</i> <i>Amelanchier Lavis</i>	Zone 4a	Moist, well-drained, slightly acid and in light shade	20' with a spread about 3/4 the height	Slow to moderate, about 6" to 1' per year	Apple Service Berry and Allegheny Service Berry
Eastern Redbud <i>Cercis canadensis</i>	Zone 4b	Moist, well-drained, tolerant of drier sandier soils	15' with a spread about 3/4 the height	Slow, about 6" to 9" per year	Small Ornamental. Best suited for sheltered locations, short lived.
Water Birch <i>Betula occidentalis</i>	Zone 4a	Moist soils which are slightly acid	15' rounded form, usually multiple stemmed	Moderate, more than 1' per year	Native, reddish brown bark.
Pagoda Dogwood <i>Cornus alternifolia</i>	Zone 3b	Moist, well-drained soils	10' to 15', broad spreading form with a spread greater than the height	Slow, about 6" to 9" per year	Native to nearby Minnesota. Layered horizontal branches.
Cockspur Hawthorn <i>Crataegus crusgalli</i>	Zone 4b	Moist, well-drained soils, tolerates droughty soils as well	15' to 20', spreading form almost equal to height	Slow to moderate	Clusters of white flowers in spring.
American Plum <i>Prunus americana</i>	Zone 3a	Not very particular, adapts to slightly alkaline soils	15' rounded form	Slow to moderate, about 1' per year	Native, can form thickets. Check nursery for other varieties.
Sour Cherry <i>Prunus cerasus</i>	Zone 4a	Moist, well-drained soils, slightly acid	10' rounded form	Slow, less than 1' per year	Good choice. Nice flowering tree.
Amur Choke Cherry <i>Prunus maackii</i>	Zone 3a	Very tolerant of any soil except wet, poorly drained conditions	25', oval form	Moderate, a little more than 1' per year	Exfoliating reddish brown. Hardy and well suited to our area.

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Small Shade Trees and Shrubs

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Smooth Sumac <i>Rhus glabra</i>	Zone 3b	Well-drained soils are preferred, tolerates dry sites and slightly alkaline soils	10' to 15'	Moderate to fast, about 2' per year	Native. Beautiful yellow and red fall color. Aggressive suckering.
Japanese Tree Lilac <i>Syringa reticulata</i>	Zone 3b	Moist, well-drained, slightly acid soils	25' Oval form	Slow to moderate, about 9" to 1' per year	Tree form of Lilac. Native to Japan.
Pekin Lilac <i>Syringa pekinensis</i>	Zone 3b	Moist, well-drained and slightly acid soils	25' Oval form	Slow to moderate, about 1' per year	Similar to Japanese Lilac tree but a little bushier.
Crab Apple Varieties	Varies				Check with local nursery.
Pear Varieties	Varies				Check with local nursery.
Apple Varieties	Varies				Check with local nursery.
Nannyberry Viburnum <i>Viburnum Lentago L.</i>	Zone 3b	Wide range	15' to 18'	Slow, 6" to 9" per year	Shrub like but can be grown as a tree.
Mountain Ash <i>Sorbus</i>	Zone 2b-4a	Well drained	10' to 30'	Slow, less than 1"	Several types can be grown here. Korean, European, Showy, Oakleaf, Greene (Native)

Recommended Tree List

Conifers

Common Name and Scientific Name	Hardiness	Soils	Height	Growth Rate	Notes
White Fir <i>Abies concolor</i>	Zone 4b	Moist, well-drained soils, will not do well in heavy clay or poorly drained soils	50' to 60', pyramidal form	Slow, about 6" to 9" per year	Suffers from winter burn on exposed sites.
Rocky Mountain Juniper <i>Juniperus scopulorum</i>	Zone 3b	Moist, well-drained loams, adapted to drier, sandier soils	40', pyramidal form	Moderate, usually more than 1' per year	Native. Many cultivars Available, hardy.
Eastern Red Cedar <i>Juniperus virginiana</i>	Zone 3b	Moist, well-drained, sandy soils	35', pyramidal form	Moderate, usually more than 1' per year	Native to Eastern South Dakota Hardy
Black Hills Spruce (White Spruce) <i>Picea glauca densata</i>	Zone 2b	Performs best on moist soils	40' to 60', can become more than 100' tall in native stands	Slow to moderate, slightly less than 1' per year	Native, adaptable. More open branching height than Blue Spruce.
Meyers Spruce <i>Picea meyeri</i>	Zone 4a	Appears to be adapted to drier sites and tolerant of slightly alkaline soils	40', slender, pyramidal, a spread about 1/3 the height	Slow to moderate, 8" to 1' a year	Seems better adaptable than Blue Spruce Nice blue-green needle.
Colorado Blue Spruce <i>Picea pungens</i>	Zone 3b	Best performance on moist soils, tolerates slightly alkaline soils	30' to 60', pyramidal form, spread slightly less than the height	Moderate, usually slightly more than 1' per year	Can be prone to pests and disease. Nice blue-green needle.
Bristle cone Pine <i>Pinus aristata</i>	Zone 4b	Tolerant of dry, slightly alkaline soils	10', very irregular form	Very slow, several inches a year	Nice landscape specimen.
Lodge pole pine <i>Pinus contorta</i>	Zone 2b	Well-drained soils are a must,	30' to 40', pyramidal form	Moderate, a little more than 1' per year	Native to Black Hills in small pockets. Susceptible to bark beetle.
Limber Pine <i>Pinus flexilis</i>	Zone 4a	Well-drained loam to sandy soils	30' pyramidal in youth, broad with age	Slow, perhaps 6" to 9" per year	Native to Black Hills, in few locations. Good ornamental. Susceptible to bark beetle.

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Common Name and Scientific Name	Hardiness	Soils	Height	Growth Rate	Notes
Mugo Pine <i>Pinus mugo</i>	Zone 3b	Moist, well-drained soils are best	Varies from 3' to 40' depending on seed source or cultivator	Slow to moderate, 3" to 1' per year	Shrub to treelike. High ornamental value
Ponderosa Pine <i>Pinus ponderosa</i>	Zone 3b	Moist, well-drained soils, tolerant of dry soils as well	50' to 80', pyramidal in youth, becoming irregular shape with age	Moderate, more than 1' per year	Native hardy to new sites. Susceptible to bark beetle.
Eastern White Pine <i>Pinus strobus</i>	Zone 3b	Best on moist, well-drained loam to sandy soils that are slightly acid.	50' to 60', open, irregular form at maturity	Moderate, more than 1' per year	Not planted often. Worth a try on select sites.
Douglas Fir <i>Pseudotsuga Menziesii</i>	Zone 4a	Moist, well-drained soils that are slightly acid	60' to 70', pyramidal form	Slow to moderate, less than 1' per year	Native to Western N. America. Rocky Mountain Douglas Fir should be planted.
American Arborvitae	Zone 4a	Moist, well-drained soils, not tolerant of droughty soils	10' to 30', pyramidal to oval shape	Slow, about 6" to 9" per year	May experience winter burn in our windy and dry environment.