

Columnar and Fastigate Trees for CO Landscapes

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Gardening Series | Trees and Shrubs

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Everyone enjoys the beauty of shade trees, but many Colorado landscapes are too small to accommodate large trees. Narrow, columnar, and fastigate trees are great options to enjoy the beauty and environmental benefits of trees and fit into smaller spaces.

How to Select Columnar and Fastigate Trees

The terms “columnar” and “fastigate” are generally used interchangeably. These trees are more narrow than wide, with a ratio of height to width of 5-to-1 or greater. These species have varied forms and shapes, from stovepipe to light pole appearances. Species can have interesting forms, textures, shapes, fall color, fruit, flowers, and bark. There are also trees with pendulous forms that grow upright but have some drooping or weeping branches.

Many columnar selections have been made from naturally occurring narrow species. These selections are propagated asexually through grafting and cuttings. The narrow form of trees is most pronounced when trees are young; as they mature, the form may widen.

Select a tree species with a mature size that fits your available space. Check for obstructions from buildings or fences and overhead utility lines. Be sure to plant for the mature height and width of the tree (refer to Table 1).

Planting

When planting, dig a saucer-shaped hole approximately three times the width of the root ball. The root flare should be visible following planting and slightly above grade. Ensure the large structural roots are at soil grade. For detailed planting instructions, refer to CSU Extension Garden Note [#636 “Tree Planting Steps”](#).

Water Requirements

Species vary in water requirements and this needs to be accounted for during the tree selection process. Plant trees with higher water needs in areas that can be easily irrigated during periods of drought. Do not plant trees that have low-water needs in heavily irrigated lawn areas or at the base of slopes. Water is paramount to overall tree health and establishment. Though trees are narrower in shape, it doesn't mean they are drought resistant (unless stated).

Culture and Maintenance

All trees will benefit from regular water during establishment. It is recommended that wood mulch be used at the base of trees, instead of plant material (including turf) or rocks. Wood mulch has been found to be beneficial to tree growth and health and doesn't compete with the tree for resources.



Quick Facts

- Trees provide shade, beauty, and protection from harsh winter winds
- Columnar and fastigate tree forms provide the benefits of larger trees, and can fit into smaller landscapes
- Trees with narrower forms can be evergreen or deciduous
- Often, columnar trees can be used to make a statement and provide interesting forms and textures to landscapes

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Pruning for narrow trees is undertaken mainly to correct structural defects, like co-dominant trunks or to remove lower branches. Ideally, pruning should be done in the late winter or early spring, prior to budbreak.

Columnar Trees and Storm Damage

Columnar trees are often more prone to storm damage. This is especially true for fast growing species and those that have narrow branch angles and codominant trunks. Slower growing species and those with shorter and more horizontal branching are less likely to be damaged with heavy snows and wind.

Description of Table 1

Table 1 has a list of both columnar evergreen and deciduous trees for Colorado landscapes. The table includes the species name, mature size (H x W), growth rate, soil moisture needs, and aesthetic value and cultural hints. This list is not comprehensive, as new cultivars are introduced into the nursery trade and others replaced. Some of these species may not be as readily available as others. Contact your local garden centers and nurseries for availability.

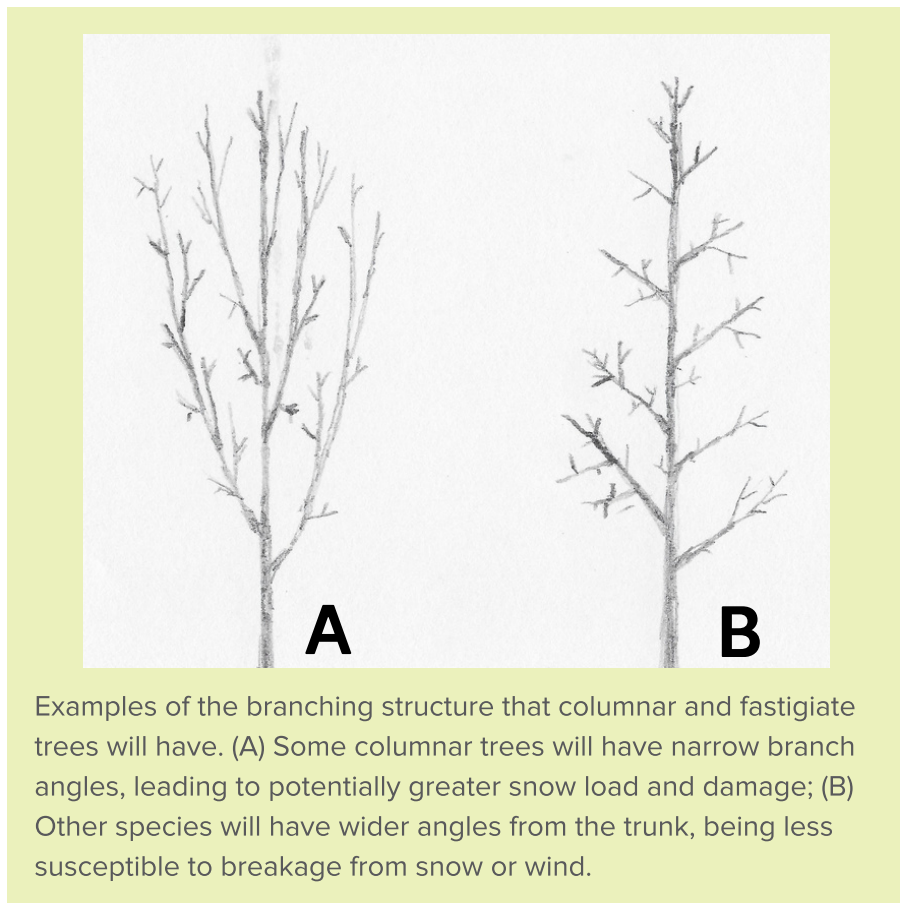


Table 1. Columnar and Fastigate Trees for Colorado

Genus	Species	Cultivar	Common Name	Mature Size (HxW)	Water Use	Aesthetic Value and Cultural Hints
Acer	platanoides	'Crimson Sentry'	Crimson Sentry Norway maple	30 x 15	Med-High	Red-purple summer foliage; leaves more scorch resistant
Acer	platanoides	'Columnare'	Columnar Norway maple	50 x 20	Med	Yellow flowers in early spring; dense canopy
Carpinus	betulus	'Frans Fontaine'	Frans Fontaine hornbeam	25 x 15	Med	Interesting bark; one of the more narrow hornbeams; yellow fall color
Celtis	occidentalis	'JFS-KSU1'	Prairie Sentinel® hackberry	45 x 12	Low-Med	Drought and heat tolerant; leaves susceptible to nipple gall; yellow fall color
Ginkgo	biloba	'Princeton Sentry'	Princeton Sentry ginkgo	40 x 15	Med	Tolerant to urban conditions once established; seedless male cultivar; yellow fall color
Juniperus	chinensis	'Blue Point'	Blue Point juniper	12 x 6	Low	Dense blue-green foliage
Juniperus	chinensis	'Hetzi Columnaris'	Hetzi Columnar juniper	15 x 5	Low	Bright green foliage; dusty-blue fruit
Juniperus	chinensis	'Spartan'	Spartan juniper	18 x 5	Low	Rich green foliage
Juniperus	chinensis	'Spearmint'	Spearmint juniper	12 x 5	Low	Bright green foliage
Juniperus	scopulorum		Rocky Mountain juniper	20 x 15	Low	Drought tolerant;
Juniperus	scopulorum	'Blue Arrow'	Blue Arrow juniper	20 x 5	Low	Bright blue foliage
Juniperus	scopulorum	'Cologreen'	Cologreen juniper	15 x 8	Low	Green foliage
Juniperus	scopulorum	'Gray Gleam'	Gray Gleam juniper	15 x 8	Low	Male cultivar (no fruit); silvery-gray color

Genus	Species	Cultivar	Common Name	Mature Size (HxW)	Water Use	Aesthetic Value and Cultural Hints
Juniperus	scopulorum	'Medora'	Medora juniper	12 x 6	Low	Male cultivar; blue-green foliage
Juniperus	scopulorum	'Moonglow'	Moonglow juniper	15 x 8	Low	Blue-gray foliage
Juniperus	scopulorum	'Skyrocket'	Skyrocket juniper	18 x 3	Low	Male cultivar; very narrow form; silvery blue foliage
Juniperus	scopulorum	'Wichita Blue'	Wichita Blue juniper	18 x 5	Low	Male cultivar; light silvery-blue foliage
Juniperus	scopulorum	'Woodward'	Woodward juniper	18 x 4	Low	Plant Select® recommendation; resistant to snow load breakage; blue-green foliage
Juniperus	virginiana	'Taylor'	Taylor redcedar	15 x 4	Low	Believed to be a male cultivar; soft silvery blue-green foliage
Malus	x	'Red Baron'	Red Baron crabapple	20 x 4	Low-Med	Reddish-purple foliage in the spring turning to bronze-green; dark red fruit and flowers
Malus	x	'Adirondack'	Adirondack crabapple	18 x 10	Low-Med	Floriferous white blooms
Picea	abies	'Cupressina'	Columnar Norway spruce	18 x 4	Med	Short dark green needles; large cones; sheds heavy wet snow
Picea	glauca	'Pendula'	Weeping White spruce	20 x 6	Low-Med	Weeping branches with an upright habit; rich blue-green needle color
Picea	glauca	'North Star'	North Star white spruce	15 x 7	Low-Med	Shorter height; dense, dark green needles
Picea	pungens	'Baby Blue Eyes'	Baby Blue Eyes spruce	15 x 8	Med	Smaller than most spruce; baby blue needle color
Picea	pungens	'Bakeri'	Bakeri blue spruce	30 x 15	Med	Silvery-blue needles
Picea	pungens	'Fastigiata'	Columnar blue spruce	25 x 10	Med	Striking blue needle color
Picea	pungens	'Hoopsii'	Hoops blue spruce	35 x 18	Med	Very blue needle color
Picea	pungens	'Blue Totem'	Blue Totem blue spruce	18 x 9	Med	Sharp angled branches; very blue color
Pinus	heldreichii		Bosnian pine	20 x 10	Low	Stiff, dark green needles; salt tolerant
Pinus	heldreichii	'Compact Gem'	Compact Gem Bosnian pine	12 x 6	Low	Stiff, very dark green needles; slow growing
Pinus	heldreichii	'Emerald Arrow'	Emerald Arrow Bosnian pine	20 x 8	Low	Upright selection of Bosnian pine; bark is silvery
Pinus	heldreichii	'Satelit'	Satelit Bosnian pine	20 x 8	Low	Upright selection of Bosnian pine
Pinus	mugo	'Columnaris'	Columnar mugo pine	20 x 10	Low-Med	Shorter in height; emerald green foliage
Pinus	mugo	'Fastigiata'	Upright mugo Pie	15 x 4	Low-Med	Narrower upright habit
Pinus	mugo	'Tannenbaum'	Tannenbaum mugo pine	30 x 18	Low-Med	Compact pyramidal form; good winter color
Pinus	nigra	'Arnold Sentinel'	Arnold Sentinel Austrian pine	15 x 8	Low-Med	Narrower version of Austrian pine; prone to storm breakage due to longer needles
Pinus	nigra	'Komet'	Komet Columnar Austrian pine	25 x 7	Low	Upright selection of Austrian pine; dark green needles; prone to snow damage
Pyrus	calleryana	'Cleveland Select' or 'Glen's Form'	Chanticleer pear	35 x 15	Med	Glossy green leaves in summer; red-purple fall color; white flowers in spring; few fruits
Pyrus	ussuriensis	'Bailfrost'	Mountain Frost® pear	25 x 15	Med	Glossy green leaves in summer; red-purple fall color; white flowers; few fruits
Pyrus	x	'NCPX1' PP 26159	Javelin pear	25 x 15	Med	Leaves emerge purple and turn to bronze-green; tightly columnar
Quercus	robur	'Fastigiata'	Upright English oak	40 x 12	Med	Upright form of English oak; prone to snow damage
Quercus	robur	'Skyrocket'	Skyrocket English oak	35 x 10	Med	More columnar form of Fastigate English oak
Quercus	robur x alba	'Crimschmidt'	Crimson Spire™ oak	40 x 15	Low-Med	Dark green foliage in summer; rusty red fall color; not susceptible to iron chlorosis; holds leaves into winter
Quercus	robur x alba	'JFS-KW1QX'	Street Spire oak	45 x 15	Med	Green leaves that turn red in the fall; leaves drop in the fall and are not persistent
Quercus	robur x bicolor (x warei)	'Long'	Regal Prince® oak	45 x 15	Low-Med	Dark green foliage in summer; brownish-yellow fall color; holds leaves into winter