Colorado State University

Extension

Evergreen Trees

Fact Sheet No. 7.403

Gardening Series | Trees and Shrubs

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Narrowleaf evergreen (conifer) trees give a landscape year-round interest, color and texture. Conifer trees are versatile and can be used as specimens, hedges, privacy screens, backdrops for smaller flowering plants, or as a windbreak planted on the north and west to deflect or intercept winter winds. (See fact sheet 7.225, *Landscaping for Energy Conservation*.)

"Evergreen" refers to trees that normally retain most of their foliage (needles) through the winter. Such trees, however, do not retain all of their needles indefinitely. For example, ponderosa pine drops needles each year that are three years old. These older needles are the innermost ones toward the main trunk. Younger needles, further out on the branch, are retained until they are three years old. This annual browning and drop of innermost, older needles can cause concern, but it is a natural process.

Selection

Examine the intended planting space for good soil drainage, adequate sunlight and sufficient space to accommodate the desired evergreen tree at its mature size. Allow for clear access to driveways, sidewalks and entryways. Determine whether the tree's growth will affect any overhead utility lines. Before planting, call the utility companies' hotline (dial 811) to mark the location of any underground lines to avoid damaging them while digging.

In smaller sites, consider smaller trees or shrubs. (See 7.418, *Small Deciduous Trees*, 7.414, *Evergreen Shrubs* or 7.415, *Deciduous Shrubs*.) Consider dwarf conifers for limited space areas. If there is sufficient space, use several kinds of evergreens to add variety to the landscape.

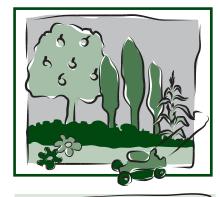
Watering and Maintenance

The following list indicates the relative moisture needs of evergreens. Plant species with similar water needs in the same general area – do not mix trees with widely different water needs.

Evergreens that need less moisture may work well on slopes. All evergreens usable in Colorado prefer well-drained soils. Avoid planting them in swales or poorly-drained, soggy areas. Evergreens that need less moisture may not do well in lawn areas because of the amount of water needed to sustain the lawn. Even for those trees that need more moisture and are compatible with lawn watering, leave the planting area free of sod to allow for good root development. An organic mulch is recommended over the entire planting area. (See 7.214, *Mulches for Home Grounds*.)

Most evergreens growing in Colorado landscapes, whether recently transplanted or well-established, benefit from supplemental water during winter dry spells. Often, such spells are accompanied by drying winds or unseasonably warm temperatures, further emphasizing the need for watering. (See 7.211, *Fall and Winter Watering*.)

For gardeners above 6,000 feet, some of the plants listed in Table 1 are not adapted. Refer to 7.423, *Trees and Shrubs for Mountain Areas* for specific recommendations. Refer to 7.421, *Native Trees for Colorado Landscapes* and 7.422, *Native Shrubs for Colorado Landscapes* for native evergreens.



Quick Facts

- Most evergreens prefer full sun; some will tolerate partial shade.
- When selecting evergreens, consider available space, soil and site conditions, and weather factors.
- Evergreens have different soil moisture preferences.
 Group drought-tolerant types separately from those that require more moisture.
- All evergreens benefit from mulches. All need sufficient water to become established after transplanting.
- Most evergreens benefit from supplemental water during dry, warm or windy periods from November to March.

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Table 1. Recommended evergreen trees for Colorado.

Plant Name	Estimated Mature Size (H x W)	Tree Shape	Growth Rate ¹	Soil Moisture ²	Comments and Cultural Hints
	. '/	1-	Arborv		
Thuja occidentalis Eastern or American arborvitae	20' x 10'	conical	S	Н	Prefers higher humidity; all varieties listed below are subject to winterburn and snow damage.
'Degroot's Spire'	12' x 4'	columnar	s	Н	Rich green foliage turns bronze in winter.
'Smaragd' ('Emerald')	12' x 4'	columnar	s	Н	Dense, medium green foliage.
'Techny'	12' x 8'	broadly columnar	s	Н	Better cold tolerance; dark green foliage.
			Fir		
Abies concolor* White fir	60' x 20'	conical	m	M-H	Flat, blue-green needles; may winterburn in windy sites; may perform poorly in clay soils.
'Candicans'	40' x 15'	broadly columnar	m	M-H	Longer, silvery-blue needles.
Abies koreana	15' x 10'	broadly	S	M-H	Needles curved upright exposing silvery
'Hortsmann's Silberlocke'	451 01	conical			undersides, violet purple cones.
Abies lasiocarpa* 'Glauca Compacta'	15' x 9'	broadly columnar	S	M-H	Slower growing with silver-blue foliage.
Blue Dwarf Rocky Mountain fir	001 5-:				
Pseudotsuga menziesii* Douglas-fir	60' x 20'	conical	m-f	М	Unique cones with "mouse-tail" bracts; more cold-tolerant and soil-adaptable.
			Junip	er	·
luniperus chinensis					
Chinese juniper 'Blue Point'	12' x 8'	broadly	m	L	Slower growing with silver-blue foliage,
2.50 1 0.110	.2 .0	columnar		_	blue-green fruit.
'Hetzi Columnaris'	15' x 5'	narrowly columnar	m	L	Abundant fruit.
'Spartan'	12' x 5'	conical	m-f	L	Dense green foliage.
'Spearmint'	15' x 6'	conical	m	Ē	Dense, bright green foliage.
luniperus scopulorum*	variable	broadly	s-m	Ē	Foliage color varies from green to blue-green.
Rocky Mountain juniper		columnar			3 3
'Cologreen'	15' x 8'	broadly columnar	s-m	L	Dense, green foliage; abundant fruit.
'Gray Gleam'	15' x 6'	conical	s	L	No fruit; dense, gray foliage.
'Moonglow'	15' x 8'	broadly	s-m	L	Dense, silver-blue foliage.
		columnar			
'Skyrocket'	15' x 3'	narrowly columnar	s-m	L	Narrow; subject to snow damage; formerly listed as <i>J. virginiana</i> 'Skyrocket'.
'Welchii'	10' x 5'	broadly columnar	s-m	L	Blue-green to medium green foliage.
'Wichita Blue'	12' x 6'	broadly columnar	s-m	L	Bright blue foliage color.
Juniperus virginiana Eastern redcedar	40' x 15'	conical	s-m	L	Open, horizontal branching; foliage turns brownish in winter.
'Blue Arrow'	15' x 3'	narrowly	s-m	L	Bright blue foliage on narrow upright form.
'Hillspire' ('Cupressifolia')	15' x 6'	columnar conical	s-m	ı	Columnar; bright green foliage.
i iliopii o (Oupressilolia)	15 7 0	COITICAL	Larc	h	Columnia, bright groot foliage.
_arix decidua	45' x 18'	broadly	m	M-H	A deciduous conifer. Needles in clusters that turn
European Larch	-0 A 10	columnar	111	IVI-I I	yellow in fall before dropping.
			Pine		- · · ·
Pinus aristata* Bristlecone pine	25' x 15'	irregular	s	L-M	Shorter, dark green needles with white resin dots; specimen plant.
Pinus edulis* Pinyon pine	20' x 15'	conical to rounded	s-m	L	Not suited for frequently watered lawn areas; edible seeds may not develop dependably in
Pinus flexilis*	40' x 20'	broadly	m	L-M	urban landscapes. Wind-tolerant; adaptable to dry soils; very
Limber pine 'Vanderwolf's Pyramid'	35' x 20'	columnar pyramidal	m	L-M	flexible branches; needles about 2". Blue-green needles on ascending branches.
Pinus heldreichii var leucodermis Bosnian Pine	20' x 12'	broadly columnar	s	L-M	Stiff, dark green needles in brush-like tufts.
^P inus mugo Mugo pine	variable	irregular	m	L-M	Variable growth habit; tree-like to shrubby;
'Tannenbaum'	12' x 6'	broadly	s	L-M	dwarf forms commonly sold for landscapes. Good winter color and hardiness.
Diama nicro	EO' v 05'	columnar		1.84	0.5" about dayly groop results to the state of
Pinus nigra Austrian pine 'Arnold Sentinel'	50' x 25'	broadly columnar	m	L-M	3-5", short dark green needles; tolerates many soil types and urban pollution.
	15' x 5'	narrowly	S	L-M	Dense, dark green needles.
'Oregon Green'	15' x 12'	columnar broadly	s	L-M	Stiff, dark green needles.

Table 1 (cont.). Recommended evergreen trees for Colorado.

			Pine	•	
Pinus ponderosa*	50' x 25'	broadly	m	L	Longer, yellow-green needles; older trees
Ponderosa pine		columnar			develop cinnamon-brown bark.
Pinus strobiformis*	45' x 25'	broadly	m-f	L-M	Blue-green needles; similar to limber pine;
Southwestern white pine		columnar			attractive elongated cones.
Pinus strobus	50' x 20'	broadly	m-f	M	Horizontal branching; fine-textured, blue-green
Eastern white pine		columnar			needles; best in protected sites.
'Fastigiata'	35' x 10'	narrowly	m	M	Fine textured blue-green needles.
		columnar			
'Pendula'	15' x 15'	weeping	m	M	Bluish-green needles on long branches that
					sweep the ground.
Pinus sylvestris	40' x 25'	broadly	m	M	Blue-green, twisted needles; mature bark is
Scotch pine		columnar			orange-brown.
'Fastigiata'	20' x 5'	narrowly	m	M	Tightly angled branches often damaged by
		columnar			snow storms.
			Sprud	ce	
Picea abies	50' x 25'	broadly	m-f	M-H	Short green needles; branches droop with age.
Norway spruce		columnar			
'Cupressina'	15' x 5'	narrowly	m-f	M-H	Good vertical accent; withstands snowloads.
•		columnar			
Picea glauca	50' x 20'	broadly	m	M	Short, greenish-white needles; adaptable tree.
White spruce		columnar			,
'Pendula'	20' x 5'	narrowly	s	M	Gray-green needles on weeping limbs; sheds
		weeping			snow loads.
Picea glauca var densata	30' x 15'	conical	s	M	Dense, short, dark green needles.
Black Hills spruce					-
Picea pungens*	60' x 25'	broadly	m	M-H	Needles short, sharp, green to blue-green.
Colorado spruce		columnar			
Picea pungens glauca*	60' x 25'	broadly	m	M-H	Needles short, sharp, blue; several varieties
Colorado blue spruce		columnar			selected for blue needles. Colorado state tree.
'Baby Blue Eyes'	15' x 8'	broadly	s	M-H	Lighter blue needles, dense growth habit.
•		columnar			-
'Bakeri'	30' x 15'	broadly	S	M-H	Brilliant blue needles and slightly irregular
		columnar			branching.
'Hoopsii'	45' x 15'	broadly	m	M-H	Intense silver-blue needles.
•		columnar			
'Fat Albert'	30' x 20'	broadly	S	M-H	Outstanding blue-needled form with strong
		pyramidal			central leader.
'Iseli Fastigiate'	15' x 5'	narrowly	s	M-H	Striking blue needles.
•		columnár			-
'R.H. Montgomery'	12' x 8'	broadly	s	M-H	Striking silver-blue needles.
('Montgomery')		pyramidal			•
	10' x 5'	conical	S	M-H	Silver-blue needles on a dense, conical form.

¹Growth rate: s = slow; m = moderate; f = fast * Native to Colorado

 $^{^{2}}$ Soil moisture: H = high; M = medium; L = low