

Community Trees

Conifer Species for Iowa

Introduction

With their ever-present foliage, conifers (cone-bearers) make excellent screens, windbreaks, and hedges and provide year-round visual interest. Unfortunately, the number of conifers recommended for Iowa has dwindled in recent years because several species have proven sensitive to our stressful climate or have fallen prey to various plant pests. For example, *Pinus nigra* (Austrian pine) has been severely disfigured by fungal pathogens *Dothistroma pini* and *Sphaeropsis sapinea*, which cause *Dothistroma* needle blight and (*Sphaeropsis*) tip blight. Pine wilt continues to decimate *Pinus sylvestris* (Scotch pine), the result of infestation by *Bursaphelenchus xylophilus* (pine wood nematode).

The following list of recommended conifers is a guideline for home-owners and landscape professionals. Not every tree will work in every situation, but when planted on appropriate sites and protected from drought, excess moisture, deicing salt, pesticides, and mechanical damages, these valuable woody plants should have long, useful lives.

Typical mature height and crown spread in feet are listed after each species (height/spread).



White fir

Abies—Fir **Culture**

Members of the genus *Abies* require moist, well-drained, acid soil with high atmospheric moisture and cool summer temperatures. Iowa's hot, dry summers limit the use of many *Abies*. Firs do well in full sun or light shade but are not suited for harsh urban sites. Transplant in the spring using balled-and-burlapped or container-grown stock. Limit pruning to removal of multiple leaders and broken branches.

Recommended Species

Abies balsamea—balsam fir
Height: 40 feet Width: 25 feet
Best in northeast Iowa on cool, moist sites

Abies concolor—concolor or white fir
Height: 50 feet Width: 30 feet
Appropriate for most of Iowa

Abies fraseri—fraser fir
Height: 40 feet Width: 25 feet
Best in northeast Iowa on cool, moist sites

Juniperus—Juniper **Culture**

It is difficult to generalize about growth habits of junipers because species vary from low-growing groundcovers to pyramidal trees. All junipers prefer open, sunny locations; in heavy shade they become thin. Junipers do best in light soil and tolerate many different pH levels.

Recommended Species

Juniperus scopulorum—Rocky Mountain juniper
Height: 30 feet Width: 10 feet
Check with local nursery operators for best selections.

Juniperus virginiana—eastern redcedar
Height: 40 feet Width: 25 feet
Many cultivars are available.



European larch

Larix—Larch **Culture**

Larches are deciduous conifers that prefer moist, well-drained sites with plenty of sun.

Recommended Species

Larix decidua—European larch
Height: 75 feet Width: 50 feet
More tolerant of Iowa conditions than American larch

Larix laricina—American larch or tamarack
Height: 60 feet Width: 30 feet
Requires moist soil and cool sites



Colorado spruce



Serbian spruce

Picea—Spruce **Culture**

Members of the genus *Picea* perform best in moderately moist, well-drained soils. Plants will be stressed on hot, dry sites and may succumb to insect and disease attack.

Recommended Species

Picea abies—Norway spruce
Height: 80 feet Width: 40 feet
Good windbreak tree

Picea glauca—white spruce
Height: 50 feet Width: 25 feet
Withstands wind, heat, cold, and drought

Picea glauca var. *densata*—
Black Hills spruce
Height: 40 feet Width: 25 feet
Susceptible to drought stress;
rather slow-growing

Picea omorika—Serbian spruce
Height: 60 feet Width: 25 feet
Protect from desiccating winter winds

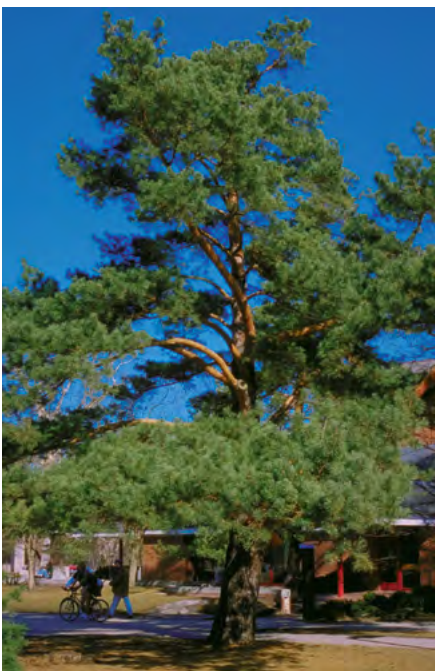
Picea pungens—Colorado spruce
Height: 40 feet Width: 25 feet
Very adaptable



Mugo pine



White pine



Scotch pine

***Pinus*—Pine**

Culture

Pines are more tolerant of poor soils, urban conditions, and adverse exposures than spruces or firs. Because of their mature size, pines are used most effectively on large scale sites, such as parks, cemeteries, golf courses, large commercial properties, and spacious residential lots.

Recommended species

Pinus aristata—bristlecone pine
Height: 20 feet Width: irregular
A picturesque slow-growing, ornamental pine

Pinus bungeana—lacebark pine
Height: 30 feet Width: 20 feet
Best in eastern Iowa

Pinus cembra—Swiss stone pine
Height: 40 feet Width: 25 feet
Best in eastern Iowa

Pinus flexilis—limber pine
Height: 40 feet Width: 30 feet
Resistant to winter burn

Pinus koraiensis—Korean pine
Height: 40 feet Width: 30 feet
Very hardy and adaptable to most conditions

Pinus mugo—mugo pine
Height: 15 feet Width: 20 feet
Dwarf forms are available

Pinus ponderosa—ponderosa pine
Height: 80 feet Width: 40 feet
Best in western Iowa

Pinus resinosa—red or Norway pine
Height: 50 feet Width: 25 feet
Best in eastern Iowa

Pinus strobus—eastern white pine
Height: 75 feet Width: 50 feet
Intolerant of road deicing salt spray

Pinus sylvestris—Scotch pine
Height: 60 feet Width: 50 feet
Susceptible to pine wilt.



Douglas fir

***Pseudotsuga menziesii*—Douglas fir**

Height: 80 feet Width: 40 feet

Culture

Prefers slightly acid to neutral, well-drained, moist soils; avoid dry sites with strong winds.



Baldcypress

***Taxodium distichum*—Baldcypress**

Height: 50 feet Width: 30 feet

Culture

Baldcypress, a deciduous conifer, grows best on sandy-loam soils with good moisture but tolerates extremes in moisture after it is firmly established in the landscape. Avoid alkaline soils.



Techny arborvitae

***Thuja occidentalis*—
Eastern arborvitae**
Culture

Arborvitae perform best on fertile, moist, well-drained soils. They prefer full sun but tolerate light shade. Choose cultivars resistant to winter browning.

Recommended cultivars

‘Brandon’

Height: 12 feet Width: 4 feet
Resistant to winter burn

‘Degroot’s Spire’

Height: 10 feet Width: 3 feet
Resistant to winter browning

‘Hetz Wintergreen’

Height: 20 feet Width: 7 feet
Strong central leader

‘Holmstrup’

Height: 10 feet Width: 4 feet
Very winter hardy

‘Techny’

Height: 12 feet Width: 8 feet
Excellent dark green foliage



Canadian hemlock

***Tsuga*—Hemlock**
Culture

Tsuga species require good drainage, adequate moisture, and cool, acid soils; they perform poorly on hot, dry, windy sites. Hemlocks tolerate dense shade but prefer partial or light shade. They are sensitive to air pollution and road deicing salts but will withstand heavy pruning.

Recommended species

Tsuga canadensis—

Canadian hemlock

Height: 70 feet Width: 40 feet

Best in eastern Iowa



Contact Organizations

*Forestry Division/Iowa
Department of Natural Resources
Wallace Building, 502 E. 9th St.
Des Moines, IA 50319-0034
(515) 281-5918
www.iowadnr.gov/forestry*

*Iowa State University Extension
Distribution Center
Ames, IA 50011
(515) 294-5247
www.extension.iastate.edu/store*

*Forestry
Ames, IA 50011-3221
(515) 294-1168
www.forestry.iastate.edu*

*Horticulture
Ames, IA 50011
(515) 294-2751
www.yardandgarden.extension.iastate.edu*

*Trees Forever
770 7th Avenue, Marion, IA 52302
(319) 373-0650
www.treesforever.org*

This institution is an equal opportunity provider. For the full non-discrimination statement or accommodation inquiries, go to www.extension.iastate.edu/diversity/ext.

Prepared by Jeff Iles, extension horticulturist, in conjunction with the Iowa Urban and Community Forestry Council.