

# 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

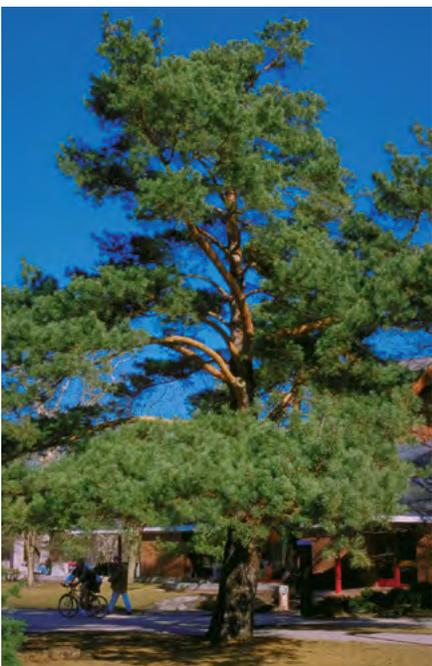
*Picea pungens*—Colorado spruce  
Height: 40 feet Width: 25 feet  
Very adaptable



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.



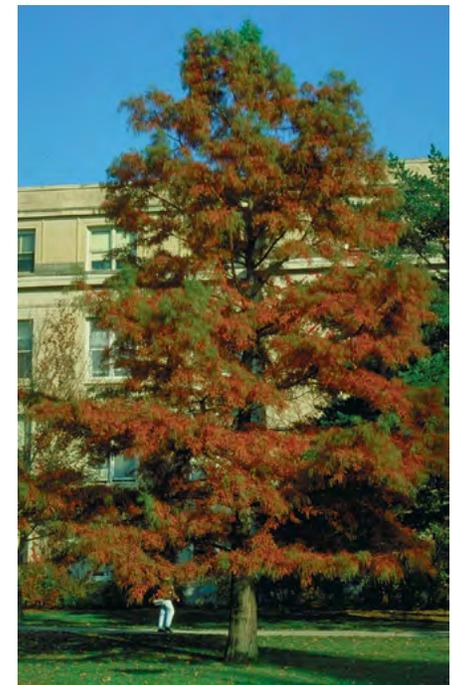
Douglas fir

## ***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**

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