

A large, mature tree with dense foliage in shades of yellow, orange, and brown, set against a bright, hazy sky at sunset or sunrise. The tree's trunk is thick and dark, and its branches spread out across the frame. The overall scene is warm and natural.

City of Bozeman

# TREE GUIDE

Choosing Trees for Public Spaces



Over 26,000 publicly-owned trees, valued at more than \$26 million dollars, are located on boulevards, in city parks and at the cemetery. Urban forests filter air pollution, reduce building energy costs, filter storm water runoff, stabilize soil, and decrease urban heat. Urban forests have also been shown to improve mental health and social interactions.

Private lots in Bozeman are bordered by a public right-of-way strip, typically 11.5 feet from the curb, including the sidewalk and boulevard. As Bozeman grows it is important to plant the proper tree in the proper place. Improper species, location, planting depth and inadequate watering are the most common planting problems. Please call the Forestry Division at 582-3200 for specific planting information.





This brochure, compiled by the Bozeman Tree Advisory Board and the City Forestry Department, is designed to help you select the trees suitable for planting on public property. You can also use it to tour Bozeman's beautiful collection of trees.

You will find a smaller selection of acceptable trees in this version of the Tree Guide as compared to past Guides. Several factors were brought into consideration regarding which trees would remain and which would be removed.

First and foremost are the increased federal and state regulations required for small municipal storm water systems. The City of Bozeman has been working with Montana Department of Environmental Quality on Phase II of our Storm Water Management Program. The purpose of this plan is to limit storm water runoff that could carry potential pollutants to local rivers and streams. Trees bearing fruit and nuts are no longer allowed because the fruit and nuts are raked from the boulevards into the gutter and then carried to either the Bozeman Creek or the East Gallatin River.

Other factors include the shape of the tree, those with wide low crowns are easily damaged by vehicles and are a maintenance issue. Black Ash is no longer acceptable due to several environmental, climate and insect issues. Russian Olive has also been removed because they are considered a noxious weed.

## **LEGEND**

The icons below designate species suited for boulevard plantings (B), as well as species for parks (P), or under utility lines (U). Symbols also highlight those with spring blooms and fall color.

**B**

### **Trees suitable for boulevard planting**

—These trees tolerate the confined planting spaces of a boulevard and can be pruned to prevent hazard to pedestrians and vehicles.

**U**

### **Trees suitable for planting under utility lines**

—These trees have a mature height of less than 30 feet and are often slow growing.

**P**

### **Trees suitable for planting in parks and open spaces**

—These trees are best suited only for planting in parks and open spaces due to branching habit, fruit production, suckering, weak wood, or invasive root systems. Space constraints also restrict species selection for given locations.



### **Flowering**

—These trees have showy blossoms which can attract bees, butterflies & hummingbirds.



### **Fall Color**

—These trees have showy fall color.

**REMEMBER ! Call  
before you dig!**

**Utilities Underground  
Location Center**

**1-800-424-5555 (free service)**



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# TREE SPECIES GUIDE

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**ALDER** (*Alnus species*)

**P**

This native shrubby tree is best suited for parks and open spaces near water. Has interesting catkins, good wildlife browse.

Mature height: 20-40'

Zone: 2-7

Growth rate: Moderate

**See at:** Tuckerman Park, east side along Bozeman Creek





P



**ASPEN, QUAKING** (*Populus tremuloides*)

This popular native tree is excellent for park and open areas. It's suckering habit precludes boulevard planting. It has golden fall color. Protect from deer.

Mature height: 60'

Zone: 2

Growth rate: Fast

**See at:** Canterbury Park, west edge, at East Olive and S. Tracy

B

P



**BIRCH, PAPER** (*Betula papyrifera*)

Paper Birch is known for its white bark. This species exhibits a bright yellow fall leaf color. Requires extra moisture. This tree is native to northwest Montana.

Mature height: 50-60'

Zone: 2-6

Growth rate: Moderate

**See at:** 1101 Mountainash Ave.

P

**BIRCH, WATER** (*Betula occidentalis*)

This birch is native to western Montana. Suitable for open spaces with adequate moisture.

Mature Height: 20-25'

Zone: 4-8

Growth rate: Moderate

**See at:** MSU Arboretum southwest of 11th & College, west side of parking lot

P



**BIRCH, CUT LEAF WEEPING** (*Betula pendula 'Dalecarlica'*)

Weak wood, susceptibility to pests, and its weeping form make Weeping Birch a poor candidate for a street tree. Requires extra moisture.

Mature height: 30-40'

Zone; 2-6

Growth rate: Moderate

**See at:** Lindley Park, southeast corner  
and at Sunset Hills Cemetery, northeast corner



**B  
U  
P**

**CRABAPPLE, FLOWERING** (*Malus hybrids*)

Flowering crabapple is a very popular small ornamental tree. Flower color varies from white to pink to red. Mature size varies depending on the cultivar. Fireblight is a common disease and resistant cultivars should be used. **Only** fruitless varieties are suitable for street or park tree use. Protect from deer.

Mature height: 8'-25'

Zone: 2 and up

Growth rate: Moderate

**See at:** 160 Meagher— 'Spring Snow' and 115 S. Wallace

**P**

**DOUGLAS-FIR** (*Pseudotsuga menziesii*)

Although evergreens have been planted as street trees, in general, Douglas Firs are not acceptable due to root system type and sight triangle visibility. Severe pruning is required to remove limbs that cause encroachment and visibility problems.

**See at:** Cemetery, southwest section

**B  
P**

**ELM, AMERICAN** (*Ulmus americana*)

Because of its vase-shaped form, this species was one of the most commonly planted street trees in the past. However, Dutch Elm Disease has wiped out large numbers of American Elms across the country. Disease Resistant cultivars and hybrids are available and should be planted.

Mature height: 60-70'

Zone: 2-9

Growth rate: moderate

**See at:** 209 South 6th and bordering Cooper Park and 'Brandon' - 820 Hunters Way

**P**

**FIR** (*Abies*)

Although evergreens have been planted as street trees, in general, Firs are not acceptable due to root system type and sight triangle visibility. Severe pruning is required to remove limbs that cause encroachment and visibility problems.

**See at:** MSU duck pond area— Concolor Fir (*Abies concolor*)  
Alpine Fir (*Abies lasiocarpa*)



### **HACKBERRY, COMMON** (*Celtis occidentalis*)

**B**  
**P** Common Hackberry generally requires a warmer climate, although a few have been successfully planted here. It is drought tolerant and suited for dry, windy conditions.

Mature height: 40-60'

Zone: 2-9

Growth rate: Moderate

**See at:** 208 North 15th and 309 N. 21st

### **HONEYLOCUST** (*Gleditsia triacanthos var. inermis*)

**B**  
**P** A fine-textured tree providing filtered shade, the Honeylocust is drought and salt tolerant.

Mature height: 40-60'

Zone: 3-9

Growth rate: Moderate

Cultivars: 'Skyline'

**See at:** 311 North 17th



### **JUNIPER** (*Juniperus*)

**P** Although evergreens have been planted as street trees, in general, Junipers are not acceptable due to spreading root system and sight triangle visibility. Severe pruning is required to remove limbs that cause encroachment and visibility problems.

**See at:** East Gallatin Recreation Area, along trail west end of lake

### **LARCH** (*Larix*)

**P** Although evergreens have been planted as street trees, in general, Larch are not acceptable due to spreading root system and sight triangle visibility. Severe pruning is required to remove limbs that cause encroachment and visibility problems.

**See at:** MSU Forestry Lab, S. 8th  
and MSU Duck Pond on S. 11th



### **LILAC, JAPANESE TREE** (*Syringa reticulata*)

**B**  
**U**  
**P** This is an excellent choice for a flowering street tree. It blooms in June with large, white, and very fragrant flower clusters.

Mature height: 20-30'

Zone: 3-7

Growth rate: Moderate

**See at:** 900 block of South 8th, east and west side





**LINDEN, AMERICAN** (*Tilia americana*)

**B**  
**P** The American Linden is a large tree with beautiful heart-shaped leaves. It is slow growing, pest free, and does well in urban conditions. It is damaged by road salts and does not tolerate drought. Fragrant yellow green flowers attract honey bees.

Mature height: 60-80'

Zone: 2-8

Growth rate: Moderate

**See at:** 312 South 6th—'American'  
906 & 905 Brentwood—'Redmond'

**LINDEN, LITTLELEAF** (*Tilia cordata*)

**B** Smallest of the Linden family. Susceptible to damage from road salts.

**U** Mature height: 25-35'

**P** Zone: 4-7

Growth rate: Moderate

**See at:** 1024 South Grand

**MAACKIA, AMUR** (*Maackia amurensis*)

**B** This is a small tree with multi-season interest.

**U** Mature height: 18-20'

**P** Zone 3-8

Growth rate: Slow

**See at:** 2436 Snapdragon



**MAPLE, AMUR** (*Acer ginnala*)

**B** One of the hardiest maples for our area. The single trunk form is suitable on boulevards. Its shrubby form is better for private

**U** landscapes than right-of-way strips. Drought tolerant.

Mature height: 15-20'

Zone: 3-7

Growth rate: Moderate

**See at:** 1014 Woodland



**MAPLE, HYBRIDS** (*Acer hybrids*)

**P** Autumn Blaze and Sienna Glen are newer hybrid maples that hold promise for our area. Both have excellent orange-red fall color.

Mature height: 50-60'

Zone: 3-4

Growth rate: Moderate

**See at:** Harvest Creek Trail System between Durston & Oak





**B  
P**

**MAPLE, NORWAY** (*Acer platanoides*)

One of Bozeman's most beautiful street trees. It is drought tolerant and does well in urban conditions.

Mature height: 40-50'

Zone: 3-7

Growth rate: Moderate

**See at:** 721 N. Bozeman-'Schwedler'  
1014 S. 6th-'Emerald Queen'  
201 Lindley Place-'Crimson King'

**B  
P**

**MAPLE, RED** (*Acer rubrum*)

Red Maple does better with regular irrigation. Has orange-red fall color.

Mature height: 50'

Zone: 3-8

Growth Rate: Moderate to Fast

**See At:** 920 Brentwood



**P**

**MAPLE, SILVER** (*Acer saccharinum*)

Silver Maple is fast growing and has weak wood. Even though it's hardy, the best place to plant this species is in a large open area where its vigorous, water-seeking roots and weak branches will not cause damage. May cause sidewalk damage.

Mature height: 60-100'

Zone: 3-9

Growth rate: Fast

**See at:** MSU Family Housing on Garfield

**B  
P**

**MAPLE, SUGAR** (*Acer saccharum*)

The Sugar Maple is a beautiful tree with excellent orange-red fall color.

It only does well in some parts of Bozeman. Prone to sunscald.

Mature height: 50-60'

Zone: 3-5

Growth rate: Slow

**See at:** South 10th & College on 10th and 419 S. Grand



**B  
U  
P**

**MAPLE, TATARIAN** (*Acer tartaricum*)

Like the Amur Maple, this species has shrub-like tendencies and is best planted in a parks and open spaces. The single trunk form is suitable on boulevards.

Mature height: 20-25'

Zone: 3-6

Growth rate: Moderate

**See at:** Bozeman City Shops, south side—200 block of East Aspen  
and 702 Hunters Way





**OAK, BUR** (*Quercus macrocarpa*)

**B**  
**P** Bur Oak is one of our most stately trees. It is drought resistant and tolerates a wide range of soil types and urban conditions. It is strong wooded and has few pest problems.

Mature height: 60-70'

Zone: 3-8

Growth rate: Slow

**See at:** 403 West Alderson and Centennial Park, north east corner

**OAK, NORTHERN RED** (*Quercus rubra*)

**B**  
**P** This hardy street tree of the Midwest is being trialed in Bozeman.

Mature height: 60'

Zone: 4-8

Growth rate: Moderate

**See at:** east side boulevard on Ferguson between Durston & Cascade and West Glen Park, south east corner off of Meriweather



**PEAR, USSURIAN** (*Pyrus ussuriensis*)

**B**  
**U** The hardiest of all pears and the least susceptible to fire blight. Flowers are light pink to white, bears little or no fruit. Protect from deer.

Mature height: 20-30'

Zone: 3-6

Growth rate: Moderate

**See at:** 548 E. Babcock on Wallace



**PINE** (*Pinus*)

**P** Although several evergreens have been planted as street trees, in general, Pines are not acceptable due to spreading root system and sight triangle visibility. Severe pruning is required to remove limbs causing encroachment and visibility problems.

**See at:** MSU Interpretive Center Area, west side of parking lot - Bristle

cone Pine (*Pinus aristata*), Limber pine (*Pinus flexilis*)

MSU Brick Breeden Fieldhouse south side—Ponderosa Pine (*Pinus ponderosa*)

1th & College by MSU Sign—Austrian Pine (*Pinus nigra*)

MSU Willson Courtyard—Scotch Pine (*Pinus sylvestris*)

MSU Hedges Hall, west side—Lodgepole Pine (*Pinus contorta*)

**POPLAR** (*Populus species*)

**P** Cottonwood, Poplar, and Aspen are members of the *Populus* family, all grow fast and have weak wood. Some are native river-bottom species with water-seeking, suckering root systems and are susceptible to a wide variety of pests.

Mature height: 40-100'

Zone: 2-7 varies

Growth rate: Fast

**See at:** Bozeman Ponds



### **SPRUCE** (*Picea*)

**P** Although evergreens have been planted as street trees, in general, Spruce are not acceptable due to spreading root system and sight triangle visibility. Severe pruning is required to remove limbs causing encroachment and visibility problems.

**See at:** MSU Interpretive Center Area at 11th & College—  
 Engelmann Spruce (*Picea engelmannii*)  
 Blackhills Spruce (*Picea glauca* var. *densata*)  
 Colorado Spruce (*Picea pungens*), both green & blue  
 Norway Spruce (*Picea abies*)

### **WILLOW, GOLDEN** (*Salix alba*)

**P** These large willows have bright yellow branches and are weak wooded. Willows prefer moist areas and are most suitable for parks and open spaces.

Mature height: 40'-50'

Zone: 2-8

Growth rate: Fast

**See at:** Bozeman Ponds, southeast edge of east pond

### **WILLOW, LAUREL LEAF** (*Salix pendantra*)

**P** This native willow has shiny green leaves and like other willows has weak wood and prefers moist areas. Only suitable for parks and open spaces.

Mature height: 30'-35'

Zone: 2-5

Growth rate: Fast

**See at:** East Gallatin Recreation Area, west of parking lot



Image compliments of Bozeman Survey Project, Cooper Park, Looking South, 2008\* by [Kyle Bajakian](#)





## **COST SHARE PROGRAM**

The Cost Share Program is designed to provide trees along city streets at a shared cost between Bozeman homeowners and the City of Bozeman's Forestry Division. We hope to encourage a diverse selection of hardy species for our community's forest. To qualify for this program:

- Planting site must be on city property, inside city limits
- Site must be to final landscape grade and suitable for species selected
- Forestry Division must be informed of underground irrigation
- Homeowner agrees to water tree regularly
- Limit ONE tree per applicant
- Tree Replacement vouchers are not for use with this program

The Cost Share Program opens in mid-March and has a limited number of trees available. Participation in the program is on a first received basis with clip-out applications available in the Bozeman Daily Chronicle, as well as at the City Shop Complex and City Hall. Applications will also be available for download at [www.bozeman.net/bozeman/forestry/CostShare](http://www.bozeman.net/bozeman/forestry/CostShare) once the program opens.

Trees will be 1-1/2" minimum trunk diameter and will be installed by City of Bozeman Forestry Personnel by the end of June. Cost varies from year-to-year.

For additional information call (406) 582-3226.



Image compliments of Bozeman Survey Project, 700 N. Wallace, looking North, 2008" by [Kyle Bajakian](#)



## **TREE REPLACEMENT PROGRAM**

The Tree Replacement Program is a program where the City of Bozeman Forestry Division contributes toward the purchase of replacing boulevard trees that have been lost due to insect damage, disease, or vandalism. Replacement trees must be planted on the city boulevards—No Exceptions!

Homeowners may obtain a \$75 voucher for every 6” in tree diameter. Site inspections may be scheduled by calling 582-3227. Dead boulevard trees or those in very poor condition will be removed at the discretion of city arborists, along with stump grinding for trees over 6” in diameter.

To be eligible for this program, replacement trees must be placed in accordance with city policy:

- Inspected and removed by city forestry personnel
- Minimum diameter of 1.5”
- Not conflicting with underground or overhead utilities
- Not encroaching into traffic sight triangle or signage
- Spaced within the proper distances from existing trees (some sites may not have room for a replacement tree do to existing trees/utilities)

Property owners and local nurseries participating in this program must adhere to the City of Bozeman Forestry Division’s planting specifications.

Vouchers are valid until December 31 of the year they are issued. For more information please call 582-3227.

## **THINGS TO REMEMBER**

When touring the neighborhoods to view these trees, please respect the property and privacy of those who reside at the corresponding addresses.

**Tree Planting Permits are required from the City Forestry Department before any planting can occur.** This helps with proper locations and species as well as keeping the city tree inventory up to date. 582-3200.

Visit the City Forestry webpage at [www.bozeman.net](http://www.bozeman.net), go to Departments, then Public Service, then Forestry.

Please reference the “Setting Down Roots in our Community” brochure for additional information.

## **COMMON MYTHS**

**#1: ROOTS WILL GROW DEEPER WHEN THE TREE IS PLANTED DEEP—** Trees should be planted with the root flare visible, if planted deeper and the roots survive they will grow upward. This will cause sidewalk damage and problems in the lawn area.

**#2: IF A LITTLE MULCH IS GOOD, A LOT OF MULCH IS BETTER—** No more than 3 to 4" of mulch is needed and should be kept 6" away from the trunk. Too much mulch can disrupt soil moisture and keeping it away from the trunk avoids rodent damage and infection.

**#3: DRESSING WOUNDS WILL STOP ROT—** Trees have a natural process of sealing off wounds. Dressing wounds to prevent rot has not been proven helpful.

**#4: WHEN BRACING TREES DO IT TIGHTLY—** In order for trees to stimulate the proteins to bond with calcium which strengthens cell walls trees need to be able to sway. Bracing tightly could cause a tree to be less sturdy. Remove bracing after 2 seasons to avoid girdling the trunk as it grows.

**#5: TOPPING TREES TO REDUCE HEIGHT DOES NOT CAUSE INJURY—** The crown and roots of a tree are injured causing the tree to become hazardous. Drop crotch pruning is the preferred method.

## **THE CITY OF BOZEMAN FORESTRY DIVISION**

Forestry Division personnel are ISA Certified Arborists who prune city trees, diagnose them for insect and disease problems, remove dead and dying trees, and replace them according to the Arbor Specifications Manual. Forestry personnel work to maintain the Bozeman urban forest with funding from a yearly property assessment mandated by the City Commission.

## **THE BOZEMAN TREE ADVISORY BOARD**

A citizen advisory board appointed by the City Commission. If you are interested in serving as a volunteer check [www.bozeman.net](http://www.bozeman.net).

*City of Bozeman*

City Shop Complex  
814 N. Bozeman Ave.  
P.O. Box 1230  
Bozeman, MT 59715

Phone: 406-582-3200  
Fax: 406-582-3201  
[www.bozeman.net](http://www.bozeman.net)

