# Tree Landscape Planting

- The value of Woody Plant Landscaping
- Locally Adapted Species List
- Tips for Successful Planting
- Pierre Ordinances—Public Needs to Know



Community Tree Statistics:

"Trees properly placed around buildings can reduce air conditioning needs by 30 percent, and can save 20—50 percent in energy used for heating" - USDA

"Healthy, mature trees add an average of 10 percent to a property's value." - USDA

sh *** X  Buckeye X  X	× × × ×	45	Prome	A I	
Black Ash *** ad' Ohio Buckeye	× × ×		20	0	Greenish white bark, root suckers
ad' Ohio Buckeye	××	50	25	- 0	Less prone to emerald ash borer
	×	45	40	- 0-	June flowering, messy fruit
		45	40	0-	Native, long-lived, hard to transplant
Northern Catalpa X	×	09	20	0	Orchid-like flowers, large leaves, seeds
Amur Corktree * X	×	45	45	- 0-	Corky bark, tolerates variety of soils
Cottonwood	×	06	09	-	Fast growing, large tree, weak wood
Green Ash, all varieties *** X	×	50	25	- 0	Hardy, prone to emerald ash borer
Kentucky Coffeetree X	×	65	45	- 0	Females have pods, few pest problems
'Redmond' & American Linden X	×	50	20	- <	Dense, pyramidal form, under utilized
Littleleaf Linden X	×	65	25	F <	Good street tree, pyramidal form
Mongolian Linden X	X	45	25	4	Very hardy, great fall color

<sup>\*</sup> Very tolerant of alkaline soils. \* \* Small trees should not be planted near, or in locations where they will obstruct street signs. See Ordinance 6-4-104 \*\*\* See back page

Tall Deciduous Shade Trees	Boulevard Tree	Shade Tree	Height	Crown Spread	Shape	Features
Ginkgo (male only)	×	×	65	35	Ą	Fan-shape leaf, gold fall color
Hackberry *	×	×	50	40	$\nabla$	Fairly insect/disease free, showy bark
Honeylocust, all varieties *	×	×	50	30	9	Less dense, showy varieties, cankers
Silver Maple	×	×	75	50	$\nabla$	Not for narrow Blvd., chlorosis issues
'Autumn Blaze' Maple	×	×	45	35	0-	Good fall color, less chlorosis issues
European White Poplar *	×	×	55	50	0	Weak wood, root suckers, showy leaf
Black Walnut	×	×	50	30	0	Slow start, walnuts, hard to transplant
White Willow		×	85	75	0-	Fast growing, short-lived, weak wood
Tall Coniferous Trees						
Douglas-fir		×	09	20	Ą	Short needles, Very ornamental
European Larch		×	70	25	Ą	Golden fall color, drops needles in fall
Austrian Pine		X	55	30	9	Similar to Ponderosa, denser branching

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Tall Coniferous Trees	Boulevard Tree	Shade Tree	Height	Crown Spread	Shape	Features
Ponderosa Pine *		X	08	52	ó	Native, long needles, drought tolerant
Scotch Pine		X	45	35	♦	Older bark orange. Shorter needles
Black Hills Spruce *		X	50	20	♦	Native, short blunt needles
Colorado Spruce		X	45	20	Ą	Can have blue growth, sharp needles
Small Deciduous Trees **						
Apple, varieties of proven perf.		X	35	35	0	Prone to apple scab & maggot
Apricot, varieties of proven perf	X		20	15	0-	Pinkish flowers in Spring, reliable fruit
European & Paper Birch			40	20	♦	White bark, prone to birch borer
River Birch			40	20	♦	Bronze bark color, prone to chlorosis
'Canada Red' Cherry & Shubert	×		30	20	$\triangle$	Foliage turns red with age, suckers
'Northstar' Cherry	X		30	20	J	White spring flowers, edible fruit
Amur Chokecherry	X		35	20	9	Bronze color bark attractive in winter

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	Boulevard	Shade		Crown		
<b>Small Deciduous Trees</b>	Tree	Tree	Height	Spread	Shape	Features
Common Chokecherry	X		30	20	$\triangle$	White flowers, edible berries, suckers
Crabapple, all adapted varieties	×		15	10	$\triangle$	Showy white/Pink flowers,
'Sensation' Boxelder	×	X	30	25	0-	Red fall color, attracts boxelder bugs
Thornlus Cockspur Hawthorne	×		25	25	0-	White flowers, red fruit
Japanese tree Lilac *	×		25	20	0-	Showy white flowers in June
Amur Maple	×		15	10	0-	Red/Orange fall color. Prefers acid soil
Mountain Ash, European/showy	×		30	20	0-	Bronze bark/white flower/orange fruit
Pear, ones of proven performance			40	30	6	Good fruit when survives frost
Plum, ones of proven performance			20	15	0	Fruit, thorn-like side branches
Small Coniferous Trees * *						
Eastern Red Cedar			40	20	♦	Hardy conifer, turns purplish in winter
Juniper, upright of good perform.			35	10	9	Hardy conifer, good screen planting

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## **Tree Planting Tips**

If a tree is planted correctly, it will grow twice as fast and live at least twice as long as one that is incorrectly planted.



### **Planting Balled or Containerized Stock**

Ideally, the tree planting site should be dug or roto-tilled one foot deep and approximately five times the diameter of the root ball. This prepared soil will encourage root growth beyond the root ball and result in a healthier tree.

Beware that sometimes soil is heaped up over the roots in the tree nursery. Make sure you scrape or dig away the soil at the top of the root ball until you encounter the root collar, where actual roots flare out from the base of the stem. Measure the height of the root ball from that point to the bottom, and dig the hole for the tree in the middle of your prepared area for that depth.

Digging the hole shallow, and mounding soil up to the root collar will be better for the tree than digging it too deep and leaving a basin. The hole should have sloped sides and enough width to allow you to easily work around it.

In transplanting, be sure to keep soil around the roots. Always handle your tree by the ball, not by the trunk or branches. Don't let the root ball completely dry out. Prevent root girdling by vertically cutting any roots that show tendencies to circle the root ball. Circling roots can eventually strangle your tree as it grows bigger.

After placing the tree, pack soil firmly but not tightly around the root ball. Water the soil and place a minimum of a three foot circle of mulch (organic is best) two to four inches deep around the tree. Leave an area approximately six inches around the base of the tree free of mulch to provide aeration and prevent rodents from taking up residence where they may chew on tender new bark.

### **Pierre Street Tree Ordinances**

Pierre Street Tree Ordinances The Public Should Be Aware Of: For Full Text: http://ci.pierre.sd.us/

## Section 6-4-101. Location of trees - distance from street corners and fireplugs.

No street tree shall be planted closer than 5 feet of any street corner, measured from the property line extended. No street tree shall be planted closer than 10 feet of any fireplug.

## Section 6-4-102. Shade trees not permitted within limits of the street - unlawful to injure grass, trees, shrubs, flowers and plants - penalty.

Shade trees may be planted between the sidewalk and the curb but not within three feet of the curb.

## Section 6-4-104. Trimming of trees required - city trimming at owner's expense.

The occupant of any private premises or the owner of the same if not occupied, abutting on any public street, road or alley within the city shall keep all trees standing upon such premises or between the same and the center of the adjoining street, road or alley so trimmed that no bough or branch thereof shall be lower than twelve feet above the surface of the street, road or alley or eight feet above the surface of any sidewalk thereon and shall keep all such trees trimmed so that no trunk, limb or branch thereof shall in any way or at any time interfere with the movement of delivery, maintenance, garbage disposal, and emergency service vehicles or come in contact with any street lighting, power, or other electrically charged wire when such wires are lawfully strung on posts located on any public street, road or alley or between the lot lines and curb of any street. Said occupants or owners shall remove all dead, diseased or dangerous trees, or broken or decayed limbs, which constitute a menace to the safety of the public, and shall trim any tree or shrub which interferes with visibility of any traffic control device or signs.

## Section 6-4-105. Declaration of policy on removal of trees infected with Dutch Elm disease.

The City Commission does hereby determine that the health of elm trees within the corporate and territorial limits of the City of Pierre is threatened by a fatal disease known as Dutch Elm disease; and it has further determined that the loss of elm trees growing upon public and private property would substantially depreciate the value of property within said limits and impair the health, safety, general welfare and convenience of the public. It is declared to be the intention of the Pierre

City Commission to control and prevent the spread of this disease and this Ordinance is enacted for that purpose.

#### Section 6-4-119. Tree Topping.

It shall be unlawful as a normal practice for any person, firm, or city department to top any street tree, park tree, or other tree on public property. Topping is defined as the severe cutting back of limbs to stubs larger than three inches in diameter within the tree's crown to such a degree so as to remove the normal canopy and disfigure the tree. Trees severely damaged by storms or other causes, or certain trees under utility wires or other obstructions where other pruning practices are impractical may be exempted from this ordinance at the determination of the Director of Public Works or by some qualified person acting for him.

### **Emerald Ash Borer**

\*\*\* The emerald ash borer is a new exotic beetle from Asia, first identified in southeast Michigan in July 2002. The larvae aggressively attack live ash trees by feeding in the inner bark, the food transfer layer of trees, and outer sapwood, eventually girdling and killing branches and entire trees. Millions of trees have been killed in southeast Michigan, and the pest has spread to several additional states. Although it is not yet known to have spread to South Dakota, experts agree that it eventually will. Although ash species are still being recommended for planting, this serious new pest threat emphasizes the need to diversify our community landscapes.

For more information on the emerald ash borer, visit the following web sites:

USDA Forest Service: www.na.fs.fed.us/spfo/eab/index.html

Michigan Department of Agriculture: www.michigan.gov/mda/0,1607,7-125-1568\_2390\_18298---,00.html

Michigan State University: www.msue.msu.edu/reg\_se/roberts/ash/

Sponsors:
City of Pierre
Division of Resource Conservation & Forestry
Pierre Arbor Committee
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