

Street Tree Guide

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We would like to thank the contributors listed below for the important role they played in creating this guide.

Contributors:

Arbor Day Foundation: Educational illustrations

J. Frank Schmidt & Son Company: Photos & tree information

Staff Contributor:

Michelle Owen, Director of Public Works

Jenny Sullivan, Data Analyst

Tree Board Members:

Lyle Kuchenbecker– President

Christine Howard

Eric Wirfs

George Wheaton

Marria Knight



Baker City Public Works Department
1655 1st Street, Baker City, OR 97814
Phone: 541.523.2063
www.bakercity.com

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Introduction

Trees are a valuable asset to any community. Research has shown trees offer many benefits, including increased property values, energy savings, and improved soil, air, and water quality. In business districts, trees enhance economic vitality and social experiences.

Baker City recognizes the value of trees and has created a Tree Board, implemented ordinances regarding trees, established tree replacement and planting programs, and has been designated a Tree City USA through the Arbor Day Foundation for nearly three decades.

The Tree Board advises property owners about proper tree planting, pruning, maintenance, disease and safety concerns. Please remember a City permit is required before planting or removing a tree within the city right-of-way, alongside streets, or in alleys. The Tree Board reviews all permits to ensure trees do not interfere with utilities, impair safety, or block parking access.

By creating this guide, the Tree Board hopes to improve and beautify the community's existing street tree inventory by providing educational and reference material to further encourage our community to plant and maintain trees.

Trees Not Permitted and why

Aspen– all, due to short life span

Birch– any, due to propensity for borers despite published resistance

Box Elder– due to pest propensity

Buckeye– (Horse Chestnut) due to fruit production

Canada Red Chokecherry– propensity for suckering

Catalpa– due to seed pods

Cottonwood– due to short life, propensity for failure and water requirements

Elm– Chinese and Siberian. American Elm permitted if listed as Dutch Elm Resistant. Due to propensity for Bacterial infection and failure potential.

Fruit tree– any tree producing fruit larger than 1/2 inch diameter.

Ginkgo– female prohibited due to seed production and odor

Hawthorne– due to local propensity for bacterial Fire Blight

Honey Locust– due to propensity for borers

Horse Chestnut- (Buckeye) due to fruit production

Locust– Black and yellow, due to propensity for borers

Norway Maple– too large for street tree

Quaking Aspen– due to short life span

Plum– any, due to short life span

Poplar– any; due to short life span, propensity for failure and water requirements

Redbud– due to propensity for suckering

Red Maple– due to mono-culture avoidance

Russian Olive– due to invasive nature

Silver Maple– due to mono-culture avoidance

Sycamore– due to propensity for bacterial infection

Walnut– any, due to fruit production

Willow– any; due to short life span, propensity for failure and water requirements

Considered on a case-by-case basis

Maple

Ash– Manchurian Ash

Conifers

Dogwood

How to Use This Guide

This guide is divided into sections determined by the width, height, and spacing requirements that trees will need at maturity. Specific heights, crown spreads, and other tree characteristics can be found under the description of each tree in this guide.

Small trees- can be planted beneath utility lines and in smaller planting strip. Typical their mature height does not exceed 25 feet.

Medium- are predominately planted for their shade and general landscape uses. Typical mature height is between 30-40 feet.

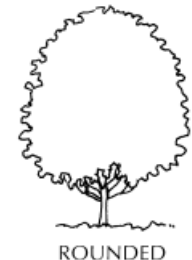
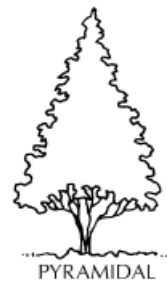
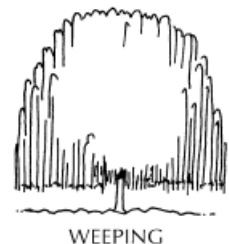
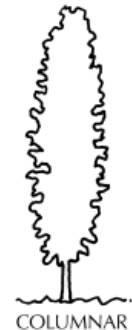
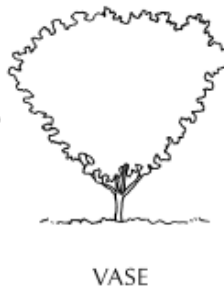
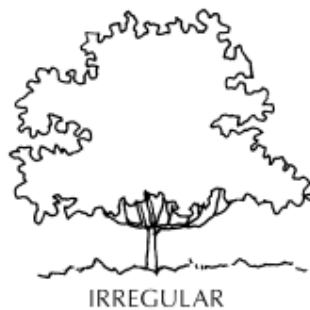
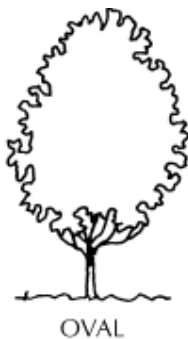
Large- When selecting a tree from this class, be sure you have ample room to accommodate it at maturity. Typical height at maturity is 40-60 feet.

Extra Large- Please ensure ample room to accommodate this tree at maturity. These trees are 60 to 100 feet tall at maturity.

Conifers- provide year round greenery, screening, and serve as excellent wildlife sanctuaries. They generally should not be pruned and therefore need large growing areas away from buildings, sidewalks and driveways.

Tree Shapes

These illustrations are examples of tree shapes at maturity. This gives you an idea of how the tree will look and help you plan. The tree shapes are referred to under each tree's description in this guide.



Street Trees & Public Right-of-Ways

Street trees are trees, shrubs, bushes and all other woody vegetation taller than 2 feet, on land lying between property lines on either side of all streets, avenues, or ways within the city.

A Public Right-of-Way is an area allowing passage of the public- people, vehicles or utilities. This includes passageways such as streets, pedestrian connections, alleys, utilities and other forms of public infrastructure.

USDA Hardiness Zones

Referring to these zones can help you decide which type of tree to plant for optimal growing success. The hardiness zones which are most applicable to Baker City are:

Zone 3 and Zone 4 (Zone 5 is highly susceptible to winter kill)

Street Tree Planting/Removal Permit

If you want to plant or remove a tree from a Public Right-of-Way (generally, the area located between the street and sidewalk).

1. Obtain a permit through the Public Works Department. Permits can be obtained online at www.bakercity.com or in the Public Works Department in City Hall at 1655 1st Street, Baker City, OR. If you have questions, you may contact City Hall by calling (541) 523-6541.
2. Submit it to Public Works Department staff.
3. You will be notified of a decision regarding your permit, using the contact information you listed.

There is no charge for the permit.

Plan Before You Plant

Selecting a tree meeting site conditions is the most important factor in guaranteeing its success.

Before you dig you must call the Oregon Utility Notification Center - 811 or www.digsafelyoregon.com

Landscaping Purpose. To provide shade, color, screening from wind or to enhance wildlife habitat.

Planting Site. Are there overhead or underground utilities present? Make sure you give your tree adequate room to grow. Try to envision the tree 50 years in the future.

Soils can be highly variable in urban areas. Too much or too little drainage often causes trees to decline and die. Check with your county extension office for soil testing information.

Maintenance. All trees need regular watering and proactive inspection for pests and disease. Planning now can save time and money later.

Mature size. We encourage you to choose a tree to fill the space available for height and width. Please **do not** plant a small tree with space available for a large tree.

Tree Planting Instructions

The three most common types of planting stock found at local nurseries are in containers, bare root, or balled and burlapped (B&B). Planting procedures vary, depending on the type of stock selected. Each has advantages and disadvantages, but a sturdy tree will result by carefully following the procedures outlined below.

1. Dig a hole 2-3 times as wide as the root ball and the **same depth** as the tree was planted in the nursery. Make sure the sides of the hole are rough and uneven. This helps the roots become established in the native soil. Continue with the steps below, depending on the type of stock you are planting.



Container Stock. Gently remove container and inspect the root ball for circling roots. If only a few are found, gently separate and spread them outward. Eliminate masses of circling roots by cutting 2-4 vertical slices on the root ball sides to a depth of one-half inch and cut a shallow "x" on the bottom of the root ball. Cutting circling roots in this way allows growth of new roots into the surrounding native soil. Place the root ball in the planting hole, making sure that the top is level with or slightly higher than the surrounding ground.



Balled & Burlapped (B&B). Carefully set the tree into the planting hole so that the top of the root ball is level with or slightly higher than the surrounding ground. If the tree is in a wire basket, completely remove it, if possible, or remove the upper half after the tree is in its final planting position. Take care not to damage the roots or disturb the integrity of the root ball. Adjust the position using pressure on the root ball; don't move it by twisting the trunk.



Bare Root. Be sure to keep the roots moist at all times! Prune away any damaged or broken roots. Place the tree in the hole at the same depth that it grew in the nursery. Do not allow roots to curl once inside of the hole. Add soil until the tree can stand by itself. Hold it straight while the hole is being filled. Gently push soil under and between roots with your hands to remove large air pockets. If the tree settles in the hole, gently pull it back to the proper depth.

2. Stand back and inspect the tree from several sides to make sure it's straight. If not, move the tree in the hole until it stands straight. Backfill with soil around the roots until the hole is half full. Water sparingly to settle the soil and remove air pockets. Lightly tamp the soil in with the shovel handle to compress the soil around the root ball, taking care not to damage the roots. Continue adding soil until the hole is filled. **Do not** cover the top of the root ball with soil.
3. With the remaining soil build a basin around the edge of the filled hole. Fill the basin with water several times and allow it to soak into the root ball between each filling. Add soil where excessive settling has occurred.
4. Fill the basin with 2-3" of wood chips. Do not place chips directly against the trunk, as this may promote trunk rot.
5. Unless you live in a windy area, it is not necessary to stake the tree. If you do stake, remove them after one year. Stake if the root ball is fractured or the trunk is not stable.

Maintaining Healthy Trees

Once a tree is planted there are several things that must be done to help ensure its survival. Most of the threats to the health and life of young trees can be avoided or reduced with a few simple precautions. Please read the following post-planting care tips.

Watering the tree regularly during the first year is critical to its establishment. Apply about 1 1/2" of water per week at one time, rather than watering daily. Place a shallow pie pan under the tree canopy and water the area until 1 1/2" of water accumulates in the pan. Depending upon your sprinkler system, it may take 1/2 hour to 3-4 hours. Begin watering in the spring when soils start drying out and continue watering until fall. Deduct rainfall received during the week from the 1 1/2" total. Water more often in periods of drought and above normal temperatures.

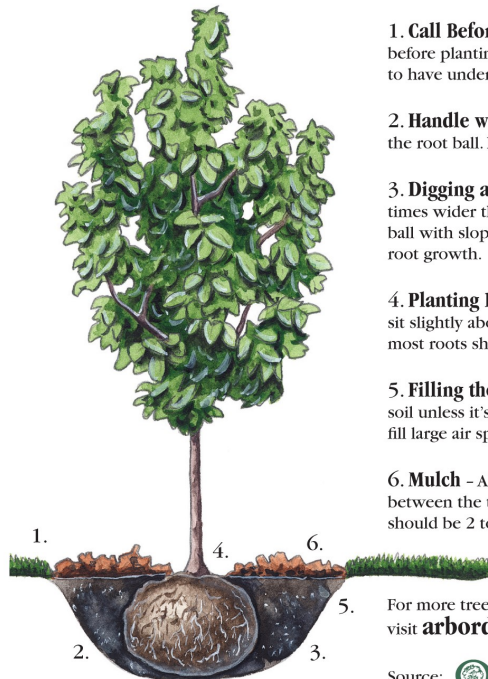
Mulching is highly recommended. Mulch with wood chips to help retain soil moisture and reduce weeds. It also protects the tree from lawn mowers and weed whippers. Mulch with 2"-3" of material at a 6' diameter. Keep mulch a few inches away from the tree trunk to avoid trunk rot. As mulch decomposes, it enriches the soil and provides organic matter and beneficial micro-organisms.

Fertilizing supplies nutrients necessary for normal and accelerated growth. Fertilizers are natural or synthetically produced elements applied to the soil or foliage of plants. With the exception of nitrogen, fertilizing with other nutrients is usually not required unless a known deficiency exists. As long as your trees have normal leaf size and color and appear to be growing well, the nutrients in the soil are probably adequate.

If a deficiency is suspected, a soil analysis should be done to determine what nutrient or mineral is deficient. More information regarding testing can be provided by the Baker County Extension Service. After testing, a report is prepared for you to identify what nutrients need to be applied to correct any deficiencies. Only those nutrients which are known to be deficient should be applied since over application of certain elements over time can be harmful to your trees.

Over fertilization can contribute to ground water contamination or pollution of adjacent bodies of water. If nitrogen is to be applied, slow release formulas are recommended as they will limit the chances of root 'burning', which can be caused by some of the quick release, high concentrate, nitrogen fertilizers. Natural organic forms of nitrogen are your best choice for fertilizing.

Six things you should know when planting a tree.



1. Call Before You Dig - Several days before planting, call the national 811 hotline to have underground utilities located.

2. Handle with Care - Always lift tree by the root ball. Keep roots moist until planting.

3. Digging a Proper Hole - Dig 2 to 5 times wider than the diameter of the root ball with sloping sides to allow for proper root growth.

4. Planting Depth - The trunk flare should sit slightly above ground level and the top-most roots should be buried 1 to 2 inches.

5. Filling the Hole - Backfill with native soil unless it's all clay. Tamp in soil gently to fill large air spaces.

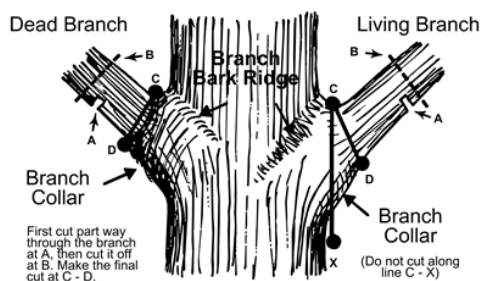
6. Mulch - Allow 1 to 2 inch clearance between the trunk and the mulch. Mulch should be 2 to 3 inches deep.

For more tree-planting tips and information, visit arborday.org.

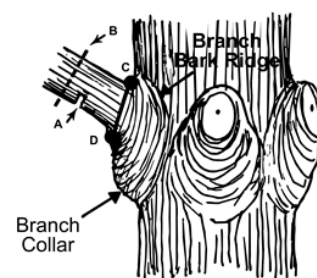
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Pruning is the most common tree maintenance procedure. Pruning to improve structure or enhance vigor is associated with mature or aging trees. When planting young trees, prune to remove the dead, broken or crossing branches. Do not apply wound dressings to the cut area after pruning. It is not necessary and may impede the tree's natural healing process. For a list of licensed tree pruners, please contact the Baker City Public Works Department.

Proper Pruning Principles



Hardwoods



Conifers



Pests. Some of the more common

forms of pests include insects, mites, bacteria, fungi and viruses. There are many organisms in the landscape that are considered pests because of the amount of damage they cause the host plant or because they may be present in such large numbers that they become undesirable. However, some of these organisms **do not harm** plants but are truly beneficial to the host plant and are a valuable component of the ecosystem.



problems.

Many pest problems occur as a result of improper watering, poor plant stock, or an inferior planting site. Trees that are poorly adapted to a particular site are usually the ones most affected by pests. Choosing the appropriate tree and planting it in an environment capable of sustaining good growth will significantly reduce many pest

Weeds and the Use of Herbicides. Keep the area around your tree free of weeds and other competing plants. Use wood chip mulch to suppress the weeds or remove them by hand when possible. Avoid the use of herbicides near the tree, as certain formulations may seriously injure or kill the tree. If you do decide to use herbicides, avoid getting any on the leaves, branches, trunk or near the root area of any plant you wish to keep. Beware of fertilizers containing weed killers. These types of 'weed and feed' fertilizers **should not be used** over areas where tree roots are growing, as they can seriously injure or even kill trees. Remember that tree roots extend well beyond the perimeter of the outermost branches.

Small Trees

American Hophornbeam (*Ostrya virginiana*)



| | | | |
|---------------|-----|-------------------|---------------------------|
| Zone | 5 | Shape | Round, shrubby small tree |
| Height | 10' | Foliage | Cream –yellow and green |
| Spread | 8' | Fall Color | Yellow |

Brightly variegated foliage graces this diminutive birch. Outer portions of the leaves are cream white to yellow, while the center remains green. The tree has small leaves than typical of the species and is much smaller at maturity.

Forest Pansy Botanical Name: *Cercis canadensis*



| | | | |
|---------------|-----|-------------------|--------------------------------------|
| Zone | 5 | Shape | Upright rounded |
| Height | 20' | Foliage | Deep purple painting to bronze-green |
| Spread | 25' | Fall Color | Yellow orange |

Flower: Magenta rose: A highly prized red leaved selection of Eastern Redbud. Delicate magenta rose flowers appear before the foliage. New growth is exceptionally glossy.

Thornless Cockspur Hawthorne Botanical Name: *Crataegus crus-galli* "Inermis"



| | | | |
|---------------|-----|-------------------|------------------------|
| Zone | 4 | Shape | Rounded spreading |
| Height | 25' | Foliage | Leathery, deep green, |
| Spread | 25' | Fall Color | Orange or rusty orange |

Flower: Small, white in 2" clusters, **Fruit:** Dark red 3/8"-1/2", persistent. This small adaptable tree has the excellent foliage of *Crataegus crus-galli* while complexly lacking the dangerous thorns.

Crimson Cloud Hawthorne Botanical Name: *Crataegus laevigata* "Inermis"



| | | | |
|---------------|-----|-------------------|--|
| Zone | 4 | Shape | Oval, with upright spreading wavy branches |
| Height | 25' | Foliage | Small glossy green |
| Spread | 18' | Fall Color | |

Flower: Bright red with white centers; **Fruit:** Bright red. This tree is distinctive for its wavy branch habit and bright red flowers with white centers.

Small Trees

Paul's Scarlet Hawthorne

Botanical Name: *Crataegus laevigata* 'Pauls Scarlet'



| | | | |
|---------------|-----|-------------------|-------------------------------|
| Zone | 4 | Shape | Dense upright spreading, oval |
| Height | 22' | Foliage | Small, deeply lobed, green |
| Spread | 20' | Fall Color | |

Flower: Double, scarlet to rose; **Fruit:** Sparse deep red. The brilliant colored flowers make this tree the showiest of all the Hawthorns in the spring. This selection is susceptible to leaf spot.

Marilee Crabapple

Botanical Name: *Malus* 'Jarmin'



| | | | |
|---------------|-----|-------------------|-------------------------------|
| Zone | 4 | Shape | Narrow upright, inverted cone |
| Height | 24' | Foliage | Medium green |
| Spread | 10' | Fall Color | |

Flower: Double large white; **Fruit:** Virtually fruitless. Pink buds open to unusually large, white double blooms. Unique for its stiffly upright, narrow form and virtually fruitless nature, it is an excellent choice for courtyard settings and street scapes, and for use near utility lines.

Toba Hawthorne

Botanical Name: *Crataegus* x *mordenensis* "Inermis"



| | | | |
|---------------|-----|-------------------|----------------|
| Zone | 3 | Shape | Upright, round |
| Height | 20' | Foliage | Dark green |
| Spread | 20' | Fall Color | |

Flower: In clusters, double white, fading to pink, fragrant. **Fruit:** Red 3/8". Selected by the Morden Station in Canada, A hardy tree with a well behaved branch pattern.

Aristocrat Pear

Botanical Name: *Pyrus calleryana* "Inermis"



| | | | |
|---------------|-----|-------------------|---|
| Zone | 4b | Shape | Pyramidal,, with open, spreading branches |
| Height | 40' | Foliage | Narrow, dark green, glossy |
| Spread | 28' | Fall Color | Deep red |

An outstanding pear selection with an unusual growth habit, Aristocrat has an open, informal appearance. Branch angles are wider than other pears, thus more resistant to storm damage. Highly rated by the Ohio Shade Tree Evaluation project.

Small Trees

Jack Pear

Botanical Name: *Pyrus calleryana* "Jack"



| | | | |
|---------------|-----|-------------------|----------------------|
| Zone | 4 | Shape | Compact upright oval |
| Height | 16' | Foliage | Dark green |
| Spread | 10' | Fall Color | Yellow |

Flower: White. Tight and upright in form, this cultivar is ideal for narrow streets and planting beneath utility wires. Its dwarf growth rate results in a cultivar that matures at less than half the size typical of the species. Its density and upright habit give the unusual combination of a forma appearance in a low maintenance tree.

Chanticlear Pear

Botanical Name: *Pyrus calleryana* "Chanticlear"



| | | | |
|---------------|-----|-------------------|-----------------------------|
| Zone | 4 | Shape | Upright, narrowly pyramidal |
| Height | 40' | Foliage | Green, glossy |
| Spread | 15' | Fall Color | Reddish |

Flower: White, in clusters. A densely growing, narrow selection suitable for street plantings. It is resistant to fireblight and much less susceptible to winter breakage than Bradford.

Wireless Zelkova

Botanical Name: *Zelkova serrata* "Schmidtlow"



| | | | |
|---------------|-----|-------------------|------------------------|
| Zone | 5 | Shape | Broadly spreading vase |
| Height | 24' | Foliage | Medium green |
| Spread | 36' | Fall Color | Red |

Selected for its low height and broad spreading shape, this cultivar has an ideal shape for street plantings under utility lines. Its red fall color is a surprising bonus feature.

Medium Trees

Hedge Maple

Botanical Name: *Acer campestre* (Carnival is varigated)



| | | | |
|---------------|-----|-------------------|--------------------|
| Zone | 5 | Shape | Dense and rounded |
| Height | 30' | Foliage | Dark green, glossy |
| Spread | 30' | Fall Color | Yellow |

A low maintenance, tough tree which adapts well to urban settings. Medium slow in growth rate and long lived. Attractive corky bark is striking in the winter.

Highland Park Sugar Maple

Botanical Name: *Acer grandidentatum* x *saccharum* 'Hipzam'



| | | | |
|---------------|-----|-------------------|------------|
| Zone | 4 | Shape | Pyramidal |
| Height | 35' | Foliage | Dark green |
| Spread | 22' | Fall Color | Red |

Intermediate in size, this tree appears to be a hybrid between *A. grandidentatum* and *A. saccharum*. Tightly upright and pyramidal, its thick leaves are tatter resistant and turn bright red in autumn. Faster growing and more upright than typical bigtooth maples yet smaller and more heat resistant than sugar maple.

Crimson Sunset Maple

Botanical Name: *Acer truncatum* x *platanoides*



| | | | |
|---------------|-----|-------------------|--------------------------|
| Zone | 4 | Shape | Upright oval |
| Height | 35' | Foliage | Deep purple |
| Spread | 25' | Fall Color | Maroon to reddish bronze |

Heat tolerance is the distinguishing characteristic of this *Acer truncatum* hybrid. Its foliage resembles that of Crimson King, but its form is more upright and compact. Thanks to the *Acer truncatum* percentage, it flourishes in the summer heat where few purple leafed plants will grow.

Urban Sunset Maple

Botanical Name: *Acer truncatum* x *platanoides* (JFS -KW187)



| | | | |
|---------------|-----|-------------------|----------------------------------|
| Zone | 4b | Shape | Narrow pyramidal to upright oval |
| Height | 35' | Foliage | Dark green, glossy |
| Spread | 20' | Fall Color | Deep red |

Compact, upright and narrow, this tree calipers well and develops a naturally uniform canopy with minimal pruning. Easy to grow and relatively problem free, it produces few seeds and develops an ideal upright street tree form.

Medium Trees

River Birch

Botanical Name: *Betula nigra* (Cully improved)



| | | | |
|---------------|-----|-------------------|------------------------------|
| Zone | 4 | Shape | Broadly pyramidal to rounded |
| Height | 40' | Foliage | Medium to dark green |
| Spread | 35' | Fall Color | Yellow to gold |

The bark exfoliates to expose tan, pink, or orange colored younger stems, which contrast beautifully with the white barked species.

Royal Frost

Botanical Name: *Betula x*

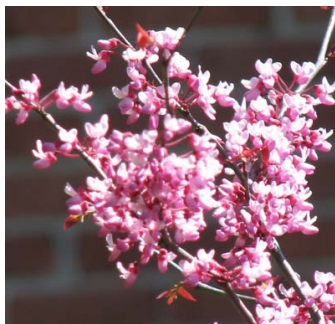


| | | | |
|---------------|-----|-------------------|--------------------------|
| Zone | 4 | Shape | Pyramidal |
| Height | 40' | Foliage | Purple-bronze |
| Spread | 25' | Fall Color | Yellow-orange to reddish |

A hybrid of Crimson Frost and Whitespire, this tree combines purple-bronze foliage with an upright pyramidal growth habit. It maintains a strong leader and shows better caliper development and density than other purple leaf birch.

Eastern Redbud

Botanical Name: *Cercis canadensis*



| | | | |
|---------------|-----|-------------------|---|
| Zone | 5 | Shape | Multi-stem or low branching tree. Somewhat flat topped. |
| Height | 25' | Foliage | Medium green |
| Spread | 30' | Fall Color | Yellow |

Flower: Reddish purple in bud, rosy-pink when open. The profuse flowers that bloom in April or May before the leaves develop make this a spring favorite. It is attractive as a tree for naturalized garden areas or as a graceful addition to a small yard.

Amur Maackia(

Botanical Name: *Maackia amurensis* KW187)



| | | | |
|---------------|-----|-------------------|---------------------------------|
| Zone | 3 | Shape | Upright vase with rounded crown |
| Height | 25' | Foliage | Medium green |
| Spread | 20' | Fall Color | |

Flower: Upright white clusters. A very hardy, small upright tree that grows well in tough environments. This nitrogen-fixing tree does well in poor soils and flowers in mid-summer when few other trees are in bloom.

Medium Trees

Black Tupelo

Botanical Name: Nyssa Sylvatica



| | | | |
|--------|-----|------------|--|
| Zone | 5 | Shape | Pyramidal when young, spreading and irregular with age |
| Height | 35' | Foliage | Dark green, glossy |
| Spread | 20' | Fall Color | Hot coppery red |

Rich green glossy foliage ignites with brilliant fall tones, ranging from scarlet to maroon, yellow and orange. Fissured grey bark provides winter interest. Adaptable to urban conditions including compacted and poorly drained soils and occasional drought.

Sourwood Gum

Botanical Name: Oxydendrum arboreum



| | | | |
|--------|-----|------------|----------------------|
| Zone | 5 | Shape | Pyramidal to rounded |
| Height | 20' | Foliage | Dark green, glossy |
| Spread | 15' | Fall Color | Orange, scarlet |

Flower: Creamy white, bell shaped. A slow-growing, small tree whose light green, bronze tinted foliage turns brilliant orange and scarlet tones in the fall. Creamy white, bell shaped clusters up to 10 inches in length smother its branches in mid-summer.

Large and Extra Large Trees

Princeton Gold Maple

Botanical Name: *Acer platanoides* "Princeton Gold"

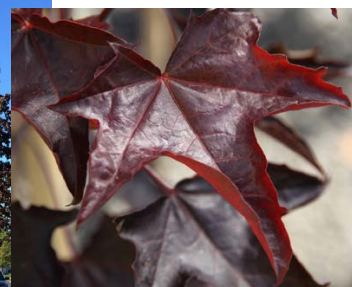


| | | | |
|---------------|-----|-------------------|---------------|
| Zone | 4 | Shape | Oval |
| Height | 35' | Foliage | Bright yellow |
| Spread | 30' | Fall Color | Yellow |

Princeton Gold is characterized by yellow foliage, particularly bright on new growth. The overall coloration is similar to Sunburst Honeylocust.

Crimson King

Botanical Name: *Acer platanoides*



| | | | |
|---------------|-----|-------------------|-----------------------------------|
| Zone | 4 | Shape | Oval when young, becoming rounded |
| Height | 40' | Foliage | Deep purple |
| Spread | 35' | Fall Color | Maroon to reddish-bronze |

The most commonly used cultivar of the purple-leaved Norway Maples. Crimson King retains its purple foliage color well from spring until fall.

Armstrong Gold Maple

Botanical Name: *Acer rubrum* "Armstrong Gold"



| | | | |
|---------------|-----|-------------------|---------------------------|
| Zone | 4 | Shape | Narrow, tightly fastigate |
| Height | 40' | Foliage | Medium green |
| Spread | 12' | Fall Color | Golden to orange |

Selected from an evaluation of hundreds of seedlings of 'Armstrong', this cultivar improves greatly on the parent, with brighter foliage color, greater foliage density, and compact, less leggy growth habit. Improved columnar form recommends it for narrow street planting sites.

Red Pointe Maple

Botanical Name: *Acer rubrum* "Frank J PP16769"



| | | | |
|---------------|-----|-------------------|-------------------|
| Zone | 5 | Shape | Broadly pyramidal |
| Height | 45' | Foliage | Dark green |
| Spread | 30' | Fall Color | Bright red |

Brilliant red fall color plus upright, broadly pyramidal form make this Schmidt introduction a standout. The refined form and foliage of the best *Acer rubrum* cultivars combine with the faster growth rate normally found in *Acer x freemanii*. A straight and dominant central leader results in strong branch angles that make it easier to grow.

Large and Extra Large Trees

Red Sunset Maple

Botanical Name: *Acer rubrum* 'Franks Red'



| | | | |
|---------------|-----|-------------------|-----------------------------|
| Zone | 4 | Shape | Upright branching, oval |
| Height | 45' | Foliage | Dark green, glossy |
| Spread | 35' | Fall Color | Brilliant orange-red to red |

Highly rated and reliable, Red Sunset has become the standard to which others are compared. Developed by J. Frank Schmidt, Jr., it is vigorous with a strong and symmetrical branching pattern. Lustrous, glossy green summer foliage changes to brilliant shades of red and orange-red in the fall.

October Glory Maple

Botanical Name: *Acer rubrum* "October Glory"



| | | | |
|---------------|-----|-------------------|----------------------------|
| Zone | 5 | Shape | Broadly oval to round |
| Height | 40' | Foliage | Medium green, glossy |
| Spread | 35' | Fall Color | Deep red to reddish-purple |

October Glory is around headed selection which is the last cultivar to color in the fall. While it is less cold hardy than most cultivars, it seems to be better adapted to areas with mild winters and hot summer temperatures.

Fall Fiesta Maple

Botanical Name: *Acer saccharum* "Bailsta"



| | | | |
|---------------|-----|-------------------|---------------|
| Zone | 4 | Shape | Broadly ovate |
| Height | 50' | Foliage | Dark green |
| Spread | 40' | Fall Color | Orange, red, |

Sturdy and compact when young, this cultivar matures to become a full size specimen with an especially symmetrical crown and thick dark green summer foliage. Autumn brings on a mix of orange, red, and yellow colors.

Paper Birch

Botanical Name: *Betula papyrifera*



| | | | |
|---------------|-----|-------------------|------------|
| Zone | 3 | Shape | Oval |
| Height | 50' | Foliage | Dark green |
| Spread | 35' | Fall Color | Yellow |

In cooler climates, this is the most permanent and desirable of all white barked birches. Slow to turn white, but a perfect chalk-white when older. Beautiful as a single stem tree or clump form.

Large and Extra Large Trees

Emerald Avenue Hornbeam

Botanical Name: *Carpinus betulus* "JFS-KW1CB"PAF



| | | | |
|---------------|-----|-------------------|----------------------------|
| Zone | 5 | Shape | Broadly pyramidal to ovate |
| Height | 30' | Foliage | Deep Green |
| Spread | 20' | Fall Color | Yellow |

A stout trunk, strong central leader, and sturdy branch arrangement led to our nicknaming this brawny tree "The Hulk". Vigorous and easy to grow, its performance is impressive on the street. When other look tired during the dog days of summer, Emerald Avenue maintains healthy deep green foliage, thanks to its superior heat tolerance.

Pyramidal European Hornbeam

Botanical Name: *Carpinus betulus* 'Festigiata'



| | | | |
|---------------|-----|-------------------|--|
| Zone | 5 | Shape | Dense and compact, narrow when young , becoming oval |
| Height | 35' | Foliage | Dark green |
| Spread | 25' | Fall Color | Yellow |

Symmetrical and formal in appearance. It is heat and drought resistant, and seems to be relatively free of disease and pest problems.

Espresso Kentucky Coffee Tree

Botanical Name: *Gymnocladus dioica* 'JFS Espresso'



| | | | |
|---------------|-----|-------------------|--|
| Zone | 4 | Shape | Oval to vase with upright arching branches |
| Height | 50' | Foliage | Huge doubly compound leaves, bluish-green |
| Spread | 35' | Fall Color | Yellow |

The huge doubly compound leaves give this tree a tropical feel, and the arching branches present an elm-like form. This is a seedless selection. Good tolerance of heat, drought, and cold.

Bloodgood London Planetree

Botanical Name: *Platanus x acerfolia*



| | | | |
|---------------|-----|-------------------|------------------------------|
| Zone | 5 | Shape | Broadly pyramidal |
| Height | 50' | Foliage | Large, maple like, medium to |
| Spread | 40' | Fall Color | Yellow |

Reputed to be more resistant to anthracnose than the species. The naturally shedding bark creates a dappled brown and cream pattern that accentuates sunlight filtering through foliage. This is a popular tree for malls, parks, and shopping centers.

Large and Extra Large Trees

White Oak

Botanical Name: *Quercus alba*



| | | | |
|---------------|-----|-------------------|-----------------------------|
| Zone | 4 | Shape | Rounded |
| Height | 45' | Foliage | Medium green, fine textured |
| Spread | 45' | Fall Color | Red to reddish purple |

One of the mightiest of the noble oaks, White Oak is claimed by several states as their official tree. Reputed to be slow-growing, well-grown nursery plants grow fairly quickly once established. Unlike English Oak, this native of Eastern North America is resistant to powdery mildew.

Street Spire Oak

Botanical Name: *Quercus robur* x *alba* "JFS-KW10X"



| | | | |
|---------------|-----|-------------------|-----------------|
| Zone | 4 | Shape | Narrow columnar |
| Height | 45' | Foliage | Dark green |
| Spread | 14' | Fall Color | Rusty red |

Dark green leaves of this narrowly columnar tree are mildew resistant. Turning red in autumn, they fall to reveal stiffly upright branches. Similar to Crimson Spire, but does not hold brown foliage through the winter. Wide crotch angles and short upsweeping branches create a storm resistant structure.

Swamp White Oak

Botanical Name: *Quercus bicolor*



| | | | |
|---------------|-----|-------------------|-------------------------|
| Zone | 4 | Shape | Rounded, open |
| Height | 45' | Foliage | Green with wavy margins |
| Spread | 45' | Fall Color | Yellow brown to reddish |

A beautiful native tree with lustrous, heavy textured green leaves with wavy margins. Adaptability to wet, poorly drained soils and tolerance of drought make it a fine choice for urban settings.

Scarlet Oak

Botanical Name: *Quercus coccinea*



| | | | |
|---------------|-----|-------------------|---------------------------------------|
| Zone | 4 | Shape | Upright spreading, open, broadly oval |
| Height | 50' | Foliage | Dark green, glossy |
| Spread | 40' | Fall Color | Red |

Scarlet Oak generally displays the finest fall color of the genus. Autumn brings deep, brilliant shades of red. Low maintenance and tolerant of dry soils and drought.

Large and Extra Large Trees

Northern Pin Oak

Botanical Name: *Quercus ellipsoidalis*



| | | | |
|---------------|-----|-------------------|-------------------|
| Zone | 4 | Shape | Pyramidal to oval |
| Height | 55' | Foliage | Green |
| Spread | 40' | Fall Color | Red |

Closely related to Pin Oak, this tree shares many positive attributes and is also more tolerant of dry alkaline soils. Also known as Hill's Oak, its native range is the northern midwest, but it can be used more widely.

Bur Oak

Botanical Name: *Quercus macrocarpa*



| | | | |
|---------------|-----|-------------------|------------------------|
| Zone | 3 | Shape | Broadly oval |
| Height | 55' | Foliage | Dark green |
| Spread | 45' | Fall Color | Yellow to yellow brown |

A large and impressive native tree, with a thick trunk and stout branches. Does well in alkaline soils.

Cobblestone Bur Oak

Botanical Name: *Quercus macrocarpa* 'JFS-KW14



| | | | |
|---------------|-----|-------------------|--------------|
| Zone | 3 | Shape | Broadly oval |
| Height | 55' | Foliage | Dark green |
| Spread | 45' | Fall Color | Yellow |

A traditional form of bur oak with the corkiest bark we have observed in the nursery. With bur oak's rugged form and unusually corky branches, it has an "ancient tree" look at a young age. Than handsome foliage is dark green and the tree was selected for mildew and anthracnose resistance.

Pin Oak

Botanical Name: *Quercus palustris*



| | | | |
|---------------|-----|-------------------|---------------|
| Zone | 4 | Shape | Pyramidal |
| Height | 55' | Foliage | Green |
| Spread | 40' | Fall Color | Orange to red |

Pin Oak is a tree with a very distinctive growth habit. The strong central leader is maintained to the top. Branches are long, slender and horizontally layered, giving this large tree an elegant appearance.

Large and Extra Large Trees

Skinny Genes

Botanical Name: *Quercus robur* x *alba* 'JFS KW2QX'

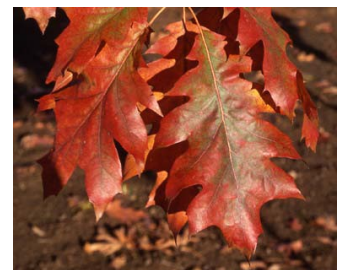


| | | | |
|---------------|-----|-------------------|-----------------------------|
| Zone | 4 | Shape | Columnar, tightly fastigate |
| Height | 45' | Foliage | Dark green, glossy |
| Spread | 10' | Fall Color | Yellow to tawny yellow |

Columnar and fastigate in form, it is the narrowest yet of the English X White Oak hybrids. The glossy, very dark green summer foliage is mildew resistant and gives a clean summer appearance, then turns yellow in autumn. Selected from second-generation seedlings of a sister of Crimson Spire.

Red Oak

Botanical Name: *Quercus Rubra*



| | | | |
|---------------|-----|-------------------|------------|
| Zone | 4 | Shape | Rounded |
| Height | 50' | Foliage | Dark green |
| Spread | 45' | Fall Color | Red |

Red Oak is a large, fast growing, broad headed tree. The large leaves turn from a rich green to deep red in the fall.

Redmond Linden

Botanical Name: *Tilia Americana* x *euchlora* 'Redmond'



| | | | |
|---------------|-----|-------------------|-------------------|
| Zone | 3 | Shape | Densely pyramidal |
| Height | 35' | Foliage | Light green |
| Spread | 25' | Fall Color | Yellow |

Rapid growth and heavy caliper development at a young age give this sturdy cultivar a head start in the nursery and in the landscape. Large leaves give it a coarser textured appearance as it matures to a pyramidal and symmetrical shape.

Corinthian Linden

Botanical Name: *Tilia* 'Corzam'



| | | | |
|---------------|-----|-------------------|--------------------|
| Zone | 3 | Shape | Narrowly pyramidal |
| Height | 45' | Foliage | Dark green |
| Spread | 15' | Fall Color | Yellow |

This is the narrowest of the Linden cultivars. Small, thick, deep green leaves give it a finer textured, more delicate appearance.

Large and Extra Large Trees

Summer Sprite Linden

Botanical Name: *Tilia "Halka"*



| | | | |
|---------------|-----|-------------------|--------------------|
| Zone | 4 | Shape | Narrowly pyramidal |
| Height | 45' | Foliage | Dark green |
| Spread | 15' | Fall Color | Yellow |

Perfect for confined city spaces, this natural semi-dwarf develops a dense and compact form with a rounded to upright oval shape and sheared appearance.

Greenspire

Botanical Name: *Tilia cordata*



| | | | |
|---------------|-----|-------------------|-----------------------|
| Zone | 4 | Shape | Pyramidal symmetrical |
| Height | 40' | Foliage | Dark green |
| Spread | 30' | Fall Color | Yellow |

Introduced in 1961, this durable cultivar has become the standard of comparison among the Lindens. It has a strong central leader, very uniform branch arrangement and a symmetrical, pyramidal form.

Green Mountain Linden

Botanical Name: *Tilia tomentosa 'PNI 6051'*



| | | | |
|---------------|-----|-------------------|--|
| Zone | 5 | Shape | Broadly pyramidal to oval |
| Height | 45' | Foliage | Dark green with silvery-white undersurface |
| Spread | 35' | Fall Color | Yellow |

Upright, symmetrical growth habit forming a dense canopy. Wind causes a shimmering effect as it ruffles the dark green leaves to reveal the silvery white undersides.

Sterling Silver Linden

Botanical Name: *Tilia tomentosa 'Sterling'*



| | | | |
|---------------|-----|-------------------|--|
| Zone | 5 | Shape | Broadly pyramidal |
| Height | 45' | Foliage | Leaves green with silver-gray undersurface |
| Spread | 35' | Fall Color | Yellow |

A vigorous growing tree with a very neat and symmetrical shape. Its two-tone leaves, dark green above and silver below, shimmer in the slightest breeze. Thanks to their fuzzy (tomentose) texture, they resist the feeding of insects.

Large and Extra Large Trees

Green Vase

Botanical Name: *Zelkova serrata* 'Green Vase'

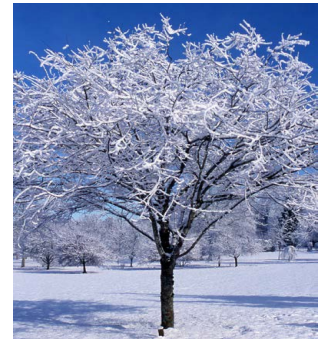


| | | | |
|---------------|-----|-------------------|------------------------------------|
| Zone | 5 | Shape | Vase with upright arching branches |
| Height | 45' | Foliage | Green |
| Spread | 30' | Fall Color | Orange |

A vigorous Zelkova selection, producing a taller, more graceful tree than "Village Green". Its finer textured foliage produces dappled shade.

Halka

Botanical Name:



| | | | |
|---------------|-----|-------------------|------------------|
| Zone | 5 | Shape | Upright vase |
| Height | 45' | Foliage | Medium green |
| Spread | 35' | Fall Color | Yellow to orange |

Zelkova has long, gracefully arching branches which make a magnificent canopy. More than any Zelkova, its form comes closest to resembling an American Elm. Halka is the fastest growing Zelkova cultivar.

Musashino (Columnar) Zelkova

Botanical Name:

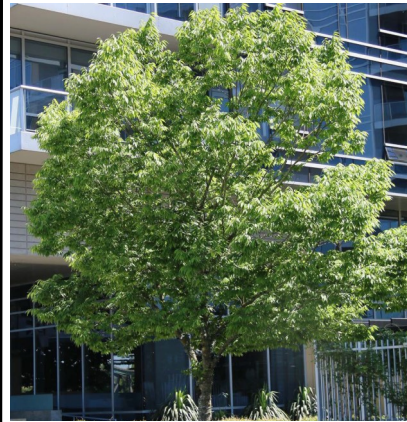


| | | | |
|---------------|-----|-------------------|--------------------------|
| Zone | 5 | Shape | Very narrow upright vase |
| Height | 45' | Foliage | Medium green |
| Spread | 15' | Fall Color | Yellow |

Ideal for narrow street use, tightly upright branches allow good vehicle and pedestrian clearance beneath the delicate green canopy.

Village Green

Botanical Name:



| | | | |
|---------------|-----|-------------------|--------------|
| Zone | 5 | Shape | Rounded vase |
| Height | 40' | Foliage | Deep green |
| Spread | 40' | Fall Color | Rusty red |

This widely used cultivar is more upright and faster growing than the species. Foliage is very dense, dark green and presents a clean appearance.