



## Street Tree Informational Supplement.

### Benefits of Trees

- Trees can lower overall energy expenses by shading a building from the summer heat and providing screening from winter winds. In the United States the energy savings from healthy and mature trees which are properly located to maximize screening can be as high as 20-25% per year.
- Trees filter pollutants, absorb carbon dioxide and produce oxygen. Twenty mature trees filter the pollutants of one car driven 60 miles a day. In addition 78 mature trees annually produce enough oxygen annually for 18 people.
- Mature trees improve the aesthetic of any corridor or neighborhood and can increase property values by 5-20% when compared to property without street trees.

### Small Trees with narrow crowns.

Suitable for tree lawns, 5'+ wide and under wires.

1.



<http://www.labartlett.com/pictures/Paperbark-Maple.jpg>

#### ***Acer griseum* - Paperbark Maple**

- Maximum 20' H x 15-20' W • Slow Grower (<12"/year) • Bloom: No
- Stress Tolerance: Intermediate • Salt Tolerance: Sensitive • Fall Color: Red, Orange, Yellow

This small, round-headed tree has fairly open branching. The bark peels off in paper-like strips to expose a bright copper-colored bark beneath. This provides interesting winter color, but this effect is primarily in the younger branches. Paperbark maple is best used as a lawn specimen tree where it is most visible in winter. It tolerates a wide range of soils and exposures.

2.



<http://www.ag.auburn.edu/hort/landscape/dbpages/images/289d.JPG>

#### ***Amelanchier arborea* - Downy Serviceberry**

- Maximum 25' H x 15' W • Moderate Grower (12-24"/year) • Bloom: Yes, White
- Stress Tolerance: Intermediate • Salt Tolerance: Sensitive • Fall Color: Orange, Red, Yellow

Small tree, beautiful fall colors. White spring flowers giving way to 1/4" fruit loved by birds. This tree has a narrow, rounded crown, the twigs often red-brown to purplish, becoming gray; bark smooth, grayish, "striped" with vertical fissures and very ornamental.

3.



<http://www.urbanforestnursery.com/images/treeprofileimages/profileautumnbrillianceserviceberryfall.jpg>

#### ***Amelanchier x grandiflora* - Autumn Brilliance; Robin Hill Serviceberry**

- Maximum 20' H x 15' W • Moderate Grower (12-24"/year) • Bloom: Yes, White
- Stress Tolerance: Intermediate • Salt Tolerance: Sensitive • Fall Color: Red

This small tree is upright with a multi-stem or single trunk. Leaves are dark, lustrous green turning to brilliant red in fall. 2" white blossoms in clusters appearing in spring. Spreading branch habit and limited size make this tree adaptable to many situations. Requires little maintenance.

4.

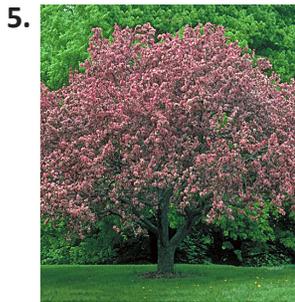


[http://photos.laurelcreeknursery.com/images/A\\_6/4/3/8/58346/Cornus\\_Mas\\_Dogwood\\_2d855.jpg](http://photos.laurelcreeknursery.com/images/A_6/4/3/8/58346/Cornus_Mas_Dogwood_2d855.jpg)

#### ***Cornus mas* - Cornelian Cherry Dogwood**

- Maximum 18' H x 15-20' W • Slow Grower (<12"/year) • Bloom: Yes, Yellow
- Stress Tolerance: Intermediate • Salt Tolerance: Sensitive • Fall Color: Purple, Red

This small, round, upright tree bears small yellow flowers very early (in late winter or early spring) before leaves develop. Flower buds are conspicuous and attractive in winter, and the bark is flaky, exfoliating and gray-brown to brown. Red berries develop in the spring. Foliage turns purplish-red in fall. Tolerates a wide range of soil types and is generally pest free.



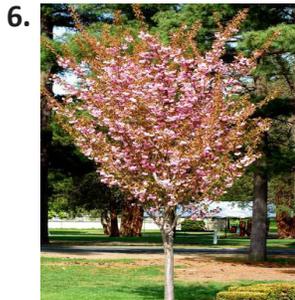
5.

***Malus 'Indian Summer'* - Indian Summer Crabapple**

- Maximum 15' H x 15' W •Slow Grower (<12"/year) •Bloom: Yes, White
- Stress Tolerance: Intermediate/High •Salt Tolerance: Moderate/High •Fall Color: Varies

This small, round-headed tree has fairly open branching. Pink to red buds open to white spring flowers. This tree has red fruit which are enjoyed by wildlife. This small ornamental is highly adaptable to many different environments.

[http://www.rutgersln.com/large\\_image.asp?productimages/CRABAPPLE%20INDIAN%20SUMMER.JPG](http://www.rutgersln.com/large_image.asp?productimages/CRABAPPLE%20INDIAN%20SUMMER.JPG)



6.

***Prunus serrulata 'Kwanzan'*- Kwanzan Cherry**

- Maximum 25' H x 25' W •Moderate Grower (12-24"/year) •Bloom: Yes, Pink
- Stress Tolerance: Low •Salt Tolerance: Moderate/High •Fall Color: Yellow

This small tree has an, upright, spreading form. This tree has double-pink, very attractive flowers which is why it is planted. The tree has good yellow fall color and does not bear fruit. However this plant is relatively short lived with a 20 year lifespan and is susceptible to bacterial diseases.

[http://0.tqn.com/d/landscaping/1/0/2/0/kwanzan\\_cherry\\_tree\\_large.jpg](http://0.tqn.com/d/landscaping/1/0/2/0/kwanzan_cherry_tree_large.jpg)



7.

***Prunus virginiana 'Canadian Red'* - Canada Red Cherry**

- Maximum 10-25' H x 10-20' W •Fast Grower (>24"/year) •Bloom: White
- Stress Tolerance: Intermediate •Salt Tolerance: Moderate •Fall Color: Red

This small, round-headed tree has pink to red buds open to white spring flowers. This small ornamental is an effective screen. The new growth is green, maturing to maroon-red. The small, white flowers in spring produce small, red fruits in summer that are savored by birds. This fruit is an edible chokecherry. Canadian Red has a vigorous growth, straight trunk and uniform top.

<http://www.seufertreefarm.com/images/spring-canada-red-select-cherry.jpg>



8.

***Syringa reticulata 'Ivory Silk'* - Ivory Silk Tree Lilac**

- Maximum 20' H x 20' W •Moderate Grower (12-24"/year) •Bloom: Yes, White
- Stress Tolerance: Intermediate •Salt Tolerance: High •Fall Color: No Color Change

This small vase shaped tree, has huge clusters of creamy white flowers, borne in early summer for about two weeks and are highly showy and ornamental but lack the fragrance of spring-blooming Lilacs. This tree also exhibits attractive red-brown shedding bark.

<http://www.everchanginggarden.ca/Photos/2008/BloomsIvorySilkLilac.jpg>

**Small Trees with narrow crowns.**

Suitable for tree lawns, 8'+ wide and under wires.



1.

***Acer campestre* - Hedge Maple**

- Maximum 30' H x 25-30' W •Moderate Grower (12-24"/year) •Bloom: No
- Stress Tolerance: High •Salt Tolerance: Moderate/High •Fall Color: Red, Orange, Yellow

This dense, broad spreading tree has green 2-4" lobed shaped leaves. This tree is tolerant of tough conditions with no serious pests or disease problems. Moreover this tree is attractive as a street tree due to its ability to tolerate stressful conditions while maintaining a full canopy.

<http://www.syracuse.ny.us/parks/images/hedgemaple.jpg>



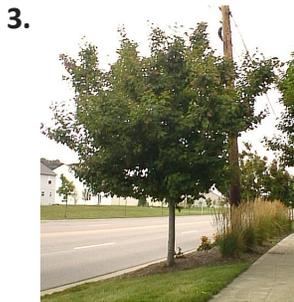
2.

### ***Acer ginnala* - Amur Maple**

- Maximum 25' H x 15-25' W •Moderate Grower (12-24"/year) •Bloom: No
- Stress Tolerance: Intermediate •Salt Tolerance: Moderate •Fall Color: Vibrant Red

Amur maple is an excellent, low-growing tree. The has an upright, rounded, finely branched growth habit which creates dense shade under the crown. Due to excessive branchiness, some pruning is required early in the life of the tree to create dominant major branches. Amur maple can grow rapidly when it is young if it receives water and fertilizer, but it is well-suited for planting close to power lines since it slows down and remains small at maturity.

<http://www.enjoygardening.com/wp-content/uploads/2008/09/amur-maple.jpg>



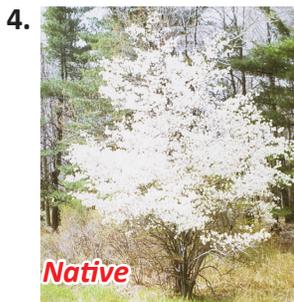
3.

### ***Acer tartaricum* - Tartarian Maple**

- Maximum 20-30' H x 15-20' W •Moderate Grower (12-24"/year) •Bloom: No
- Stress Tolerance: High •Salt Tolerance: Moderate/High •Fall Color: Yellow, Red

An Asiatic maple with fall color ranging from yellow to red but is usually not as showy as the Amur maple. The habit is rounded, informal and attractive. Tartarian Maple is tolerant of urban sites and compacted soil. These trees may need to be pruned to ensure that they have a structurally stable branching pattern.

<http://shade-trees.tripod.com/image/trees/tatarian-maple-10.jpg>



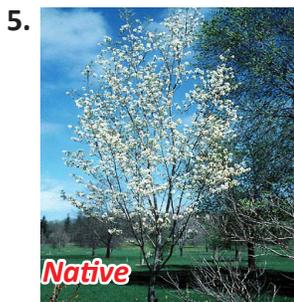
4.

### ***Amelanchier canadensis* - Shadowblow Serviceberry**

- Maximum 20' H x 20' W •Moderate Grower (12-24"/year) •Bloom: Yes, White
- Stress Tolerance: Intermediate •Salt Tolerance: Sensitive •Fall Color: Yellow, Orange

Shadowblow Serviceberry has an upright oval to rounded shape. This tree is available with single or multiple stems. This tree is characterized by its attractive white flowers in the spring followed by red to purple summer fruit which is attractive to birds. Green leaves in fall fade to a vibrant and yellow/orange.

[http://www.wildflower.org/image\\_archive/640x480/PCD3612/PCD3612\\_IMG0031.JPG](http://www.wildflower.org/image_archive/640x480/PCD3612/PCD3612_IMG0031.JPG)



5.

### ***Amelanchier laevis* - Allegheny Serviceberry**

- Maximum 30' H x 15-20' W •Fast Grower (>24"/year) •Bloom: Yes, White
- Stress Tolerance: Intermediate •Salt Tolerance: Moderate •Fall Color: Yellow, Red

Allegheny Serviceberry has an upright, irregular shape. This tree is available with single or multiple stems. The tree is short-lived and has a rapid growth rate. The main ornamental feature is the white flowers borne in drooping clusters in mid spring. The purplish black berries are sweet and juicy but are soon eaten by birds. The fall color is yellow to red. It is well-adapted for planting beneath power lines due to its small size.

[http://www.scottsblufflandscaping.com/Pictures/large\\_shrubs/alleghenyserviceberryf.jpg](http://www.scottsblufflandscaping.com/Pictures/large_shrubs/alleghenyserviceberryf.jpg)



6.

### ***Carpinus caroliniana* - American Hornbeam**

- Maximum 20-30' H x 20-25' W •Slow Grower (<12"/year) •Bloom: Yes, Orange/Yellow
- Stress Tolerance: High •Salt Tolerance: Sensitive •Fall Color: Yellow, Orange

A handsome tree in many locations, the tree slowly reaches maturity. It will grow with an attractive open habit in total shade, but be dense in full sun. The muscle-like bark is smooth, gray and fluted which provides for winter interest. The fall color is faintly orange to yellow and stands out in the landscape or woods in the fall.

<http://www.huntersville.org/interactive%20ordinance/IMAGES/AmericanHornbeam.jpg>

7.



<http://www.kennedycountrygardens.com/redbud3.jpg>

### ***Cercis canadensis* - Redbud**

- Maximum 25' H x 25' W •Fast Grower (>24"/year) •Bloom: Yes, Lavender
- Stress Tolerance: High •Salt Tolerance: Sensitive •Fall Color: Yellow

The Redbud is vase shaped and airy in its form and is available with single trunk and multi-stem varieties. This tree offers beautiful lavender flowers in early spring which give way to reddish purple leaves that turn to green in summer and yellow in fall. Moreover this tree is tolerant of severe stress including drought and pollution and has no serious pest or disease problems.

8.



[http://www.city-data.com/forum/attachments/knoxville/40756d1240984440-just-back-knoxville-trip-flowering-tree-upload\\_gallery\\_plantmaterials\\_trees\\_images\\_fringetree.jpg](http://www.city-data.com/forum/attachments/knoxville/40756d1240984440-just-back-knoxville-trip-flowering-tree-upload_gallery_plantmaterials_trees_images_fringetree.jpg)

### ***Chionanthus virginicus* - Fringetree**

- Maximum 20' H x 20' W •Slow Grower (<12"/year) •Bloom: Yes, White
- Stress Tolerance: Intermediate •Salt Tolerance: Sensitive •Fall Color: Yellow

It is hard to think of a more beautiful, small tree than Fringetree when it is in full bloom. The upright oval to rounded form adds dark green color in summer, bright white flowers in spring. The pure white, slightly fragrant flowers, emerging just as the dogwood flowers fade, hang in long, spectacular panicles which appear to cover the tree with cotton for two weeks.

9.



<http://arboretum.unl.edu/webimages/greatplants/cornpagoda.JPG>

### ***Cornus alternifolia* - Pagoda Dogwood**

- Maximum 20' H x 20' W •Slow Grower (<12"/year) •Bloom: Yes, White
- Stress Tolerance: Low •Salt Tolerance: Moderate •Fall Color: Red, Purple

The Pagoda Dogwood is a round-headed tree has an interesting horizontal branching structure. This tree is characterized by creamy white flowers preceded by blue/black fruit which are enjoyed by birds. Moreover full, dark green leaves give way to a red to purple fall color. The horizontal branching structure provides for an interesting winter look. This tree is pest resistant but, susceptible to borer's and bacterial diseases.

10.



[http://www.jfschmidt.com/articles/smoketree/american\\_smoketree.jpg](http://www.jfschmidt.com/articles/smoketree/american_smoketree.jpg)

### ***Cotinus obovatus* - American Smoketree**

- Maximum 20' H x 15-25' W •Slow Grower (<12"/year) •Bloom: Yes, Pink, White, Grey
- Stress Tolerance: Intermediate •Salt Tolerance: Sensitive •Fall Color: Varies

American Smoketree is a seldom specified tree with a round, symmetrical form. Multiple trunks eventually become twisted and gnarled. Pink/white/grey springtime flowers give the plant an unusual, somewhat smoky effect. American Smoketree is most outstanding for its beautiful foliage which are pinkish-bronze when young, mature to a lush, dark blue/green then, in autumn, change into gorgeous shades of yellow, red, orange, or purple.

11.



<http://www.sesterfarms.com/img/plants/thornlesscockspurhaw-10041634m.jpg>

### ***Crataegus crusgalli* 'Inermis' - Thornless Cockspur Hawthorn**

- Maximum 20' H x 20' W •Slow Grower (<12"/year) •Bloom: Yes, White
- Stress Tolerance: Intermediate •Salt Tolerance: Moderate •Fall Color: Yellow

Thornless Cockspur Hawthorn is an excellent small tree with a broad, rounded form. Foliage is dark green and very glossy, turning bright gold in fall. White clusters of flowers are showy and bloom in spring. Summer fruit are a bright red and provide excellent color and attract birds.. Bark is exfoliating in thin gray strips, and provides winter interest.

12.



### ***Halesia carolina* - Silverbell**

- Maximum 30' H x 15-25' W •Moderate Grower (12-24"/year) •Bloom: Yes, White
- Stress Tolerance: Intermediate •Salt Tolerance: Sensitive •Fall Color: Yellow

Silverbell is a round, upright, vase shaped tree which is interesting all year long, with attractive medium green foliage, pretty flowers, showy fruits, and exfoliating bark. It branches low to the ground, making a nice lawn or specimen tree and when pruned to one central leader can be used as a street tree in residential areas.

[http://www.halkanursery.com/picts/Halesia\\_tetraptera\\_Carolina2.jpg](http://www.halkanursery.com/picts/Halesia_tetraptera_Carolina2.jpg)

13.



### ***Maackia amurensis* - Amur Maackia or Mayday Tree**

- Maximum 20-25' H x 15-25' W •Slow Grower (<12"/year) •Bloom: Yes, White, Blue
- Stress Tolerance: Intermediate/High •Salt Tolerance: Sensitive •Fall Color: None

Amur Maackia exhibits a symmetrical, round vase shaped form is well suited as a street tree. Foliage is grey/green when young but mature to dark green, and often drop in fall without significantly changing color. In summer, dense white blooms with a blue tinge appear. These blooms are followed by the appearance of flat, two to three-inch-long pods. Peeling, orange/brown, shiny bark is especially noticeable.

<http://www.plantplaces.com/photos/Maackia.jpg>

14.



### ***Magnolia stellata* 'Royal Star' - Royal Star Magnolia**

- Maximum 20' H x 15' W •Slow Grower (<12"/year) •Bloom: Yes, White, Pink
- Stress Tolerance: Low •Salt Tolerance: Sensitive •Fall Color: Yellow

Royal Star Magnolia exhibits a broad to oval form and is available in single trunk or clump form. For street tree application this tree must be pruned. The white flowers have a slight touch of pink coloration, and are produced in spring before the leaves appear, even on young plants. Flowers can be injured if cold weather arrives during flowering.

<http://greengrasslandscape.com/photogallery/Magnolia%20stellata%20%27Royal%20Star%27.jpg>

15.



### ***Malus* 'Centurion' - Centurion Crabapple**

- Maximum 20' H x 15' W •Moderate Grower (12-24"/year) •Bloom: Yes, Pink, Red
- Stress Tolerance: Intermediate •Salt Tolerance: Sensitive •Fall Color: Yellow

Centurion Crabapple is characterized by an upright, columnar form. This tree has pink to red flowers in spring, which give way to red fruit and red to bronze foliage. Pink to red buds open to white spring flowers. This tree has red fruit which are enjoyed by wildlife. This small ornamental is highly adaptable to many different environments.

<http://www.johnstonplants.com/shade%20and%20flw.trees/malus%20centzam%20centurion%20crabapple.jpg>

16.



### ***Malus* 'Donald Wyman' - Donald Wyman Crabapple**

- Maximum 20' H x 25' W •Moderate Grower (12-24"/year) •Bloom: Yes, White
- Stress Tolerance: Intermediate •Salt Tolerance: Sensitive •Fall Color: Yellow

Donald Wyman Crabapple is a broad, round-headed tree has fairly open branching. Pink to red buds open to white spring flowers. This tree has red fruit which are enjoyed by wildlife. This small ornamental is highly adaptable to many different environments.

[http://www.groundtradeschange.com/plant\\_database/deciduous\\_trees/malus\\_wyman/donald\\_wyman\\_1.jpg](http://www.groundtradeschange.com/plant_database/deciduous_trees/malus_wyman/donald_wyman_1.jpg)



**Malus 'Prairie Fire' - Prairie Fire Crabapple**

- Maximum 20' H x 20' W •Moderate Grower (12-24"/year) •Bloom: Yes, Purple-red
- Stress Tolerance: Intermediate •Salt Tolerance: Sensitive •Fall Color: Orange

Prairie Fire Crabapple has an attractive upright, rounded form. This species of crabapple blooms in May with crimson-colored buds and purple-red flowers. Every part of the tree is a feast for the eyes, right down to the dark red bark that resembles cherry. Autumn brings bright orange leaves and shiny red, cone-shaped fruit. This tree is a favorite of songbirds

<http://www.loudounnursery.com/img/Nursery%20images/malus%20prairie%20fire.JPG>



**Malus 'Snowdrift'- Snowdrift Crabapple**

- Maximum 20' H x 15' W •Moderate Grower (12-24"/year) •Bloom: Yes, White
- Stress Tolerance: Intermediate •Salt Tolerance: Sensitive •Fall Color: Yellow

The Snowdrift crab has an upright, spreading, rounded, dense crown, and can be grown as a multi-stemmed or single trunk tree. This tree exhibits pink buds which turn into a profusion of snowy white blossoms in April or May. This is followed small, orange-red fruits that attract birds and persist on the tree throughout the winter.

[http://www.arborday.org/trees/graphics/trees/detail/Snowdrift-Crabapple\\_1.jpg](http://www.arborday.org/trees/graphics/trees/detail/Snowdrift-Crabapple_1.jpg)



**Malus 'Sugar Tyme' - Sugar Tyme Crabapple**

- Maximum 20' H x 15' W •Moderate Grower (12-24"/year) •Bloom: Yes, White
- Stress Tolerance: Intermediate •Salt Tolerance: Sensitive •Fall Color: Yellow

The Sugar Tyme Crabapple is an upright, oval tree. This small, round-headed tree has fairly open branching. Pink to red buds open to white spring flowers. This tree has red fruit which are enjoyed by wildlife. This small ornamental is highly adaptable to many different environments.

[http://www.halkanursery.com/picts/Malus\\_Sugartyme2.jpg](http://www.halkanursery.com/picts/Malus_Sugartyme2.jpg)



**Malus x zurni 'Calocarpa' - Redbud Crabapple**

- Maximum 20' H x 20' W •Moderate Grower (12-24"/year) •Bloom: Yes, White
- Stress Tolerance: Intermediate •Salt Tolerance: Sensitive •Fall Color: Yellow

Redbud Crabapple is a symmetrical, rounded tree which spreads uniformly. This tree is an excellent specimen with attractive red flower buds which open to reveal white spring flowers. This tree has deep red fruit in fall which are enjoyed by wildlife. Redbud Crabapple also exhibits a good resistance to disease and pests.

<http://www.monrovia.com/img/plants/1006/d/3058-redbud-crabapple-full-shot.jpg>



**Robina pseudoacacia- Globe; Purple Robe Locust**

- Maximum 15' H x 15' W •Slow Grower (<12"/year) •Bloom: Yes, White
- Stress Tolerance: Intermediate/High •Salt Tolerance: Moderate/High •Fall Color: Varies

This small, round-headed tree has fairly open branching. Pink to red buds open to white spring flowers. This tree has red fruit which are enjoyed by wildlife. This small ornamental is highly adaptable to many different environments.

[http://www.rutgersln.com/large\\_image.asp?productimages/CRABAPPLE%20INDIAN%20SUMMER.JPG](http://www.rutgersln.com/large_image.asp?productimages/CRABAPPLE%20INDIAN%20SUMMER.JPG)

22.



### ***Styrax japonicus* - Japanese Snowbell**

- Maximum 20-30' H x 15-25' W •Slow Grower (<12"/year) •Bloom: Yes, White
- Stress Tolerance: Intermediate •Salt Tolerance: Moderate •Fall Color: Red

Japanese Snowbell is a small tree with a rounded canopy with a horizontal branching pattern. The smooth, attractive bark has orange-brown interlacing fissures adding winter interest to any landscape. The white, bell-shaped, drooping flower clusters of Japanese Snowbell are quite showy in May to June. Due to its small stature and vase-shape, it can make a nice street tree where overhead space is limited.

<http://www.hort.uconn.edu/plants/campus/uconn/dec/walk4/eight/sjap.jpg>

### **Medium Trees.**

Suitable for tree lawns, 6'+ wide but, not under wires.

1.



### ***Acer buergerianum* - Trident Maple**

- Maximum 25' H x 25' W •Moderate Grower (12-24"/year) •Bloom: No
- Stress Tolerance: High •Salt Tolerance: Sensitive •Fall Color: Red

*Acer buergerianum*, the Trident Maple, is grown in many parts of the world as a 'Street' tree due to its tolerance of pruning, dry soil and air-pollution. Leaves are dark-green above and blue-green underneath, turning beautiful shades of orange and red in Autumn. New buds are a red/brown color. Bark is buff and flakes revealing a soft-orange under bark. In maturity the bark becomes darker.

<http://oregonstate.edu/dept/ldplants/images/acbu12.jpg>

2.



### ***Aesculus x carnea 'Briotii'* - Rubyred Horsechestnut**

- Maximum 35-45' H x 35-45' W •Slow Grower (<12"/year) •Bloom: Yes, Red
- Stress Tolerance: Intermediate/High •Salt Tolerance: Moderate/High •Fall Color: No Change

Rubyred Horsechestnut is quite striking with dark green, coarse-textured foliage. Pyramidal in shape when very young, this tree develops slowly into a round, very dense shade tree. The multitude of deep scarlet flowers are quite attractive to bees and hummingbirds. The prickly seedpods which can be messy on the original hybrid are nearly absent on this cultivar making it better suited than the species for urban street tree planting.

<http://www.halkanursery.com/picts/aesculuscarneafmchair2.jpg>

3.



### ***Alnus cordata* - Italian Alder**

- Maximum 40' H x 25' W •Fast Grower (<24"/year) •Bloom: No
- Stress Tolerance: High •Salt Tolerance: Moderate •Fall Color: No Change

Italian Alder forms a neat spire. The leaves are glossy, and pear-like. Leaves last well into winter, particularly under street lighting. Being highly tolerant of urban pollution it is a particularly adaptable urban tree. Good for parks and as a street tree.

[http://lh6.ggpht.com/\\_rWksMjEBTQk/Sa1lxaeyjcl/AAAAAAAAAJel/IyMMbAibWSw/s800/leo-mic-Alnus-](http://lh6.ggpht.com/_rWksMjEBTQk/Sa1lxaeyjcl/AAAAAAAAAJel/IyMMbAibWSw/s800/leo-mic-Alnus-)

4.

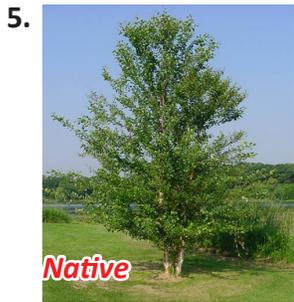


### ***Alnus glutinosa* - European Black Alder**

- Maximum 45' H x 20-40' W •Fast Grower (<24"/year) •Bloom: No
- Stress Tolerance: High •Salt Tolerance: Moderate •Fall Color: None

The Black Alder is pyramidal when young, rounded or oval as they mature. The dark green, roundish leaves with toothed edges and pale undersides are joined in spring by rather insignificant male and female flowers. Foliage remains green well into the fall. It is the fruits which are most interesting, small, nutlike, one-inch "cones" which persist throughout the fall and winter and are food for a variety of wildlife.

[http://upload.wikimedia.org/wikipedia/commons/thumb/e/ea/European\\_black\\_alder.jpg/250px-European\\_black\\_alder.jpg](http://upload.wikimedia.org/wikipedia/commons/thumb/e/ea/European_black_alder.jpg/250px-European_black_alder.jpg)

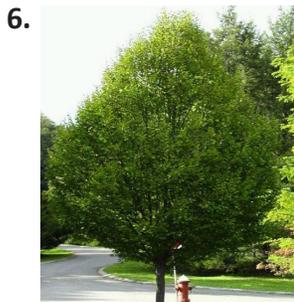


***Betula nigra* - River Birch**

- Maximum 40-45' H x 25-35' W •Fast Grower (<24"/year) •Bloom: Yes, Brown, Insignificant
- Stress Tolerance: Intermediate •Salt Tolerance: Sensitive •Fall Color: Yellow

River Birch has a narrow, oval to pyramidal crown when young, spreading wider with age as several branches become dominant. It lacks the white trunk bark associated with other birches but is distinguished by reddish, brown bark peeling off in film-like papery curls providing interest all year round. Pruning in the early years will be required to remove lower branches when they are located close to areas where clearance is needed for vehicular traffic.

[http://geneseeconservation.org/images/Birch\\_River\\_Form.jpg](http://geneseeconservation.org/images/Birch_River_Form.jpg)

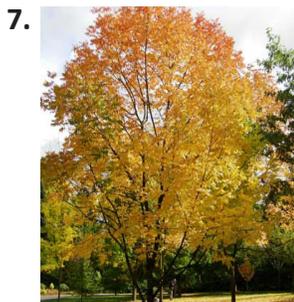


***Carpinus betulus 'Fastigiata'* - Columnar European Hornbeam**

- Maximum 30-40' H x 15-20' W •Slow Grower (<12"/year) •Bloom: Yes, White/Grey
- Stress Tolerance: Intermediate/High •Salt Tolerance: Sensitive •Fall Color: Yellow

Columnar European Hornbeam, the most common cultivar sold, grows 30 to 40 feet tall and 20 to 30 feet wide, without a central leader but instead fans out into a very densely-foliated, columnar or oval-shaped tree making it ideal for use as a hedge, screen, or windbreak.

<http://greenspade.com/wp-content/uploads/2008/11/europeanhornbeam.jpg>



***Cercidiphyllum japonicum* - Japanese Katsuratree**

- Maximum 30-40' H x 35-40' W •Fast Grower (<24"/year) •Bloom: No
- Stress Tolerance: Intermediate •Salt Tolerance: Moderate •Fall Color: Yellow, Red

This excellent and attractive tree develops into a symmetrical, round-headed shade tree. New leaves have a reddish purple color that changes to green in summer. Fall color is a spectacular yellow, with some red. This tree is essentially free of pests.

<http://a123.g.akamai.net/f/123/12465/1d/media.canada.com/0784bb05-ab0e-4bd2-aec9-4ccd77e2817b/kra.jpg>

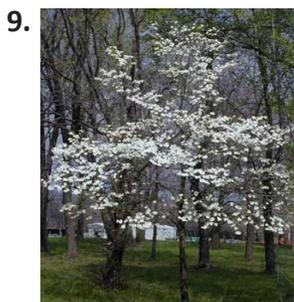


***Cledrastis kentuckea* - Yellowwood**

- Maximum 30-50' H x 40' W •Moderate Grower (12-24"/year) •Bloom: Yes, White
- Stress Tolerance: High •Salt Tolerance: Sensitive •Fall Color: Yellow

Yellowwood exhibits a clean, founded form. The most distinctive feature is its clusters of white, fragrant flowers. This tree will adapt to many environments and has no serious disease or pest problems.

<http://www.rutgersln.com/ProductImages/YELLOWWOOD.JPG>



***Crataegus phaenopyrum* - Washington Hawthorn**

- Maximum 25-35' H x 25' W •Fast Grower (<24"/year) •Bloom: Yes, White
- Stress Tolerance: High •Salt Tolerance: Moderate •Fall Color: Orange, Red

Washington Hawthorn exhibits a broad, oval canopy with dense branching. The small, white, abundant flowers, produced in clusters in late spring are followed by showy orange to red fruit that persist into winter, if not eaten by birds. The fall leaf color is orange to red and can be quite striking. Tolerates severe stresses including drought and pollution.

[http://www.soonerplantfarm.com/\\_ccLib/image/plants/DETA-29.jpg](http://www.soonerplantfarm.com/_ccLib/image/plants/DETA-29.jpg)



**10. *Crataegus verdis* 'Winter King' - Winter King Hawthorne**

- Maximum 15' H x 15' W •Fast Grower (<24"/year) •Bloom: Yes, White
- Stress Tolerance: High •Salt Tolerance: Moderate •Fall Color: Bronze

Winter King Hawthorn exhibits a broad, wide spreading habit with dense branching. The small, white, abundant flowers, produced in clusters in late spring are followed by showy orange fruit that persist into winter, if not eaten by birds. Tolerates severe stresses including drought and pollution. This tree is ideal as a specimen or street tree where its pleasing architecture, bark and colorful fruits can be a focal point.

[http://www.itrees.com/media/catalog/product/cache/1/image/5e06319eda06f020e43594a9c230972d/f/i/file\\_12\\_6.jpg](http://www.itrees.com/media/catalog/product/cache/1/image/5e06319eda06f020e43594a9c230972d/f/i/file_12_6.jpg)



**11. *Evodia danielii* - Korean Evodia**

- Maximum 25' H x 25-30' W •Fast Grower (<24"/year) •Bloom: Yes, White
- Stress Tolerance: High •Salt Tolerance: Moderate •Fall Color: Yellow, Green

Korean Evodia is an irregular, spreading, round tree with dark green leaves. The leaves often drop in autumn while still green, though some trees have been known to provide a display of clear yellow fall foliage. In early summer, many showy, flat-topped flower clusters appear, the white, fragrant blossoms attracting a multitude of bees. Following this gorgeous display of blooms is the production of ornamental, red to black fruits.

[http://moonnurseries.com/files/EVDANB\\_001.jpg](http://moonnurseries.com/files/EVDANB_001.jpg)



**12. *Fagus sylvatica* 'Roseo-marginata' - Tricolor Beech**

- Maximum 40-45' H x 35-40' W •Slow Grower (<12"/year) •Bloom: Yes, Green
- Stress Tolerance: Low •Salt Tolerance: Sensitive •Fall Color: Copper, Yellow

Tricolor Beech is broad and upright in form. This tree exhibits distinctive purple leaves with a delicate pinkish white margin that varies in width. Smooth gray bark a beautiful accent in the winter landscape. All cultivars tolerate pruning well and grow best in moist, well drained, acid soils. This is a tree for future generations and requires a lot of space to mature properly.

<http://stonewallnursery.com/Fagus%20sylvatica%20%27Roseomarginata%27%20Nemours%20%2703.jpg>



**13. *Gleditsia tricanthos inermis* 'Impcole' - Imperial Honeylocust**

- Maximum 30-35' H x 25-30' W •Fast Grower (<24"/year) •Bloom: No
- Stress Tolerance: Intermediate •Salt Tolerance: Moderate •Fall Color: Yellow

Imperial Honeylocust is the most compact and formal version of Honeylocust. This tree is rounded in form and shorter than most Honeylocusts. This controlled growth makes this tree appropriate for use as a street tree. This tree exhibits fine, green foliage which turns yellow in the fall.

<http://www.sesterfarms.com/Img/plants/imperialhoneylocustj-10041618m.jpg>



**14. *Koelreuteria paniculata* 'Fastigiata' - Columnar Golden Rain Tree**

- Maximum 20-30' H x 15-20' W •Moderate Grower (12-24"/year) •Bloom: Yes, Yellow
- Stress Tolerance: Intermediate •Salt Tolerance: Moderate •Fall Color: Yellow

Columnar Golden Rain Tree exhibits a tight, compact growth habit. It is rarely attacked by pests and grows in a wide range of soils, including high pH soils. This tree tolerates dryness and casts little shade because of the narrow growth habit. It would make a good tree particularly where overhead or soil space is limited, due to its narrow crown and adaptive abilities.

<http://www.maddoxgardencenter.com/images/koelreuteria%20golden%20rain.jpg>



15.

***Magnolia x soulangiana* - Saucer Magnolia**

- Maximum 20-25' H x 20-30' W •Moderate Grower (12-24"/year) •Bloom: Yes, White
- Stress Tolerance: Intermediate •Salt Tolerance: Sensitive •Fall Color: Yellow

Saucer Magnolia's exhibit a rounded, oval shape with low branches and a single or clumping trunk form. This tree is noticed for its smooth gray bark and white to lavender fragrant flowers in spring. The flower buds are susceptible to a spring frost. This tree is pest and disease resistant.

<http://www.ag.auburn.edu/hort/landscape/dbpages/images/345x.jpg>



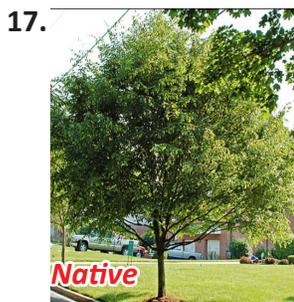
16.

***Nyssa sylvatica* - Sourgum/Blackgum**

- Maximum 50' H x 25-35' W •Slow Grower (<12"/year) •Bloom: Yes, White
- Stress Tolerance: High •Salt Tolerance: Moderate/High •Fall Color: Orange, Red

Sourgum has a pyramidal shape with horizontal branches growing from a typically straight trunk. Lower branches droop with age and will need to be removed if used as a street tree. This tree provides a brilliant display of red to deep purple foliage in the fall. The small, blue fruits may be considered a litter nuisance in urban/suburban plantings but are quite popular with many birds and mammals, and they wash away quickly.

<http://greenspade.com/wp-content/uploads/2008/12/nyssamcnielweb.jpg>



17.

***Ostrya virginiana* - American Hophornbeam**

- Maximum 30-40' H x 25-30' W •Slow Grower (<12"/year) •Bloom: Yes, Brown, Green
- Stress Tolerance: Intermediate/High •Salt Tolerance: Sensitive •Fall Color: Yellow

American Hophornbeam exhibits an oval or round canopy form. This tree has a lovely yellow fall color, and the small nutlets, which ripen in summer and fall, are used by birds and mammals during the winter. Bark is an attractive orange or grayish brown peeling off in longitudinal strips. The finely-textured crown casts a medium or dense shade in full sun, but is more open in the shade casting a light shadow.

<http://cache.daylife.com/imageserve/006c71YdArh12/610x.jpg>



18.

***Oxydendrum arboreum* - Sorrel Tree/Sourwood**

- Maximum 25-35' H x 25-30' W •Slow Grower (<12"/year) •Bloom: Yes, White
- Stress Tolerance: Intermediate •Salt Tolerance: Moderate •Fall Color: Red, Orange

Sourwood usually grows as a pyramid or narrow oval with a more or less straight trunk. Leaves are dark, lustrous green and appear to weep or hang from the twigs. The branching pattern and persistent fruit make the tree interesting in the winter. The mid- to late-summer flowers create a graceful effect at flowering time. There are few sights that are as striking as a row of Sourwood in fall color.

<http://www.uri.edu/ce/healthylandscapes/demophotos/ce%20center/Sourwood%20tree.png>



19.

***Parrotia persica* - Persian Parrotia**

- Maximum 20-30' H x 20-30' W •Slow Grower (<12"/year) •Bloom: Yes, Purple
- Stress Tolerance: High •Salt Tolerance: Sensitive •Fall Color: Yellow Orange Red

The foliage of Persian Parrotia which attracts the most attention, unfolding as reddish-purple young leaves, maturing to a lustrous, dark green through the summer, and then finally putting on a brilliant fall display of various hues of vivid yellow, burnt orange, and deep, pure scarlet. Space 20 to 30 feet apart along a street to create a canopy over the walk. It will not canopy over the street but will form a wall of wonderful foliage .

<http://www.ca.uky.edu/HLA/Dunwell/Parrotiapersica.jpg>

20. ***Phellodendron amurense 'Macho'* - Macho Amur Corktree (Male Only)**



<http://www.usm.maine.edu/arboretum/75autcork.jpg>

- Maximum 30-40' H x 30-40' W •Moderate Grower (12-24"/year) •Bloom: Yes, White
- Stress Tolerance: High •Salt Tolerance: Moderate •Fall Color: Bronze

Macho Amur Corktree has a short, thick trunk and an open, rounded canopy which makes it ideal as a durable shade tree. It can be used as a street and parking lot planting because it is fruitless. The deciduous, dark green, pinnately compound leaflets change to bronze and yellow in the fall before dropping. The insignificant yellow/green flowers appear in late May to early June. Fruits are not produced on this male selection of Corktree.

21. ***Prunus mackii* - Amur Chokecherry**



[http://shade-trees.tripod.com/image/trees/amur\\_chokecherry.jpg](http://shade-trees.tripod.com/image/trees/amur_chokecherry.jpg)

- Maximum 30-40' H x 25-35' W •Moderate Grower (12-24"/year) •Bloom: Yes, White
- Stress Tolerance: Intermediate •Salt Tolerance: Moderate •Fall Color: Yellow

Amur Chokecherry is pyramidal when young but ultimately forms a dense, rounded canopy which provides light shade below. The deciduous leaves are joined in early to mid-May by an explosion of white, fragrant flowers. The multitude of tiny black fruits which follow ripen in August and are quite attractive to birds. This tree has one of the most attractive bark features of any tree in North America.

22. ***Quercus robur 'Fastigiata'* and *'Skyrocket'* - Columnar English Oak**



[http://ketenewplymouth.peoplesnetworkknz.info/image\\_files/0000/0000/6118/Fabur\\_fastigiata-3.JPG](http://ketenewplymouth.peoplesnetworkknz.info/image_files/0000/0000/6118/Fabur_fastigiata-3.JPG)

- Maximum 40' H x 15-20' W •Moderate Grower (12-24"/year) •Bloom: No
- Stress Tolerance: High •Salt Tolerance: High •Fall Color: Copper

Columnar English Oak is an upright tree which matures into a dense elongated oval shape. with a short trunk and makes a striking landscape specimen. The leaves maintain their dark green color throughout the year until they turn brown in autumn. They often remain on the tree for some time before dropping. The attractive, dark brown bark is deeply ridged and furrowed, and the one-inch acorns persist on the tree throughout the winter.

23. ***Sophora japonica* - Pagoda Tree**



[http://shade-trees.tripod.com/image/trees/sophora\\_japonica.jpg](http://shade-trees.tripod.com/image/trees/sophora_japonica.jpg)

- Maximum 40' H x 30-35' W •Fast Grower (<24"/year) •Bloom: Yes, White to Yellow
- Stress Tolerance: High •Salt Tolerance: High •Fall Color: Yellow

Sophora species form a fine-textured, round canopy even as a young tree. It has a rapid growth rate and tolerates polluted city conditions, heat, and drought, because of this Sophora species are highly recommended as street trees. The very showy, greenish-white to yellow flowers are produced in mid to late summer and provide an airy feel to the tree for several weeks.

24. ***Sorbus aucuparia* - European Mountain Ash (Unaffected by Emerald Ash Borer)**



<http://www.misttermcgregor.com/euroash.jpg>

- Maximum 25-30' H x 15-25' W •Moderate Grower (12-24"/year) •Bloom: Yes, White
- Stress Tolerance: Intermediate •Salt Tolerance: Moderate •Fall Color: Yellow, Red

European Mountain-Ash has a dense oval form. The white flowers are somewhat showy, appearing in the spring after the leaves. The tree shows its true colors when the fruit is set in mid-summer. The wonderfully-showy, orange-red fruit is borne in heavy clusters of about 40 berries although cultivars are available with pink, yellow and red fruits. Fruits are usually eaten by birds.

## Large Trees.

Suitable for continuous tree lawns, 8'+ wide but, not under wires

1.



<http://www.qscaping.com/Images/Photos/F277-08.jpg>

### ***Acer nigrum* 'Greencolumn' - Greencolumn Black Maple**

- Maximum 40-50' H x 15-20' W
- Fast Grower (<24"/year)
- Bloom: No
- Stress Tolerance: Intermediate/High
- Salt Tolerance: Moderate/High
- Fall Color: Orange

The Greencolumn Black Maple is a strong growing maple with characteristically less invasive roots than other large Maple Species. This tree exhibits bright green leaves with showy apricot and orange fall colors.

2.



<http://upload.wikimedia.org/wikipedia/commons/6/69/CeltisOccidentalis.jpg>

### ***Celtis laevigata* 'All Seasons'- All Seasons Sugarberry**

- Maximum 50' H x 50' W
- Fast Grower (<24"/year)
- Bloom: Yes, Green
- Stress Tolerance: High
- Salt Tolerance: High
- Fall Color: Yellow

Sugarberry is a very large, broad, fast growing deciduous tree has a rounded vase crown with spreading, long branches. The medium-textured, light green leaves turn bright yellow in fall and can be showy in some years. This tree is highly adaptable to many conditions.

3.



<http://www.tree-pictures.com/hackberry5.jpg>

### ***Celtis occidentalis* - Hackberry**

- Maximum 40-60' H x 40-50' W
- Fast Grower (<24"/year)
- Bloom: Yes, Green
- Stress Tolerance: High
- Salt Tolerance: Moderate
- Fall Color: Yellow

Hackberry is a rounded, vase shaped tree which is characterized by a fast growth habit and tolerance for tough conditions. This tree is utilized extensively in street tree applications due to its tough nature. The mature bark is light gray, rough and corky and the small fruit turns from orange red to purple and is relished by birds. Caution, the berries will temporarily stain sidewalks and other paved surfaces.

4.



[http://farm4.static.flickr.com/3079/2513090224\\_752d6c0fbd.jpg](http://farm4.static.flickr.com/3079/2513090224_752d6c0fbd.jpg)

### ***Cercidiphyllum japonicum* - Katsura Tree**

- Maximum 40-60' H x 35-60' W
- Moderate Grower (12-24"/year)
- Bloom: Yes, Green
- Stress Tolerance: Intermediate
- Salt Tolerance: Moderate
- Fall Color: Yellow

Katsura Tree is a rounded headed shade tree which has an extremely attractive form. New leaves are heart shaped and have a reddish/purple color which changes to medium green in summer. This tree is highly adaptable to many different environments and essentially free of pests. Select single stemmed specimens for street tree use and be sure that the major limbs are well spaced along a central trunk to prevent branches from splitting from the tree.

5.

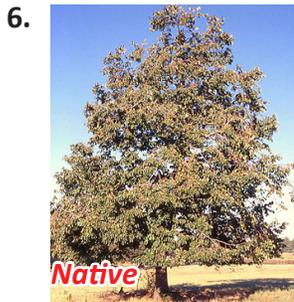


[http://www.bgky.org/tree/images/turkish\\_filbert\\_hazelnut.jpg](http://www.bgky.org/tree/images/turkish_filbert_hazelnut.jpg)

### ***Corylus colurna* - Turkish Filbert**

- Maximum 40-60' H x 25-35' W
- Slow Grower (<12"/year)
- Bloom: No
- Stress Tolerance: High
- Salt Tolerance: Sensitive
- Fall Color: Yellow

Turkish Filbert exhibits a pyramidal form. Like many trees with horizontal branches, the main limbs are quite small in diameter in relationship to the typically straight trunk, and arise at almost a 90-degree angle. This should make the tree quite durable in urban areas and helps maintain a symmetrical crown. The lush, dark green leaves are five inches long and stay on the tree long into the fall, finally turning a pale yellow/green before dropping.

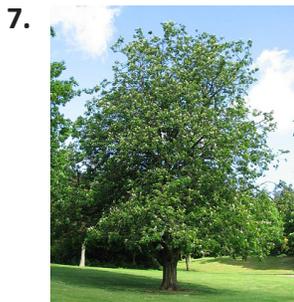


***Diospyros virginiana* - Persimmon**

- Maximum 40-60' H x 20-35' W •Moderate Grower (12-24"/year) •Bloom: Yes, White
- Stress Tolerance: High •Salt Tolerance: High •Fall Color: Red

Common Persimmon is an interesting, somewhat irregularly-shaped tree. Bark is grey or black and distinctly blocky with orange in the valleys between the blocks. Fall color can be a spectacular red. It is well adapted to cities, but presents a problem with fruit litter. The trunk typically ascends up through the crown in a curved but very dominant fashion, rarely producing double or multiple leaders.

<http://www.texasbeyondhistory.net/adaes/images/persimmon-sm.jpg>

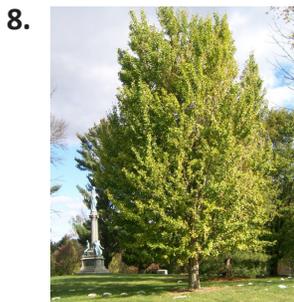


***Fagus sylvatica* - European Beech**

- Maximum 25' H x 25' W •Slow Grower (<12"/year) •Bloom: No
- Stress Tolerance: Intermediate •Salt Tolerance: Sensitive •Fall Color: Copper

European Beech has a wide, oval, spreading form. Branches normally sweep the ground in a graceful fashion. This tree has showy copper leaves in fall. For street tree applications branches must be pruned. This tree makes one of the finest specimens of all available in North America for large scale landscapes.

<http://www.keele.ac.uk/university/arboretum/memorial/images/edwardVII.JPG>



***Ginkgo biloba* - Ginkgo (Male Only)**

- Maximum 50-75' H x 50-60' W •Slow Grower (<12"/year) •Bloom: No
- Stress Tolerance: High •Salt Tolerance: Moderate •Fall Color: Yellow

Ginkgo Biloba makes a durable street tree where there is enough overhead space to accommodate the large size. The shape is often irregular with a large branch or two seemingly forming its own tree on the trunk. This tree has no known insect or disease pests. The interesting fan shaped leaves produce a showy yellow in fall. Only male non-fruiting varieties should be planted to avoid fruit with noxious odor.

<http://www.plantplaces.com/photos/Ginkgo-biloba.Autumn.Gold.JPG>



***Gleditsia tricanthos inermis* - Moraine, Shademaster and Skyline Honeylocust**

- Maximum 50-75' H x 35-50' W •Fast Grower (<24"/year) •Bloom: No
- Stress Tolerance: High •Salt Tolerance: High •Fall Color: Yellow

Honeylocust exhibits a graceful, vase-shape to oval form. It will grow two to four feet each year during the first 15 years after planting. vase shape. The small leaflets are very light and airy, and provide soft, dappled shade below. The tiny leaflets turn golden yellow in fall before dropping and are so small they easily vanish into the grass below, without any raking being necessary. Due to its salt and stress tolerance this tree is well suited as a hardy street tree.

[http://www.mrjacksfarm.com/dnn/Portals/0/Skyline\\_Hone\\_Locust.jpg](http://www.mrjacksfarm.com/dnn/Portals/0/Skyline_Hone_Locust.jpg)

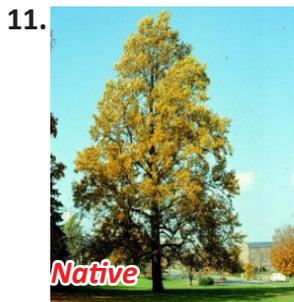


***Gymnocladus dioica* - Kentucky Coffeetree**

- Maximum 60-75' H x 45-60' W •Moderate Grower (12-24"/year) •Bloom: Yes, White
- Stress Tolerance: High •Salt Tolerance: Moderate •Fall Color: Yellow

Kentucky Coffeetree exhibits an irregular oval form with an open canopy. The foliage is dark green turning a vibrant yellow in fall. Flowers are white and fragrant but, usually hidden by the dark foliage. The seed pods are legume-like but, will disintegrate rapidly. Male cultivars without fruit should be available soon. These will be well-suited for planting along streets.

[https://facultystaff.richmond.edu/~jhayden/landscape\\_plants/summer\\_woody\\_plants/gymnocladus\\_dioica\\_VATECH\\_01s.JPG](https://facultystaff.richmond.edu/~jhayden/landscape_plants/summer_woody_plants/gymnocladus_dioica_VATECH_01s.JPG)



***Liriodendron tulipifera* - Tuliptree**

- Maximum 45-100' H x 25-45' W •Moderate Grower (12-24"/year) •Bloom: Yes, Green
- Stress Tolerance: Intermediate •Salt Tolerance: Sensitive •Fall Color: Yellow

Tuliptree exhibits a narrow oval crown, even as it grows older. Trunks become massive in old age, becoming deeply furrowed with thick bark. The tree maintains a straight trunk and generally does not form double or multiple leaders. The fall color is gold to yellow. The scented, tulip-like, greenish-yellow flowers appear in mid-spring. Tuliptree is well suited as a street tree provided it is specified more as a specimen or in entrance areas.

<http://image.gardening.eu/giardino/Alberi/Liriodendron/Liriodendron.jpg>



***Magnolia acuminata* - Cucumber Magnolia**

- Maximum 60-80' H x 35-60' W •Fast Grower (<24"/year) •Bloom: Yes, Yellow
- Stress Tolerance: Intermediate •Salt Tolerance: Sensitive •Fall Color: Yellow

Cucumber Magnolia is pyramidal when young but becomes broad, oval or rounded with age. Branches must be pruned in street tree applications. Older trees have a stately silhouette, particularly in the winter with branches bare, sporting a number of large-diameter branches growing from a dominant central trunk.

[http://www.westonnurseries.com/\\_ccLib/image/plants/DETA-225.jpg](http://www.westonnurseries.com/_ccLib/image/plants/DETA-225.jpg)

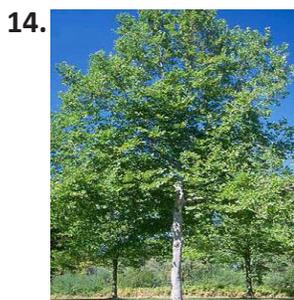


***Metasequoia glyptostroboides* - Dawn Redwood**

- Maximum 70-90' H x 15-25' W •Fast Grower (<24"/year) •Bloom: No
- Stress Tolerance: Intermediate •Salt Tolerance: Sensitive •Fall Color: Orange

Dawn Redwood exhibits a perfect pyramidal form. Although it looks like an evergreen, the needles are deciduous. The orange-red to brown trunk base is the most outstanding part of the tree. The tree requires little if any pruning to maintain the pyramidal form. The tree is very tolerant of air pollution and will do well as a street tree with lower branches removed.

<http://mylandworks.com/Upload%5CGallery%5Cplantmaterials%5CTrees%5CImages%5CDawn%20Redwood.jpg>



***Platanus x acerifolia* - Bloodgood, Columbia and Liberty London Planetree**

- Maximum 75-85' H x 50-70' W •Fast Grower (<24"/year) •Bloom: Yes, Red (Insignificant)
- Stress Tolerance: High •Salt Tolerance: Moderate •Fall Color: Yellow

London Planetree exhibits pyramidal form in youth, it develops a spreading rounded crown with age supported by a few, very large-diameter branches. The London Planetree looks similar to the Sycamore but, is bred to be more disease resistant. This tree has been used for many years as a street tree and provides interesting bark characteristic, large leaves and a nice spreading canopy.

<http://troymi.gov/parksrec/trees/treestoplant/LondonPlanetree3.jpg>



***Quercus alba* - White Oak**

- Maximum 60-100' H x 60-80' W •Slow Grower (<12"/year) •Bloom: No
- Stress Tolerance: Intermediate •Salt Tolerance: High •Fall Color: Red

White Oak exhibits a symmetrical pyramidal, round form. The red fall color is fairly reliable year to year and is outstanding among the Oaks Brown leaves may be held on the tree into the early part of the winter. This tree is mostly pest and disease resistant. For street tree applications the lower branches may need to be pruned.

[http://shade-trees.tripod.com/image/trees/white\\_oak.jpg](http://shade-trees.tripod.com/image/trees/white_oak.jpg)



***Quercus bicolor* - Swamp White Oak**

- Maximum 50-70' H x 50-70' W •Moderate Grower (12-24"/year) •Bloom: No
- Stress Tolerance: Intermediate •Salt Tolerance: Moderate •Fall Color: Yellow, Red

Swamp White Oak exhibits a broad, open, rounded canopy and casting dense shade below. The shiny, dark green leaves turn a showy yellow/brown to red before dropping. The oval, one-inch acorns are usually found in pairs on one to four-inch-long stems, and are quite attractive to a variety of mammals and birds. Swamp White Oak has deeply ridged and furrowed, dark brown bark, and forms an impressive street tree.

<http://www.colostate.edu/Dept/CoopExt/4dmg/images/swampoak.jpg>



***Quercus coccinea* - Scarlet Oak**

- Maximum 60-75' H x 45-60' W •Moderate Grower (12-24"/year) •Bloom: No
- Stress Tolerance: Intermediate •Salt Tolerance: Moderate •Fall Color: Red

Scarlet Oak exhibits a rounded, spreading canopy. This canopy makes the tree well-suited for planting along streets. The tree is so-named for its beautiful, red-colored fall leaves. Fairly smooth grey bark in youth roughens to a dark brown or black on the trunk of older specimens. Plant 30 to 40' on center to form a canopy overhead along streets.

[http://3.bp.blogspot.com/\\_RK8-efjKL-0/RwbwmAaCRHI/AAAAAAAAABek/206X6ebFzHY/s320/scarlet+oak.jpg](http://3.bp.blogspot.com/_RK8-efjKL-0/RwbwmAaCRHI/AAAAAAAAABek/206X6ebFzHY/s320/scarlet+oak.jpg)

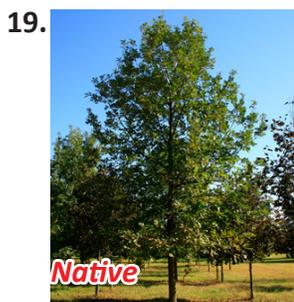


***Quercus imbricaria* - Shingle Oak**

- Maximum 40-60' H x 40-60' W •Slow Grower (<12"/year) •Bloom: Yes, Green (Insignificant)
- Stress Tolerance: High •Salt Tolerance: High •Fall Color: Yellow, Red

Shingle oak exhibits a stately rounded, pyramidal form which retains its symmetry. The smooth leaves begin as red to yellow and deepen to a rich green through the summer, then turn shades of yellow and rust again in the fall before dropping. Some leaves will persist on the tree throughout the winter. In May or early June the flowers followed by the production of one-half to one-inch-long, dark brown acorns.

[http://www.halkanursery.com/picts/Quercus\\_imbricaria2.jpg](http://www.halkanursery.com/picts/Quercus_imbricaria2.jpg)



***Quercus macrocarpa* - Bur Oak**

- Maximum 15' H x 15' W •Slow Grower (<12"/year) •Bloom: No
- Stress Tolerance: Intermediate/High •Salt Tolerance: Moderate/High •Fall Color: Varies

Bur Oak exhibits a symmetrical, round spreading form which in street tree application can be quite stunning. Bark is an unusual light brown to grey depending on the specimen, and is deeply furrowed on older trees. Acorns are almost completely covered with a furry, bur-like cap and are large, creating a sizeable clean-up job in a maintained landscape. Architects like the tree due to its uniformity in crown shape.

[http://www.halkanursery.com/picts/Quercus\\_macrocarpa2.jpg](http://www.halkanursery.com/picts/Quercus_macrocarpa2.jpg)



***Quercus muehlenbergii* - Chinkapin Oak**

- Maximum 40-60' H x 50-60' W •Fast Grower (<24"/year) •Bloom: No
- Stress Tolerance: Intermediate/High •Salt Tolerance: Moderate •Fall Color: Yellow

Chinkapin Oak exhibits a broad, rounded canopy with strong branches. Young trees often exhibit a straight central leader with numerous branches originating at the same node. The yellow/green, deciduous, lobed leaves turn shades of red, yellow, orange and brown before dropping in fall. The acorns which are produced are edible. The lowest branches should be removed in street tree applications.

<http://porkyfarm.com/images/Quercus%20muehlenbergii%20%201.jpg>

21.



### ***Quercus rubra* - Northern Red Oak**

- Maximum 60-70' H x 50-60' W •Fast Grower (<24"/year) •Bloom: No
- Stress Tolerance: High •Salt Tolerance: High •Fall Color: Red

Northern Red Oak exhibits a broad, round form and grows quicker than most other Oak species. The foliage turns deep red in the fall. Acorns are small and easily cleaned up or eaten by wildlife. This tree withstands most conditions, has a clean habit of growth and makes one of the best street and shade trees.

[http://www.hosstreefarm.com/images/northernredoaktree\\_5pxa.jpg](http://www.hosstreefarm.com/images/northernredoaktree_5pxa.jpg)

22.



### ***Taxodium distichum* - Bald Cypress**

- Maximum 45-75' H x 25-35' W •Fast Grower (<24"/year) •Bloom: No
- Stress Tolerance: High •Salt Tolerance: Moderate •Fall Color: Yellow, Copper

Bald Cypress exhibits a pyramidal shape when young which gradually develops into a broad-topped spreading, open canopy. The pale green, needle-like leaves turn a brilliant coppery red in fall before dropping, but the bare branches and reddish gray, peeling bark provide much landscape interest during the winter. This tree is relatively maintenance free, requiring pruning only to remove dead wood and unwanted lower branches.

<http://www.characterstrees.com/sitebuilder/images/BaldCypress-450x600.jpg>

23.



### ***Tilia cordata* - Littleleaf Linden**

- Maximum 60-70' H x 35-50' W •Fast Grower (<24"/year) •Bloom: Yes, Yellow
- Stress Tolerance: Intermediate •Salt Tolerance: Sensitive •Fall Color: Yellow

Littleleaf Linden exhibits a dense pyramidal to oval crown which casts deep shade. Architects enjoy using the tree due to its predictably symmetrical shape. Littleleaf Linden is a prolific bloomer, the small, fragrant flowers appearing in late June and into July. Japanese beetles often skeletonize Linden foliage towards the end of the summer.

[http://www.winona.edu/publications/treebook/images/LittleLeaf-Linden-Fall-257\(1\).jpg](http://www.winona.edu/publications/treebook/images/LittleLeaf-Linden-Fall-257(1).jpg)

24.



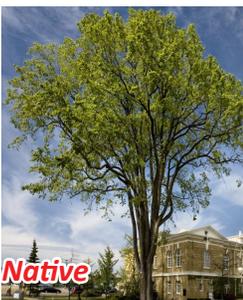
### ***Tilia tormentosa* - Silver Linden**

- Maximum 50-70' H x 40-70' W •Fast Grower (<24"/year) •Bloom: Yes, White/Yellow
- Stress Tolerance: Intermediate •Salt Tolerance: Moderate •Fall Color: Yellow

Silver Linden exhibits a pyramidal form when young but develops into an upright silhouette with an oval canopy and often has multiple trunks. The dark green leaves turn yellow before dropping in autumn. In early summer, the trees are perfumed with extremely fragrant clusters of small, yellow/white blossoms. Reportedly less susceptible to Japanese beetles than other Lindens.

<http://www.uvm.edu/~uvmwalks/3/plantimages/Tiliatomentosa06.jpg>

25.



### ***Ulmus americana Specific Hybrids* - American Liberty and Valley Forge Elm**

- Maximum 50-60' H x 30-70' W •Fast Grower (<24"/year) •Bloom: No
- Stress Tolerance: High •Salt Tolerance: Moderate •Fall Color: Yellow

American Liberty and Valley Forge Elm Hybrids are disease resistant American Elm's with a pedigree and warranty against Dutch Elm Disease. The American Elm displays a classic vase shaped form, and is perfect for many locations including street tree applications. As the tree matures, it displays wide canopies to heights that afford clear views of the architectural details of buildings and deep shade for people to enjoy.

[http://www.yourleaf.org/sites/yourleaf.org/files/sm\\_joe\\_pantalone\\_-\\_american\\_elm.jpg](http://www.yourleaf.org/sites/yourleaf.org/files/sm_joe_pantalone_-_american_elm.jpg)

26.



<http://www.arthurleej.com/images/Pion.JPG>

***Ulmus carpinifolia Specific Hybrids - Patriot, Pioneer, and Liberty Elm***

- Maximum 50' H x 50' W •Fast Grower (<24"/year) •Bloom: No
- Stress Tolerance: High •Salt Tolerance: Moderate •Fall Color: Yellow

Patriot, Pioneer and Liberty Elm Hybrids are a cross between Eurasian and European Hybrids. These elms are disease resistant hybrid elms and are not susceptible to Dutch Elm Disease. These hybrids exhibit a rounded form and grow quickly. Dark green leaves change to yellow in fall. These trees are more rounded in shape and a bit smaller than the American hybrids and make excellent street trees.

27.



<http://www.texarkanacollege.edu/~mstorey/plants/P000256.jpg>

***Ulmus parvifolia - Lacebark Elm***

- Maximum 40-50' H x 35-50' W •Fast Grower (<24"/year) •Bloom: No
- Stress Tolerance:High •Salt Tolerance: Moderate •Fall Color: Varies

Lacebark Elm exhibits a graceful, upright, rounded canopy of long, arching, and somewhat weeping branches which are clothed with two to three-inch-long, shiny, dark green, leathery leaves. This tree is adaptable to many situations and is well suited as a street tree. The showy, exfoliating bark reveals random, mottled patterns of grey, green, orange, and brown, adding great textural and visual interest. This elm is not susceptible to Dutch Elm Disease.

28.



<http://www.urbanforestnursery.com/images/treeprofileimages/profilegreenvasezelkova.jpg>

***Zelkova serrata 'Green Vase' - Green Vase Japanese Zelkova***

- Maximum 60-80' H x 50-60' W •Fast Grower (<24"/year) •Bloom: No
- Stress Tolerance:High •Salt Tolerance: Moderate •Fall Color: Red, Copper

Green Vase Japanese Zelkova is upright in habit and tolerant of pollution, makes a great city street tree. Major branches grow very upright and provide easy clearance for tall vehicles below making it quite suitable as a street tree. Leaves turn a brilliant burnt umber in the fall. The crowns will eventually grow together if trees are planted on 30-foot-centers, forming a wonderful shaded street.