Agenda, City of Bloomington Tree Commission Monday 15 August 2022, 10-11 am, Switchyard Park

Introduction

1. Introductions

#### Consent agenda

2. Approval of Minutes of 18 July 2022, meeting (in your email)

3. Next meeting will be Monday, September 9, 10am, Switchyard Park

**Discussions and Presentations** 

4. Public comment, if any

5. Engineering presentations

### Reports

6. Urban Forester's Report (Tim Street)

7. Update on Urban Forester position (Tim Street)

<u>Special focus of this meeting</u> 7. The topic of this meeting is a. the tree species listed in the UDO portion of the Bloomington Municipal Code and b. the tree species listed in the Tree Care Manual. These should be reconciled with each other and with current practice.

# **Topics for discussion**

I. In all publications, should we use some special designation for native trees, e.g., printing them in **bold**?

II. The regulations in the UDO supersede the regulations listed in the Tree Care Manual. The current UDO is newer than the Tree Care Manual. Tree Care Manual tree lists are an earlier attempt to codify what is now codified in the UDO.

III. The UDO and the Tree Care Manual are directed at different audiences.

The UDO species lists are legal technical specifications directed at landscape architects and designers who are working on plans for developments to be approved by the City.

The Tree Care Manual is directed at residents of the City of Bloomington. It is the principal educational resource that the Tree Commission creates to inform citizens about the choice, planting, and maintenance of trees. The City hands it out at public events such as the Farmers' Market and Arbor Day. It is available in several formats (online, in print). It is written in a style and format that is accessible to the general reader. It is the first source that City residents turn to for information about trees. It may be required for our Tree City USA status.

IV. The UDO is Title 20 of the Bloomington Municipal Code

(https://library.municode.com/in/bloomington/codes/code of ordinances)

The tree species lists are in Title 20, Section 04 "Development Standards and Incentives," subsection 080, "Landscape, buffering, and fences."

There are three tables relevant to the Tree Commission: Table 04-14 Permitted Street Tree Species (table attached) Table 04-15 Permitted Interior Tree Species (table attached) Table 04-18 Prohibited Plant Species (table attached)

These lists include:

1. Permitted trees --- trees that can be included in any plan, with no complaints, "by right."

2. **Prohibited** plant species --- trees that may not be included in any plan because they are invasive trees or because they have poor growing characteristics.

3. Any other trees many be included in a plan, subject to the approval of the Urban Forester and the Tree Commission. (These are the engineering plans that we often review at our meetings.)

V: Suggested revisions to the UDO.

Table 04-14 Permitted Street Tree Species.

Erin revised this list earlier in the spring. This is the PDF Tim sent to us. It was submitted to Council by Planning and Transportation as part of a larger packet of revisions to the UDO, and approved, although it does not yet appear in the current version online.

Recommendation: leave this list as is.

#### Table 04-15 Permitted Interior Tree Species

The Tree Commission has jurisdiction over street trees, which are owned by the City; it does not have jurisdiction over private trees such as these interior trees.

Recommendation: revise this list and include it in the Tree Care Manual under a title like "Here are some trees you might not have thought of planting."

#### Table 04-18 Prohibited Plant Species

The Tree Commission can edit this list and suggest to the Urban Forester that it be included in the next set of revisions to the UDO.

Recommendation: edit Prohibited Invasive Trees and Prohibited Plants with Poor Characteristics. Consider adding Japanese tree lilac (Syringa reticulata) to the list as per: Mary's note. Note that elm (ulmus) currently appears in both the permitted and the prohibited tree lists.

VI. The current version of the Tree Care Manual is dated 2017, prior to the completion of the tree species lists in the UDO.

Lists of tree species appear under the section "Bloomington Approved Street Tree Species." There are nine tables: (copy attached) Table 1: Small tree Table 2a: Crabapple recommended Table 2b: Crabapple not recommended

Table 3: Medium tree Table 4: Large tree

Table 5: Undesirable species for street trees

Table 6: Tolerant of urban conditions

Table 7: Slow to recover from transplanting

Table 8: Planting season by species

VII. Crabapples Crabapples are on the UDO list of prohibited plants with poor characteristics. *Recommendation: omit the crabapple tables*.

VII. Miscellaneous tree species lists
Table 5: Undesirable species for street trees
Recommendation: replace with the UDO Prohibited Invasive Trees and Prohibited Plants with Poor Characteristics
Table 6: Tolerant of urban conditions
Recommendation: omit this table.
Table 7: Slow to recover from transplanting
Recommendation: omit this table.
Table 8: Planting season by species
Recommendation: omit this table.

IX. Revise the Tree Care Manual to better serve as an educational resource for City residents

The Tree Care Manual currently contains conflicting recommendations: some of the recommendations are about street trees, and some of the recommendations are about private trees. At the minimum we should separate these two sets of recommendations, especially because street trees already are covered in the UDO.

We can do more. We can include the information about street trees from the UDO. However, we can also do a better job of educating residents about what kinds of trees are good to plant by establishing some principles for selecting trees and by making suggestions of good trees to plant. This is important for two reasons. First, most people who are reading the Tree Care Manual are reading it to learn more about the private trees they plan to plant, not about street trees. Secondly, we can influence what private trees are planted by including specific desirable trees in our lists. For example, very few people are going to plant our native fruit trees --- persimmon and pawpaw --- in their yards unless someone suggests that these are desirable trees to plant.

Recommendation: replace the section "Bloomington Approved Street Tree Species" with a section entitled "Recommended Street Trees and Recommended Private Trees."

X. Proposed organization for new section "Recommended Street Trees and Recommended Private Trees"

Part 1: Street trees

- 1. Special needs of street trees
- 2. Permitted street trees

Table: UDO list of permitted street tree species

3. Invasive trees: Why are they a problem?

Table: UDO list of prohibited invasive trees

4. Trees with undesirable characteristics: What characteristics make a tree bad for a street tree? Table: UDO list of prohibited trees with poor characteristics

Part 2: Private trees and recommendations for residents

1. Plant more trees. In the past one tree in the front lawn was OK; in an era of climate change we need more tree canopy cover and more trees.

- 2. Plant native trees. Why are native trees especially valuable? Table: Native trees: large, medium, small
- 3. Plant a variety of trees. Diversity is as important among trees as it is among people Table: Here are some trees you may not have thought of: large, medium, small
- 4. Plant fruit trees. Fruit trees have innumerable benefits, and you get fruit, too. Table: Recommended fruit trees. Persimmon, pawpaw go here. Fig? Serviceberry?

Table: Fruit trees to avoid, and why. Apple.

5. Plant nut trees.

Table: Recommended nut trees. Which ones? Table: Nut trees to avoid and why. Black walnut

Handouts

2022 Updated Street Tree List UDO (from Tim Street)

2022 20—04 Table 04-18 Prohibited Plant species

2017 Tree Care Manual Bloomington approved street tree species list

2022 8 2 Ecologic LLC: Japanese Tree Lilac (Syringa reticulata)



### Bloomington Tree Commission Minutes of the meeting, 18 July 2022

PRESENT: Laurel Cornell (chair, Professor Emeritus of Sociology and Studio Art); Stephanie Freeman-Day (PhD Student, SPEA); George Hegeman (Professor Emeritus, Microbiology, IUB); Mary Welz (Sycamore Land Trust Education Director, MC-IRIS Board Member); Dedaimia Whitney (Bloomington Environmental Commission, Indiana Tree Steward); Mia Williams (landscape architect, Indiana University).

ABSENT: Jeff Palmer (Professor Emeritus, Biology, IUB)

GUESTS: Julie Ramey, (Community Relations Manager, Parks and Recreation); Tim Street (Operations Director, Parks Dept)

#### **CONSENT AGENDA**

Approval of Minutes of 27 June, 2022, meeting Next meeting will be Monday, 15 August, 10 a.m., Switchyard Park

#### REPORTS

**Trees at IU** (Mia Williams). IU planted about half a dozen trees in the spring, but they won't be doing any additional planting until fall, because of high temperatures and lack of rainfall. Mia said they are also having staffing problems, particularly with retention.

#### **NEW BUSINESS**

Letter of thanks for Kerry Bridges, approved

Letter of thanks for Dave Parkhurst, approved

#### **OLD BUSINESS**

**Urban Forester position** (Tim Street). Posting closes on 27 July. Review of candidates will start in early August, in-person interviews possibly on the 23<sup>rd</sup>. Salary will be in the low \$50s.

City Legal review of proposed bylaws for the Tree Commission (Tim Street).

- 1. Instead of listing commissioner duties in the bylaws, they are listed instead in Municipal Code 2.20.15. Several commissioners expressed dissatisfaction with this, as it requires interested person to take several additional steps to get the information.
- 2. City Legal said the TC does not have the authority to establish term limits. It was suggested that if an individual member's participation becomes problematic, the [possibly] global attendance requirements for city boards and commissions could be used to gently suggest that non-participating members resign.
- 3. Leadership titles should be president (instead of chair) and vice-president (instead of recorder). Dedaimia was appointed vice-president until the end of the year when new officers are chosen.

#### **Revisions to Tree Care Manual** (all)

1. The Tree Commission already regularly updates the tree species recommendations in the Tree Care Manual. Many members of the Tree Commission have current scientific information on which tree species should be recommended, allowed, and prohibited.

Pests and diseases also erupt quickly, making their target species risky for inclusion in the approved lists. Because of this need for timely revision, the TC wants the tree species list to be housed in the Tree Care Manual with a pointer to it in the UDO. Such a change will require City Council approval; Tim said he would try to make this happen.

- 2. The TC agreed to a yearly update of the Tree Care Manual. After the current revision is completed, there will be a discussion of the optimal time for revision each year.
- 3. Mary noted a discrepancy between the language regarding tree species in the UDO vs. the Tree Care Manual. She said it caused much confusion; TC agreed it should be reconciled.
- 4. There is some confusion about where edits sent in by Mary and Mia went after Erin left. Mary has preserved her comments and will forward them to the TC. Laurel suggested we focus on the tree species list first, followed by other textual edits. Our goal will be to have the recommendations about the UDO to the Council by the end of the year. Tim will send the commission the current list, which incorporates Erin's changes.
- 5. To general agreement, Mary suggested the TC invite public comment about the tree species list once the commission has its work finished.
- 6. The TC's next meeting will be devoted to reconciling the separate tree species list.

#### Additional announcements

George said MCPL is considering creating a trail through Batchelor Forest named in honor of Tom Coleman, long-serving member of the TC and one of the creators of the school forest.

Respectfully submitted,

Dedaimia Whitney

#### Chapter 20.04: Development Standards & Incentives 20.04.080 Landscaping, Buffering, and Fences

Common Name	Scientific Name
Large Street Trees - 45 feet or more at mature height	
Black Maple	Acer nigrum
Red Maple	A <del>cer rubrum</del>
Sugar Maple	Acer saccharum
Sugar Hackberry	Celtis laevigata
Hackberry	Celtis occidentalis
American Beech	Fagus grandfolia
Thornless Honeylocust	Gleditsia triacanthos inermis
Kentucky Coffee Tree	Gymnocladus dioica
Sweetgum	Liquidambar styraciflura
Tulip Tree	Liriodendron tulipifera
Blackgum or Tupelo	Nyssa sylvatica
Sycamore	Platanus occidentalis
London Planetree	<u>Platanus x acerfolia</u>
White Oak	Quercus alba
Swamp White Oak	Quercus bicolor
Scarlet Oak	Quercus coccinea
Shingle Oak	Quercus imbricaria
Overcup Oak	<u>Quercus lyrata</u>
Bur Oak	Quercus macrocarpa
Blackjack Oak	<u>Ouercus marilandica</u>
Chinkapin Oak	<u>Quercus muhlenbergi</u>
Red Oak	Quercus rubra
Shumard Oak	Quercus shumardii
Post Oak	Quercus stellata
Black Oak	Quercus velutina
Bald Cypress	Taxodium distichum
Basswood or American Linden	Tilia americana
Elm	<u>Ulmus</u>
Medium Street Trees - 25 feet to 45 feet at mature heig	ght
Autumn Flame Red Maple	Acer rubrum
River Birch	<u>Betula nigra</u>
Downy Serviceberry	Amelanchier arborea
American Hornbeam or Blue Beech	Carpinus caroliniana
Yellowwood	Cladrastis lutea
Hop Hornbeam or Ironwood	Ostrya virginiana
Regal Prince Oak	<u>Ouercus x warei</u>
Crimson Spire Oak	Quercus

Bloomington, Indiana – Unified Development Ordinance Effective Date: April 18, 2020 Last Amended Date: July 12, 2021

# Chapter 20.04: Development Standards & Incentives 20.04.080 Landscaping, Buffering, and Fences

### **Table 04-14: Permitted Street Tree Species** Bold text indicates evergreen species

Common Name	Scientific Name	
Small Street Trees - Under 25 feet at mature height		
Apollo Maple	Acer saccharum "Barrett Cole"	
Shadblow Serviceberry	Amelanchier canadensis	
Allegheny Serviceberry	Amelanchier laevis	
Apple Serviceberry hybrids	Amelanchier x grandiflora	
Eastern Redbud	Cercis canadensis	
Flowering Dogwood	Cornus florida	
Thornless Cockspur Hawthorn	Crataegus crus-galli	
Washington Hawthorn	Crataegus phaenopyrum	
Green Hawthorn	Crataegus viridis	

#### Table 04-15: Permitted Interior Tree Species Bold text indicates evergreen species

Common Name	Scientific Name	
Large Trees - 45 feet or more at mature hei	ght	
Ohio Buckeye	Aesculus glabra	
Yellow Buckeye	Aesculus octandra	
Bitternut Hickory	Carya cordiformis	
Pignut Hickory	Carya glabra	
Shellbark Hickory	Carya laciniosa	
Shagbark Hickory	Carya ovata	
Mockernut Hickory	Carya tomentosa	
Northern Catalpa	Catalpa speciosa	
Black Walnut	Juglans nigra	
Eastern Red Cedar	Juniperus virginiana	
Cucumber Tree	Magnolia acuminata	
White Pine	Pinus strobus	
Virginia Pine	Pinus virginiana	
Blae_k Cherry	Prunus serotina	
Chestnut Oak	Quercus prinus	
Canadian or Eastern Hemlock	Tsuga Canadensis	
Medium Trees - 25 feet to 45 feet at mature	height	
River Birch	Betula nigra	
Sassafras	Sassafras albidum	
American Arborvitae	Thuja occidentalis	
Small Trees - Under 25 feet at mature heigh	nt	
Pawpaw	Asimina triloba	
Pagoda Dogwood	Cornus alternifolia	

Bloomington, Indiana – Unified Development Ordinance Effective Date: April 18, 2020 Last Amended Date: July 12, 2021

Common Name	Scientific Name	
Prohibited Invasive Trees		
Amur Maple	Acer ginnala	
Norway Maple	Acer platanoides	
Tree-of-Heaven	Ailanthus altissima	
Black Alder	Alnus glutinosa	
Russian Olive	Elaeagnus angustifolia	
Autumn Olive	Elaeagnus umbellata	
Glossy Buckthorn	Frangula alnus	
White Mulberry	Morus alba	
Princess Tree	Paulownia tomentosa	
Sawtooth Oak	Quercus acutissima	
Amur Cork Tree	Phellodendron amurense	
Callery Pear and all cultivars	Pyrus calleryana	
European or Common Buckthorn and all cultivars	Rhamnus cathartica	
Glossy or Smooth Buckthorn and all cultivars	Rhamnus frangula	
Buckthorn Tallhedge and all cultivars	Rhamnus frangula columnaris	

Common Name	Scientific Name	
Black Locust	Robinia pseudoacacia	
Siberian Elm	Ulmus pumila	
Prohibited Plants with Poor Characteristics		
Box Elder	Acer negundo	
Silver Maple	Acer saccharinum	
European White Birch	Betula pendula	
Poison Hemlock	Conium maculatum L.	
Ash	Fraxinus species	
Gingko (female only)	Gingko biloba	
Giant Hogweed	Heracleum mantegazziznum	
Rice Cutgrass	Leersia oryzoides	
Flowering Crabapple	Malus	
Wild Parsnip	Pastinaca sativa	
American Elm	Ulmus Americana	
Poison lvy	Toxicodendron radicans	
Poison Sumac	Toxicodendron vernix	
Prohibited Invasive Herbaceous Perennials		
Japanese Chaff Flower	Achyranthes japonica	

# **Bloomington Approved** Street Tree Species Lists

Per the City of Bloomington Tree Ordinance, the following tables shall constitute the official street tree species acceptable for planting in Bloomington. These are the tree species with growth characteristics that do well on urban sites. All trees are suited for USDA cold hardiness Zone 5.

The tables also include specifications for the minimum distances to be maintained between trees and other infrastructure when planting new trees within the public right of way.

# **TABLE 1 - Small Tree Species for Small Spaces**

Small trees are defined as those trees attaining a height of 20 to 30 feet at maturity.

#### **Distance from infrastructure**

- » Plant no closer than two feet from street, sidewalk, or curb.
- » Minimum grow space of four feet of tree lawn.
- » Small trees may be planted under overhead utility lines.
- » Do not plant within five feet of any underground utility (phone, sewer, water, cable, electric).
- » Do not plant within 10 feet of any utility pole or fire hydrant.
- » Do not plant within three feet of a parking area unless vehicle wheel stops are provided.
- » Trees should not be planted where traffic line of sight is compromised at intersections.
- » Tree pruning may be required as the tree matures to maintain adequate street and sidewalk clearance.

#### Minimum size

Trees planted in the public street tree lawn must be a minimum 1½-inch diameter caliper (caliper is measured six inches above ground level).

Common Name	Scientific Name	Recommended Cultivars
Allegheny Serviceberry	Amelanchier laevis	
American Hornbeam	Carpinus caroliniana	
Apple Serviceberry hybrids	Amelanchier x grandiflora	'Princess Diana' 'Autumn Brilliance'
Eastern Redbud	Cercis canadensis	Use single-trunk tree form on streets
Flowering Crabapple	Malus sp.	Many different types. See Table 2. Some native to the U.S., others Eurasia
Flowering Dogwood	Cornus florida	Plant only on sheltered sites, tree form
Japanese Tree Lilac	Syringa reticulate	'Ivory Silk'
Kousa Dogwood	Cornus kousa chinensis	
Shadblow Serviceberry	Amelanchier canadensis	
Thornless Cockspur Hawthorn	Crataegus crus-galli	'Inermis' pink flowers, purple leaves
Washington Hawthorn	Crataegus phanenopyrum	only where thorns are not problematic
Winter King Hawthorn	Crataegus viridis	'Winter King'

## **TABLE 2 - Recommended Crabapple Cultivars**

Trees of the *Malus* (crabapple) species come in many beautiful shapes, sizes, and colors of leaf and flower, making it a popular, highly utilized specimen tree. Some crabapples, however, are plagued with disease, insects, and fruit litter problems. Diseases include scab, fireblight, apple-cedar rust, and powdery mildew. Researchers have bred new cultivars to resist these diseases and insects like the Japanese beetle. Maintenance requirements of crabapples can also be rather high. Often, recurring sprouts must be trimmed from the tree base. Because crabapples can grow quite wide and low, trees planted next to sidewalks, streets, and driveways need to be pruned for adequate clearance. Use of crabapple trees along the street should be reserved for tree lawns of sufficient size to accommodate the eventual width.

Many new cultivars are on the market annually. Purchase only disease-resistant varieties.

The following attractive cultivars, tested by Purdue University, have proven to have good disease and insect tolerance and few problems with fruit drop.

Cultivar	Height	Width	Comments
'Adirondack'	18'	10'	densely covered with white flowers
Baccata 'Jackii'	20'	20'	white flowers, glossy leaves
'Bechtel'	30'	15'	fragrant, large double pink flowers
'Centzam' (Centurion)	20'	15'	rose-red flower, reddish leaves
'David'	12'	12'	good looking year 'round, smaller
'Hargozam' (Harvest Gold)	25′	20'	white flowers, gold fruit
'Pink Spires'	15′	12'	pink flowers, purple leaves
'Prairiefire'	20'	20'	pink-red flowers, excellent tree
'Red Barron'	18′	8'	good for narrow spaces
'Red Jewel' (Jewelcole)	15'	12'	smaller tree, red persistent fruit
'Sinai Fire'	15′	15′	white flowers, weeping shape
'Van Eseltine'	25′	12'	upright vase shape
'Winter Gold'	25′	20'	winter-persistent gold fruit
X zumi 'Calocarpa' (Zumi)	20'	24'	white flower, red persistent fruit

#### **Crabapple Cultivars Not Recommended**

The following should not be used because of insect and disease susceptibility.

Cultivar	Cultivar	Cultivar
'Adams'	'Indian Summer'	'Selkirk'
'Baskatong'	'Liset'	'Sentinel'
'Brandywine'	'Madonna'	'Snowdrift'
'Candied Apple'	'Mary Potter'	'Sugar Tyme'
'Donald Wyman'	'Prairie Maid'	'Velvet Pillar'
'Doubloons'	'Profusion'	'White Cascade'
'Indian Magic'	'Robinson'	'White Candle'

# **TABLE 3 - Medium Tree Species for Medium Spaces**

Medium trees are defined as those trees attaining a height of 30 to 45 feet at maturity.

#### **Distance from infrastructure**

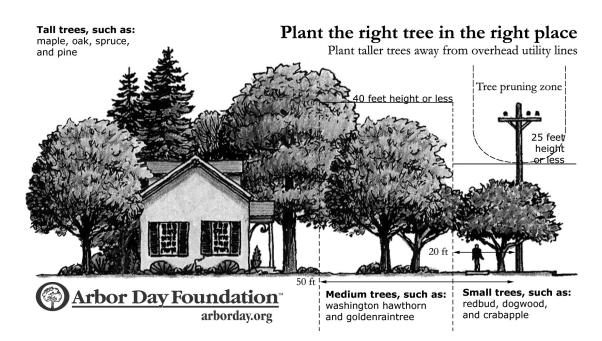
- » Plant no closer than three feet from street, sidewalk, or curb.
- » Minimum grow space of five to six feet of tree lawn.
- » Do not plant under or within 10 lateral feet of any overhead utility lines.
- » Do not plant within five feet of any underground utility (phone, sewer, water, cable, electric).
- » Do not plant within 10 feet of any utility pole or fire hydrant.
- » Do not plant within three feet of a parking area unless vehicle wheel stops are provided.
- » Trees should not be planted where traffic line of sight is compromised at intersections.

#### Minimum size

Trees planted in the public street tree lawn must be a minimum 1<sup>3</sup>/<sub>4</sub> inch diameter caliper (caliper is measured six inches above ground level).

Native tree species are indicated in **bold**.

Common Name	Scientific Name	Recommended Cultivars
American Hophornbeam	Ostrya virginiana	
European Hornbeam	Carpinus betulus	'Fastigata'
Golden Raintree*	Koelreuteria paniculata	*should come from northern seed sources and nurseries; extreme cold may damage the tree
Katsura Tree	Cercidiphyllum japonicum	Plant only on sheltered sites, tree form
River Birch	Betula nigra	relatively short lived
Turkish Filbert	Corylus colurna	
Whitespire Birch	Betula platyphlla japonica	'Whitespire'
Yellowwood	Cladrastis lutea	



### **TABLE 4 - Large Trees for Large Spaces**

Large trees are defined as those trees attaining a height of 45 feet or more at maturity.

Large shade trees are recommended for planting wherever room allows, as they help increase Bloomington's overall tree canopy and provide numerous environmental benefits. Maple species are not included on this list due to the large existing population of maples in Bloomington.

#### Distance from infrastructure

- » Plant no closer than four feet from street, sidewalk, or curb.
- » Minimum grow space of eight feet of tree lawn.
- » Do not plant under or within 20 lateral feet of any overhead utility lines.
- » Do not plant within five feet of any underground utility pole or fire hydrant.
- » Do not plant within three feet of a parking area unless vehicle wheel stops are provided.
- » Trees should not be planted where traffic line-of-sight is compromised at intersections.

#### Minimum size

Trees planted in the public street tree lawn must be a minimum 1<sup>3</sup>/<sub>4</sub> inch diameter caliper (caliper is measured six inches above ground level).

Native tree species are indicated in **bold**.

Common Name	Scientific Name	Recommended Cultivars
Bald Cypress	Taxodium distichum	
Basswood	Tilia Americana	'Boulevard', 'Redmond'
Blackgum/Tupelo	Nyssa sylvatica	
Bur Oak	Quercus macrocarpa	needs grow space of 12 feet or more
Cucumber Magnolia	Magnolia acuminate	only where thorns are not problematic
English Oak	Quercus robur	susceptible to powdery mildew
Ginkgo	Ginkgo biloba	male clones only
Hackberry	Celtis occidentalis	
Homestead Elm	Ulmus x	'Homestead'
Kentucky Coffeetree	Gymnocladus dioica	male clones only
Littleleaf Linden	Tilia cordata	'Glenleven,' 'Greenspire'
London Planetree	Platanus x acerfolia	'Bloodgood'
Northern Red Oak	Quercus rubra	
Shingle Oak	Quercus imbricaria	
Shumard Oak	Quercus shumardii	
Swamp White Oak	Quercus bicolor	
Sweetgum	Liquidambar styraciflua	'Moraine' - all have messy fruit
Thornless Honeylocust	Gleditsia triacanthos inermis	'Imperial', 'Shademaster', 'Skyline', 'Sunburst'
White Oak	Quercus alba	
Zelkova	Zelkova serrata	'Green Vase'

# **TABLE 5 - Undesirable Species for Street Trees**

These trees shall not be planted along public streets. Undesirable characteristics are listed. Evergreens are acceptable on public sites only where visibility is not a problem.

- » Fast-growing trees are weak-wooded trees and are susceptible to storm damage.
- » Do not plant an unknown seedling, which is very likely an undesirable species.
- » Avoid buying and planting cheap trees that have poor form or are partially dead.

Common Name	Scientific Name	Problems
American Elm	Ulmus Americana	disease prone
Amur maple	Acer ginnala	invasive seed
Arborvitae	Thuja sp.	visibility problems
Aspen	Populus tremuloides	weak wood
Ash, White and Green	Fraxinus sp.	Emerald ash borer prone
Black Locust	Robinia pseudoacacia	cankers, borers, breakage prone
Black Walnut, Butternut	Juglans sp.	messy fruit, alleotrophy
Boxelder	Acer negundo	weak wood, poor form, invasive seed
Catalpa	Catalpa speciosa	messy fruit
Common Cherry, Black Cherry	Prunus sp.	messy fruit, insect problems
Common Crabapple	Malus sp. (unimproved)	messy fruit, disease prone
Cottonwood	Populus deltoides	weak wood, messy seed
Fir	Abies sp.	visibility obstruction
Flowering Pear	Pyrus calleryana	invasive seed
Juniper	Juniper sp.	visibiity obstruction
Lombardy Poplar	Populus sp. 'Lombardy'	canker disease, weak wood
Mountain Ash	Sorbus sp.	thrives poorly here
Norway Maple	Acer platanoides	invasive seed
Osage Orange	Maclura pomifera	messy fruit
Persimmon	Diospyros virginiana	messy fruit
Pine	Punus sp.	visibility obstruction
Red, Slippery Elm	Ulmus rubra	disease problems
Russian Olive	Elaeagnus angustifolia	disease prone
Siberian Elm	Ulmus pumila	disease prone, weak wood, messy
Silver Maple	Acer saccharinum	weak wood, poor form
Spruce	Picea sp.	visibility obstruction
Tree of Heaven	Ailanthus altissima	invasive seed, weak wood
Tulip Poplar	Liriodendron tulipifera	weak wood
White Mulberry	Morus alba	messy fruit, somewhat invasive
White Paper Birch	Betula papyrifera	borer insects, short lived
Willow	Salix sp.	weak wood, invasive roots, messy

# **TABLE 6 - Trees Tolerant of Urban Conditions**

The following tables give advice on trees that tolerate urban conditions and timetables for planting to get the best survival. Urban sites often have poor soils and are exposed to stresses like pollution and road salt. These trees have proven to be most tolerant of such conditions and are good choices for tough sites.

Species	Species	Species
Basswood	Golden Raintree	Littleleaf Linden
Black Maple	Hackberry	London Planetree
Bur Oak	Hawthorns	Eastern Redbud
Crabapple	Hedge Maple	Shingle Oak
Cucumber Magnolia	Honey Locust	
Ginkgo	Kentucky Coffeetree	

# **TABLE 7** - Trees Slow to Recover from Transplanting

Species	Species	Species
American Hornbeam	Hackberry	Cucumber Magnolia
Flowering Dogwood	Kentucky Coffeetree	Serviceberry
Ginkgo		

# **TABLE 8 - Planting Season by Species**

Experience in tree planting has shown that certain trees have a higher survival rate when dug and balled and burlapped in the spring. The following two lists show the season that trees are normally dug at the nursery and outplanted. While containerized trees can be planted during most of the growing season, balled and burlapped trees should be planted when they are dormant (the leaves are off). This is usually Oct. 20 through May 1 in northern Indiana. Trees can be planted in winter as long as the ground is not frozen and the root ball is kept from freezing. Balled and burlapped trees can be planted while in leaf if extra care is taken to maintain constant root ball moisture and to protect the fragile leaves from drying out.

Spring Planting Only		
Bald Cypress	Flowering Pear	Kousa Dogwood
Black Gum/Tupelo	Golden Raintree	London Planetree
Cucumber Magnolia	Hackberry	Oaks, all (summer watering required)
Flowering Cherry	Hawthorns, all	Sweetgum
Flowering Dogwood		Zelkova

Spring or Fall Planting		
Basswood/Linden	Japanese Tree Lilac	Redbud
Crabapples	Kentucky Coffeetree	River Birch
Ginkgo	Littleleaf Linden	Serviceberry
Honey Locust		

# **Eco Logic LLC**

August 2 at 1:59 PM · 🕄

# Japanese Tree Lilac (Syringa reticulata)

Unfortunately, the lessons learned from the disastrous introduction of callery pears to North America are not being heeded by those who specify our urban street trees. Japanese tree lilac (Syringa reticulata) has become the small flowering tree of choice for street trees despite the known invasive tendencies of many east Asian woody plants in the eastern deciduous forests of North America.

At Holliday Park in Indianapolis, a mature planting of over two dozen of these trees follows a paved path through the park. In the native woodlands on the other side of the path, an increasing number of their shade-tolerant saplings have been found during invasive plant mapping efforts by Eco Logic Senior Ecologist Kevin Tungesvick. Some of these saplings are up to 750 feet from the parent trees. The seeds have a papery wing surrounding the kernel that aids in wind dispersal. These invading saplings will be removed through our contract with Indy Land Stewardship, however it is easy to imagine this happening in urban woodlots across the Midwest where no stewardship activities occur.

Our woodlands are replete with native understory species with proven landscaping value including redbud, hornbeam, serviceberries, hawthorns, and native crabapples. Use of these native species will protect our woodlands from invasive species and support our indigenous wildlife.





Eco Logic LLC - Posts | Facebook



