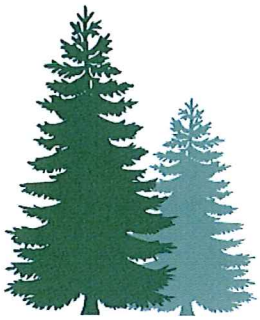

Tree Lists

Species information & selection

Selection of species, varieties, and cultivars:

1. "Right Tree - Right Place". Consider the physical conditions of your planting site. Sun and wind exposure, soil type and drainage pattern are all factors that can effect the growth and performance of the tree.

2. When choosing the right tree, it helps to consider varieties and cultivars that has a distinct character or trait. Selection of a particular species and/or cultivar can help solve problems related to planting sites. This can reduce the need for pesticides; reduce maintenance; improve tree health; predict crown size and root space needs; enhance aesthetics through more diversity of flowers; eliminate the nuisance of fruit dropping and thorns in addition to extending the life of the tree.

3. Tables 1, 2 & 3 on pages 5 through 7 of this manual contain lists of acceptable trees, entitled *Preferred Shade Tree List, Alternate / Substitute Tree List & Narrow, Columnar Trees.* The trees on these lists have been proven adaptable to and suitable for urban conditions in West Lafayette. These lists contain species by size category and common and scientific name. Trees suitable for use as street trees have been marked as such in these tables.

4. Additionally, a list of undesirable trees is provided in Table 4 on page 8. The trees on this list may not be utilized as street or parking lot trees required by the West Lafayette Landscape Ordinance. These tree species have proven undesirable characteristics such as weak woodedness, litter problems, insect and disease problems, poor form, visibility obstruction and hardiness. These trees are not suitable for use as required landscape ordinance trees but may be used if restricted to special locations on private property where they can function well due to adaptability, landscape effect, or ecosystem benefit.

5. Improved cultivars and seedless, thornless varieties **must** be used when available. Northern grown tree stock is advised to improve tree survival rate. Small trees used as street trees must be upright / columnar in form; not clump form. Most small trees are not suitable for narrow tree lawns due to low branching. Minimum size for trees required by the Landscape Ordinance:
    a. Single and two-family residential projects 1 ½ inch caliper
    b. Commercial and multi-family projects 2 ½ inch caliper

Table 1
Preferred Shade Trees
Large / Medium Tree List

Trees from Table 1 will eventually reach a height of between thirty (30) to eighty (80) feet in most urban situations. Variations of plant selections not included on the *Preferred Shade Tree List* may be approved through the Greenspace Administrator. Improved cultivars and seedless, thornless varieties **must** be used when available. Northern grown tree stock is advised to improve tree survival rate. *** symbolizes trees that are dug only during the spring.**

STREET TREES

COMMON NAME	SCIENTIFIC NAME
American Yellowwood	*Cladrastis kentuckea*
Bald Cypress	*Taxodium distichum*
*Blackgum (cultivars)	*Nyssa sylvatica* (cultivars)
Coffeetree, Kentucky (male only)	*Gymnocladus dioicus* (male only)
Dawn Redwood	*Metasequoia glyptostroboides*
Elms, Hybrid	*Ulmus* x hybrid (Frontier, New Horizon, Accolade)
*Ginkgo	*Ginkgo biloba* (male only)
Hackberry	*Celtis occidentalis* (cultivars)
Honeylocust, thornless	*Gleditsia triacanthos f. inermis* (cultivars)
*Horsechestnut, Red	*Aesculus x carnea 'Briotii'*
Katsuratree	*Cercidiphyllum japonicum*
Linden, Silver 'Sterling Silver'	*Tilia tomentosa* 'Sterling Silver'
*Magnolia, Cucumber (cultivars)	*Magnolia acuminata* (cultivars)
Maple, Miyabe State Street	*Acer miyabei* 'Morton'
*Oak, Chestnut	*Quercus montana* (*Q. prinus*)
*Oak, Chinkapin	*Quercus muehlenbergii*
*Oak, Northern Pin	*Quercus ellipsoidalis*
*Oak, Northern Red	*Quercus rubra*
*Oak, Shingle	*Quercus imbricaria*
*Oak, Shumard	*Quercus shumardii*
*Oak, Swamp Chestnut	*Quecus michauxii*
*Oak, Swamp White	*Quercus bicolor*
Planetree, London (cultivars)	*Platanus* x *acerifolia* (cultivars)
*Sweetgum (cultivars)	*Liquidambar styraciflua* (cultivars)
*Tulip	*Liriodendron tulipifera*
Zelkova, Japanese	*Zelkova serrata*

LANDSCAPE TREES
(but unacceptable as street trees)

COMMON NAME	SCIENTIFIC NAME
*Birch, River	*Betula nigra*
Corktree, Amur	*Phellodendron amurense* (male only)
Elm, Lacebark	*Ulmus parviflora* (cultivars)
Fir, White	*Abies concolor*
*Oak, Bur	*Quercus macrocarpa*
Pine, White	*Pinus strobus*
Spruce, Colorado	*Picea pungens*
Spruce, Norway	*Picea abies*
Spruce, Serbian	*Picea omorika*
Sycamore	*Platanus occidentalis*

Table 2
Alternate / Substitute Trees
Small Tree List

Trees from Table 2 will eventually reach a height of between fifteen (15) to thirty (30) feet in most urban situations. The *Alternate / Substitute Tree List* may be used with the approval of the Greenspace Administrator under circumstances not conducive to trees listed in Table 1 (i.e. overhead power lines, narrow planting strips). *** symbolizes trees that are dug only during the spring.**

STREET TREES

COMMON NAME	SCIENTIFIC NAME
*Cherry, Cornelian	*Cornus mas* (single Stem)
*Crabapple, 'Spring Snow' (sterile)	*Malus* 'Spring Snow'
*Hawthorn, 'Crusader' (thornless)	*Crataegus crusgalli* 'Crusader'
Hornbeam, American	*Carpinus caroliniana*
Hornbeam, European	*Carpinus betulus*
Hophornbeam, American	*Ostrya virginiana*
Japanese Lilac Tree	*Syringa reticulata* (cultivar)
Maple, Hedge	*Acer campestre*
*Persian Ironwood (Cultivars)	*Parrotia persica*
Redbud	*Cercis canadensis* (single stem)
Serviceberry	*Amelanchier* species

LANDSCAPE TREES
(but unacceptable as street trees)

COMMON NAME	SCIENTITIFIC NAME
*Crabapple, Japanese	*Malus floribunda* (disease resistant cultivars)
*Crabapple, Siberian	*Malus baccata* (disease resistant cultivars)
*Dogwood, Japanese	*Cornus kousa*
*Dogwood, Pagoda	*Cornus alternifolia*
Fringetree	*Chionanthus* species
*Hawthorn, Cockspur 'Crusader' (thornless)	*Crataegus crusgalli* 'Crusader'
*Hawthorn, Green 'Winter King'	*Crataegus viridis* 'Winter King'
*Hawthorn, Washington	*Crataegus phaenopyrum*
*Magnolia, Star	*Magnolia stellata*
Maple, Paperbark	*Acer griseum*
Redcedar, Eastern 'Canaert'	*Juniperus virginiana* 'Canaertii'
Viburnum, Nannyberry (tree form)	*Viburnum lentago* (tree form)
Witchhazel	*Hamamelis* species

Table 3
Alternate / Substitute Trees
Narrow, Columnar Habit Trees

Trees from Table 3 are narrow, columnar habit trees that will eventually reach a height of between thirty (30) to eighty (80) feet in most urban situations. Trees from *Narrow, Columnar Habit Trees* table are for situations where a typical canopy spread of thirty-five (35) to sixty (60) feet cannot be accommodated and has been directed to be used by the Greenspace Administrator. Substitutions may be approved through the Greenspace Administrator, but require prior approval. Improved cultivars and seedless, thornless varieties **must** be used when available. Northern grown tree stock is advised to improve tree survival rate. *** symbolizes trees that are dug only during the spring.**

STREET TREES

COMMON NAME	SCIENTIFIC NAME
Elm, 'Everclear'	*Ulmus* x 'Everclear'
*Hornbeam, Upright European	*Carpinus betulus* 'Fastigata'
*Oak, Columnar English	*Quercus robor* 'Fastigata'
*Oak, Crimson Spire	*Quercus* x 'Crimschmidt'
*Oak, Regal Prince	*Quercus* x 'Regal Prince'
Pine, Columnar White	*Pinus strobus* 'Fastigata'
*Sweetgum, 'Slender Silhouette'	*Liquidambar styraciflua* 'Slender Silhouette'
*Persian Ironwood, 'Vanessa'	*Parrotia persica* 'Vanessa'
Zelkova, Japanese 'Musashino'	*Zelkova serrata* 'Musashino'

Table 4
Undesirable Street Tree List

Trees listed in Table 4 are not suitable for street trees and **shall not** be allowed as trees required by the Landscape Ordinance. Undesirable characteristics are listed.

COMMON NAME	SCIENTIFIC NAME	PROBLEMS
Arborvitae	Thuja sp.	visibility obstruction
Ash, green, white and blue	Fraxinus sp.	Borer insects
Ash, Mountain	Sorbus sp.	thrives poorly
Aspen	Populus tremuloides	weak wood
Birch, White Paper	Betula papyrifera	borer insects, poor survival
Boxelder	Acer negundo	weak wood, poor form, invasive seed
Catalpa	Catalpa speciosa	messy fruit
Cherry, Choke	Prunus virginiana	messy fruit, insect problems
Cherry, Common	Prunus sp.	messy fruit, insect problems
Cottonwood, common	Populus deltoides	weak wood, messy seed
Crabapple, Common	Malus sp.	messy fruit, disease problems, poor form
Elm, Siberian	Ulmus pumila	weak wood
Elm, Slippery Red	Ulmus rubra	disease problems
Locust, Black	Robinia pseudoacacia	shallow rooted, borer insects, cankers
Maple, Silver	Acer saccharinum	weak wood, poor form
Maple	Acer sp.	high population, unless noted on Tables
Mulberry, White	Morus alba	messy fruit & crown
Olive, Russian	Elaeagnus angustifolia	disease prone, invasive
Orange, Osage	Maclura pomifera	messy fruit & crown
Pear, Common	Pyrus sp.	invasive
Persimmon	Diospyros virginiana	messy fruit
Poplar, Lombardy	Populus sp.	weak wood, canker disease
Tree of heaven	Ailanthus altissima	invasive seed, weak wood
Walnut, Butternut	Juglans sp.	messy fruit, allelopathy
Willow	Salix sp.	weak wood, messy

Note:
Do not plant unknown seedlings which are likely to be an undesirable species.