2015

City of Kirkwood Street Tree Guide





City of Kirkwood 139 S. Kirkwood Road Kirkwood, MO 63122 314-822-5801

Introduction

Introduction

The Kirkwood Urban Forestry Commission (KUFC) is pleased to present these updated lists of recommended street trees for enhancing Kirkwood's streets, avenues, boulevards, and ways. Development of this composite list is the result of significant research, incorporating the advice from local professionals including arborists, urban foresters, nurserymen, horticulturists, and landscaping managers. The intention of this effort is to provide urban planners, architects, landscape architects, public works managers, utility managers, and Kirkwood residents with a list of trees appropriate for street tree application, tailored to the Kirkwood environment. Since the world of living plants is quite dynamic, these lists will be reviewed periodically by the KUFC and updated if deemed necessary after reviewing the results of current urban forestry research.

The KUFC completed its most recent review and update of the city's current list of recommended street trees as of June, 2012. The Kirkwood Urban Forestry Commissions' primary intention associated with development of this highly researched document is to provide Kirkwood citizens and staff with state-of-the-art tree recommendations as the community continues to enhance Kirkwood's urban forest.

Kirkwood Urban Forestry Commission (*at time of update***)**

Roger Vonder Bruegge, Chair David Endres, Vice Chair Alan Hautly David Slane Michelle Storgion Priscilla Ward Rita Schoenberg

Kirkwood City Council

Arthur McDonnell, Mayor Iggy Yuan, Deputy Mayor Gerry Biedenstein Nancy Luetzow Gina Jaksetic Bob Sears Paul Ward

Introduction, continued

Note

For the convenience of the users, each list is offered twice: alpha sorted by **botanical name** and **common name**.

Definitions

- Botanical Name: the scientific Latin name of a plant.
- Cultivar: a named plant variety selected for specifically unique and desired characteristics.
- **Invasive:** by introduction to the landscape, any plant that can cause economic or environmental harm or harm to human health.
- Street Tree: trees growing on city right-of-way of all streets, avenues, or ways within the city. [NOTE: Contact *City of Kirkwood Public Works/Engineering* 314-822-5822 for verification of city right-of-way locations.]
- **Tree-form**: a single trunk form of a tree species normally offered as a clump or multi-trunk tree
- **Tree Lawn:** the city right-of-way planting area between the street curb/edge and the sidewalk.

Undesirable Trees Not Recommended for Kirkwood

While many tree species are quite applicable and adaptable for Kirkwood's challenging urban streetscape, the KFUC has also identified a variety of trees not appropriate for use within the streetscape environment. Primary reasons for discouraging the use of these undesirable tree species include:

- Weak branching habit, resulting in frequent release of fallen branches.
- Producer of messy fruit, creating a slip hazard on the pavement and sidewalk surfaces.
- Prone to damage by insects, diseases and nutrient deficiencies.
- Producer of numerous viable seeds, creating an invasive plant impact upon the surrounding landscape.

Potentially Threatened Trees

The dynamic nature of plants and the environment requires constant monitoring of trees and their potential pest enemies. The increased presence of such pests as Emerald Ash Borer and Japanese Beetle can affect the decision to place trees on the recommended lists or on the list of undesirable trees. Potential pest problems are referenced in the comment section associated with each tree list.

Kirkwood Electric and Ameren Lines

Ameren does not recommend planting trees under power lines that will attain more than 25' in height. Kirkwood Electric does not recommend planting any trees under power lines. Cable and phone lines using the same power poles are only about 16' off the ground. Electric utilities are required to trim trees in the right-of-way so that they do not interfere with electric lines, which can be detrimental to the look and shape of the trees.

Small Trees (under 30' ht.)

<u>Underlined Species</u> =

Plant of Merit

Small Trees (under 30' ht.)

SORTED BY BOTANICAL NAME TL = Suited for Tree Lawn spaces

	GGESTED TIVAR(S)	COMMON NAME	TL
NAME COL	TIVAR(3)	IVAI*IL	
Acer buergeranum Tolerant of dry sites		Maple, Trident	YES
		Maple, Amur asive in the eastern US, but not form (single-trunk) selections fo	
Acer palmutura		Maple, Japanese	YES
Acer tataricum		Maple, Tatarian	YES
Amelanchier x grandiflo	Autumn Su Cumulus Princess Di Snowcloud Tradition	unset iana	YES
		D	\/FC
Cercis camadensis		Redbud, Eastern	YES
Cornus Florida		Flowering Dogwood	YES
Cratacgus punctate O	hio Pioneer (th	ornless) Hawthorne, Dotted	YES
Cratacgus viridis V Maintains attractive red fi	Vinter King Fuit during the Wi	Hawthorne, Green inter months	YES
Maackia amurensis Not readily available		Maackia, Amur	YES
Magnolia soulangiana Suggest tree-form (single	Merrill trunk) selection	Magnolia s for street tree application	YES
Magnolia x hybrids Suggested cultivars are	Centurion Harvest Gold Prairie Fire Professor Spre Snowdrift Sugar Tyme	Crabapple, Flowering	YES
Syringa reticulate	Ivory Silk Regent Summer Snov	w Lilac, Japanese Tree	YES

Medium Trees (30' – 45' ht.)

Medium Trees (30' – 45' ht.)

SORTED BY BOTANICAL NAME TL = Suited for Tree Lawn spaces

BOTANICAL NAME	SUGGESTED CULTIVAR(S)	COMMON NAME	TL
Acer campestre Not really available	Queen Elizabeth	Maple, Hedge	YES
Acer miyabei <i>May be drought sen</i>	State Street (Morton)) Maple, Miyabe	YES
Acer x truncatum	Norwegian Sunset Pacific Sunset	Maple, Shantung	YES
Betula nigra Extensive surface ro (single trunk) select	Heritage Dura Heat oots compete with ground tions for street tree applica	Birch, River cover plantings; suggest treation; may be short lived as a	YES e-form a street tree
Carpinus betulus Suggest tree-form (.	Fastigiate (upright) single trunk) selections for	Hornbeam, European rstreet tree application	YES
Cladrastis kentuke	a	Yellowwood, American	YES
Corylus colurna Tolerant of dry sites	s; not readily available	Filbert, Turkish	YES
Eucommia ulmoido Not readily available		Hardy Rubber Tree	YES
Gleditsia triacanth Suggested cultivars	•	Honeylocust, Thornles	s YES
Ilex opaca		Holly, American	YES
Magnolia acumina	te	Magnolia, Cucumbertr	ee YES
Ostrya virginiana		Hophornbeam, Americ	can YES
Phellodendron am Tolerant of dry sites		Corktree, Amur	YES

Note:

The Kirkwood Urban Forestry Commission discourages the use of ornamental pear (Pyrus) trees as street trees. Even the purported "improved" cultivars have been found to be subject to storm damage and fire blight disease. Arborists consider these species to be invasive, creating an adverse plant impact upon the surrounding landscape.

Large Trees (over 45' ht.)

Large Trees (over 45' ht.)

SORTED BY BOTANICAL NAME TL = Suited for Tree Lawn spaces

BOTANICAL NAME	SUGGESTED CULTIVAR(S)	COMMON NAME	TL
Acer saccharum Not well adapted to damage by Asian Lo		Maple, Sugar ction; may be sensitive to salt,	YES ; subject to
Acer x freemanii	Autumn Blaze	Maple, Hybrid	YES
Carya ovate		Hickory, Shag Bark	YES
Celtis occidentalis Tolerant of dry sites		Hackberry, Common	YES
Ginkgo biloba Only male cultivars fruit		Gingko, Maidenhair Tree e trees produce messy and fou	
Gleditsia triacanth	Shademaster Skyline	Honeylocust, Thornless	YES
Platanus x acerifo	lia Bloodgood	Planetree, London	YES
Quercus bicolor		Oak, Swamp White	
Quercus macrocar Difficult to transplar		Oak, Bur better suited for large lawn ai	reas
Quercus phellos May be marginally o	cold hardy; prone to iron c	Oak, Willow Chorosis	
Quercus robur Foliage may be prof	Fastigiate (upright Skymaster (uprigh ne to powdery mildew dise	t) Oak, English	
Quercus rubra		Oak, Northern Red	
Quercus shumard	ii	Oak, Shumard	

<u>Underlined Species</u> = Plant of Merit

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SORTED BY BOTANICAL NAME TL = Suited for Tree Lawn spaces

BOTANICAL	SUGGESTED	COMMON	TL
NAME (CULTIVAR(S)	NAME	
Quercus x Warei Attractive glossy folia	Regal Prince (Lor ge	ng) Oak, Hybrid	
Taxodium distichum Tolerant of poorly dra		Bald Cypress	YES
Tilia cordata	Chancellor (uprig Fairview Glenleven Greenspire	ht) Linden, Littlelea	af
Subject to defoliation by the Japanese beetle; not always the most salt and drought tolerant			
Tilia tomentosa	Green Mountain Sterling	Linden, Silver	
Ulmus parvifolia	Dynasty Ohio	Elm, Lacebark	or Chinese YES
May be marginally co.	ld hardy		
Zelkova serrata	Green Vase Halka Village Green	Zelkova, Japano	ese YES

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Small Trees (under 30' ht.)

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Small Trees (under 30' ht.)

SORTED BY COMMON NAME TL = Suited for Tree Lawn spaces

COMMON NAME	BOTANICAL NAME	SUGGESTED CULTIVAR(S)	TL
Crabapple, Flowering Suggested cultivars are	·	Centurion Harvest Gold Prairie Fire Professor Sprenger Snowdrift Sugar Tyme ar diseases	YES
Dogwood, Flowering	Cornus Florida		YES
Hawthorne, Dotted Suggested cultivar is th	Crataegus punctal		ess) YES
Hawthorne, Green Maintains attractive red	Crategus viridis I fruit during the winte	Winter King r months	YES
Lilac, Japanese Tree	Syringa reticulate	Ivory Silk Regent Summer Snow	YES
Maackia, Amur Not readily available	Maackia amurensi	is	YES
Magnolia Suggest tree-form (sing	Magnolia x lebner		YES
Magnolia, Saucer Suggest tree-form (sing		iana r street tree application	YES
		re in the eastern U.S., but n n (single trunk) selections f	
Maple, Japanese	Acer palmatum		YES
Maple, Tatarian	Acer tataricum		YES
Maple, Trident Tolerant of dry sites	Acer buergeraniu	m	YES
Redbud, Eastern Tolerant of dry sites	Cercis canadensis	S	YES

Small Trees (under 30' ht.)

SORTED BY COMMON NAME TL = Suited for Tree Lawn spaces

COMMON NAME	BOTANICAL NAME	SUGGESTED CULTIVAR(S)	TL
Serviceberry	_	randiflora <u>Autumn Brillian</u> Autumn Sunset Cumulus Princess Diana Snowcloud Tradition	<u>ce</u> YES
Suggest tree-form (single trunk) selections for street tree application			

Small Trees (under 30' ht.)

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Medium Trees (30'-45' ht.)

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Medium Trees (30'-45' ht.)

SORTED BY COMMON NAME TL = Suited for Tree Lawn spaces

COMMON E NAME	OTANICAL NAME	SUGGESTED CULTIVAR(S)	TL
Extensive surface roots of		Heritage cover plantings; suggest tree- tion; may be short lived as a s	
Corktree, Amur Tolerant of dry sites	Phellodendron amu	rense Macho	YES
Filbert, Turkish Tolerant of dry sites; not	Corylus colurna t readily available		YES
Hardy Rubber Tree Not readily available in c	Eucommia ulmoide ommerce	S	YES
Holly, American	Ilex opaca		YES
Honeylocust, Thornles Suggested cultivars are		os Imperial	YES
Hophornbeam, Americ Tolerant of dry sites	an Ostrya virginian	a <u>.</u>	YES
Hornbeam, European Suggest tree-form (singl	Carpinus betulus e trunk) selections for	<u>Fastigiate (Upright)</u> street tree application	YES
Magnolia, Cucumbertr	ee Magnolia acumir	nate	YES
Maple, Hedge <i>Not readily available</i>	Acer campestre	Queen Elizabeth	YES
Maple, Miyabe May be drought sensitive	Acer miyabei	Morton (State Street)	YES
Maple, Shantung	Acer x truncatum	Norwegian Sunset Pacific Sunsest	YES
Yellowwood, Americar	Cladrastis kentuk		YES

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Large Trees (over 45' ht.)

SORTED BY COMMON NAME TL = Suited for Tree Lawn spaces

TL
YES
YES
YES
smelling
YES
YES
YES
lrought
YES
subject to

Difficult to transplant; produces large acorns, better suited for large lawn area

Large Trees (over 45' ht.)

Large Trees (over 45' ht.)

SORTED BY COMMON NAME TL = Suited for Tree Lawn spaces

COMMON NAME		SUGGESTED CULTIVAR(S)	TL
Oak, English	Quercus robur	Fasitigiate (upright) Skymaster (upright)	
Foliage may be prone	to powdery mildew diseas	5 <u>e</u>	
Oak, Hybrid Attractive glossy foliag	Quercus x Warei ge	Long (Regal Prince)	
Oak, Northern Red	Quercus rubra		
Oak, Shumard	Quercus shamardii		
Oak, Swamp White	Quercus bicolor		
Oak, Willow May be marginally colo	Quercus phellos d hardy; prone to iron cho	prosis	
Planetree, London	Plantanus x acerif	olia Bloodgood	YES
Zelkova, Japanese	Zelkova serrata	Green Vase Halka Village Green	YES

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Undesirable Trees

Undesirable Trees

SORTED BY BOTANICAL NAME TL = Suited for Tree Lawn spaces

BOTANICAL NAME	COMMON TL NAME
Acer negundo Messy fruit; weak branched	Boxelder
Acer saccharinum Weak branched	Maple, Silver/Soft
Acsculus (species) Messy fruit	Horsechestnut
Ailanthus altissima Invasive weed	Tree of Heaven
Catalpa (species) Messy fruit	Catalpa
Crataegus phaenopyrum Highly susceptible to Cedar Apple Rust disea along sidewalks	Hawthorne, Washington ase; thorns may be a hazard if planted
Fraxinus Americana	Ash, White
Fraxinus Pennsylvanica	Ash, Green
Gingko biloba (female non-cultivars) Female trees produce abundance of messy,	Ginkgo, Maidenhair Tree malodorous fruit
Gleditsia triacanthos (species with thorn Hazardous thorns	ns) Honeylocust
Juglans nigra <i>Messy fruit</i>	Walnut, Black
Liquidambar styraciflua Messy fruit	Sweet Gum
Malus (species) (large fruit varieties) Messy fruit	Apple
Malus x hybrids (disease prone varietic e.g.: Hopa, Radiant) Early leaf drop due to leaf disease	
Morus (species) (fruiting varieties) Messy fruit	Mulberry

Undesirable Trees

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BOTANICAL NAME	COMMON NAME	TL
Populus (species) <i>Invasive tree</i>	Poplar; Cottonwood	
Prunus (species) (fruiting varieties) Messy fruit; short lived	Cherry; Plum	
Pyrus (species) (fruiting varieties) Messy fruit; invasive tree	Pear	
Pyrus Calleryana Invasive tree	Bradford Pear	
Pyrus hybrids (all cultivars) Quite subject to fire blight disease and wind	Pear, Ornamental I damage; invasive tree	
Quercus acutissima Invasive tree	Oak, Sawtooth	
Quercus imbricaria Difficult to transplant; prone to oak wilt dise	Oak, Shingle Pase	
Quercus palustris Prone to iron chorosis (yellow foliage) on sit	Oak, Pin tes with high PH soils	
Robinia pseudoacacia Weak branched	Locust, Black	
Salix (species) Produces abundance of fallen branches	Willow	

NOTE:

All conifer (needled evergreen) trees (e.g.: pine, spruce, etc.) are discouraged for street tree use due to low branching characteristics (evergreen tree species do not favor lower branch removal).

Undesirable Trees

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SORTED BY COMMON NAME TL = Suited for Tree Lawn spaces

COMMON NAME	BOTANICAL TL NAME
Apple Messy fruit	Malus (species) (large fruit varieties)
Ash, White	Fraxinus Americana
Ash, Green	Fraxinus Pennsylvanica
Boxelder Messy fruit; weak branched	Acer negundo
Catalpa Messy fruit	Catalpa (species)
Cherry; Plum Messy fruit; short lived	Prunus (species) (fruiting varieties)
Crabapple	Malus x hybrids (disease prone varities e.g.: Hopa, Radiant)
Early leaf drop due to leaf disease	
Ginkgo, Maidenhair Tree Female trees produce abundance of	
Hawthorne, Washington Highly susceptible to Cedar Apple I along sidewalks	Crataegus phaenopyrum Rust disease; thorns may be a hazard if planted
Honeylocust Hazardous thorns	Gleditsia triacanthos (species with thorns)
Horsechestnut Messy fruit	Aesculus (species)
Locust, Black Weak branched	Robinia pseudoacacia
Maple, Silver/Soft Weak branched	Acer saccharinum
Mulberry Messy fruit	Morus (species) (fruiting varieties)
Oak, Pin Prone to iron chorosis (yellow folia	Quercus palustris ge) on sites with high PH soils

Undesirable Trees

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SORTED BY COMMON NAME TL = Suited for Tree Lawn spaces

COMMON NAME	BOTANICAL NAME	TL
Oak Sawtooth Invasive tree	Quercus acutissima	
Oak, Shingle Difficult to transplant; prone to oak	Quercus imbricaria wwilt disease	
Pear, Bradford Invasive tree	Pyrus Calleryana	
Pear, Ornamental Quite subject to fire blight disease	Pyrus (all cultivars) and wind damage; invasive tree	
Pear Pyrus (species) Messy fruit; invasive tree	Pyrus (fruiting varieties)	
Poplar, Cottonwood Invasive tree	Populus (species)	
Sweet Gum Messy fruit	Liquidambar styraciflua	
Tree of Heaven Invasive weed	Ailanthus altissima	
Walnut, Black Messy fruit	Juglans nigra	
Willow Produces abundance of fallen brane	Salix (species) ches	

NOTE:

All conifer (needled evergreen) trees (e.g.: pine, spruce, etc.) are discouraged for street tree use due to low branching characteristics (evergreen tree species do not favor lower branch removal).

For more information about the selection, planting and care of urban trees, visit the following useful websites:

Alliance for Community Trees

http://actrees.org

Ameren: Planting Trees From the Ground Up

www.ameren.com/sites/aue/Environment/VegetationManagement/Documents/PlantingTrees.pdf

Arbor Day Foundation

www.arborday.org

Find a Certified Arborist (International Society of Arboriculture):

www.isa-arbor.com/findArborist/findarborist.aspx

Forest ReLeaf of Missouri

www.moreleaf.org

Missouri Botanical Garden "PlantFinder":

www.mobot.org/gardeninghelp/plantfinder

Missouri Botanical Garden "Plants of Merit":

www.plantsofmerit.org

Missouri Department of Conservation/Forestry:

www.mdc.mo.gov/forest

Right Tree in the Right Place:

www.righttreerightplace.com

Trees are Good (International Society of Arboriculture):

www.treesaregood.com

Tree Selection Guide (University of IL Extension):

http://urbanext.illinois.edu/treeselect/

Plants of Merit, a program of the Missouri Botanical Garden, promotes underused, reliable and ecologically responsible plants for diversifying private and public landscapes.