

APPENDIX B

RECOMMENDED LANDSCAPING SPECIES **AND PROHIBITED INVASIVE SPECIES**

Consult the Missouri Botanical Garden website for information about individual landscaping species at: <http://www.missouribotanicalgarden.org/plantfinder/plantfindersearch.aspx>

- 1) Recommended Shade Trees
- 2) Recommended Small/Ornamental Trees
- 3) Recommended Shrubs
- 4) Recommended Shrubs and Trees for Screening/Buffering
- 5) Prohibited Invasive Plants

Recommended Shade Trees

COMMON NAME	LATIN NAME	MATURE HEIGHT (feet)	CROWN SPREAD (feet)	INTEREST	CULTURAL NOTES
Beech, American	<i>Fagus grandifolia</i>	50 - 80	40 - 80	magnificent specimen tree	intolerant to salt, drought, compaction
Birch, Paper	<i>Betula papyrifera</i>	50 - 70	25 - 50	NH state tree, fall color, bark	intolerant to drought, soil compaction, pollution; selection of insect and disease tolerant species is important
Black Gum	<i>Nyssa sylvatica</i>	30 - 50	20 - 30	beautiful in fall, fine architecture	requires moisture; intolerant to pollution, soil compaction; requires careful consideration for special use
Elm	<i>Ulmus</i>	50 - 70	30 - 50	elegant upright form	select disease resistant cultivar, e.g. Princeton Valley Forge
Ginkgo	<i>Ginkgo biloba</i> (male)	40 - 50	25 - 30	yellow fall color	very hardy, difficult sites
Gum, Sweet	<i>Liquidambar styraciflua</i>	60 - 80	40 - 60	five-lobed leaves; hard, spiked fruit	tolerates pool drainage
Hackberry, Common	<i>Celtis occidentalis</i>	40 - 60	40 - 60	light brown, distinctive bark	Intolerant to salt and shade, edible berries
Hawthorne, Fleshy	<i>Crataegus succulenta</i>	20 - 25	20 - 25	fruits/fall color	withstands drought
Hopthornbeam, American	<i>Ostrya virginiana</i>	25 - 40	25 - 30	handsome tree	winter tolerant; salt intolerant
Hornbeam, American	<i>Carpinus caroliniana</i>	20 - 35	20 - 35	orange-red in fall	wet areas
Larch, American	<i>Larix laricina</i>	60 - 100	20 - 30	fine in masses	intolerant to drought and pollution
Locust, Honey	<i>Gleditsia triacanthos</i>	60 - 80	60 - 80	tolerant of urban conditions	scented cream-color flowers
Linden	<i>Tilia</i>	50 - 80	30 - 50	broad conical tree	well drained soil; multiple cultivars – select varieties with care
Maple, Red	<i>Acer rubrum</i>	40 - 70	30 - 50	fall color	intolerant to drought and pollution
Maple, Sugar	<i>Acer saccharum</i>	40 - 80	30 - 60	beautiful fall color	Intolerant to pollution
Maple, Three Flower	<i>Acer triflorum</i>	25 - 30	25 - 30	fine small specimen	requires well drained soil
Maple, Trident	<i>Acer buergeranum</i>	20 - 30	20 - 30	fall color	hardy, withstands drought
Oak, Pin	<i>Quercus palustris</i>	50 - 70	40 - 60	distinctive canopy	tolerates poorly drained soil
Oak, Scarlet	<i>Quercus coccinea</i>	50 - 70	40 - 50	fall color	requires well drained soil
Oak, Red	<i>Quercus rubra</i>	50 - 75	50 - 75	tall tree	high maintenance
Oak, Swamp White	<i>Quercus bicolor</i>	50 - 60	50 - 60	large, broad leaves	wet areas, intolerant of salt and pollution
London Plane Tree	<i>Platanus acerifolia</i>	75 - 100	60 - 75	exfoliating bark	tolerant of pollution and compaction; leaf - slow breakdown
Zelkova, Japanese	<i>Zelkova serrata</i>	50 - 80	50 - 80	handsome bark, architecture	hardy, well-drained soil; requires regular pruning

Recommended Small/Ornamental Trees

COMMON NAME	LATIN NAME	INTEREST	CULTURAL NOTES
Apple Serviceberry/Shadbush	<i>Amelanchier</i>	white flowers, fall color	wet areas
Cherry	<i>Prunus</i>	flowers	can be difficult to grow and maintain
Crabapple, Donald Wyman	<i>Malus spp. 'Donald Wyman'</i>	white flowers, red fruit	well drained soil
Crabapple, Japanese Flowering	<i>Malus floribunda</i>	pink-white flowers, yellow-red fruit	well drained soil
Crabapple, Professor Sprenger	<i>Malus spp. 'Professor Sprenger'</i>	beautiful tree, flowers, fruit	hardy
Dogwood, various	<i>Cornus various</i>	flowers, shape, fruit	withstands drought
Lilac, Japanese Tree	<i>Syringa reticulata</i>	beautiful flowers	most trouble free lilac
Pagoda Tree, Japanese	<i>Sophora japonica</i>	foliage and fragrant flowers	rich, well drained soils
Pear	<i>Pyrus</i>	beautiful white canopy in bloom	Well-drained soil in full sun to partial shade
Plum, Canadian	<i>Prunus nigra</i>	white flowers, red fruit	works in small spaces

Recommended Shrubs

All are deciduous except where otherwise noted

COMMON NAME	LATIN NAME	INTEREST	CULTURAL NOTES
Arrowwood	<i>Viburnum Dentatum</i>	flowers/fruit/fall color	withstands adverse city conditions
Azalea	<i>Azalea</i>	beautiful flowers	tends to be overused
Bayberry, Northern	<i>Myrica pensylvanica</i>	semi-evergreen	no serious insect or disease problems
Blueberry, Highbush	<i>Vaccinium corymbosum</i>	flowers/fruit/fall color, winter twigs	withstands adverse city conditions/ attractive to birds
Cotoneaster	<i>Cotoneaster</i>	flowers and fruit	moist, loamy, well-drained soils
Cranberry, Highbush or Cranberrybush	<i>Viburnum Trilobum</i>	showy white flowers, glossy red berries	generally free of insect and disease problems; attractive to birds
Dogwood, Panicked	<i>Cornus Racemosa</i>	flowers/fruit/colored stalks/fall color	will tolerate adverse city conditions
Dogwood, Red Osier	<i>Cornus Sericea</i>	red stems, white berries	tolerant of most adverse city conditions
Elderberry	<i>Sambucus Canadensis</i>	white flowers, purple berries	tolerates adverse city conditions; attractive to birds.
Forsythia	<i>Forsythia</i>	yellow flowers in early spring; wild form	medium, well-drained soils
Holly	<i>Ilex</i>	Leaves, flowers, and berries	<u>evergreen</u> , useful to plant male and female near each other
Juniper	<i>Juniperus</i>	depends on variety	<u>evergreen</u> , many varieties and forms
Lilac	<i>Syringa</i>	beautiful fragrant flowers	well-drained soil in full sun
Mountain Laurel	<i>Kalmia Latifolia</i>	evergreen/flowers	<u>evergreen</u>
Rhododendron, Rosebay	<i>Rhododendron Maximum</i>	flowers/evergreen	<u>evergreen</u> . some pollution tolerance
Spicebush	<i>Lindera Benzoin</i>	yellow flowers/red fruits	no serious insect or disease problems
Viburnum, Sweet	<i>Viburnum Lentago</i>	flowers/fruit/fall color	tolerates adverse city conditions; select carefully due to pests
Viburnum, Mapleleaf	<i>Viburnum Acerifolium</i>	fall color	withstands adverse city conditions; select carefully due to pests
Winterberry, Black Alder	<i>Ilex Verticillata</i>	beautiful red berries in fall	cool, moist, acid soils; shade ok; relatively free of insect and disease; need male and female plants
Witch Hazel	<i>Hamamelis virginiana</i>	lacy colorful blossoms	many varieties
Yew	<i>Taxus</i>	colorful fruit	<u>evergreen</u>

Recommended Shrubs and Trees For Screening/Buffering

All are evergreen except where noted otherwise

COMMON NAME	LATIN NAME	HEIGHT (in feet)	GROWTH RATE	CULTURAL AND USE NOTES
Arborvitae, Eastern	<i>Thuja occidentalis</i>	30 - 50	Moderate	Tolerates wide range of conditions; can also function as low hedge; prunes and tops well
Boxwood	<i>Buxus</i>	3 - 5	Slow	<u>Shrub</u> .
Cedar, Red	<i>Juniperis virginiana</i>	50 - 75	Slow	High wildlife value.
Cedar, Western Red	<i>Thuja plicata</i>	Up to 65	Moderate	Moist, fertile, well-drained soil
Euonymus	<i>Euonymus</i>	3 - 6	Moderate/ Rapid	<u>Shrub</u> . Deciduous but dense
Fir, Douglas	<i>Pseudotsuga menziesii</i>	75 - 100	Moderate	High wildlife value. Don't mix with Colorado Spruce
Forsythia	<i>Forsythia</i>	5 - 8	Rapid	<u>Shrub</u> . Deciduous, wild form
Hemlock, Canadian	<i>Tsuga canadensis</i>	75 - 100	Slow/ Moderate	Needs high moisture; low salt tolerance
Juniper	<i>Juniperus</i>	3 - 10	Rapid	<u>Shrub</u> . Many varieties.
Lilac	<i>Syringa</i>	3 - 10	Moderate	<u>Shrub</u> . Deciduous.
Pine, Austrian (Black Pine)	<i>Pinus nigra</i>	20 - 40	Moderate	Tolerates salt & city conditions; susceptible to disease
Pine, Eastern White	<i>Pinus strobus</i>	75 - 100	Moderate	Prefers acid soil. High wildlife value.
Pine, Japanese Black	<i>Pinus thundersiana</i>	60 - 80	Moderate	Tolerates salt
Pine, Red	<i>Pinus resinosa</i>	50 - 100	Moderate	Tolerates droughty conditions.
Pine, Scotch	<i>Pinus sylvestris</i>	30 - 60	Rapid/ Moderate	Prefers acid soils; tolerates droughty conditions.
Privet	<i>Ligustrum</i>	6 - 12	Rapid	<u>Shrub</u> . select evergreen, noninvasive variety
Spirea	<i>Spiraea</i>	2 - 6	Moderate/ Rapid	<u>Shrub</u> . Deciduous but the brush is dense
Spruce, Colorado	<i>Picea pungens</i>	75 - 100	Slow	Prefers acid soil. Don't mix with Douglas Fir
Spruce, Norway	<i>Picea abies</i>	50 - 75	Moderate	Many cultivars available; attractive form
Spruce, White	<i>Picea glauca</i>	50 - 75	Slow	Prefers acid soil.
Viburnum	<i>Viburnum</i>	5 - 8	Moderate/ Rapid	<u>Shrub</u> . Deciduous
Yew	<i>Taxus</i>	3 - 8	Slow	<u>Shrub</u> .

Prohibited Invasive Plants

COMMON NAME	LATIN NAME	REASON
Autumn Olive	<i>Eleagnus umbellata</i>	Crowds out native vegetation
Barberry, European	<i>Berberis vulgaris</i>	Forms thorny thickets preventing native herbaceous and shrub growth
Barberry, Japanese	<i>Berberis thunbergii</i>	Forms thorny thickets preventing native herbaceous and shrub growth
Bittersweet, Oriental	<i>Celastrus orbiculatus</i>	Vines grow up to 66 feet long.
Buckthorn, Common	<i>Rhamnus cathartica</i>	Buckthorn invading drier areas
Buckthorn, Glossy	<i>Rhamnus frangula</i>	Tolerant of dense shade and invades wet areas
Euonymus, Winged	<i>Euonymus alatus</i>	Dense shade and dense root system crowd out everything but own seedlings
Honeysuckle	<i>Lonicera morrowii and tatarica</i>	Form impenetrable thickets and displace vegetation in young forests and floodplains
Honeysuckle, Japanese	<i>Lonicera japonica</i>	Vine that chokes supporting trees and shrubs
Japanese Knotweed	<i>Fallopia japonica</i>	Very aggressive shrub along edge of roadsides and open lots
Locust, Black	<i>Robinia pseudoacacia</i>	Crowds out native vegetation
Loosestrife, Purple	<i>Lythrum salicaria</i>	Grows aggressively in wetlands
Maple, Norway	<i>Acer platanoides</i>	Crowds out native vegetation
Rose, Multiflora	<i>Rosa multiflora</i>	Crowds out native vegetation