

RECOMMENDED TREES FOR PLANTING IN THE CITY OF NEW CASTLE

Small Trees (15'-30')

Botanical Name	Common Name	Street Tree	Urban Tolerance	Multiple Cultivars	Foliage	Notes
<i>Acer burgerianum</i>	Trident Maple	Y	Y	Y	D	Specimen tree for streets, patios and small areas.
<i>Acer campestre</i>	Hedge Maple	L	Y	Y	D	Lawn tree or hedges. Adaptable to many soils.
<i>Acer griseum</i>	Paperbark Maple	L	L	Y	D	Specimen, patio or border tree.
<i>Acer palmatum</i>	Japanese Maple	N	L	Y	D	Specimen or patio tree.
<i>Acer tataricum</i>	Tatarian Maple	N	L	N	D	Specimen, patio or border tree.
<i>Amur ginnala</i>	Amur Maple	L	Y	Y	D	Specimen, patio or border tree.
<i>Carpinus caroliniana</i>	American Hornbeam	L	N	N	D	Lawn tree or hedges. Acidic, well-drained soils.
<i>Cercis canadensis</i>	Eastern Redbud	L	L	Y	D	Specimen, patio or border tree.
<i>Chionanthus retusus</i>	Chinese Fringetree	N	Y	Y	D	Specimen tree for naturalistic groupings.
<i>Chionanthus virginicus</i>	White Fringetree	N	Y	Y	D	Specimen tree for naturalistic groupings.
<i>Cornus mas</i>	Cornelian Cherry Dogwood	N	L	Y	D	Specimen tree for formal or naturalistic groupings. Limb-up to reveal bark.
<i>Cotinus obovatus</i>	American Smoketree	L	Y	N	D	Specimen, patio or border tree. Adaptable to difficult sites.
<i>Crataegus spp.</i>	Hawthorns	L	Y	Y	D	Specimen, lawn or border tree. Select only single stem and thornless for street trees.
<i>Franklinia alatamaha</i>	Franklinia	N	N	N	D	Specimen, patio or border tree.
<i>Ilex opaca</i>	American Holly	N	Y	Y	E	Select only cultivars for landscape plantings.
<i>Juniperus chinensis</i>	Chinese Juniper	N	Y	Y	E	Border or hedge tree. Select upright cultivar
<i>Koelreuteria paniculata</i>	Goldenraintree	Y	Y	Y	D	Specimen, patio or border tree.
<i>Lagerstroemia indica</i>	Crapemyrtle	L	Y	Y	D	Specimen, lawn or border tree. Select only single stem for street trees
<i>Maackia amurensis</i>	Amur Maackia	N	N	N	D	Specimen tree for patios and small areas.
<i>Magnolia virginiana</i>	Sweetbay Magnolia	N	N	Y	D	Lawn, patio or border tree. Acidic, well-drained soils.
<i>Magnolia x soulangiana</i>	Saucer Magnolia	N	L	Y	D	Specimen, lawn or border tree. Acidic, well-drained soils.
<i>Malus spp.</i>	Flowering Crabapples	L	L	Y	D	Specimen, lawn, patio or border trees. Select only single stem for street trees.
<i>Oxydendrum arboreum</i>	Sourwood	Y	N	N	D	Specimen tree for patios and small areas. Acidic, well-drained soils.
<i>Parrotia persica</i>	Persian Parrotia	Y	Y	Y	D	Select single stem for street trees.
<i>Pinus bungeana</i>	Lacebark Pine	N	N	Y	E	Specimen, patio or border tree.
<i>Prunus spp.</i>	Flowering Cherry Trees	L	L	Y	D	Specimen, lawn, patio or border trees. Select only single stem for street trees.
<i>Styrax japonica</i>	Japanese Snowbell	N	N	Y	D	Specimen, patio or border tree.
<i>Syringa reticulata</i>	Japanese Tree Lilac	Y	Y	Y	D	Select single stem for street trees.
<i>Taxus cuspidata</i>	Japanese Yew	N	Y	Y	D	Border or hedge tree. Select upright cultivar

Medium Trees (30' to 50')

Botanical Name	Common Name	Street Tree	Urban Tolerance	Multiple Cultivars	Foliage	Notes
<i>Abies concolor</i>	White Fir	N	L	Y	E	Border or hedge tree.
<i>Betula lenta</i>	Black Birch	N	N	N	D	Specimen, lawn or border tree.
<i>Betula nigra</i>	River Birch	N	N	Y	D	Specimen, lawn or border tree. Utilize cultivars for disease resistance.
<i>Carpinus betulus</i>	European Hornbeam	Y	Y	Y	D	Select upright cultivar for street trees. Lawn tree or hedges.
<i>Chamaecyparis thyoides</i>	Atlantic Whitecedar	N	L	Y	E	Specimen, border or hedge tree. Tolerant of wet sites.
<i>Cedrus atlantica</i>	Atlas Cedar	N	Y	Y	E	Specimen, lawn or border tree.
<i>Cryptomeria japonica</i>	Japanese Cryptomeria	N	Y	Y	E	Border or hedge tree.
<i>Juniperus scopulorum</i>	Colorado Redcedar	N	Y	Y	E	Specimen, border or hedge tree. Tolerant of a wide range of soils.
<i>Juniperus virginiana</i>	Eastern Redcedar	N	Y	Y	E	Specimen, border or hedge tree. Tolerant of a wide range of soils.
<i>Magnolia grandiflora</i>	Southern Magnolia	L	Y	Y	E	Specimen, lawn or border tree. Select appropriate cultivar for street tree.
<i>Ostrya virginiana</i>	American Hophornbeam	N	N	N	D	Lawn tree or hedges. Naturalistic areas.
<i>Pinus bungeana</i>	Lacebark Pine	N	L	Y	E	Specimen, border or patio tree. Attractive bark.
<i>Pinus strobus</i>	White Pine	N	Y	Y	E	Border or hedge tree.
<i>Pinus virginia</i>	Virginia Pine	N	N	N	E	Border or hedge tree.
<i>Pistacia chinensis</i>	Chinese Pistache	Y	Y	N	D	Specimen, lawn or border tree. Tolerant of a wide range of soils.
<i>Salix babylonica</i>	Weeping Willow	N	N	Y	D	Specimen, lawn or border tree. Utilize cultivars

Large Trees (40'+)

Botanical Name	Common Name	Street Tree	Urban Tolerance	Multiple Cultivars	Foliage	Notes
<i>Acer rubrum</i>	Red Maple	L	L	Y	D	Specimen, lawn or border tree. Well-drained, acidic soils.
<i>Acer saccharum</i>	Sugar Maple	L	N	Y	D	Specimen, lawn or border tree. Well-drained, acidic soils.
<i>Aesculus hippocastanum</i>	Horsechestnut	N	L	Y	D	Specimen, lawn or border tree. Well-drained, acidic soils.
<i>Aesculus x carnea</i>	Red Horsechestnut	N	L	Y	D	Specimen, lawn or border tree. Well-drained, acidic soils.
<i>Celtis laevigata</i>	Sugar Hackberry	Y	Y	N	D	Specimen, lawn or border tree. Tolerant of a wide range of soils.
<i>Celtis occidentalis</i>	Hackberry	L	Y	N	D	Specimen, lawn or border tree. Tolerant of a wide range of soils.
<i>Cercidiphyllum japonicum</i>	Katsura Tree	Y	L	N	D	Specimen, lawn or border tree.
<i>Cladrastis kentuckea</i>	American Yellowwood	Y	Y	Y	D	Specimen, lawn or border tree. Tolerant of a wide range of soils.
<i>Corylus colurna</i>	Turkish Filbert	Y	Y	N	D	Lawn or border tree. Tolerant of a wide range of soils.
<i>Fagus grandifolia</i>	American Beech	N	L	N	D	Specimen, lawn or border tree.
<i>Fagus sylvatica</i>	European Beech	N	L	Y	D	Specimen, lawn or border tree. Hedge tree with heavy pruning.
<i>Ginkgo biloba</i>	Ginkgo	Y	Y	Y	D	Use males only where pedestrian traffic may occur.
<i>Gleditsia triacanthos inermis</i>	Thornless Honeylocust	Y	Y	Y	D	Lawn or border tree. Select cultivars for street trees.
<i>Gymnocladus dioicus</i>	Kentucky Coffeetree	L	Y	Y	D	Specimen, lawn or border tree. Tolerant of a wide range of soils. Large seed pods

<i>Liquidambar styraciflua</i>	Sweetgum	L	Y	Y	D	Specimen, lawn or border tree. Utilize fruitless cultivar on streets.
<i>Liriodendron tulipifera</i>	Tuliptree	N	L	Y	D	Specimen, lawn or border tree. Well-drained, acidic soils.
<i>Magnolia acuminata</i>	Cucumbertree Magnolia	L	Y	Y	D	Specimen, lawn or border tree. Well-drained, acidic soils.
<i>Metasequoia glyptostroboides</i>	Dawn Redwood	N	Y	Y	D	Lawn or border tree. Not recommended for Historic District streets.
<i>Nyssa sylvatica</i>	Blackgum	Y	L	Y	D	Specimen, lawn or border tree. Well-drained, acidic soils.
<i>Platanus x acerifolia</i>	London Planetree	Y	Y	Y	D	Specimen, lawn or border tree. Tolerant of a wide range of soils.
<i>Quercus acutissima</i>	Sawtooth Oak	L	L	N	D	Lawn or border tree. Not recommended for Historic District streets.
<i>Quercus bicolor</i>	Swamp White Oak	L	Y	Y	D	Specimen, lawn or border tree. Not recommended for Historic District streets.
<i>Quercus coccinea</i>	Scarlet Oak	L	L	N	D	Lawn or border tree. Not recommended for Historic District streets.
<i>Quercus imbricaria</i>	Shingle Oak	L	L	N	D	Lawn or border tree. Not recommended for Historic District streets.
<i>Quercus macrocarpa</i>	Bur Oak	L	Y	Y	D	Specimen, lawn or border tree. Not recommended for Historic District streets.
<i>Quercus phellos</i>	Willow Oak	L	Y	Y	D	Lawn or border tree. Not recommended for Historic District streets.
<i>Quercus prinus</i>	Chestnut Oak	N	L	N	D	Specimen, lawn or border tree. Not recommended for Historic District streets.
<i>Quercus robur</i>	English Oak	L	Y	Y	D	Lawn, border or hedge tree. 'Fastigiata' is a narrow-growing cultivar.
<i>Quercus rubra</i>	Red Oak	L	Y	Y	D	Specimen, lawn or border tree. Not recommended for Historic District streets.
<i>Quercus shumardii</i>	Shumard Oak	L	Y	N	D	Specimen, lawn or border tree. Not recommended for Historic District streets.
<i>Quercus velutina</i>	Black Oak	N	L	N	D	Specimen or lawn tree. Not recommended for Historic District streets.
<i>Taxodium distichum</i>	Baldcypress	L	Y	Y	D	Specimen, lawn or border tree. Not recommended for Historic District streets.
<i>Tilia americana</i>	Basswood	Y	Y	Y	D	Specimen, lawn or border tree. Select cultivars for street trees.
<i>Tilia cordata</i>	Littleleaf Linden	Y	Y	Y	D	Specimen, lawn or border tree. Select cultivars for street trees.
<i>Tilia tomentosa</i>	Silver Linden	Y	Y	Y	D	Specimen, lawn or border tree. Select cultivars for street trees.
<i>Ulmus americana</i>	American Elm	Y	Y	Y	D	Specimen, lawn or border tree. Utilize cultivars for disease resistance.
<i>Ulmus parvifolia</i>	Lacebark Elm	Y	Y	Y	D	Specimen, lawn or border tree. Tolerant of a wide range of soils.

Definitions

Street Tree - Indicates whether a tree is appropriate for typical street tree applications. Y - Yes, N- No, L- Limited requiring greater investigation per tree species/cultivar selection and site constraints.

Urban Tolerance - Indicates the general degree to which a tree can tolerate conditions in an urban environment (i.e. soil compaction, de-icing salts, reflected heat load, alkaline soils, heavy pruning) Y - Yes, N- No, L- Limited requiring greater investigation per tree species/cultivar selection and site constraints.

Multiple Cultivars - Indicates whether cultivars of the tree species are commonly available in the nursery industry. Additional analysis is needed per the differing growth habits and environmental tolerances of each cultivar. Y - Yes, N -No

Foliage - Indicates whether a tree species is D - deciduous or E -evergreen.

Specimen Tree - A tree species and /or cultivar with special characteristics such that they are typically planted singularly or in small groups in prominent locations.

Lawn Tree - A tree species appropriate for open lawns and/or requiring large open spaces.

Border Tree - A tree species appropriate for the edges of spaces, such as lawns, and/or integrated among combinations of understory and screening or hedge plantings.

Patio Tree - A smaller tree species appropriate for settings that are typically enclosed and/or don't require high clearance heights to branches.

Hedge Tree - A tree species that can be placed into naturalistic or clipped hedges. Typically these are multi-stemmed or fastigate (upright and narrow) species and cultivars.

Trees to Avoid

Botanical Name	Common Name	Notes
<i>Acer platanoides</i>	Norway Maple	Over-used, invasive, easily dispersed, crowds-out native species
<i>Acer saccharinum</i>	Silver Maple	Over-used, weak-wooded, susceptible to ice/snow damage
<i>Ailanthus altissima</i>	Tree of Heaven	Invasive
<i>Betula papyrifera</i>	Paper/White Birch	Susceptible to disease
<i>Cupressusx leylandii</i>	Leyland Cypress	Over-used, susceptible to disease
<i>Fraxinus spp</i>	Ash Trees	Susceptible to disease
<i>Mimosa spp</i>	Mimosa Trees	Invasive, weak-wooded
<i>Morus alba</i>	Common Mulberry	Extremely messy and staining fruit, invasive
<i>Paulownia tomentosa</i>	Empress Tree	Invasive, messy flower pods
<i>Pinus nigra</i>	Austrian Pine	Susceptible to disease
<i>Pinus parviflora</i>	Japanese Pine	Susceptible to disease
<i>Pyrus calleryana</i>	Callery Pear	Over-used, invasive, weak-wooded, susceptible to ice/snow damage
<i>Quercus palustris</i>	Pin Oak	Over-used
<i>Tsuga spp</i>	Hemlock Trees	Susceptible to disease
<i>Zelkova spp</i>	Zelkova Trees	Over-used, weak-wooded, susceptible to ice/snow damage