

Scientific name	Common Name	Foliage	Minimum Healthy Soil VOLUME in CUBIC feet*	Soil SQUARE FEET for Unrestrained Growth	Mature Spread, feet	Mature Height, feet	Growth Rate	Site conditions	notes
Large street and yard trees									
<i>Acer rubrum</i>	Red maple	Deciduous	1000	2827	30-50'	35-50'	slow-fast	Tolerates wet and compacted soils but needs space.	Very shallow roots inhibit growth of groundcovers, including grass.
<i>Celtis laevigata</i>	Sugar hackberry	Deciduous	600	1385	30-60'	50-70'	medium	Tolerates most soils, moisture and pH, compaction, sun to part shade, high wind	Fruit can be messy.
<i>Celtis occidentalis</i>	Common Hackberry	Deciduous	600	1385	30-60'	40-100'	rapid	Tolerates most soils, moisture and pH, compaction, sun to part shade, high wind	Fruit can be messy.
<i>Liriodendron tulipifera</i>	Tulip Poplar	Deciduous	600	1256	30-60'	80-120'	fast	Moist, well drained acidic soil	Very tall, straight trunk
<i>Nyssa biflora</i>	Swamp Black Gum	Deciduous	300	452	20-35'	40-70'	medium	Grows in any neutral to acid soil including wet soil, full sun to part shade, as well as the soil isn't very dry.	
<i>Nyssa sylvatica</i>	Black gum	Deciduous	300	452	20-35'	40-70'	medium	Any neutral to acid soil, full sun	many cultivars available
<i>Carya illinoensis</i>	Pecan	Deciduous	550	1600	45-75'	70-100'		Very tolerant of any reasonably well drained soil.	Classic edible nuts. Native to sections of the southeastern US. Many live in Edenton, having been generously planted by the CCC.
<i>Platanus occidentalis</i>	Sycamore	Deciduous	1000	2827	75-100'	75-100'	fast	Tolerant of most soils, moisture, full sun to light shade	Tolerates urban conditions
<i>Quercus bicolor</i>	Swamp White Oak	Deciduous	1000	2827	50-60'	50-60'	medium	Tolerates wet, dry, and poor soils	
<i>Quercus coccinea</i>	Scarlet Oak	Deciduous	600	1385	45-60'	50-80'	fast	Acidic, moist to well drained soil is best, sun to part shade	
<i>Quercus lyrata</i>	Overcup oak	Deciduous	300	452	35-60'	35-60'	medium	well drained to wet soils, "Highbeam" cultivar 20-40' spread, smaller with restricted root zone	Performs well in urban settings
<i>Quercus michauxii</i>	Swamp Chestnut Oak	Deciduous	1000	2857	30-70'	60-80'	medium	Any acidic soil including wet soils	
<i>Quercus pagoda</i>	Cherrybark Oak	Deciduous	1000	2857	30-70'	90-130'	medium	Prefers moist acidic soil, full sun to partial shade	
<i>Quercus phellos</i>	Willow oak	Deciduous	1000	2827	25-50'	40-75'	fast	Any neutral to acidic soil that is not constantly saturated or very dry	May suffer wind damage more than slower growing oaks. Fine leaves and small acorns make for easy cleanup in fall.
<i>Quercus rubra</i>	Northern red oak	Deciduous	1000	2827	50-75'	50-70'	medium to fast	Moist to well drained neutral to acidic soil	
<i>Quercus shumardii</i>	Shumard oak	Deciduous	1000	2827	30-40'	50-70'	slow	Drought / Compaction / Salt	
<i>Quercus stellata</i>	Post Oak	Deciduous	1000	2827	35-50'	40-50'	medium	tolerates any neutral to acidic well drained soil including shallow soil, tolerates drought, full sun preferred	
<i>Quercus virginiana</i>	Live Oak	Evergreen	1000	2827	30-100'	40-80'	medium	Moist to occasionally dry neutral to acidic soils in full sun to partial shade, resists salt and wind damage	Evergreen, smaller cultivars available. Pruning may be needed to ensure wide spreading branches start high enough.
<i>Tilia americana</i>	American Basswood	Deciduous	600	1385	30-60'	60-80'	medium	tolerates any moist to well drained soils that are not compacted	lovely formal rounded form, cultivars available
Small street and yard trees									
<i>Amelanchier x grandiflora</i>	Shadbush	Deciduous	300	254	15-20	20-25'	medium	Full sun to part shade, in any neutral to acidic soil that does not say constantly wet or dry.	This natural hybrid of 2 native Amelanchier species has beautiful spring flowers and edible fruit. Many cultivars are available, with Autum Brilliance being particularly fine.
<i>Amelanchier laevis</i>	Allegheny Serviceberry	Deciduous	300	450	15-20	15-25	medium	Full sun to part shade, in any neutral to acidic soil that does not say constantly wet or dry.	Beautiful early spring flowers and edible fruit. Can be single or multistemmed. Cultivars include Snowcloud and Spring Flurry
<i>Betula nigra</i>	River Birch	Deciduous	300	254	40-60'	30-70'	fast	Adaptable, but prefers moist acidic loamy soil in full sun to part shade. Tolerates wet soil, compacted soil but will drop leaves very early in drought.	Many cultivars are available, especially smaller ones. Can be grown with single or multiple stems. Will drop lots of little catkins and twigs.
<i>Carpinus caroliniana</i>	American Hornbeam	Deciduous	300	254	20-35'	20-30'	medium	any neutral to acidic soils, wet soils, shade, sun, handles urban conditions, wind, and dry soils	Interesting 'rippling muscle' trunk, cultivars with varying forms available.
<i>Chionanthus virginicus</i>	Fringetree	Deciduous	300	254	12-20	15-30	slow	Grows well in sun to part shade in average to well drained soil.	Stunning fragrant flowers in spring. Fruit drop from female trees can be messy.
<i>Crataegus viridis</i>	Green hawthorn	Deciduous	300	450	20-35'	20-35'	slow	Tolerates any soil texture and pH, moist to well drained, full sun preferred, tolerates drought	Stunning flowers in spring, red winter berries. Use thornless cultivars where foot traffic desired and thorny cultivars to discourage foot traffic. Can be pruned into a hedge. Winter King is an exceptional cultivar with few thorns, can be pruned into a hedge
<i>Crataegus phaenopyrum</i>	Washington Hawthorn	Deciduous	300	450	20-25	20-35	medium	Any soil other than wet, sun to part shade, tolerates very dry conditions.	Stunning flowers in spring, red winter berries. Use thornless cultivars where foot traffic desired and thorny cultivars to discourage foot traffic. Can be pruned into a hedge. Cultivars with various forms available.
<i>Ilex decidua</i>	Possumhaw	Deciduous	30	16	5-12'	7-15'	medium	sun, part shade any acidic soil that is not continuously soaked or droughty	Multistemmed, beautiful winter berries, many cultivars

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<i>Ilex vomitoria</i>	Yaupon	Evergreen	48	100	8-12'	10-21'	medium	grows wild in swamps and on sand dunes, full sun to deep shade, any neutral to acidic soil	Evergreen, great screen, can be pruned into hedge, tree, multistemmed tree, cultivars of many sizes available, winter berries
<i>Myrica cerifera</i>	Wax Myrtle	Evergreen	48	64	8-10'	20-25'	fast	Tolerates any soil texture and pH, moist to well drained, full sun preferred, tolerates drought	Scented evergreen foliage. Can be pruned to any form - tree, multistemmed tree, or hedge.
<i>Ostrya virginica</i>	Eastern Hop Hornbeam	Deciduous	300	452	15-30'	20-40'	slow	Tolerates any soil texture and pH, moist to well drained, including compacted soil, tolerates full sun but prefers part shade and will tolerate full shade	
Large yard trees, caution for streetside**									
<i>Chamaecyparis thyoides</i>	Atlantic White Cedar	Evergreen	150	452	30-40'	60-80'	medium	acidic, moist to wet soils, full sun to part shade	Evergreen, can be planted densely as a screen or used as a specimen, smaller cultivars available
<i>Diospyros virginiana</i>	Persimmon	Deciduous	600	1385	20-35'	30-80'	slow	moist, rich soil preferred but will tolerate most anything except wet soils, full sun to part shade	Edible fruit from female plants, Morris Burton and Prok are especially good cultivars, dropping fruit can be messy.
<i>Ilex opaca</i>	American Holly	Evergreen	240	180	10-20'	40-60'	slow	Neutral to acidic moist to well drained soil in sun to part shade.	Thorny evergreen can be used as an impenetrable hedge (given time) or a specimen with deep green leaves a bright red berries. Many cultivars available.
<i>Juniperus virginiana</i>	Easter redbcedar	Evergreen	300	452	10-20'	35-40'	medium to fast	Drought / High pH / Compaction / Salt tolerant	Large evergreen, great for screen or as a specimen
<i>Magnolia grandifolia</i>	Southern Magnolia	Evergreen	1000	2827	30-50'	60-80'	slow to medium	Organic and clay soils of any pH in full sun to part shade.	Evergreen, MASSIVE, too large for many yards, shallow roots
<i>Morus rubra</i>	Red Mulberry	Deciduous	300	452	35-40'	25-60'	fast	Best grown in rich, moist, well-drained soils in full sun to part shade	Unlike the more commonly seen M. alba, M. rubra is native to North Carolina. Its fruits are edible, and especially delicious cultivars are available. Dropping fruits can be messy.
<i>Sassafras albidum</i>	Sassafras	Deciduous	600	1385	25-40'	30-60'	medium to fast	Prefers well drained sandy soils in full sun to part shade.	
<i>Taxodium distichum</i>	Baldcypress	Deciduous	600	1385	20-30'	50-70'	medium	Thrives in moist to wet soils, standing water	Excellent for yards that frequently flood or stay soggy. In such conditions will form 'knees' that interfere with mowing but stabilize the tree during hurricanes. Cultivars available.
Small yard trees, caution for streetside***									
<i>Amelanchier arborea</i>	Serviceberry	Deciduous	300	254	10-15'	15-25'	slow	Grows in full sun to partial shade and acidic to neutral, sandy, loam, or clay soil that is moist and well drained, but occasionally wet or dry.	Lovely spring flowers and edible fruit. Cultivars available. Generally multistemmed, with a suckering habit.
<i>Asimina triloba</i>	PawPaw	Deciduous	100	100	15-30'	15-30'	medium	Deep shade to full sun in moist, rich soils.	Edible fruit, with cultivars available
<i>Cornus alternifolia</i>	Pagoda Dogwood	Deciduous	300	254	20-30'	15-25'	slow	Prefers full sun to partial shade in rich, moist, well drained soil. Tolerates poor acidic soil.	Few serious insect or disease pests. Can be grown in multistemmed form or single stemmed form. Cultivars available.
<i>Cornus florida</i>	Flowering Dogwood	Deciduous	300	452	15-30'	15-25'	slow	Needs moist rich acidic soil and dappled or partial shade when young. When older can tolerate more open conditions. Many cultivars available.	
<i>Halesia diptera</i>	Silverbell	Deciduous	300	254	15-25'	15-30'	medium	Requires rich moist soils, full sun to part shade. Does not tolerate drought.	
<i>Hamamelis virginiana</i>	Southern Witchhazel	Deciduous	300	254	15-20'	15-30'	medium	Requires rich moist soils, full sun to part shade. Does not tolerate drought.	
<i>Magnolia virginiana</i>	Sweetbay Magnolia	Deciduous	300	452	10-35'	10-35'	moderate to fast	Prefers acidic soils with high organic material, moist or occasionally wet, in full sun to part shade. Tolerates salt and pollution. Many cultivars.	Evergreen in most years, beautifully scented flowers. Can be grown in single or multistemmed form.
<i>Malus angustifolia</i>	Southern Crabapple	Deciduous	300	452	20-30'	20-30'	medium	Prefers moist neutral to acidic loamy soil in full sun to part shade.	Fruit drop can be messy.
<i>Oxydendrum arboreum</i>	Sourwood	Deciduous	300	254	10-15'	20-30'	slow	Prefers rich soil with high organic matter, moist but well drained, in full shade to full sun.	
<i>Rhus copallinum</i>	Winged Sumac	Deciduous	100	100	7-15'	10-20'	medium	Grows full sun to part shade in any moist to well drained, neutral to acid soil, tolerates drought and poor soil.	Forms colonies, and is most attractive as a mass or deciduous hedge. Burgandy fall foliage, rosy red fall and winter fruit, or to control erosion on slopes. Short lived.

*In parking lots and highly developed areas, soil must have a balanced mix of sand, silt and clay with generous amounts of organic material to a minimim depth of 30 inches.

**Extreme spread, foliage that blocks sight lines or messy fruit may cause problems along some streets

***The need for rich moist soil, fruit drop, or a tendency to form colonies may cause problems along some streets.