



Department of
Horticultural Science

LARGE TREES FOR NORTH CAROLINA

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Large trees are dominant features in the landscape. Many plans rely on trees for several design functions: to provide background, enclosure, define spaces, help reduce noise and unsightly views. Trees also provide needed shade, channel breezes, and break forceful winds. They also help the environment by filtering pollutants and exchanging oxygen for carbon dioxide.

When choosing trees, consider the growth rate and habit along with the overall form and texture of leaves and bark.

Properly selected and located trees can enhance the landscape setting and generally improve property values. Once growing, care should be exercised when working or playing around trees. Often, shade tree damage in the form of soil compaction, root damage, improper pruning, chemical and mechanical injury can cause irreversible harm to a tree. Remember, the tree's roots are found in the upper 12 to 15 inches of soil and can grow 40 to 50 percent beyond the drip line of a tree.

Botanical Name and COMMON NAME	Hardiness		Growth				Height		Landscape Remarks
	Zone	Group	Rate	Exposure	Texture	Form	Spread		
Acer floridanum FLORIDA MAPLE	6,7,8	D	med-fast	sun	medium	oval	40-50' 20-25'	excellent shade tree and beautiful fall color	
Acer platanoides NORWAY MAPLE	6,7,8	D	moderate	sun	coarse	dense-broad spreading branches	60-80' 50-70'	"Crimson King" red-purple foliage	
Acer rubrum RED MAPLE	6,7,8	D	rapid	sun/shade	medium	symmetrical spreading branches	40-50' 25-35'	beautiful habit and color "October Glory" - scarlet foliage in fall	
Acer saccharinum SILVER MAPLE	6,7,8	D	rapid	sun	medium	upright open branches	60-80' 50-75'	fast growing shade tree but noted for weak branches and shallow roots	
Acer saccharum SUGAR MAPLE	6,7	D	slow	sun or part shade	medium- coarse	round top	50-75' 30-40'	excellent landscape tree casts very dense shade	
Carya illinoensis PECAN	6,7,8	D	moderate	sun or part shade	medium	irregular open branches	60-100' 30-50'	good shade tree for "edible" landscape	
Carya spp. HICKORIES	6,7,8	D	slow to moderate	sun	medium	spreading crown	60-100' 30-50'	infrequently propagated in nurseries but grows natively	
Catalpa bignonioides SOUTHERN CATALPA	6,7,8	D	rapid	sun	coarse	thick trunk crooked branches	30-50' 20-25'	long-lived untidy tree; interesting winter habit; good habitat for fish bait	
Cedrus deodora DEODAR CEDAR	6,7,8	E	rapid	sun or part shade	fine	pyramidal pendulous branches	30-50' 20-30'	excellent screen tree for Piedmont; good substitute for white pines	
Cryptomeria japonica JAPANESE CRYPTOMERIA	6,7,8	E	medium	sun	fine	narrow columnar	40-50' 10-20'	rich green foliage interesting bark	
Cunninghamia lanceolata CHINAFIR	6,7,8	E	moderate to slow	sun to shade	medium	pyramidal	50-60' 20-25'	good green color during growing season; tends to "brown out" inside as it matures	
x Cupressocyparis leylandi LEYLAND CYPRESS	6,7,8	E	rapid	sun	medium	pyramidal	50-70' 10-15'	fast growing can be size controlled, several varieties - excellent screening plant	
Diospyrus virginiana PERSIMMON	6,7,8	D	slow	sun	coarse	slender irregular	40-50' 20-30'	very interesting bark- "edible landscape" plant	
Fagus grandiflora BEECH	6,7,8	D	slow	sun	medium	dense-low spreading	60-80' 40-60'	large tree with very dense shade; foliage often remains on tree in winter	
Fraxinus americana WHITE ASH	6,7	D	rapid	sun	medium	broad rounded top	60-80' 50-70'	tolerates adverse conditions "Autumn Purple" - good fall color	
Ginkgo biloba MAIDENHAIR TREE	6,7,8	D	slow	sun	medium	pyramidal but later rounded	40-70' 20-40'	plant male species of tree - very interesting shape of foliage; leaves fall rapidly in fall	
Gelditsia triacanthos HONEYLOCUST	6,7,8	D	moderate	sun	fine- medium	upright, open with maturity	50-75' 25-40'	many thornless varieties available at nurseries; excellent street tree	
Juniperus virginiana EASTERN RED CEDAR	6,7,8	E	moderate to rapid	sun	fine	upright with spread- ing branches	30-40' 10-20'	native evergreen-good for evergreen screen- interesting bark	

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Liquidambar styraciflua SWEETGUM	6,7,8	D	slow	sun or part shade	medium	semi- conical	60-100' 50-75'	excellent landscape tree but in a natural area; fruit is a litter problem in lawn areas	
Liriodendron tulipifera TULIP TREE	6,7,8	D	moderate	sun to rapid	coarse	cylindrical head	60-150' 30-40'	fast growing shade tree branches are brittle	
Magnolia grandiflora SOUTHERN MAGNOLIA	7,8	E	moderate to rapid	sun or part shade	coarse	symmetrical	40-60' 25-30'	should be planted where lower branches can grow to ground	
Nyssa sylvatica BLACK TUPELO-Black Gum	6,7,8	D	moderate	sun or shade	medium	open irregular width	40-60' 20-30'	spectacular red autumn color good native tree for NC	
Paulownia tomentosa EMPRESS TREE	6,7,8	D	rapid	sun	coarse	open crown spreading branches	30-50' 20-30'	best used as accent tree	
Pinus palustris LONGLEAF PINE	7,8	E	rapid	sun	fine	open rounded top ascending branches	80-100' 25-40'	susceptible to ice and storm damage	
Pinus strobus WHITE PINE	6,7	E	moderate	sun	fine	pyramidal	80-100' 30-40'	good native tree for mountains, in lower piedmont is marginal	
Pinus sylvestris SCOTCH PINE	6,7,8	E	rapid	sun	medium but later becomes more open	pyramidal	40-70' 15-30'	good landscape form and color	
Pinus taeda LOBLOLLY PINE	6,7,8	E	rapid	sun to part shade	fine	horizontal with ascend- ing branches	70-90' 30-40'	good windbreak - tolerant of poor soils	
Pistacia chinensis CHINESE PISTACHE	6,7,8	D	rapid	sun	fine	rounded	40-60' 15-30'	brilliant fall color	
Platanus occidentalis SYCAMORE	6,7,8	D	rapid	sun to part shade	coarse	broad branches open head	70-100' 60-80'	good shade tree - leaves have a tendency to drop all summer long	
Populus nigra LOMBARDY POPLAR	6,7,8	D	fast	sun	medium	upright- narrow	40-70' 10-12'	fast growing-has many landscape problems - short-lived	
Quercus alba WHITE OAK	6,7,8	D	slow	sun to part shade	coarse medium	broad head thick trunk	80-100' 50-80'	slow growing but excellent for any landscape	
Quercus coccinea SCARLET OAK	6,7,8	D	rapid	sun	coarse medium	symmetrical round head	60-80' 40-50'	good fall color-fast growing oak oak	
Quercus nigra WATER OAK	6,7,8	D	rapid	sun to part shade	medium	broad-oval round top	50-75' 30-40'	matures into large shade tree-yellowish fall foliage	
Quercus palustris PIN OAK	6,7,8	D	rapid	sun to part shade	medium	pyramidal low branches	60-80' 40-50'	holds leaves throughout winter	
Quercus phellos WILLOW OAK	6,7,8	D	moderate	sun	fine	conical in youth, develops rounded crown	60-80 40-50	often referred to as "Pin Oak" because of narrow leaves - this is incorrect	
Quercus virginiana LIVE OAK	7,8	E	slow	sun to part shade	medium	wide spreading branches	30-50' 50-80'	excellent for coastal areas if protected from salt spray	

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Salix babylonica WEeping WILLOW	6,7,8	D	rapid	sun to part shade	fine	slender- pendulous branches	<u>30-50'</u> 20-40'	much landscape interest, avoid planting near sewers, water lines, etc.
Taxodium distichum BALD CYPRESS	6,7,8	D	slow	sun to part shade	fine	pyramidal	<u>50-100'</u> 20-30'	good tree but not used very much -excellent when planted near water
Tilia americana AMERICAN LINDEN	6,7,8	D	rapid	sun to part shade	medium	broad rounded crown	<u>60-75'</u> 45-60	useful as shade tree in urban areas
Tilia cordata LITTLELEAF LINDEN	6,7,8	D	rapid	sun	medium	pyramidal spreading branches	<u>30-50'</u> 25-40'	excellent street tree - transplants easily
Tsuga canadensis CANADIAN HEMLOCK	6,7	E	rapid	shade to part shade	fine	pyramidal	<u>30-80'</u> 15-30'	excellent screen and prunes well
Tsuga caroliniana CAROLINA HEMLOCK	6,7	E	rapid	part shade	fine	pyramidal	<u>30-70'</u> 20-25'	creates good screen for shady areas
Ulmus americana AMERICAN ELM	6,7,8	D	slow	sun	medium	broad umbrella- like crown	<u>75-125'</u> 60-120'	beautiful growth habit but Dutch Elm disease limits use
Zelkova serrata JAPANESE ZELKOVA	6,7,8	D	moderate to rapid	sun to part shade	medium to fine	rounded head	<u>50-60'</u> 40-50'	good shade tree and tolerant to urban conditions