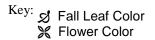
## RECOMMENDED STREET TREES FOR NORTH CAROLINA

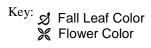
Below is a list of recommended street trees for North Carolina. Special attention has been given to species with the ability to handle air pollution and heat stress involved with urban environments. Other environmental tolerances and sensitivities are listed below. Be aware that some site preparation may be necessary to ensure tree survival, proper soil and water conditions are necessary for any species to survive. This does not mean that pruning and other kinds of maintenance won't be required during the life of the tree. Also, be aware that species listed as large trees will require more growing space to remain healthy (both below and above ground), for they will have larger root systems and wider crowns. Species listed as small trees are particularly useful when utility lines are present. Many of the species listed below have multiple cultivars available for purchase, please be sure to choose the correct one for the site.

LARGE TREES: Mature height greater than 50 feet tall								
TREE SPECIES			GROWTH RATE			VISUAL	ENVIRONMENTAL	DDODLEMO
Scientific Name	Common Name	SHAPE	Slow	Medium	Fast	INTEREST	TOLERANCE	PROBLEMS
Eucommia ulmoides	hardy rubber tree	Rounded	•				Drought	
Fraxinus pennsylvanica	green ash	Rounded		•		Ø	High pH/Salt/Drought/ Compaction	Numerous seeds can be problematic on females
Gleditsia triacanthos var. inermis	thornless honeylocust	Rounded		•		<mark>\$</mark>	Wet soils/Drought/Salt/ High pH/Compaction	Plant bugs, mites, webworm
Gymnocladus dioicus	Kentucky coffeetree	Rounded		•			Drought/Salt/High pH	Pods may be problematic; Needs adequate growing space
Liquidambar styraciflua	sweetgum	Pyramidal		•		<mark>⊅</mark>	Wet soils	Needs adequate growing space; Fruit litter may be problem, 'Rotundiloba' may be alternative
Metasequoia glyptostroboides	dawn redwood	Pyramidal		•			Wet soils/High pH	
Nyssa sylvatica	black gum	Pyramidal		•		<b>2</b> 2	Acid soils	
Platanus x acerifolia	London planetree	Rounded			•		Compaction/Drought/ Salt	Adequate space; Anthracnose can be problem.
Quercus bicolor	swamp white oak	Rounded	•				Wet soils/Drought/Salt/ Compaction	Acorn litter. Requires ample space and acid soil
Quercus imbricaria	shingle oak	Rounded		•			Dry soils	
Quercus lyrata	overcup oak	Rounded		•			Wet soils	
Quercus palustris	pin oak	Pyramidal		•		Ø	Wide range of soils	Adequate space
Quercus phellos	willow oak	Pyramidal			•		Wet or Dry sites/ Compaction	
Quercus rubra	northern red oak	Rounded			•	Ø	Drought/Compaction/ Salt	Acorn litter



LARGE TREES: Mature height greater than 50 feet tall								
Quercus shumardii	Shumard oak	Rounded		•	Ø	Drought/Compaction/ Salt	Acorn litter	
Quercus virginiana	live oak	Rounded	•			Wet soils/Compaction/ Salt		
Sophora japonica	Japanese pagodatree	Rounded		•	Ж	Drought/Compaction/ Salt	Litter problems; Canker can be a problem	
Taxodium distichum	baldcypress	Pyramidal		•		Wet soils/Compaction		
Tilia tomentosa	silver linden	Rounded		•		Drought/Salt/pH adaptable/Compaction	Aphids	
Ulmus parvifolia	lacebark elm	Rounded		•	Ø	Drought/Salt/pH adaptable/Compaction		
Zelkova serrata	Japanese zelkova	Rounded		•	Ø	Drought/pH adaptable/Compaction	Narrow crotch angle susceptible to splitting	

MEDIUM TREES: Mature height between 35 feet and 50 feet tall								
TREE SPECIES			GROWTH RATE			VISUAL	ENVIRONMENTAL	DDODLEMO
Scientific Name	Common Name	SHAPE	Slow	Medium	Fast	INTEREST	TOLERANCE	PROBLEMS
Acer rubrum	red maple	Rounded		•		<b>z</b>	Wet soils/compaction	Tends to have cankers under heavy stress; Over planted.
Aesculus hippocastanum	horsechestnut	Rounded	•			<mark>ø</mark> %	PH adaptable/salt tolerant/compaction	Susceptible to leaf blotch and scorch
Aesculus x carnea	red horsechestnut	Rounded	•			36	Compaction/acidic soil	
Carpinus betulus	European hornbeam	Narrow		•		ø	Dry soils/pH adaptable	
Carpinus caroliniana	American hornbeam	Pyramidal	•			<b>12 2</b>	Acidic soils	Sensitive to drought and compacted soils
Celtis laevigata	sugarberry	Rounded		•		ø	Wet soils/compaction /salt	Intolerant of high pH
Corylus colurna	Turkish filbert	Narrow		•		ø	Drought/pH adaptable	
Juniperus virginiana	eastern redcedar	Pyramidal		•			Drought/High pH/ Compaction/Salt	
Koelreuteria paniculata	goldenraintree	Rounded		•		<b>%</b>	Drought/Salt/High pH	
Phellodendron amurensis	Amur corktree	Rounded		•		<mark>\$</mark>	Drought/Wet soils/pH adaptable	Fruit may be a problem on females
Prunus sargentii	Sargent cherry	Narrow			•	<mark>図</mark> 米	Drought/Salt/Acid soils	Avoid poorly drained sites. Japanese beetles



TREE SPECIES		J	ht less than 35 feet tall (sui			VISUAL	ENVIRONMENTAL	
Scientific Name	Common Name	SHAPE	Slow	Medium	Fast	INTEREST	TOLERANCE	PROBLEMS
Acer campestre	hedge maple	Rounded	•			<mark>\$</mark>	High pH/Drought/ compaction	
Amelanchier arborea	serviceberry	Rounded		•		<mark>⊿</mark> %		Specify tree form. Good alternative to crapemyrtle.
Cercis canadensis	eastern redbud	Rounded			•	<mark>∅</mark> Ж	pH adaptable	
Chionanthus virginicus	fringetree	Rounded	•			×		
Cornus kousa	Kousa dogwood	Rounded	•			<b>2</b> %	Acidic soils	
Crataegus viridis	green hawthorn	Rounded		•		<mark>⋬</mark> <b>2</b>	PH adaptable/ Drought/Wet soils	
Halesia tetraptera	Carolina silverbell	Rounded		•		<mark>ø</mark> %	Acid soils	Specify tree form. Good alternative to crapemyrtle.
Lagerstromia spp.	crapemyrtle	Rounded			•	<mark>z z</mark> K <b>XX</b>	Wet soils	Over planted and often unnecessarily topped.
Maackia amurensis	Amur maackia	Rounded	•			×	Drought/pH adaptable	
Malus spp.	flowering crabapple	Rounded		•		S NXX	Wide range of soils/Salt/ Compaction	Specify tree form; fruit litter problem; scab is a problem for many species
Pistacia chinensis	Chinese pistache	Rounded		•		Ø	High pH	
Prunus caroliniana	Carolina cherrylaruel	Pyramidal			•	×	Drought/pH adaptable	Avoid poorly drained sites
Prunus virginiana	chokecherry	Narrow			•	<b>2</b>	Drought/Salt	Avoid poorly drained sites
Syringa reticulata	Japanese tree lilac	Pyramidal		•		26	Drought/pH adaptable	