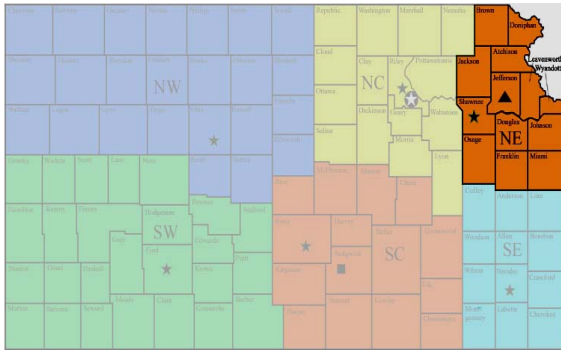


# Preferred Trees for Northeast Kansas



Growing trees successfully depends on the selection of the right trees for the intended site. It is important to match the growing conditions and space available on the site with the cultural requirements and projected size of each tree to be planted. The following four charts on the following pages show the tolerances of individual trees to various environmental conditions as well as the major landscape attributes of each tree. Not all recommended trees for planting in Northeast Kansas are included. The preferred trees listed were recommended by industry professionals such as city foresters, local tree boards, county and horticulture extension agents, commercial arborists and retail/production nursery interests.

## KEY TO USING THIS INFORMATION:

**TREE SPECIES AND CULTIVARS:** The names of the trees are listed in the center of four different charts. Three of the charts list deciduous trees according to average mature height [a plus (+) indicates they may grow slightly larger.] The fourth chart lists evergreen trees. If improved cultivars of the trees are available and recommended, they are listed. Cultivars often possess improved plant characteristics like better fall color; a unique form; more attractive flowers, fruit or bark; greater heat tolerance; or increased pest resistance. Many trees are available in single and multi-stemmed form. Multi-stemmed forms are more likely to be damaged from snow, ice, or wind.

**ENVIRONMENTAL TOLERANCES:** The left side of each chart indicates whether the tree is tolerant to various environmental conditions including full sun, light shade, alkaline soil, drought or wet soil. Each chart also shows how resistant each tree is to insect and disease pests. A "G" (for good) under the appropriate column indicates the tree is strongly tolerant of the characteristic indicated. A "F" (for fair) signifies that the tree shows some tolerance. A blank space in a column indicates the tree is not tolerant and should not be subjected to that environmental condition. Specific information on the "alkaline soil" and "pests" categories follows:

**ALKALINE SOIL:** (G) = tree may tolerate soils with a pH up to 8.0 or more; (F) = tree generally will tolerate an alkaline soil up to a pH of 7.5; (blank) = tree may not tolerate alkaline soils; do not plant in alkaline soils to avoid the problem of iron or manganese chlorosis.

**PESTS:** (G) = tree is usually free of insect and disease problems; (F) = tree encounters insect or disease pests on an infrequent basis and often is not permanently damaged; (blank) = tree may suffer from pests which may permanently damage or kill the tree and/or the tree may exhibit minor insect and disease problems on a frequent basis which may affect the aesthetics of the tree or insects may commonly be a nuisance.

**LANDSCAPE ATTRIBUTES:** The right side of each chart includes average mature height and spread of each tree. The size is sometimes highly variable due to the size and shape of different cultivars planted and variability among growing sites. The landscape attributes of flowers, fruit, autumn color and ornamental bark are also listed.

**DESIRABLE FLOWERS:** (G) = the flowers are showy, adding unique ornamental interest to the landscape; (F) = the flowers are not particularly showy, but may possess other desirable characteristics such as fragrance; (blank) = the flowers are generally considered insignificant.

**SHOWY OR USEFUL FRUIT:** (G) = fruits are generally aesthetically pleasing; (F) = fruits or nuts are not considered unusually showy, but may provide other interest or benefits such as attracting wildlife; (blank) = no showy or useful fruit.

**AUTUMN FOLIAGE COLOR:** (G) = the autumn leaf color is typically quite good (may vary with individual trees, cultivars and environmental conditions, however); (F) = the fall color may provide interest in some years; (blank) = autumn foliage color is generally not considered an asset of this particular tree.

**ORNAMENTAL BARK:** (G) = the bark or twigs are considered to be exceptionally ornamental; (F) = the bark or twigs (on at least some cultivars) lend interest to the landscape (good color, texture, etc.); (blank) = the bark or twigs are not generally considered to be ornamental.

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ENVIRONMENT (tolerant of)						LANDSCAPE ATTRIBUTES						
FULL SUN	LIGHT SHADE	ALKALINE SOIL (HIGH pH)	DROUGHT	WET SOIL	PESTS (RESISTANT TO)		MATURE HEIGHT	MATURE SPREAD	DESIRABLE FLOWERS	SHOWY OR USEFUL FRUIT	AUTUMN FOLIAGE COLOR	ORNAMENTAL BARK
						<b>SMALL DECIDUOUS TREES</b> (usually under 20 feet at maturity)  <i>Trees with mature height 20 feet or less can be used within 15 feet on either side of utility lines.</i>						
	G				F	<b>Japanese Maple</b> ( <i>Acer palmatum</i> ) Protect from summer wind and heat exposure.	15-25	15-25			G	
G	F	F	G	F	F	<b>Amur Maple</b> ( <i>Acer tataricum</i> var. <i>ginnala</i> ) <b>Cultivars:</b> 'Compactum', 'Flame' and other improved selections	15-20	15-20			G	
G	G					<b>Serviceberry</b> ( <i>Amelanchier x grandiflora</i> ) <b>Cultivar:</b> 'Autumn Brilliance'. Choose superior cultivars and native species.	15-25	15-20	G	G	F	
G	F	G	F		F	<b>Eastern Redbud</b> ( <i>Cercis canadensis</i> ) <b>Cultivars:</b> 'Alba', 'Forest Pansy'	20-25+	20-25+	G		F	F
G	F	G	F		F	<b>Oklahoma Redbud</b> ( <i>Cercis canadensis</i> subspecies <i>texensis</i> 'Oklahoma')	15-20+	15-20+	G		F	F
G	G				F	<b>Chinese Fringetree</b> ( <i>Chionanthus retusus</i> )	15-25	10-25	G	G		G
G	G				F	<b>White Fringetree</b> ( <i>Chionanthus virginicus</i> )	10-20	10-20	G			
G		F	F		F	<b>Common Smoketree</b> ( <i>Cotinus</i> spp.) Purple and green leaf cultivars available	10-15	10-15	G			
G	F	G	G		F	<b>Winterberry Euonymus</b> ( <i>Euonymus bungeanus</i> )	15-20+	10		G	F	
	G				G	<b>Star Magnolia</b> ( <i>Magnolia stellata</i> ) Protect from summer wind and heat exposure.	15-20	10-15	G			
	G			F	G	<b>Sweetbay Magnolia</b> ( <i>Magnolia virginiana</i> ) Protect from summer wind and heat exposure.	10-30	10-20	F			
G		F	F			<b>Flowering Crabapple</b> ( <i>Malus</i> spp.) Many cultivars available. Choose disease resistant cultivars only. Superior cultivars include: 'Prairiefire', 'Adirondack', 'Adams', 'Sargeant'. Also refer to KSU Research and Extension Crabapple Publication MF-875.	varies	varies	G	G		F
G	F				F	<b>Chokecherry</b> ( <i>Prunus virginiana</i> ) <b>Cultivar:</b> 'Canada Red Select'	15-25	10-15	G	G	F	
G		G	F		F	<b>Japanese Tree Lilac</b> ( <i>Syringa reticulata</i> ) <b>Cultivar:</b> 'Ivory Silk'	20-25	15-25	G			G

ENVIRONMENT (tolerant of)						LANDSCAPE ATTRIBUTES						
FULL SUN	LIGHT SHADE	ALKALINE SOIL (HIGH pH)	DROUGHT	WET SOIL	PESTS (RESISTANT TO)		MATURE HEIGHT	MATURE SPREAD	DESIRABLE FLOWERS	SHOWY OR USEFUL FRUIT	AUTUMN FOLIAGE COLOR	ORNAMENTAL BARK
						<b>MEDIUM DECIDUOUS TREES</b> (usually 20 to 40 feet at maturity)						
G	F	F	F	F	F	<b>Trident Maple</b> ( <i>Acer buergerianum</i> ) Some trees could suffer winter injury.	20-35	20-30			G	F
G	G	F	G		G	<b>Hedge Maple</b> ( <i>Acer campestre</i> ) <b>Cultivar:</b> Queen Elizabeth™ ('Evelyn')	25-35	25-35			F	
F	F	F			G	<b>Paperbark Maple</b> ( <i>Acer griseum</i> )	20-30	15-30			F	G
G	F	F	F		G	<b>Shantung (Purpleblow) Maple</b> ( <i>Acer truncatum</i> ) <b>Cultivars-</b> hybrid with <i>A. platanoides</i> : 'Keithsform' (Norwegian Sunset™), 'Warrensred' (Pacific Sunset™).	25-30	25-30			F	
F	G				F	<b>American Hornbeam</b> ( <i>Carpinus caroliniana</i> )	20-30	20-30				

G		F			G	<b>American Yellowwood</b> ( <i>Cladrastis kentukea</i> )	30-50	40-55	F		F	
G		G	G			<b>Goldenraintree</b> ( <i>Koelreuteria paniculata</i> )	30-40	30-40	G	G	F	
G		G	G	F	G	<b>Osage Orange</b> ( <i>Maclura pomifera</i> ) <b>Cultivars:</b> 'Wichita', 'Whiteshield'. Fruitless and thornless cultivars recommended for most community plantings.	30-40+	20-40			G	F
F	G					<b>Saucer Magnolia</b> ( <i>Magnolia x soulangiana</i> ) Protect from summer wind and heat exposure.	20-30	15-25	G			
G		F	F			<b>Flowering Crabapple</b> ( <i>Malus species</i> ) Many cultivars available. Choose disease resistant cultivars only. Superior cultivars include: 'Centurion'; 'Ralph Shay'; Siberian Crab ( <i>M. baccata</i> 'Jackii'); 'Spring Snow'; 'Van Eseltine'; White Angel™ ('Inglis'); 'Red Splendor'. Also refer to KSU Research and Extension Crabapple Publication MF-875.	varies	varies	G	G		F
G	G	F	F		G	<b>Hophornbeam (Ironwood)</b> ( <i>Ostrya virginiana</i> )	25-40	20-30		F	F	F
G		F	G		F	<b>Callery Pear</b> ( <i>Pyrus calleryana</i> ) Several improved cultivars available. Superior cultivars include: 'Chanticleer' (also labeled 'Cleveland Select'), 'Capital', 'Aristocrat', 'Redspire'. 'Bradford' is not a recommended cultivar.	30-40+	10-45	G	F	G	
G		G	G		G	<b>Chinkapin Oak</b> ( <i>Quercus muehlenbergii</i> )	35-40+	40-45		F	F	
G		G	G		G	<b>Western Soapberry</b> ( <i>Sapindus drummondii</i> )	25-40+	25-30	G	G	G	F

ENVIRONMENT (tolerant of)						LANDSCAPE ATTRIBUTES						
FULL SUN	LIGHT SHADE	ALKALINE SOIL (HIGH pH)	DROUGHT	WET SOIL	PESTS (RESISTANT TO)		MATURE HEIGHT	MATURE SPREAD	DESIRABLE FLOWERS	SHOWY OR USEFUL FRUIT	AUTUMN FOLIAGE COLOR	ORNAMENTAL BARK
<b>LARGE and VERY LARGE DECIDUOUS TREES</b> (usually 40 feet and larger at maturity)												
G	F	F				<b>Freeman Maple</b> ( <i>Acer x freemanii</i> ) <b>Cultivar:</b> 'Armstrong'; 'Jeffersred' (Autumn Blaze®); Autumn Fantasy™. Poisonous to horses.	50-60	40-50			G	F
G	F	G	G			<b>Norway Maple</b> ( <i>Acer platanoides</i> ) Several cultivars available. Superior cultivars include: 'Emerald Queen', 'Superform' (Green leaf cultivars) and "Fairview', 'Crimson King', 'Royal Red' (Red leaf cultivars).	40-50	40-50				
G	F			G		<b>Red Maple</b> ( <i>Acer rubrum</i> ) <b>Cultivars:</b> Red Sunset® ('Franksred'); October Glory®; 'Autumn Flame'; Burgundy Belle® 'Magnificent Magenta' and columnar forms; Poisonous to horses.	40-60	35-50	F		G	F
G	G	F				<b>Sugar Maple</b> ( <i>Acer saccharum</i> ) <b>Cultivars:</b> 'Commemoration'; 'Legacy'; Caddo; 'Fall Fiesta'; 'Bonfire'; all are more heat tolerant/leaf tatter resistant cultivars.	40-60+	30-50			G	
G				G	F	<b>River Birch</b> ( <i>Betula nigra</i> ) <b>Cultivar:</b> 'Heritage'	40-60	40-50	F		F	G
G	F		F		F	<b>European Hornbeam</b> ( <i>Carpinus betulus</i> ) Upright cultivars available.	40-60	30-40+				
G		F	G		F	<b>Persimmon</b> ( <i>Diospyros virginiana</i> )	35-50+	20-35	F	G	F	G
G		G	G		G	<b>Ginkgo</b> ( <i>Ginkgo biloba</i> ) <b>Cultivars:</b> 'Autumn Gold'; 'Princeton Sentry'; 'Magyar'. Male cultivars recommended for most community plantings.	50-60+	25-40			G	F
G		G	G	F		<b>Thornless Honeylocust</b> ( <i>Gleditsia triacanthos</i> var. <i>inermis</i> ) <b>Cultivars:</b> 'Shademaster', 'Skyline', 'Imperial'.	40-60+	30-50			F	
G		G	G	F	G	<b>Kentucky Coffeetree</b> ( <i>Gymnocladus dioica</i> ) Seedless cultivars available.	50-60+	30-45		F	F	F
G				G		<b>Sweetgum</b> ( <i>Liquidambar styraciflua</i> )	50-75	35-50		F	G	F
G	F			G		<b>Black Tupelo (Black Gum)</b> ( <i>Nyssa sylvatica</i> )	30-50	20-30			G	G
G	F	G	F	G		<b>London Planetree</b> ( <i>Platanus x acerifolia</i> )	60-80	50-60		F		G

