

SHADE TREES

	Botanical Name	Common Name	Pronunciation	Size	Rate	Habit	Ornamental Feature(s)	Use
Maples	<i>Acer buergeranum</i>	Trident Maple	a' ser ber-jer-e-a' num	20-35' H&W	Slow to medium	Oval-rounded to rounded outline	A lovely, small tree; tendency toward multiple and low branching unless trained to a single stem. New growth rich bronze to purple; yellow, orange, & red in fall; colors later than many maples (late Oct.-early Nov.)	A very adaptable tree for small spaces. Small patio, lawn, or street tree; might work in planter boxes; bonsai specimen. Highly drought tolerant.
	<i>Acer campestre</i>	Hedge Maple	a'ser kam-pes' tre	25-35' H&W	Slow, 10-14'@10-15 yr.	Rounded & dense, often branched to the ground; can be easily limbed up.	Fall color variable, yellow-green or yellow in fall; one of latest trees to color developing along with Norway Maple in late Oct.-early Nov. Attractive corky bark.	Excellent small lawn specimen, street tree, good under utility lines; can be pruned into hedges. Does well in dry soil.
	<i>Acer ginnala</i>	Amur Maple	a' ser gin-a' la	15-18'(25')x15-18'(25')+	12-20"/yr.	Multi-stemmed large shrub or small tree often rounded in outline (variable).	Yellow & red fall color - variable; best color seen in full sun. One of the first trees to leaf out, often in full leaf by late March.	Small specimen, patio tree, screen, grouping, massing, corners or blank walls of large buildings. Does better in shade than most maples. Can be tailored to specific landscape requirements by pruning. Withstands heavy pruning. Can be grown very successfully as a container plant.
	<i>Acer griseum</i>	Paperbark Maple	a'ser gris' e-um	20-30' H; spread 1/2 to =	Slow, 6-12"/yr.	Upright-oval, oval or rounded (usually the last 2)	Beautiful cinnamon or red-brown exfoliating bark. Bark character develops on second year wood. Fall leaves russet-red or red, can be good, but variable.	Specimen
	<i>Acer platanoides</i>	Cleveland Norway Maple	a'ser plat-an-oi' dez	40-50' x 30-40'	6.4' x 2.7' after 4 yrs.	Upright-oval to oval-rounded, not as wide spreading as the species	Excellent golden yellow fall color.	Shade tree. One of best Norway cultivars for urban plantings.
		Crimson King Norway Maple		15-25' x 10-20' in zones 6-7	Slow to moderate. 5.2"/yr.	Oval when young, becoming rounded	Dark black purple leaf color throughout the growing season.	Large accent tree, specimen or lawn shade tree.
Drummond Norway Maple		30-40' H&W		23' x 13.9' @ 10 yrs.	Rounded	Light green leaves edged with white	Shade tree.	

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Maples	<i>Acer platanoides</i>	Emerald Queen	a'ser plat-an-oi' dez	50' x 40'	Rapid, 26' x 20.7' after 20 yrs.	Ascending branches, oval-rounded outline.	Fall color is bright yellow.	Shade tree. One of best Norway cultivars for urban plantings.
		Royal Red		40' x 30'	Slower than Crimson King, 2.6"/yr.	Oval when young, becoming rounded	So similar to Crimson King that they may be the same plant.	Shade tree.
		Summershade		42' x 40'	Rapid, 12' x 10.6' @ 4 yrs.	Rounded	Heat resistant. Fall color variable.	Shade tree.
	<i>Acer rubrum</i>	Red Maple	a'ser ru'brum	40-60' x 25-35'	Med. To fast, 10-12' in 5-7 yrs.	Pyramidal when young, later ascending branches, rounded crown	New leaves reddish tinged, fall varies fm. greenish yellow to yellow to brilliant red. One of first to color in fall.	Will take wet feet. Specimen tree for lawn, park or street. Fall effect is dazzling when planted with a backdrop of <i>Pinus strobus</i> .
	<i>Acer rubrum (Acer x freemanii)</i>	Armstrong Red Maple		50-70' x 15'	Fast, 15.4' x 4.5' @ 4 yrs.	Fastigate	Fall color variable, although some display good orange-red color.	Good for narrow locations.
	<i>Acer rubrum (Acer x freemanii)</i>	Autumn Blaze		50' x 40'	Almost too fast, 4 x as fast as the species.	Dense oval-rounded head with ascending branch structure.	Excellent orange-red fall color that persists later than many cultivars. One of the best Red Maples for fall color.	Doesn't develop the tight head of October Glory and Red Sunset. More drought tolerant than true <i>Acer rubrum</i> cultivars.
	<i>Acer rubrum</i>	Autumn Flame		35-40' high & wide	Moderate to fast, 21' x 24' @ 10 yrs.	Rounded with dense crown	Colors 3-4 wks. ahead of October Glory	Large shade tree street tree, group plantings, buffer, naturalizing.
		Bowhall		50' x 15'		Upright form with narrow pyramidal-columnar head	Good yellowish-red fall color	Good for narrow locations.
		October Glory		40-50' high	Moderate, 11' x 6.4' @ 4 yrs.	Broadly oval to rounded.	Red fall color more intense than Red Sunset - colors after Red Sunset. Develops excellent red fall color even in latitudes that are not environmentally perfect for maximum color.	Adaptable to urban sites. Shade tree.

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Maples	<i>Acer rubrum</i>	Red Sunset	a'ser ru'brum	45-50' x 30-35'	Moderate to fast, 13.6' x 7.8' @ 4 yrs.	Upright oval crown	Excellent orange to red fall color. Colors before October Glory.	Large shade tree, street tree, specimen, group plantings, buffer, naturalizing.
	<i>Acer saccharinum</i>	Silver Maple	a'ser sak-kar-i'num	50-70'; spread 2/3s height	Fast, 10-12' @ 4-5 yrs.	Upright with strong spreading branches forming an oval to rounded crown	The English consider the Silver Maple a very beautiful tree.	Possibility for rugged conditions or where someone desires fast shade. In native habitat along streams it withstands several weeks of complete inundation. Will buckle sidewalks and invade water systems.
	<i>Acer saccharum</i>	Sugar Maple	a'ser sak-kar'um	40-60' X 20-40'	Slow to moderate.	Upright-oval to rounded	Brilliant yellow, burnt orange and limited red fall color.	Large shade and lawn tree. Excellent for lawn, park, golf course. Can suffer from extended heat.
		Bonfire		50' x 40'		Oval	Brilliant carmine red fall color.	
		Commemoration		50' x 35'	Fast	Oval-rounded to rounded outline	Deep yellow-orange-red fall color occurring 10-14 days earlier than species.	
		Green Mountain		45' x 35'	Moderate. 7.2' x 5' @ 4yrs.	Upright oval crown	Yellow-orange fall color	Quite heat tolerant. Performs better than species in dry, restricted areas. Large shade tree for golf course and parks.
		Legacy		50' x 35'		Crown heavier with better distribution of leaves. Somewhat butterball shaped. Dense oval.	Good yellow-orange fall color	Specimen, accent. Drought tolerant.
	<i>Acer truncatum</i>	Norwegian Sunset	a'ser trun-ka'tum	35' x 25'	Slow	Upright, oval-rounded, uniform canopy structure.	Reddish purple when emerging. Fall color an excellent combination of yellow-orange-red.	Lovely small maple with potential for street or residential areas. Heat and drought tolerant.

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Birches	<i>Betula utilis</i> var. <i>jacquemontii</i>	Whitebark Himalayan Birch	bet'u-la u'ti-lis jak' mont'e'i	30-50' x 20-35'		Pyramidal-oval	Bark is a beautiful cream-white.	Possibly borer-resistant substitute for European White Birch.
	<i>Betula nigra</i>	River Birch	bet'u-la ni'gra	30-60' x 20-50'	Medium to fast	Pyramidal to oval-headed in youth, often rounded at maturity. Frequently multi-stemmed.	Bark exfoliates into papery sheets and plates, exposing the inner bark which is colored gray-grown, salmon-brown, cinnamon-brown to reddish brown (variable).	Specimen tree for estates, parks, golf courses, campuses and other large areas. Well suited to areas that are wet a portion of the year, yet may be quite dry in the summer and fall.
		Dura-Heat		40-50' x 25-35'. Smaller than Heritage			Bark exfoliates early and is whitish. Good yellow fall color.	
		Heritage		50-60' x 30-40'			Bark exfoliates on young (1-2") trunks and open to a white to salmon-white eventually darkening to salmon-brown as the tree ages. Yellow fall color.	
<i>Betula pendula</i>	Youngii European White Birch	bet'u-la pen'du-la			Branches slender and perfectly pendulous, with a leading stem. A fat mop-head.	Weeping character.	Specimen	
Hornbeam	<i>Carpinus betulus</i> 'Fastigiata'	Upright European Hornbeam	kar-pi'nus bet'u-lus	30-40' x 15-20'	Moderate. 25' x 14' after 10 yrs.	Oval-vase shape with distinct fan-ribbed branches. Doesn't develop a central leader.	Smooth, gray, sinewy bark is welcome addition to the winter landscape. Withstands full sun or heavy shade.	Serves as an effective screen in winter because of the dense, compact, close-knit nature of the ascending branches. Screen for narrow or tight spaces.
	<i>Carpinus caroliniana</i>	American Hornbeam, Ironwood	kar-pi'nus ka-ro-lin-i-a'na	20-30' H&W	Slow, 8-10' @ 10 yrs.	Small to medium multi-stemmed, bushy shrub or single-stemmed tree with wide-spreading, flat or round-topped crown.	On older branches develop a smooth slate gray color and an irregularly fluted appearance. The overall appearance is comparable to the flexed biceps and forearm muscles (hence Musclewood). Fall color is yellow, orange, red and reddish purple, variation exists.	Best used in a naturalized situation. Will tolerate periodic flooding.

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Beech	<i>Fagus sylvatica</i>	European Beech	fa'gus sil-vat'i-ka	50-60' x 35-45'	Slow to medium, 9-12' @ 10 yrs.	Tends to branch close to ground, dense, upright, oval character when young.	Foliage a tender shimmering green when unfolding, rich russet and golden bronze fall color. Bark is smooth, gray developing an elephant hide appearance - beautiful.	Specimen, excellent for public areas, excellent hedge (withstands heavy pruning)
		Dawyck (Fastigiata) European Hornbeam		80'+ x 10'		Rigidly columnar to narrowly cone-shaped and maintains this condition without pruning.	Makes strong vertical element in the landscape. Smooth, elephant hide-like bark is attractive in winter.	Use as screen in narrow locations.
		Pendula European Hornbeam		50-60' x 50-60'+		Beautiful weeping form, sometimes branches are horizontal for a distance and then turn down forming a large tent-like mass.	Weeping character.	Specimen
		Purple Fountain European Hornbeam		25' x 12-15'		Narrow, upright growth, branches hanging down from the central stem in a loose cascading fashion.	Purple foliage fading in summer heat. Interesting growth habit.	Specimen
		Red Obelisk European Hornbeam		to 50' high	10-12' x 3' in 12 yrs.	Compact, pyramidal-columnar	Dark purple leaves.	Specimen
		Riversii European Hornbeam		50' x 40'			Deep purple supposedly holding this color into summer. The new spring growth is black purple.	Specimen

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Beech	<i>Fagus sylvatica</i>	Spaethiana European Hornbeam	fa'gus sil-vat'i-ka	50- x 40'			Deep purple leaves, veins usually lighter than the interveinal areas. Holds the color well. Leafs out about one week later than most other beeches.	Specimen
Ash	<i>Fraxinus americana</i>	Autumn Purple White Ash	frak'si-nus a-mer-i-ka'na	35-40' x 20-25'	fast	Pyramidal-rounded	Reddish-purple fall color holding 2-4 wks.	Handsome native tree for parks and other large areas.
	<i>Fraxinus pennsylvanica</i>	Green Ash	frak'si-nus pen-sil-va'ni-ka	50-60', spread 1/2 hgt.	Fast, 2-3'/yr. May grow 8-12' in a single season	Softly pyramidal when young, upright-spreading at maturity. Extremely irregular crown.	Respectable to superb yellow fall color. Excellent heat and cold tolerance.	Streets, lawns, commercial areas, parks, golf courses.
		Cimmaron Green Ash		60' x 30'		Narrow in youth with upright branches forming an oval canopy.	Holds leaves 7-10 days later in fall, fall color brick red to orange-red.	
		Marshall's Seedless Green Ash		50' x 40'		Not as neat and uniform as Patmore and Summit	Glossy dark green foliage. Yellow fall color.	
		Patmore Green Ash		40-45' x 30-35'		Upright branching, oval head	More hardy than Marshall's Seedless.	
		Summit Green Ash		45' x 25'		Upright, pyramidal to moderate ovate	Foliage not as lustrous or dark green as Marshall's Seedless, but a more refined form. Excellent golden yellow fall color.	
		Urbanite Green Ash		50-60' x 35-45'		Broad pyramidal	Deep bronze to purple fall color.	
Ginkgo	<i>Ginkgo biloba</i>	Ginkgo	gingk'go biloba	40-60' x 30-50'	Slow to medium	Upright, somewhat irregular	Showy bright yellow fall foliage.	Outstanding fall color. Moderate to high drought tolerance. Lawn, specimen, focal point in fall, street tree.

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Honeylocust	<i>Gleditsia triacanthos inermis</i>	Shademaster Honeylocust	gle-dit'si-a tri-a-kan'thos in-er'mis	30-50' x 20-30'	medium to fast. 1' 10.7" / yr.	Ascending branches, strong-growing	Graceful habit and fine-textured leaves. The light shade that it produces allows grass to grow below it.	Lawn tree for providing filtered shade. Highly drought tolerant. Good choice when a background showing through is desirable.
		Skyline Honeylocust		50-70' x 35-50'	1' 9" / yr.	Pyramidal form with ascending branches. More upright than most forms.	Bright golden yellow fall color.	Lawn tree for providing filtered shade. One of most cold hardy forms.
		Sunburst Honeylocust		30-35'		Broad pyramidal head	Golden leaves on new growth changing eventually to bright green.	Lawn tree for providing filtered shade.
Kentucky Coffeetree	<i>Gymnocladus dioicus</i>	Kentucky Coffeetree	jim-nok'la-dus di-o-e'kus	60-75' x 40-50'	Slow to medium, 12-14' @ 10 yrs.	Narrow, obovate crown formed by vertically ascending branches, form varies.	One of latest trees to leaf out in spring. New leaves are pinkish to purplish tinged gradually changing to dark green, almost dark bluish green in summer. Fall color often ineffective, but excellent on some trees - yellow.	Choice tree for parks, golf courses and other large areas. Drought tolerant and suited to city conditions.
Goldenraintree	<i>Koelreuteria paniculata</i>	Goldenraintree	kol-ro-te'ri-a pan-ik-u-la'ta	20-30' x 20-25'	Medium to fast, 10-12' @ 5-7 yrs.	Dense, irregular rounded outline, branches spreading and ascending.	Yellow flowers on 12-15" long and wide panicles in June - very showy. Leaves purplish-red when unfolding, changing to yellow and golden almost orange-yellow in fall.	Small lawn tree, for shading a patio. Choice specimen tree where space is limited. Group plantings, medians and avenues.
Sweetgum	<i>Liquidambar styraciflua</i>	American Sweetgum	lik-wid-am'bar sti-ra-se-flo'a	60-75' x 35-50'	fast, 2-3'/yr. in moist soil, 1-2'/yr. in dry soil. 20.3' x 14.5' @ 10 yrs.	Pyramidal when young, of very neat outline; often with an oblong to rounded crown at maturity.	Rich yellow-purple-red fall color.	Lawn, park, or street tree, but needs large area for root development.

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Tulip Poplar	<i>Liriodendron tulipifera</i>	Tulip Poplar	lir-i-o-den'dron tu-li-pif'er-a	80-100' x 30-50'	Fast, 15-20' @ 6-8 yrs.	In open-grown situations somewhat pyramidal in youth maturing to oval-rounded. In the wild often free of branches for 70-80% of its height.	Beautiful flowers which are missed due to height of tree. Yellow or golden yellow fall color.	Not for the small residential property or streets. A very large and magnificent plant when fully grown. Specimen on a large property. Most handsome in large grouping or groves where trees develop a spire-like habit. Use for naturalizing and remediation of wetland areas.
Black Tupelo	<i>Nyssa sylvatica</i>	Black Tupelo	nis'a sil-vat'i-ka	65-75' x 25-35'	Slow to medium, 12-15' @ 10-15 yrs.	Somewhat pyramidal when young with densely set branches. In old age branches form an irregularly rounded or flat-topped crown.	One of our most beautiful native trees. Bark is almost black and alligator hide-like. Fluorescent yellow to orange to scarlet to purple fall color.	Excellent specimen tree. Not for heavily polluted areas. Lovely in a naturalized area.
Sourwood	<i>Oxydendron arboreum</i>	Sourwood	ok-si-den'drum ar- o're-um	40-60' x 25-30'	Slow to medium, 14-15' @ 12-15 yrs.	Pyramidal tree with rounded top and drooping branches.	White, urn-shaped, fragrant flowers, June to early July, on 4-10" long and wide, drooping racemose-panicles. Literally smother the foliage. Yellow, red and purple fall color, often all colors on the same tree.	An all-season ornamental. Excellent specimen plant. Good in a grove against a forest background. Also good in combination with <i>Hydrangea quercifolia</i> ; in fall color at the same time, the pinkish red of the Sourwood and the deep burgundy of Oakleaf Hydrangea are outstanding.
Chinese pistache	<i>Pistacia chinensis</i>	Chinese Pistache	pis-ta'shi'a chi-nen'sis	25-39' x 25-35'	Medium	Vase-shaped, oval, rounded to irregular crown	Showy gray-brown bark that peels to expose simon-red underneath. Dramatic orange and red fall color.	Outstanding specimen, shade or street tree. Highly drought tolerant.

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Sycamore	<i>Platanus occidentalis</i>	Sycamore	plat'a-nus ok-si-den-ta'lis	75-100' x <=	Medium to fast	Large, massive trunk, wide-spreading crown of massive, crooked branches.	A striking specimen in winter when the white, mottled bark stands out against the cold gray sky.	Not really a city tree. Leave if existing in the landscape. Could be used in a natural situation, along water courses.
London Planetree	<i>Platanus x acerifolia</i> 'Bloodgood'	Bloodgood London Planetree	plat'a-nus a-ser-e-fo'le-a	50-60' x 30-40'	Fast, 50' x 40' after 20-30 yrs/	Pyramidal in youth, developing a large, open, wide-spreading outline with massive branches as it matures. Doesn't spread as much as <i>P. occidentalis</i>	Handsome due to noble habit and exquisite cream, olive, light brown bark.	Use in open areas in parks, golf courses, campuses. Restrict use as a street tree - too large. Highly drought tolerant.
Oaks	<i>Quercus acutissima</i>	Sawtooth Oak	kwer'kus a-ku-tis'i-ma	40-60' x variable width	Medium initially, 32' @ 16 yrs. One of the fastest growing oaks	Dense, broad pyramidal in youth, varying in old age from oval-rounded to broad-rounded with low-slung, wide-spreading branches.	A good clear yellow to golden brown fall color developing late, often in November. Leaves open a brilliant yellow to golden yellow.	Should be used more, especially in the South where it is fast growing.
	<i>Quercus alba</i>	White Oak	kwer'kus al'ba	60-100' x 60-80'	Slow to medium, 12-15' @ 10-12 yrs.	Pyramidal when young, upright-rounded to broad-rounded with wide spreading branches at maturity.	One of the most handsome oaks. Wonderful bark texture. Blue-green foliage turning rich red to wine color in fall, lasting for a long period of time.	A very imposing specimen when full grown.

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Oaks	<i>Quercus bicolor</i>	Swamp White Oak	kwer'kus bi'kul-er	50-60' x <=		Broad, open, round-topped crown and short, limby trunk.	Normal fall color is yellow, but sometimes red-purple.	Good for use in areas with moist soil (found in the wild in low lying and more or less swampy situations), also excellently drought resistant. Good for naturalizing or for use in parks, golf courses and large areas.
	<i>Quercus coccinea</i>	Scarlet Oak	kwer'kus cok-sin'e-a	60-75' x 45-60'	Moderate. 1-1/2 - 2'/yr over a 10-20 yr. period	Similar to Pin Oak, but becomes more rounded and open at maturity.	Scarlet red fall color (some russet red, if at all), developing in mid-November. One of the last species to develop fall color.	Less tolerant of adverse conditions than Pin Oak and Red Oak. Generally found on dry, sandy soils.
	<i>Quercus falcata var. pagodifolia</i>	Cherrybark Oak	kwer'kus fal-ka'ta	70-80'		A rounded outline with time	Cherry-like bark, blackish and scaly.	Found in bottom land habitats, but develops best on loamy ridges.
	<i>Quercus lyrata</i>	Overcup Oak	kwer'kus li-ra'ta	30-40' high & wide	medium to fast	In youth, pyramidal-oval, oval-rounded at maturity.	Bark remiscent of White Oak from a distance. The common name comes from the cap that almost completely encloses the nut.	A bottom land species - apparently will withstand complete flooding. Use in difficult sites.
	<i>Quercus nutallii</i>	Nuttall Ok	kwer'kus nu-tal'le-i	60-80' x 35-50'	medium	Develops a full canopy (head) at an early age.	Rich, reddish-purple new growth, reddish fall color. Clean leaf drop in autumn.	Superior adaptability. Found on floodplains, bottomlands Doesn't stop growing in summer when it's hot, withstands great diversity of pH.
	<i>Quercus palustris</i>	Pin Oak	kwer'kus pa-lus'tris	50-75' x 35-40'	One of the fastest oaks. 12-15' @ 5-7 yrs.	Strongly pyramidal, usually with a central leader; the lower branches are pendulous, the middle horizontal, the upper upright. Becomes oval-pyramidal with age.	Russet, bronze or red in fall, variable.	Lawn, park, golf courses, commercial landscapes, streets.
	<i>Quercus phellos</i>	Willow Oak	kwer'kus fel-os	60-75' x 40-50'	Medium to fast, 1-2'/yr.	Pyramidal in youth, dense oblong-oval to rounded crown at maturity.	Best oak for overall texture and form; finer textured than most.	Makes a good avenue, street or boulevard tree, excellent for large area use, commercial establishments, golf courses, and parks. Moderate to high drought tolerance.

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Oaks	<i>Quercus robur</i>	Rosehill English Oak	kwer'kus ro'ber	75-100' H&W	Slow to medium, 1'4"/yr.	Large, massive, broadly rounded, open-headed tree with short trunk; in youth pyramidal to rounded.	More disease resistant than the species.	Too large for the average landscape
	<i>Quercus rubra</i>	Red Oak	kwer'kus ru'bra	60-70' x 50-60'	Fast, 2'/yr.	Rounded in youth, round-topped and symmetrical in old age.	New growth is a dusty bronze-red, and the effect can be as handsome as the spring-flowering trees.	Fast-growing oak for lawns, parks, golf courses and commercial areas. Common street and urban tree. Rivals Pin Oak in ease of transplanting. Medium to high drought tolerance.
	<i>Quercus shumardii</i>	Shumard Oak	kwer'kus shu-mar'de-i	55-80' x 50-60'	fast	Narrow, rounded at maturity, open canopy.	Brilliant red to reddish-orange fall color.	Easy to transplant, highly drought tolerant.
Weeping Willow	<i>Salix babylonica</i>	Babylon Weeping Willow	sa'liks bab-i-lon'i-ka	30-50' x 20-40'	fast	Short, stout trunk and broad, rounded crown of weeping branches which sweep the ground	Graceful weeping form.	Specimen. Wetlands.
Lindens	<i>Tilia americana</i>	Redmond American Linden	til-l-a- a-mer-i-ka'na	60-80' x 1/2-2/3s of height.	9.6"/yr	Densely pyramidal with large leaves.		Handsome street tree or lawn tree.
	<i>Tilia cordata</i>	Littleleaf Linden	til-l-a- kor-da'ta	40-60' x 35-50'	Medium, 10-15' @ 5-10 yrs.	Pyramidal in youth; upright-oval to pyramidal-rounded and densely branched in old age.		Excellent shade tree for lawn, large areas, streets, planters, malls and about any place a real quality tree is desired. Can be pruned into hedges.
		Greenspire Linden		40-50' x 30'	9.5"/yr.	Maintains a single leader and a nice branching habit.		Street tree, does well under difficult conditions.

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Elms	<i>Ulmus parviflora</i>	Lacebark Elm	ul-mus par-vi-fo'li-a	40-50' x 35-50'	Medium to fast depending on moisture and fertility.	Graceful round-headed tree often with pendulous branchlets. Vase-shaped.	Magnificent bark, mottled combination of gray, green, orange and brown, variable.	Excellent, tough durable tree for about any situation. A beautiful shade tree. Underutilized.
		Allee Lacebark Elm		50-60' x 35-40', at 4' from the soil line the mature tree has a 35" diameter trunk	fast	Vase to upright, dome-shaped	Bark exfoliates in a puzzle-like pattern exposing light gray, slate gray, gray-green and orangey brown colors; it is flecked with burnt orange corkish lenticels. The trunk is irregularly fluted. Fall color is a subdued yellow.	Highly drought tolerant. Parent tree is thriving in an 18' x 18' area surrounded by concrete. Highly resistant to Dutch elm disease and elm leaf beetle. Street tree, median, parking lots, shade tree, planters, specimen.
		Dynasty Lacebark Elm		30' H&W after 16 yrs. With 12' diameter trunk at 39" from the ground.		Vase-shaped	Fall color is a good red in cooler climates. Bark not as interesting as that of Allee.	Cold hardy.
		King's Choice Lacebark Elm		22' x 16' @ 7 yrs.	Rapid, 22' x 16' in 7 yrs.	Oval-rounded	May not develop the typical bark of a Lacebark Elm until it is much older.	
Zelkova	<i>Zelkova serrata</i>	Japanese Zelkova	zel-ko'va ser-ra'ta	50-80' x > height	Medium, possibly fast in youth, 10-12' @ 4-6 yrs.	In youth, a low-branched, vase-shaped tree; in old age maintaining a similar form with many ascending branches.	Good foliage, interesting growth habit and handsome bark. In youth bark is cherry-like, reddish brown, heavily lenticelled; in old age gray-brown, often exfoliating with a character not unlike Lacebark Elm (not as exfoliating).	Considered as a replacement for the American Elm. Moderate to high drought tolerance. Parking lots, islands, lawns, streetscapes, shade tree.
		Green Vase Japanese Zelkova		60-70' x 40-50'	Grows twice as fast as Village Green	Vase-shaped with upright arching branches, very vigorous.	Orange-brown to bronze-red fall color. More graceful than Village Green.	

SHADE TREES

	Botanical Name	Common Name	Pronunciation	Size	Rate	Habit	Ornamental Feature(s)	Use
Zelkova	<i>Zelkova serrata</i>	Village Green Japanese Zelkova	zel-ko'va ser-ra'ta	50-60' x 45-50'	medium to fast	Broad, broom head shape with age. Denser in form than Green Vase.	Smooth, straight trunk, rusty red fall color.	Considered as a replacement for the American Elm. Moderate to high drought tolerance. Parking lots, islands, lawns, streetscapes, shade tree.