

Common Name	Latin Name	Size (height X width) Hardiness zone	Comments by Michael A. Dirr <i>Manual of Woody Landscape Plants</i>	Additional Comments
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NATIVE TREES				
White fir	<i>Abies concolor</i>	9 to 23 m X 5 to 9 m Zone: 3 to 7	Can survive on dry thin soil layers, decomposed granite and barren rocks.	More drought tolerant than other fir trees.
Rocky Mountain juniper	<i>Juniperus scopulorum</i>	10 to 13 m X 1 to 5 m Zone: 3 to 7	Withstands droughty conditions very well. Many choices of cultivars.	Native, well adapted to dry conditions. Roots are extremely sensitive.
Ponderosa pine	<i>Pinus ponderosa</i>	20 to 30 m X 8 to 10 m Zone: 3 to 6	Useful for mass planting and shelterbelt.	Native, well adapted to dry conditions. A good choice for replanting.
Poplar species	<i>Populus spp.</i>	12 to 15 m X 6 to 9 m Zone: 1 to 7	Rapid establishment and growth. Many disease and insect problems.	Good tree for wildlife. <i>P. tremuloides</i> is readily available.

TREES FOR SMALL SITES				
Hedge maple	<i>Acer campestre</i>	8 to 11 m X 8 to 11 m Zone: 4 to 8	Tolerant of high pH soils and dry soils. Tolerant of compaction and pruning.	Good selection for overhead utilities. Likely best maple for dry, alkaline soils.
Tartarian maple	<i>Acer tataricum</i>	4.5 to 7 m X 4.5 to 7 m Zone: 3 to 8	Tolerant of adverse conditions including drought.	Alternative to <i>Acer griseum</i> . Intense red samaras in mid-summer.
Purpleblow or Shantung maple	<i>Acer truncatum</i>	6 to 8 m X 5 to 8 m Zone: 4 to 8	Tolerant of adverse conditions including drought. No serious pest concern.	Alternative to <i>Acer griseum</i> . Unique leaf shape.
Japanese tree lilac	<i>Syringa reticulata</i>	7 to 13 m X 5 to 8 m Zone: 3 to 7	Tree form lilac, generally trouble free. Excellent specimen tree or street tree.	Adaptable to soil pH but prefers acid soil. Pruning is required to maintain blooming.

LARGE TREES FOR LIMITED SOIL SPACE				
Maidenhair tree	<i>Ginkgo biloba</i>	16 to 27 m X 10 to 13 m Zone: 3 to 8	Slow growth until established. Very urban tolerant, no pest concerns.	Select male varieties such as cultivars 'Princeton Sentry' or 'Autumn Gold'.
Japanese pagodatree	<i>Styphnolobium japonicum</i> previously known as <i>Sophora japonica</i>	17 to 25 m X 16 to 25 m Zone: 4 to 8	Presents itself well with an excellent display of late summer white flowers.	Many cultivars are available: 'Fastigiata', 'Pendula', 'Princeton Upright' (smaller).
Japanese zelkova	<i>Zelkova serrata</i>	17 to 27 m X 15 to 27 m Zone: 5 to 8	Very handsome tree. Good foliage, interesting growth and bark.	Resistance to elm leaf beetle. Pruning required to maintain form.

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TREES FOR PARKS (some have fruit)				
Red horsechestnut	<i>Aesculus x carnea</i>	10 to 13 m X 7 to 12 m Zone: 3 to 7	Red spring flowers. More tolerance to drought than <i>A. hippocastanum</i> .	Extreme cold winter temperature may damage young trees.
European hornbeam	<i>Carpinus betulus</i>	13 to 20 m X 10 to 13 m Zone: 4 to 7	Tolerant of a wide range of soils. Tolerates pruning and small spaces.	Prone to leaf scorch during dry summer. Fastigiata' is oval-vase without a leader.
Northern catalpa	<i>Catalpa speciosa</i>	12 to 18 m X 6 to 12 m Zone: 4 to 8	Late spring flowers. Long, bean-like fruit. Tolerant of hot, dry weather.	Seeds may germinate freely. Small branches prone to wind damage.
Yellow-wood	<i>Cladrastis kentukea (lutea)</i>	9 to 15 m X 12 to 17 m Zone: 4 to 8	Excellent tree for flowers and foliage. Prune only during summer months.	Training is required on young trees. Not well tested in this region.
Turkish filbert	<i>Corylus colurna</i>	13 to 17 m X 5 to 11 m Zone: 4 to 7	Thrives in hot summers and cold winters. Tolerant of adverse conditions.	Not readily available from nurseries. Requires irrigation until established.
White ash	<i>Fraxinus americana</i>	Average: 15 m X 20 m Zone: 3 to 9	A male tree, pyramidal-rounded outline. Deep green leaves, reddish purple in fall.	Handsome for parks and large areas. Cultivars 'Autumn Purple' and 'Calypso'.
Tulip tree	<i>Liriodendron tulipifera</i>	Average: 26 m X 17 m Zone: 4 to 9	Large and magnificent when fully grown. Tulip-like flowers high in tree.	Unique leaf shape, persistent fruit. Requires adequate water. Aphid prone.
American sweetgum	<i>Liquidambar styraciflua</i>	20 to 25 m X 13 to 17 m Zone: 5 to 9	Cultivar 'Moraine' considered most cold hardy, has scarlet fall colours.	Messy, prickly fruit. Cultivar 'Ward' has minimal fruit set.
Persian ironwood	<i>Parrotia persica</i>	7 to 13 m X 5 to 10 m Zone: 4 or 5 to 8	Requires full sun. Tolerates alkaline soil. Extreme tolerance once established.	"Wow" fall colours: gold, crimson stamen. Spring leaves red-purple to dark green.
Serbian spruce	<i>Picea omorika</i>	17 to 20 m X 10 to 8 m Zone: 4 to 7	Grows on limestone and acid peats. Tolerates dry air and semi-shade.	Protect from dry winter wind (needle burn). Another option is <i>Picea orientalis</i> .
Jeffery pine	<i>Pinus jeffreyi</i>	18 to 30 m X 8 to 9 m Zone: 3 to 6	Blue-green twisted needles. Similar to ponderosa pine in growth habit.	Can endure extremes of climate. Native from Oregon to lower California.
White oak	<i>Quercus alba</i>	16 to 25 m X 16 to 25 m Zone: 3 to 9	Majestic and worthwhile for large areas.	Among the most handsome of oaks. Difficult to propagate and transplant.
Bur oak	<i>Quercus macrocarpa</i>	23 to 27 m X 20 to 27 m Zone: 2 to 8	Very adaptable to soils. More tolerant of city conditions than most oaks.	Slow growth. High pH tolerance. Difficult to propagate and transplant.

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TREES FOR DRY AND DIFFICULT SITES

Cockspur hawthorn	<i>Crataegus crusgalli</i>	6 to 9 m X 6 to 11 m Zone: 3 to 7	Cultivar 'inermis' is thornless, yet with the many desired features of the species.	Showy in spring when in bloom. Pest problems: aphids, scale, leaf spot.
Kentucky coffeetree	<i>Gymnocladus dioicus</i>	20 to 25 m X 13 to 16 m Zone: 3 to 8	Beautiful fragrant flowers. Debris from flowers and fruit on female	Drought, pH and soil adaptable. Male fruitless cultivar: 'Espresso'.
Goldenrain tree	<i>Koelreuteria paniculata</i>	10 to 13 m X 10 to 13 m Zone: 4 or 5 to 9	Choice specimen tree for limited space. Tolerates soil extremes.	Yellow flowers in early summer. Can drop plant parts and be invasive.
Amur corktree	<i>Phellodendron amurense</i>	10 to 15 m X 10 to 15 m Zone: 3 to 7	Select a cultivar that do not produce fruit. Examples: 'Macho' or 'His Majesty'.	Roots are fibrous, shallow, spreading. Can interfere with pavement. Invasive.
Scotch pine	<i>Pinus sylvestris</i>	9 to 18 m X 9 to 12 m Zone: 2 to 8	Valued for its picturesque character. Unique form and color.	Beautiful contrast among other pines. Suitable for a single specimen.
Callery pear	<i>Pyrus calleryana</i> 'Bradford'	10 to 16 m X 7 to 12 m Zone: 5 to 8	Tolerates dryness. Tight branch angles tend to split with age.	White spring flowers, scarlet fall leaves. Many cultivars to select from.
Lacebark elm	<i>Ulmus parvifolia</i>	13 to 20 m X 13 to 17 m Zone: 4 to 9	Excellent, tough and durable. Resistant to Dutch elm disease and elm leaf beetles.	Magnificent exfoliating bark. Adapted to urban extremes of soil and drought.

GOOD TREES BUT BECOMING OVER PLANTED

Green ash	<i>Fraxinus pennsylvanica</i>	15 to 20 m X 8 to 10 m Zone: 3 to 9	Transplants readily, grows anywhere. Tolerates soils of high pH, salt, drought.	Good tough tree for parks and large areas. Aphids cause severe leaf stunting.
Thornless honeylocust	<i>Gleditsia triacanthos</i>	10 to 23 m X similar width Zone: 3 to 9	Tolerant of soils and weather. Excellent lawn tree for filtered shade.	Litter from flowers, fruit, leaflets. Keep its use for difficult areas.
London plane tree	<i>Platanus X acerifolia</i>	23 to 33 m X 22 to 27 m Zone 4 to 8	Once touted as a "super" tree. Overplanted, use should be tempered.	High tolerance to extreme environments. Use carefully as mature tree is large size.
Littleleaf linden	<i>Tilia cordata</i>	20 to 23 m X 10 to 15 m Zone: 3 to 7	Excellent shade tree for large areas. Prone to aphids during summer months.	Tolerates containment pruning. Aphids can be managed.

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WORTHY OF CONSIDERATION BUT HIGH MAINTENANCE				
Red maple	<i>Acer rubrum</i>	13 to 20 m X 11 to 20 m Zone: 3 to 9	Not particularly urban tolerant. Prone to chlorosis in alkaline soil.	Chlorosis is not easily managed. Stressed trees pest to aphid problems.
Eastern redbud	<i>Cercis canadensis</i>	6 to 9 m X 8 to 9 m Zone: 4 to 9	Native to East, touch of class. Adaptable to many soil types.	Low stress tolerance, some fruit litter. Not drought tolerant.
Katsura tree	<i>Cercidiphyllum japonicum</i>	13 to 17 m X 7 to 17 m Zone: 4 to 8	Leaves reddish purple changing to bluish. Performs better in rich, acid soils.	Requires irrigation during hot weather.
Cucumber tree	<i>Magnolia acuminata</i>	15 to 27 m X 15 to 27 m Zone: 3 to 8	Prefers moist, acidic soil. Does not tolerate extreme dry or wet.	High maintenance but worth it. Roots are extremely sensitive.
Pin oak	<i>Quercus palustris</i>	20 to 23 m X 8 to 13 m Zone: 4 to 8	Very intolerant of high soil pH (chlorosis). Distinctive pyramidal growth.	Chlorosis is difficult to manage. Roots are extremely sensitive.

TREES TO AVOID				
Silver maple	<i>Acer saccharinum</i>	17 to 23 m X 11 to 15 m Zone: 3 to 9	Vigorous roots can cause damage. Place in rugged areas.	Weak wood prone to breakage in wind. Prone to chlorosis in alkaline soils.
Norway maple	<i>Acer platanoides</i>	13 to 17 m X 9 to 17 m Zone: 3 to 7	Well adapted to soil extremes. Poor fall color compared to other maples.	Leaf scorch is common in dry weather. Prone to stem girdling roots.
European white birch	<i>Betula pendula</i>	Average: 17 m X 12 m Zone: 2 to 6	Not drought tolerant. Highly susceptible to tree borer insects.	Does poorly in the region. Top dieback from lack of water and borers.
Flowering dogwood	<i>Cornus florida</i>	Average 10 m X 10 m Zone: 5	Does well in well drained, rich soil. Not pollution tolerant.	Leaves tend to scorch during dry summer. Aphids cause severe stunting in spring.
Star magnolia	<i>Magnolia stellata</i>	5 to 8 m X 10 to 15 m Zone:	Plant in protected areas. Prefers rich organic soils.	Nice spring flowers, then nothing. Low maintenance plant.
Black locust	<i>Robinia pseudoacacia</i>	10 to 13 m X 7 to 10 m Zone: 3 to 8	Extremely adaptable to soil and climate. Has a place in difficult areas.	Poor branch structure. Cultivar 'Purple Robe' has fragrant flowers.