

| Common Name | Latin Name | Size (height x width) Hardiness zone | Comments by Michael A. Dirr <i>Manual of Woody Landscape Plants</i> | Additional Comments |
|------------------------------------|------------------------------------|--|--|--|
| NATIVE TREES | | | | |
| White Fir | <i>Abies concolor</i> | 9 to 23m X 5 to 9m 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 13m X 1 to 5m Zone: 3 to 7 | Withstands droughty conditions very well. Many choices of cultivar. | Native, well adapted to dry conditions. Roots are extremely sensitive. |
| Ponderosa Pine | <i>Pinus ponderosa</i> | 20 to 30m X 8 to 10m Zone: 3 to 6 | Useful for mass planting and shelter belt scenarios. | Native, well adapted to dry conditions. A good choice for replanting. |
| Poplar species | <i>Populus spp.</i> | 12 to 15m X 6 to 9m Zone: 1 to 7 | Growth rates are phenomenal. Disease and insect problems. | Good tree for wildlife. <i>P. tremuloides</i> is readily available. |
| FOR SMALL SITES | | | | |
| Hedge Maple | <i>Acer campestre</i> | 8 to 11m X 8 to 11m Zone 4 or 5 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 7m X 4.5 to 7m 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 8m X 5 to 8m Zone 4 to 8 | Tolerant of adverse conditions including drought. No serious pest concerns. | Alternative to <i>Acer griseum</i> . Unique leaf shape. |
| FOR DRY AND DIFFICULT SITES | | | | |
| Cockspur Hawthorn | <i>Crataegus crusgalli</i> | 6 to 9m X 6 to 11m Zone: 3 to 7 | Variety <i>inermis</i> is thornless, yet with the 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 25m X 13 to 16m Zone: 3 to 8 | Beautiful fragrant flowers. Messy due to flowers and fruit of female trees. | Drought, pH and soil adaptable. Male fruitless cultivar: 'Espresso'. |
| Goldenrain Tree | <i>Koelreuteria paniculata</i> | 10 to 13m X 10 to 13m Zone: 4 or 5 to 9 | Choice specimen tree for limited space. Tolerates soil extremes. | Yellow flowers in early summer. Can drop plant parts. May be invasive . |
| Amur Corktree | <i>Phellodendron amurense</i> | 10 to 15m X 10 to 15m Zone: 3 to 7 | Select varieties that do not produce fruit. Examples: 'Macho' or 'His Majesty'. | Roots are fibrous, shallow and spreading. Can interfere with pavement. Invasive |
| Scotch Pine | <i>Pinus sylvestris</i> | 9 to 18m X 9 to 12m Zone: 2 to 8 | Valued for its picturesque character. Unique form and color. | Beautiful contrast among other pines. Suitable for a single specimen. |
| Bradford Callery Pear | <i>Pyrus calleryana</i> 'Bradford' | 10 to 16m x 7 to 12m Zone: 5 to 8 | Tolerates dryness, tends to split with age due to tight branch angles. | White spring flowers with scarlet-purple fall leaves; many cultivars to select from. |
| Lacebark Elm | <i>Ulmus parvifolia</i> | 13 to 20m X 13 to 17m Zone: 4 to 9 | Excellent, tough, durable. Resistance to Dutch Elm Disease and leaf beetles. | Magnificent exfoliating bark. Adaptable to urban extremes of soil and drought. |

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| FOR PARKS (Some have fruit) | | | | |
| Red Horsechestnut | <i>Aesculus x carnea</i> | 10 to 13m X 7 to 12m Zone: 3 to 7 | Red spring flowers. More tolerance to drought than <i>Aesculus hippocastanum</i> . | Extreme cold winters may damage young trees. |
| European Hornbeam | <i>Carpinus betulus</i> | 13 to 20m X 10 to 13m Zone: 4 to 7 | Tolerant of a wide range of soils. Tolerates pruning and small spaces. | Leaf scorch during dry summers. 'Fastigiata' is oval-vase without a leader. |
| Northern Catalpa | <i>Catalpa speciosa</i> | 12 to 18m X 6 to 12m Zone: 4 to 8 | Spring flowers. Fruit long bean-like shape. Tolerant of hot, dry weather. | Seeds may germinate freely. Wind damage on small branches. |
| Yellow-wood | <i>Cladrastis kentukea (lutea)</i> | 9 to 15m X 12 to 17m Zone 4 to 8 | Excellent tree for flowers and foliage. Prune only in summer . | Training required on young trees. Not well tested in this region. |
| Turkish Filbert | <i>Corylus colurna</i> | 13 to 17m X 5 to 11m 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: 15m X 20m 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: 26m X 17m Zone: 4 to 9 | Large and magnificent when fully grown. Tulip-like flowers high in tree. | Unique leaf and persistent fruit. Requires adequate water. Pests. |
| American Sweetgum | <i>Liquidambar styraciflua</i> | 20 to 25m X 13 to 17m Zone: 5 to 9 | Scarlet fall colours. Cultivar 'Moraine' considered most cold hardy. | Messy, prickly fruit. Cultivar 'Ward' has minimal fruit set. Mature trees may revert back to fruiting. |
| Persian Ironwood | <i>Parrotia persica</i> | 7 to 13m X 5 to 10m Zone: 4 or 5 to 8 | Requires full sun. Tolerates alkaline soil. Extreme tolerance once established. | "Wow" fall color: gold, crimson stamen. Spring leaves red-purple to dark green. |
| Serbian Spruce | <i>Picea omorika</i> | 17 to 20m X 10 to 8m Zone: 4 to 7 | Grows on limestone and acid peats. Tolerates dry air and semi-shade. | Protect from winter winds (burn). Another option is <i>Picea orientalis</i> |
| Jeffrey Pine | <i>Pinus jeffreyi</i> | 18 to 30m X 8 to 9m Zone: 3 to 6 | Blue-green twisted needles. Similar to <i>P. ponderosa</i> in growth habit. | Can endure extremes of climate. Native from Oregon to lower California. |
| White Oak | <i>Quercus alba</i> | 16 to 25m X 16 to 25m Zone: 3 to 9 | A majestic and worthwhile tree. | Among the most handsome of oaks. Difficult to propagate and transplant. |
| Bur Oak | <i>Quercus macrocarpa</i> | 23 to 27m X 20 to 27m Zone: 2 to 8 | Very adaptable to soils. Most tolerant of city conditions. | Slow growth. High pH tolerance. Difficult to propagate and transplant. |

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| LARGE TREES FOR LIMITED SOIL SPACE | | | | |
| Maidenhair Tree | <i>Ginkgo biloba</i> | 16 to 27m X 10 to 13m 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 25m X 16 to 25m Zone: 4 to 8 | Presents itself well with an excellent display of late summer white flowers. | Many cultivars are available. 'Princeton Upright' (smaller), 'Fastigiata', 'Pendula', 'Regent' |
| Japanese Zelkova | <i>Zelkova serrata</i> | 17 to 27m X 15 to 27m Zone: 5 to 8 | Good foliage, interesting growth habit and bark. Very handsome tree. | Resistance to elm leaf beetle. Pruning required to maintain form. |
| FOR ACID SOIL OR SHADED LOCATION | | | | |
| American Hornbeam | <i>Carpinus caroliniana</i> | 6 to 9m X 8 to 9m Zone 3 to 9 | Best growth in deep, rich, acidic soil. Prefers moist but will grow in drier sites. | Plant in shaded location. Better fall colour than <i>Carpinus betulus</i> . |
| Red Oak | <i>Quercus rubra</i> | 18 to 23m X 18 to 23m Zone: 4 to 8 | Prefers sandy-loam soils, well drained. Prefers soils on acid side of pH | Will develop chlorosis in high pH soils. Tolerant of city pollution. |
| Japanese Snowbell | <i>Styrax japonicus</i> | 6 to 9m X 6 to 9m Zone: 5 to 8 | A tree of singular grace and beauty. Leaves are perched like butterflies. | White flowers maintenance, hardy tree. Easy |
| WORTHY BUT HIGH MAINTENANCE TREES | | | | |
| Red Maple | <i>Acer rubrum</i> | 13 to 20m X 11 to 20m Zone: 3 to 9 | Not particularly urban tolerant. Chlorosis in high pH soils. | Chlorosis is not easily managed. A stressed tree is more pest prone. |
| Eastern Redbud | <i>Cercis canadensis</i> | 6 to 9m X 8 to 9m Zone: 4 to 9 | Eastern native tree with a touch of class. Adaptable to many soil types. | Low stress tolerance and some fruit litter. Not drought tolerant. |
| Katsura Tree | <i>Cercidiphyllum japonicum</i> | 13 to 17m X 7 to 17m Zone: 4 to 8 | Performs better in rich, acid soils. | Requires irrigation during hot weather. |
| Cucumber Tree | <i>Magnolia acuminata</i> | 15 to 27m X 15 to 27m Zone: 3 to 8 | Prefers moist, acidic soil. Does not tolerate extreme dry or wet. | High maintenance but worth it. Roots extremely sensitive. |
| Pin Oak | <i>Quercus palustris</i> | 20 to 23m X 8 to 13m Zone: 4 to 8 | Very intolerant of high soil pH (chlorosis). Distinctive pyramidal growth. | Chlorosis from pH is not easily managed. Roots extremely sensitive. |

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| BECOMING OVER PLANTED | | | | |
| Thornless Honeylocust | <i>Gleditsia triacanthos</i> | 10 to 23m X 10 to 23m Zone: 3 to 9 | Tolerant. Variable sizes in cultivation. Excellent lawn tree for filtered shade. | Messy from flowers, fruit and leaflets. Reserve for difficult areas. |
| London Plane | <i>Platanus x acerifolia</i> | 23 to 33m X 22 to 27m Zone: 4 to 8 | Once touted as a "super" tree. Overplanted, use should be tempered. | High tolerance to extreme environments. Place carefully as mature tree is large. |
| Littleleaf Linden | <i>Tilia cordata</i> | 20 to 23m X 10 to 15m Zone: 3 to 7 | Excellent shade tree for large areas. Pests (aphids, Japanese beetles). | Tolerates containment pruning. Many cultivars. Aphids can be managed. |
| TO AVOID | | | | |
| Silver Maple | <i>Acer saccharinum</i> | 17 to 23m X 11 to 15m Zone: 3 to 9 | Vigorous, roots can cause damage. Place in rugged areas. | Weak wood. Prone to stem girdling roots. |
| Norway Maple | <i>Acer platanoides</i> | 13 to 17m X 9 to 17m Zone: 3 to 7 | well adapted to soil extremes. Poor fall color. | Leaf scorch is common in late summer. Prone to stem girdling roots. |
| Birch | <i>Betula sp.</i> | Average: 17m X 12m Zone: 2 to 6 | Not drought tolerant. Avoid European white birch (borers). | Susceptible to many pests. Does poorly in this region. |
| Black Locust | <i>Robinia pseudoacacia</i> | 10 to 13m X 7 to 10m Zone: 3 to 8 or 9 | Extremely adaptable to soil and climate. Has a place in difficult areas. | Poor branch structure. Fragrant spring flowers. |