

Trees for Conserving Water

The drought conditions that California experiences have emphasized the importance of conserving water. In April 1990, the City of Sunnyvale passed an ordinance that requires the use of water conserving plants for at least 70 percent of plant materials used in new and modified landscaping plans. Water conserving trees is primarily a matter of irrigation management. Trees listed can tolerate a lowered watering regimen but in most cases do not prefer it. The listed trees do not particularly use less water than other trees but can tolerate less water than other species. They may grow more slowly but they still look ok. Some of the trees listed come from other Mediterranean climates like here in California and are well adapted to long dry summer periods. These species usually have more extensive root systems that can capture water from the soil over a wider volume.

The key to water conservation is water management. Young trees especially during our long, dry summers will have to be watered regularly. As these young trees grow they will develop broader rooting and will require watering further out rather than immediately around the tree's trunk. Once established, usually about three years from planting, watering should be reduced to three or four good soakings during the dry season, April through October. After five to six years from planting you may be able to water these trees only once or twice during the summer. Or if the trees are in or near lawn they may not require any special watering other than the water required for the lawn.

The City of Sunnyvale has developed this list to assist you with tree selection based on tree size (mature height and spread). Be careful to select a tree that will not ultimately outgrow the space you have it planted. A tree's size at planting is no indication of the tree's genetic potential. Check Sunset Western Garden Book, 2001 for more information about these and other tree species so that you may make an informed decision in selecting trees for your property.

Definition of Terms on Charts

Type of Tree:

D = Deciduous – means the tree loses its leaves during the winter months

E = Evergreen – means the plant keeps its leaves year-round

Growth Rates: are noted as VS (Very Slow), S (Slow), S-M (Slow to Medium), M (Medium), M-F (Medium to Fast), F (Fast) and VF (Very Fast).

Source: indicates the books where the information on a particular tree was obtained. The main references used were S (Sunset Western Garden Book, 2001), EB (East Bay Municipal Utility District's Water-Conserving Plants and Landscapes for the Bay Area, 1990, CA (Sunnyvale's City Arborist).

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Small to Medium Sized Trees

| Name of Tree Common name Scientific name | Max. Ht. (ft.) | Max. Spread (ft.) | Type of Tree | Color of Flower | Growth Rate | Source |
|---|-------------------------------|----------------------------------|-----------------------------|----------------------------|------------------------|---------------|
| Peppermint Tree <i>Agonise flexuosa</i> | 20 | 20-30 | D | white | F | S, EB |
| Eastern Redbud <i>Cercis canadensis</i> | To 30 | = ht. | D | pink | S-M | S,EB |
| Western Redbud <i>Cercis occidentalis</i> | 10-18 | = ht. | D | magenta or yellow | F | S,EB |
| Bronze Loquat <i>Eriobotrya deflexa</i> | 18 | 25 | E | White | F | S,EB |
| Crape Myrtle <i>Lagerstroemia indica</i> | To 30 | = ht. | D | red, purple or white | F | S,EB |
| Lagerstroemia x fauriei 'Natchez' | 35 | 20 | D | white | F | S |
| Lagerstroemia x fauriei 'Tuscarora' | 35 | 20 | D | red | F | S |
| Jerusalem Thorn <i>Parkinsonia aculeate</i> | 15-30 | = ht. | D | yellow | F | S, EB |
| Pinon Nut Pine <i>Pinus edulis</i> | 10-20 | - | E | - | S | S |
| Purple Leaf Plum <i>Prunus cerasifera</i> | 25-30 | = ht. | D | pink | M | S, EB |
| Holly Leaf Cherry <i>Prunus ilicifolia</i> | 20-30 | 1.25 ht. | E | white | M | S, EB |
| Portugal Laurel <i>Prunus lusitanica</i> | 30 | - | E | white | S-M | S, EB |
| Catalina Cherry <i>Prunus lyonii</i> | 20-30 | 1.25 ht. | E | white | M | S, EB |
| Evergreen Pear <i>Pyrus kawakamii</i> | 25 | = ht. | E | white | M | S, CA |
| African Sumac <i>Rhus lancea</i> | To 25 | = ht. | E | - | F | S, EB |
| Swamp Myrtle <i>Tristania laurina</i> | To 30 | ½ ht. | E | yellow | S-M | S, EB, CA |
| Chinese Jujube <i>Zizyphus jujube</i> | To 20 | = ht. | D | - | M-S | S, EB |

Medium Sized Trees

| Name of Tree Common name Scientific name | Max. Ht. (ft.) | Max. Spread (ft.) | Type of Tree | Color of Flower | Growth Rate | Source |
|---|-------------------------------|----------------------------------|-----------------------------|----------------------------|------------------------|---------------|
| Blackwood Acacia <i>Acacia melanoxylon</i> | To 40 | To 20 | E | cream | F | S |
| California Buckeye <i>Aesculus californica</i> | 40 | = ht. | D | cream | S-M | S, EB, CA |
| Silk Tree <i>Albizia julibrissin</i> | To 40 | To 50 | D | pink | F | S |
| Bottle Tree | 30-50 | 30 | E | white | M | S |

| | | | | | | |
|--|-------|-----------------|---|--------|-----|-----------|
| <i>Brachychiton populneus</i> | | | | | | |
| Beefwood <i>Casuarina stricta</i> | 20-45 | 2/3 ht. | E | - | F | S, EB, CA |
| Atlas Cedar <i>Cedrus atlantica</i> | 40-60 | ½ ht. | E | - | M | S, EB |
| European Hackleberry <i>Celtis australis</i> | 45-50 | 35-50 | D | - | F | S, EB, CA |
| Carob Tree <i>Ceratonia siliqua</i> | 30-40 | = ht. | E | red | M | S, EB |
| Smooth Arizona Cypress <i>Cupressus glabra</i> | 30-60 | ½ ht. to 20 ft. | E | - | F | S, EB |
| Japanese Loquat <i>Eriobotrya japonica</i> | 15030 | 20-30 | E | white | M | S, EB |
| Desert or Swamp Gum <i>Eucalyptus rudis</i> | 30-60 | - | E | white | F | S |
| Moraine Ash <i>Fraxinus 'Moraine'</i> | To 40 | To 30 | D | - | F | S, EB |
| Raywood Ash <i>Fraxinus oxycarpa</i> 'Raywood' | To 40 | 2/3 ht. | D | - | F | S, EB |
| Maidenhair Tree <i>Ginkgo biloba</i> | 30-50 | = ht. | D | - | VF | S, EB |
| Chinese Flame Tree <i>Koelreuteria bipinnata</i> | 20-40 | = ht. | D | yellow | M | S, EB |
| Goldenrain Tree <i>Koelreuteria paniculata</i> | 20-40 | 10-20 | D | yellow | M | S, EB, CA |
| Catalina Ironwood <i>Lyonothamnus floribundus</i> | 30-60 | 20-40 | E | white | M | S |
| Mayten Tree <i>Maytenus boaria</i> | 30-50 | To 20 | E | - | S-M | S |
| European Olive <i>Olea europea</i> | To 60 | = ht. | E | white | S-M | S, EB, CA |
| Eldarica Pine <i>Pinus eldarica</i> | 40 | = ht. | E | - | F | S, EB |
| Digger Pine <i>Pinus sabiniana</i> | 40-50 | - | E | - | F | S |
| Japanese Black Pine <i>Pinus thunbergiana</i> | 20-30 | = ht. | E | - | M | S, EB |
| Chinese Pistache <i>Pistacia chinensis</i> | 30-40 | = ht. | D | - | M | S, EB |
| No common name <i>Pittosporum eugenioides</i> | 40 | 10-20 | E | - | M | S, EB |
| Carolina Laurel Cherry <i>Prunus caroliniana</i> | 35-40 | - | E | white | M | S, EB |
| Flowering Pear <i>Pyrus calleryana</i> | 40 | 25-30 | D | white | M | S, EB |
| | | | | | | |

Large Trees

| Name of Tree Common name Scientific name | Max. Ht. (ft.) | Max. Spread (ft.) | Type of Tree | Color of Flower | Growth Rate | Source |
|--|----------------------|-------------------------|--------------------|--------------------|----------------|--------------|
| Deodar Cedar <i>Cedrus deodora</i> | to 80 | ½ ht. | E | - | M-F | S, EB |
| Red Gum <i>Eucalyptus camaldulensis</i> | 80-120 | - | E | - | VF | S, EB |
| Cider Gum <i>Eucalyptus gunnii</i> | 40-75 | ½ ht. | E | white | F | S, EB |
| White Ironbark <i>Eucalyptus leucoxylon</i> | 20-80 | ½ ht. | E | white | F | EB |
| Silver Dollar Gum <i>Eucalyptus polyanthemos</i> | 30-60 | 15-40 | E | white | F | S, EB |
| Red or Pink Ironbark <i>Eucalyptus sideroxylon</i> | 50-80 | ½ ht. | E | red | F | S, CA |
| Manna Gum <i>Eucalyptus viminalis</i> | To 150 | - | E | white | F | S |
| Evergreen Ash <i>Fraxinus uhdei</i> | To 80 | To 50 | E | - | VF | S, EB |
| California Black Walnut <i>Juglans hindsii</i> | 30-60 | = ht. | D | - | F | S, EB |
| Tulip Tree <i>Liriodendron tulipifera</i> | 60-80 | To 40 | D | greenish yellow | F | S |
| Canary Island Pine <i>Pinus canariensis</i> | 60-80 | ½ ht. | E | - | F | S, EB |
| Aleppo Pine <i>Pinus halepensis</i> | 30-60 | ½ ht. | E | - | M-F | S |
| Italian Stone Pine <i>Pinus pinea</i> | 40-80 | - | E | - | M | S, EB |
| London Plane Tree v. Yarwood <i>Platanus acerfolia</i> | 40-80 | 30-40 | D | - | F | S, EB |
| Western or Fremont Cottonwood <i>Populus fremontii</i> | 40-60 | - | D | greenish yellow | F | S |
| Coast Live Oak <i>Quercus agrifolia</i> | 40 | 70 | E | - | M | S, EB |
| Holly Oak <i>Quercus ilex</i> | 40-70 | = ht. | E | - | M | S, EB |
| Valley Oak <i>Quercus lobata</i> | 70 | 1.5 ht. | D | - | M | S, EB |
| Cork Oak <i>Quercus suber</i> | 50 | = ht. | E | - | M | S, EB, CA |
| Coast Redwood <i>Sequoia sempervirens</i> | To 100 | ½ ht. | E | - | F | S, EB |