

Trees in Your Home Garden

A Guide to
Choosing and Caring
for Landscape Trees

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TREES ADD INTEREST and color to a landscape and provide shade from the rays of the Central Valley sun. Before choosing a tree, many factors need to be considered such as the mature size of the tree, how its roots behave, and where to plant it.

Trees in Your Home Garden aims to take the mystery out of choosing the best tree for your situation. This publication has two parts. The first part lists tree features and factors in your landscape to consider before choosing a tree, the second part is a tree guide with a list of recommended trees for Stanislaus County.



TREE TYPES

Trees are either deciduous, evergreen, or palm.

Deciduous trees lose all their leaves almost at once; tree branches are bare in winter. Some have colorful bark, flowers, or berries. In fall, deciduous trees like ginkgo and Chinese pistache develop colorful leaves.

Evergreen trees keep most of their leaves year-long but shed some spring through summer. There are two types: broadleaf and narrowleaf/conifers. Bay laurel is an example of a broadleaf evergreen tree. Narrowleaf or conifer trees have needle-like leaves. An example would be a Japanese Pine.

Palm trees are tall and keep their leaves year-round. Heights vary, and once they mature you may need to hire a professional to remove dead leaves. An example of a palm that grow

well in our area would be the Mediterranean fan palm.

Trees are living organisms that require some clean up due to leaves, fruit, or seed pods. Trees in this guide, with notes about these kinds of special features, have additional organic material falling on the ground. They might be better planted in a front yard lawn or area people don't frequent.



LOCATION

Choosing the location of your tree is a very important step and not to be taken lightly since trees live for many years. Here are some pointers to help you determine where to plant your tree:

Pavement: Some trees aren't a good choice to plant near pavement of any kind, while others have roots that behave well. We don't recommend trees with aggressive root systems in this guide. However, trees that don't receive adequate water can sometimes have surface roots that cause problems.

High voltage power lines: When planting near power lines, choose a tree from the "small trees" section of the tree guide and make sure its final height won't interfere with power lines. Use caution, as each year people are killed or injured attempting to plant, prune, or climb trees that have grown into power lines. Call 811 for help before you dig.

Water features: Since deciduous trees drop all their leaves at once, and evergreen trees shed leaves and needles between spring and fall, you may want to consider planting a palm tree

near a fountain or swimming pool.

Lawn: Trees planted in a lawn need at least 2-3 feet of open space around the base since some grasses inhibit root growth. Add mulch three inches from base of the tree to prevent weed growth and help hold moisture.

House or building proximity: Tall, deciduous trees protect buildings from the heat of summer, helping save energy. Just make sure you give the tree enough space to grow.



TREE CHARACTERISTICS

Consider these tree characteristics before choosing a tree:

1. Tree height and spread: The guide has three sections: small (to 30 feet), medium (to 40-50 feet), and large (over 50 feet tall).
2. Tree growth: Some trees grow faster than others. Others grow quickly the first few years of their life, and then more slowly.
3. Deciduous or evergreen: Do you want a tree with attractive fall color that loses its leaves? Or an evergreen tree that keeps its leaves year-round that resembles a deciduous tree, or something that looks more like a "Christmas" tree?
4. Fall color: Many trees are noted for attractive fall colors of yellow, orange, red, and purple.
5. Colorful bark or berries: Some trees have colorful berries or bark. These characteristics are also noted in the guide.
6. Roots: Tree roots absorb water and nutrients needed for growth and development.

Often, gardeners consider roots to be a nuisance, since some trees break up concrete sidewalks and driveways or are difficult to garden under. Trees with “well-behaved roots” include London plane tree, Japanese maple, Chinese pistache, and most species of magnolias.



CHOOSING YOUR TREE

Looking at young trees at a nursery or garden center won't help you choose the right tree. Instead, walk through a neighborhood you like and examine the trees. Or look trees up online to see what a mature tree you are interested in looks like.

Just remember, if you “fall in love” with a particular tree at first sight, investigate its growth habit and characteristics to make sure it's right for your landscape before making a purchase.

Popular but Problematic

There are a few trees we want to mention that we believe have disadvantages that outweigh most of their benefits. However, some gardeners may absolutely love one or more of these trees and be prepared to deal with the problems that inevitably arise.

1. Weeping willows (*Salix babylonica*) are stunning but unfortunately need a lot of water. The roots are extremely invasive and are difficult to garden under and break up cement. They are also susceptible to many insect pests. Alternative trees with the same look include Maytens or Australian willow tree.
2. Silk Trees (*Albizia julibrissin*) have

attractive, wispy pink flowers in spring. Unfortunately, the tree also produces large amounts of seedlings that sprout all over lawns and nearby garden beds. A gardener with enough time for weeding might not mind the extra work involved to have this tree.

3. Redwoods (*Sequoia sempervirens*) are stunning trees native to the CA coast that need plenty of water. Gardeners who absolutely love them and want to plant them have to keep in mind they will need additional summer water.



TREE PLANTING, PRUNING, & STAKING

When done correctly, planting and pruning help ensure the health of your tree. Many trees fail to thrive due to incorrect planting, especially by burying the root ball below the surface of the soil.

After planting, remove the nursery tree stake since most trees do not need staking except in special situations. If you bring a tree home and it bends or falls over once you remove the stake, return it promptly.

Examine your tree to see if it needs to be pruned. The first two years of a tree's life are crucial to training your tree so it has a healthy form. Landscape trees need to be pruned to have a central leader, with all branches safely attached.

Pick up free copies of Tree Care Cards at our front desk. These cards have helpful diagrams that show illustrations of how to correctly plant, prune, and care for your tree. There are

nine titles including:

- ◆ Tree Selection
- ◆ Quality Nursery Tree Selection
- ◆ Trees & Utilities
- ◆ Tree Planting
- ◆ Tree Staking
- ◆ Training Young Trees
- ◆ Tree Pruning
- ◆ Tree Pests & Diseases
- ◆ Fruit Trees



WATERING

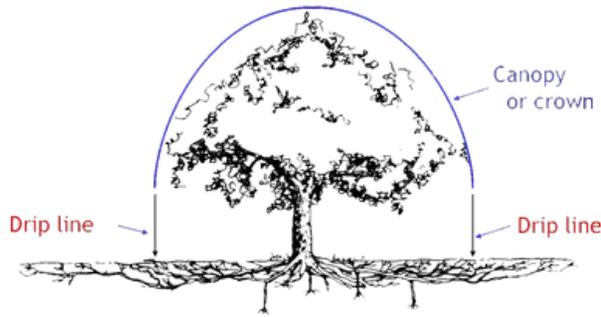
Young trees need adequate water during the growing season. Frequent, deep watering creates a healthy root system and strong tree canopy. Shallow lawn water doesn't provide enough for most trees.

During the dry season (May-October) water trees deeply every month. Arborists recommend applying water to a depth of three feet using a soaker hose or drip irrigation system around the drip line.

Remember that tree water needs vary depending on the age of the tree, climate, and soil type.

If you have a sandy soil, water drains more quickly so you may need to apply smaller amounts of water more frequently.

For clay-based soils, water drains slowly, so



you'll need to apply smaller amounts of water less frequently.

After watering, dig down a few inches near the drip line to see how deeply water penetrates your soil. This is especially important to do in summer, when hot temperatures can stress a tree that doesn't receive enough water.

The California Center for Urban Horticulture at UC Davis has developed a kit called the TRIC or tree ring irrigation system to help gardeners water. Follow their instructions online to put together your own TRIC at <https://ccuh.ucdavis.edu/tric>.



TREE PESTS

If your tree has pest problems, you might not be watering enough, and your tree may be stressed. Stressed trees are weakened and easier for pests to attack and damage. Sometimes pests occur in small numbers and won't cause noticeable damage. However, circumstances like drought or large populations of pests and diseases can overwhelm even a healthy tree and cause problems.

If you believe your tree has a pest problem, bring a sample branch (in a plastic or paper

bag if necessary) to the UCCE Master Gardeners, or enlist the help of an experienced ISA (International Society of Arboriculture) arborist.

Some trees have more pests than others. In some cases, horticulturists have found trees that are more resistant to certain pests. These trees are used to make a "new" improved version called a cultivar. Sometimes these new cultivars are improved, other times they may have unforeseen problems.

Trees listed in the Tree Guide are resistant to most tree problems unless otherwise noted. However, make sure to notice if a specific cultivar is recommended. For example, we recommend *Pyrus calleryana* 'Bradford.'

When you visit a nursery or garden center, bring this guide with you. Otherwise, you might end up with the a cultivar that is plagued with problems such as fireblight, powdery mildew, aphids, or mistletoe.

Tree Borers

Certain types of insects (mainly certain species of beetles and moths) bore into tree trunks and branches during their larval stages, producing sawdust or sap-filled holes. Most borers successfully attack trees stressed by over- or under-watering, disease, sunburn, or mechanical injury (by weed trimmers, improper staking, etc.).

By the time borers infest a tree, little can be done besides improving tree health through proper watering or pruning out infested branches. In some cases, the tree may need to be removed. A tree heavily infested with

borers will have numerous small holes randomly throughout the branches and trunk. This is not to be confused with larger holes left by woodpeckers, which occur in rows.

Sucking Insects

Many insect pests including aphids, scales, whiteflies, mealybugs, leafhoppers, and psyllids feed by sucking sap from plants. These insects excrete a sticky substance called honeydew which may drip onto on your car, patio furniture, or pavement.

Another indication of these pests are large numbers of ants climbing up and down your tree. Ants feed on honeydew and protect sucking insect pests from beneficial insects.

Beneficial insects include lady beetles (ladybugs), lacewings, and parasitic wasps. However, they can't access pests when ants are present,

Large populations of sucking insects can cause yellowing of leaves and leaf drop, but rarely result in tree death. Sometimes, sooty mold, a black, powdery fungi, uses the honeydew to complete its life cycle but does not usually harm the plant. Sooty mold is unsightly but can be cleaned off with a stream of water.

Diseases

Several diseases affect trees and can make them look unsightly. Powdery mildew covers plant leaves and flowers, and fireblight causes tree branches to look burnt.

Overwatering can cause diseases such as crown or root rot that result in dieback of limbs on a tree. Tree diseases are difficult to

diagnose. If you suspect your tree has one, bring a sample to the UCCE Master Gardeners for help.

Parasitic Plants

Broadleaf mistletoe is an evergreen parasitic plant easily noticed on deciduous trees in winter. Bare trees are often covered with clumps of green plants that make the tree appear to be evergreen.

Healthy trees can withstand a few infestations of mistletoe but will most likely lose infected limbs. Trees are rarely killed by mistletoe, but it does weaken the tree, making it susceptible to other problems.

The best way to control mistletoe is to immediately remove the limb or branch when it first appears. You can also remove the plant each time it resprouts to weaken it and prevent its spread.

Nutrient Deficiencies

Nutrient deficiencies are often incorrectly blamed for other problems. Sometimes trees lack nutrients needed for growth and development, but this is somewhat rare. Most problems are caused by diseases, insect infestations, and overwatering. Bring a sample to a UCCE Master Gardener or an experienced nursery person.



USING THE TREE GUIDE

The guide categorizes trees by common name, since this is how most home gardeners know them. To make sure the correct species is identified, the common name will be followed by the genus

and specific epithet and/or cultivar.

Information is arranged in columns that lists whether the tree is deciduous “D” or evergreen “E,” the height and width, and any special features like flowers, bark or fruit. The remarks section gives the sun and water requirements as well as any other interesting items of note about the tree.

Tree Size

The guide is broken into three tree size categories-small (to 30 feet), medium(30-50 feet) and large (50 feet or more). Only a few truly large trees are recommended since most properties are too small to have this size of a tree.

The “Height and Spread” category has the first number for eventual height, and the second (or bottom number) is the tree spread or width.

Some trees grow quickly while young, but then more slowly as they age. Others grow slowly overall. Since tree growth rates vary, a tree in the large category may not reach its eventual height until 50 years from now if it has a slow to moderate growth rate.

“Messy Trees”

Sometimes people ask for a recommendation of a tree that isn’t “messy.” This is truly impossible as trees are living organisms that shed leaves, flowers, berries, and bark depending on the species. In general, trees with large flowers and any kind of seedpod, fruit, cone or berry will need more cleanup.



NOTE ABOUT TOXICITY

Plants are toxic in small to large doses, depending on the plant. Since livestock and domestic animals have a tendency to ingest large quantities of plants, it is essential to know which trees in your landscape may have negative effects.

In the case of children, the basic lesson to be taught is not to eat or taste anything not approved of by parents or teachers.

Trees have been used in the landscape safely for many years, so there is no need to have an unreasonable fear of their use. The key points to remember are education and prevention.

Tree Guide

<u>Common & Latin Name</u>	<u>Form</u>	<u>Height & Width</u>	<u>Special Features</u>	<u>Remarks</u>
Australian Willow <i>Geijera parviflora</i>	E	25-30' 15-20'	Resembles a weeping willow but needs less water.	Full sun. Little to moderate water once established. Fast growing. Excellent patio or street tree. Roots are deep and non-invasive.
Chaste Tree <i>Vitex agnus-castus</i>	D	20-25' 15-20'	Violet-blue, or white flowers summer through fall; small clusters of dried berries.	Full sun. Regular to moderate water and well-drained soil. Thrives in hot weather. Grows quickly to mature height. Usually a multi-trunk tree with silvery-gray aromatic foliage.
Chitalpa x <i>Chitalpa tashkentensis</i>	D	20-30' 20-25'	Trumpet-shaped flowers are pink, lavender, or white spring through fall.	Full sun. Little to moderate water, do not over water. Susceptible to powdery mildew and anthracnose- plant in full sun. Leaves and blossoms constantly drop. Flowers attract pollinators.
Crabapple <i>Malus</i> 'Prairifire' or 'Adirondack'	D	10-20 15-20'	Pink, white or red flowers in spring followed by small fruits.	Full sun. Excellent lawn tree but needs additional deep water. Many cultivars are susceptible to pests. Choose 'Adirondack' or 'PrairiFire.' Fruit attracts birds, but can be messy near pavement.
Crape myrtle <i>Lagerstroemia hybrids</i>	D	10-25' 10-25'	Pink, white, red, or purple flowers in summer and fall; small clusters of dried berries.	Full sun. Infrequent but deep watering. Some cleanup required. Susceptible to powdery mildew. Choose disease-resistant cultivars like 'Catawba,' 'Cherokee,' 'Hopi,' and others. Susceptible to aphid infestation. Aphids drip honeydew, avoid planting tree near cement.
Fringe Tree <i>Chionanthus retusus</i>	D	12-25' 12-20'	White "fringe" flowers last for several weeks in mid-spring.	Full sun. Moderate to regular water. Slow growing, dome-shaped tree. Has handsome gray-brown bark that provides winter interest.
Flowering Cherry <i>Prunus serrulate</i> 'Kwanzan'	D	12-25' 12-15'	Double rose flowers in mid-spring, long lasting blooms.	Full sun. Moderate water, needs good drainage. Makes a nice patio tree. Leaves and flowers appear at the same time. Other flowering cherry tree cultivars are available.
Flowering plum <i>Prunus species</i>	D	20-25' 20-25'	Purple leaves, pink flowers, may produce fruit.	Full sun. Moderate water, needs good drainage. Many cultivars said not to drop fruit but may produce some. Makes a nice lawn tree.

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Japanese Maple <i>Acer palmatum</i>	D	15-20'	Various leaf colors, graceful shape. Interesting seed pods.	Best in filtered shade; some cultivars tolerate full sun. Moderate to regular water. Slow growth rate. Work well as a patio tree or next to a pool. Protect from hot, dry, or constant winds. Provides year-round interest.
Lilac <i>Syringa vulgaris</i> hybrids	D	5-20' 8-20'	Fragrant white, purple, pink, or blue flowers.	Best in light shade. Regular water. Multi-trunk tree does best with morning sun and afternoon shade. Cut spent blossoms just after flowering to encourage more blooms.
Mediterranean Fan Palm <i>Chamaerops humilis</i>	E	18-20' 18-20'	Inconspicuous flowers; small, 1" brownish red fruit.	Full sun to partial shade. Regular water. Multi-trunk palm has offshoots that curve in many directions. This palm is very frost tolerant, can survive (brief) low temperature drop. to 18°F. Greenish blue leaves.
Olive <i>Olea europaea</i>	E	25-30' 25-30'	Evergreen grayish green leaves.	Full sun. Little water once established. Rapid growth when young, slows with age. Prune early to create a tree shape. Choose fruitless varieties.
Smoke Tree <i>Cotinus coggygria</i>	D	20-30' 20-30'	Faded flowers look like "smoke" from a distance.	Full sun. Moderate water with good drainage. Moderate growth rate. Multi-trunk tree. Leaves turn color in fall for an attractive display.
Star Magnolia <i>Magnolia stellata</i>	D	8-10' 10-20'	White, star shaped flowers in late winter to early spring on bare branches.	Full sun. Regular water. Grows slowly and can be somewhat shrub-like. One of the first trees to bloom in late winter. Best near a window where you can see the flowers.
Trident Maple <i>Acer buergerianum</i>	D	20-25' 20-25'	Beautiful fall color, peeling bark.	Full sun or partial shade. Regular water, more in summer. Makes an excellent patio tree. Has well-behaved roots.
Tulip Tree <i>Magnolia soulangeana</i>	D	20-25' 25-30'	Large pink flowers on bare branches.	Full sun. Regular water. One of the first trees to bloom in late winter. Best near a window where you can see the flowers.
Washington Hawthorn <i>Crataegus phaenopyrum</i>	D	20-25' 15-20'	Shiny red fruit in winter.	Full sun. Regular water. Moderate growth rate. Glossy leaves turn purple, orange or red in fall. The bright red berries are a nice feature and attract many birds.
Windmill Palm <i>Trachycarpus fortunei</i>	E	25-30' 8-10'	Trunk usually thicker at the bottom than the top/	Full sun or light shade. Regular water. Can withstand frost. May be sold as <i>Trachycarpus excelsa</i> .

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Birch <i>Betula pendula</i>	D	30-40' 15-20'	Hanging green seedpods turn brown and then blow away.	Full sun. Regular water. Needs more water than most trees. Makes a good lawn tree. Rapid growth when young, slows with age. Susceptible to aphids which may drop sticky honeydew. Avoid planting near cement.
Bradford (Flowering) Pear <i>Pyrus calleryana</i> 'Bradford'	D	40-50' 25-30'	Showy white flowers in early spring; small, inedible fruit.	Full sun. Moderate water. Roots are well-behaved, trees can be planted near cement. This cultivar is resistant to fireblight and mistletoe, a problem that plagues other callery pear cultivars.
Catalpa <i>Catalpa bignonioides</i>	D	30-40' 30-40'	Two inch white trumpet-like flowers; interesting seed capsules.	Full sun or light shade. Moderate to regular water. Extremely tough tree that can withstand hot climates. Native to South-Eastern U.S.
Chinese Hackberry <i>Celtis sinensis</i>	D	35-40' 35-40'	Mature trees have attractive bark.	Full sun or partial shade. Moderate water. Roots are well-behaved. Susceptible to hackberry aphids which may drop sticky honeydew. Avoid planting near cement or treat for aphids if needed.
Chinese Pistache <i>Pistacia chinensis</i>	D	30-50' 30-50'	Female trees have attractive berries; all trees provide stunning fall color.	Full sun. Moderate water. Slow to moderate growth. Non-aggressive roots. Does well in lawn. Male cultivar 'Keith Davey' is fruitless, use near sidewalks, lawn or a patio.
Eastern Redbud <i>Cercis canadensis</i>	D	15-35' 15-35'	Pea-shaped purplish pink flowers in spring on bare branches.	Full sun or light shade. Moderate to regular water. Fast growing tree with heart-shaped leaves. Excellent street or patio tree. Blooms early in late winter. Fall color. 'Oklahoma' is a popular cultivar that does well in our area.
Ginkgo <i>Ginkgo biloba</i>	D	35-50' 25-30'	Green leaves turn golden in fall.	Full sun. Moderate to regular water. Well-behaved roots. Purchase a male cultivar tree; female tree fruit has an unpleasant odor.
Golden Rain Tree <i>Koelreuteria paniculata</i>	D	30-40' 20-40'	Lantern like golden capsules in fall.	Full sun. Moderate to regular water. Needs good drainage. Can withstand drought. Roots are well-behaved. Seedlings of the tree self-sow and can be a nuisance in lawns and landscapes.
Holly Oak <i>Quercus ilex</i>	E	30-60' 30-60'	Egg-shaped grayish-brown acorns.	Full sun. Little water once established. Moderate growth rate. Good evergreen lawn tree. Deep roots do not disturb pavement.

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Maytens <i>Matenus boaria</i>	E	30-40' 30-40'	Graceful tree resembles a weeping willow.	Full sun. Water deeply to prevent roots from appearing at surface. Avoid disturbing soil under the tree. Slow to moderate growth rate.
Queen Palm <i>Syagrus romanzoffi- anum</i>	E	45-50' 20-25'	Exotic-looking palm tree.	Full sun. Regular water. Attractive but needs more water than most trees. Is not tolerant to frost, may be damaged if temperatures dip below 25F. May produce orange fruits.
Raywood Ash <i>Fraxinus angustifolia oxycarpa</i> 'Raywood'	D	25-35' 20-25''	Lacy leaves turn purplish red in fall.	Full sun. Regular water. Rapid growth when young, slows with age. Roots are well-behaved. Underwatered trees are susceptible to a disease that causes branch dieback. Resistant to anthracnose.
Red Horse Chestnut <i>Aesculus x carnea</i>	D	35-40' 35-40'	Copious plumes of red flowers in spring.	Full sun. Regular water. Fast growing. Well-behaved roots. Makes an excellent lawn or patio tree. Plant may be toxic to livestock and humans if consumed.
Strawberry <i>Arbutus unedo</i>	E	20-35' 15-30'	Bell shaped white flowers in spring; large red fruits.	Full sun to partial shade. Little to moderate water. Slow to moderate grower. Roots are well-behaved. Makes an excellent lawn tree. Fruit drop makes it a poor choice for areas near cement.
Sweet Bay Laurel <i>Laurus nobilis</i>	E	12-40' 12-40'	Small yellow flowers; purple berries. Leaves used in cooking.	Full sun. Moderate water, good drainage. Slow growing tree. Well-behaved roots. Excellent tree in lawn or near cement. 'Saratoga' is a popular cultivar. Prone to attack from black scale insects.

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Chinese Elm <i>Ulmus parvifolia</i>	E/D	40-60' 50-70'	Decorative bark that sheds in puzzle-like pieces.	Full sun. Regular water. Fast growing tree. Evergreen in our area, although some leaf shed can be expected. Makes a good patio or street tree, can also be used as a privacy screen.
Cork Oak <i>Quercus suber</i>	E	30-60' 40-50'	Handsome cork textured bark. Shiny gray leaves.	Full sun. Moderate water and good drainage. Excellent shade or street tree.
Deodar Cedar <i>Cedrus deodara</i>	E	70-80' 35-40'	Graceful looking tree with wispy branches.	Full sun. Moderate water. Fast growing. Various cultivars exist that are shorter.
Japanese Black Pine <i>Pinus thunbergii</i>	E	40-50' 35-40'	Resembles a Christmas tree.	Full sun. Little to moderate water. Fast growing. Bright green needles form in bunches of two. Lends well to bonsai.
Liquidambar <i>Liquidambar styraciflua</i>	D	50-60' 20-25'	Showy fall colors of yellow, orange, red, and purple depending on climate.	Full sun. Moderate to regular water. Good street tree if given large area to grow. Otherwise, surface roots crack sidewalks and come up in lawns. Spiky seedpods can make it difficult to rake and mow. 'Rotundiloba' does not produce spiky seed pods.
London Plane Tree <i>Platanus x acerifolia</i>	D	40-80' 30-40'	Attractive cream-colored bark. Soft brown seed clusters in winter.	Full sun. Moderate to regular water. Excellent lawn or street tree. Does have problems with anthracnose and powdery mildew. Cultivar 'Yarwood' is resistant to powdery mildew, 'Bloodgood' is resistant to anthracnose.
Podocarpus <i>Podocarpus gracilior</i>	E	20-60' 10-20''	Graceful, fern-like leaves.	Full sun or partial shade. Regular to moderate water. Narrow growth makes it a good choice near walls and walkways. Excellent lawn, street, or patio tree. Virtually pest-free.
Silver Dollar Eucalyptus <i>Eucalyptus cinerea</i>	E	20-55' 20-45'	Young leaves are round and grayish green.	Full sun. Little to no water once established. Best on a dry site. Cut back young foliage frequently for steady supply of small leaves for floral arrangements.
Southern Magnolia <i>Magnolia grandiflora</i>	E	60-80' 30-40'	Large fragrant white flowers. Showy seed pods.	Full sun. Regular water. Makes a good street or shade tree, although roots may lift pavement. Thick canopy creates deep shade that most plants won't thrive under.

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