

# TEXAS TREES

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# The Many Benefits of Trees

**M**ature native and adapted trees are one of the most valuable components of a landscape, whether for their aesthetic beauty or the numerous economic and environmental benefits they provide.

## Trees

- Increase property values
- Serve as visual, noise, and wind screens
- Clean air
- Provide oxygen
- Cool surrounding areas (including your home)
- Reduce utility bills!
- Can help you save water
- Help prevent water pollution
- Help prevent soil erosion and control flooding
- Provide wildlife food and habitat

## Selecting Native or Adapted Trees

Native and adapted plants are the ideal choice for a beautiful water efficient landscape. Trees of varied structure, texture, and color can suit well-manicured and naturalistic landscape designs alike.

A growing number of Texans are looking to incorporate more native and better-adapted trees into their home or business landscape for a variety of reasons:

- Drought tolerance
- Heat tolerance
- Lower water use
- Lower fertilizer use
- Fewer pesticides needed

When selecting the right tree for your property, you might also want to consider:

- Growth potential
- Shape
- Function
- Water requirements (some use even less than others)
- Pest resistance
- Longevity (How long do they typically live?)
- Growth rate
- Is it deciduous (loses its leaves) or evergreen?
- Do you want an ornamental tree or a shade tree?

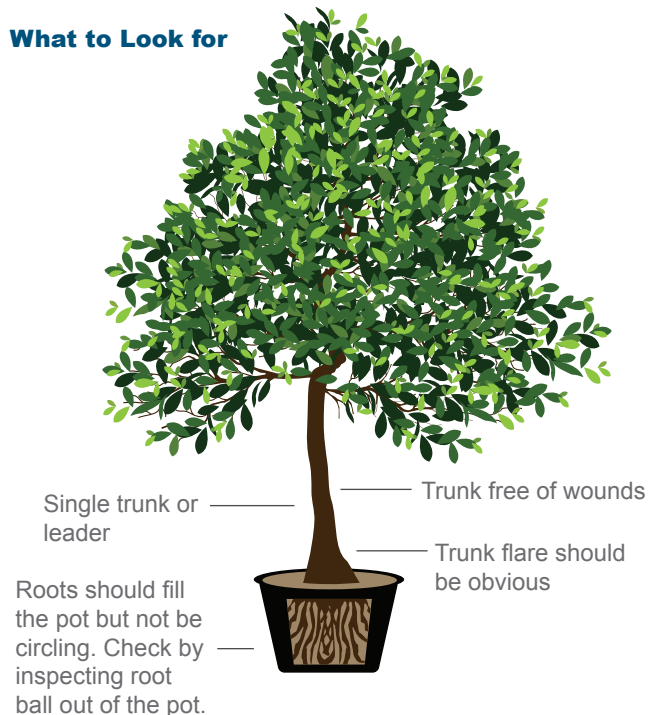
## Plant Spacing and Placement “Right Plant, Right Place”

A healthy native or adapted tree is a valuable asset, but to ensure the best success, it should be planted properly and in the right place depending on the specific requirements for each plant.

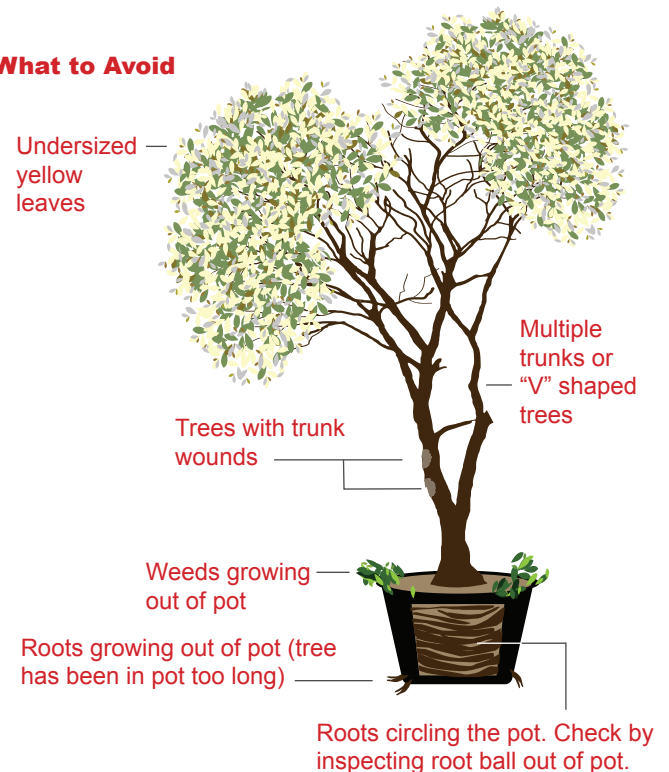
- Read the plant tag!
- Pay close attention to hardiness, light requirement, sizing, and spacing.
- Proper spacing is even more important when considering planting medium to large tree species and their growth potential. Be mindful so the tree you select will not encroach on power lines or other problem areas as it matures.

## Tree Selection

### What to Look for

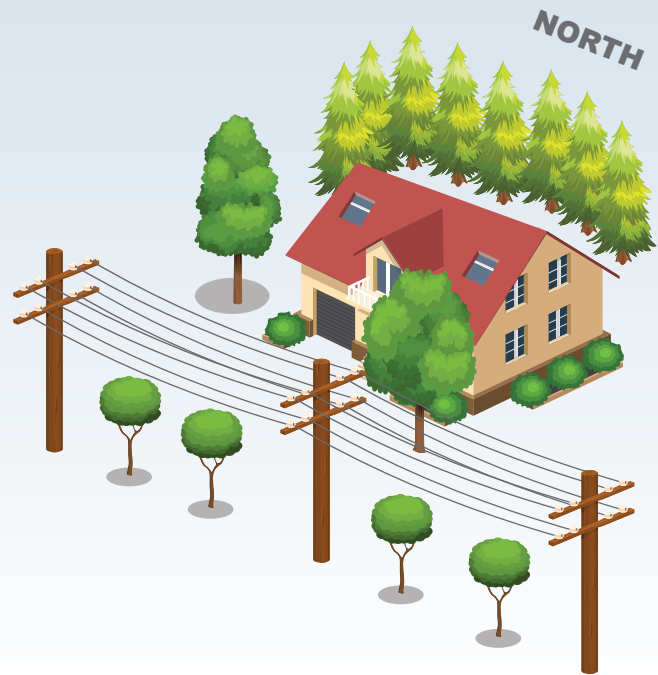
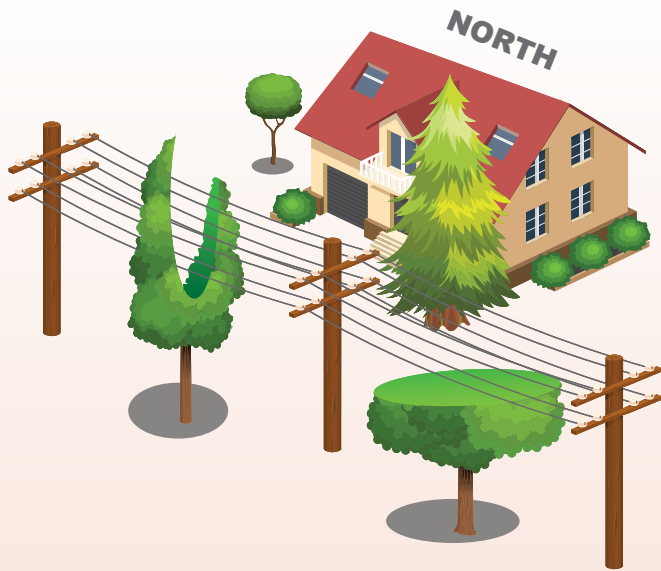


### What to Avoid



## Proper Tree Placement

Shorter ornamental trees are good choices for avoiding electrical hazards and preserving tree health under powerlines. Large deciduous trees on the southern and western faces of the home will block the summer heat while allowing warmth to enter the home in winter. An evergreen tree screen on the northernmost area of the property will shield against harsh winter winds.



## Improper Tree Placement

Planting large trees under power lines creates electrical hazards and is detrimental to tree health due to heavy mutilation requirements. Meanwhile, large evergreen trees placed on the southern face of the home can block warming sunlight in the winter months, contributing to inefficient energy use.

## Watering Trees

Water is the most limiting factor for tree growth and overall health. The amount of water used in irrigation depends on soil texture, structure, temperatures, and the amount and timing of recent rain events. Trees planted in heavier clay soils with greater water-holding capacity will require less water. Over-watering these sites often leads to anaerobic soil conditions, leading to root diseases or even death.

Supplemental watering should be part of your tree maintenance plan during periods without rainfall. Drought conditions can contribute to decline, making trees more susceptible to other pest problems. Irrigation systems designed to water turf MAY NOT sufficiently water your trees, and trees MAY require additional watering methods. Lawns can be replaced in a matter of days, but a 20-year old tree may never be truly replaced!

Supplemental irrigation should only begin when soil moisture is low. If rain events are frequent and heavy during the growing season,

little supplemental irrigation will be necessary. The most efficient method to water trees is with a soaker hose or drip irrigation allowing the water to slowly infiltrate the root zone. We recommend an application of 2"- 4" of organic mulch around the tree to conserve moisture and increase infiltration during watering.

When watering, do not concentrate the water at the base of the tree. Most of the fine roots, which take up moisture, are located several feet from the trunk. Excessive watering at the base can even contribute to pest and disease issues.

When watering mature trees, focus on the area away from the base, underneath the crown of the tree to a few feet beyond the drip line. Watering infrequently, but deeply, encourages healthy root growth. The cycle and soak method prevents runoff and is typically the most water efficient method for the heavy clay soils common in parts of Texas.

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Young or recently planted trees may require more frequent watering. When watering, be sure to thoroughly irrigate both the newly planted root ball AND the surrounding area. To estimate soil moisture around newly planted trees and avoid watering too much or too little, utilize a soil moisture meter.

Three in one  
moisture, light and  
ph balance meter

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### When to Stake Trees:

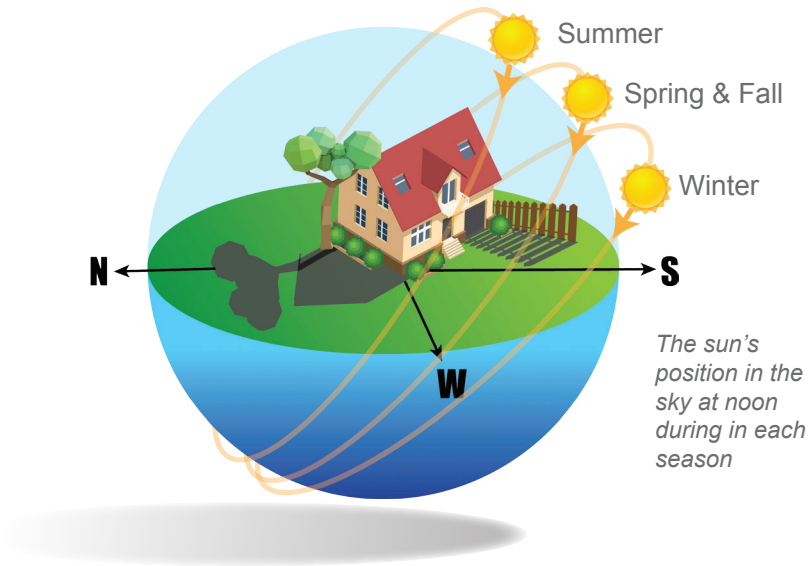
- High wind conditions
- Very large tree size
- Fall-planted evergreens
- Very weak trunk
- High population pressure

Don't stake unless you have to. Remove stakes and ties within 1 year. Use flexible ties with a broad smooth surface (canvas.)



## Understanding Plant Lighting under Trees

The amount and quality of light on your property can change over time, especially in landscapes with maturing trees and large shrubs, new buildings, or even new fences. While established turfgrass and other sun-loving plants might grow successfully in these areas for a while, many times we start to see them decline, becoming thinner and less dense as the shade begins to encroach. Over-watering and/or over-fertilizing are often the response in these lower light situations. These poor management practices can be even more detrimental to your landscape and the environment in the long run.



## Advantages to Gardening under Shade Trees

There are actually quite a few ways gardening under mature trees can enhance your landscape!

### Save Water!

We see less water loss in shadier areas, both in the plants themselves with slower transpiration rates and in the soil moisture around them showing less evaporation.

### Added Interest

Trees should be considered valuable assets, should be considered an asset, serving as backdrops or structural focal points that can complement or even enhance your plantings.

### Moderate Temperatures

Shade gardens are the perfect place to sit and relax or entertain guests, especially during the summer months in North Texas!

### Increase your plant pallet

There is a whole new world of plant material that not only tolerates, but thrives, in the shade. These shade-loving plants vary tremendously in their forms, grow habits, foliage, and in the shape color of their blooms!

## Trees for North Texas and Beyond

### Shade Trees

Big Tooth Maple  
Caddo Maple  
Shantung Maple  
Pecan  
Arizona Cypress  
Eastern Red Cedar  
Goldenrain Tree  
Southern Magnolia  
Eldarica Pine  
Chinese Pistache  
White Oak  
Red Oak  
Lacey Oak  
Bur Oak  
Chinquapin Oak  
Post Oak  
Live Oak  
Soapberry  
American Elm  
Cedar Elm  
Lacebark Elm

### Ornamental Trees

Japanese Maples  
Red Buckeye  
Skyrocket Juniper

Redbud-Many Varieties  
Desert Willow  
Smoketree  
Hawthorns  
Texas Persimmon  
Loquat  
Possumhaw Holly  
Yaupon Holly  
Blue Point Juniper  
Hollywood Juniper  
Wichita Blue Juniper  
Crape Myrtle  
Goldenball Leadtree  
Deciduous Magnolia  
Wax Myrtle  
Japanese Black Pine  
Honey Mesquite  
Cherry Laurel  
Pomegranate  
Prairie Flameleaf Sumac  
Eve's Necklace  
Texas Mountain Laurel  
Mexican Buckeye  
Vitex  
Chitalpa  
Fig



Developed in cooperation with the Water Efficiency Network of North Texas

Subject matter currently under review