

A Tree Planting and Maintenance Guide



“A Quality of Life City”



City of Hurst

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The purpose of this booklet, developed by the Hurst Parks and Recreation Department, is to help the residents of Hurst identify, select, plant, and care for trees around their homes. This mission is part of the ½ Cent Sales Tax that was passed in 1992 to help support further park development and City-Wide Beautification projects. The creation of this booklet was started by a grant awarded by the Texas Forest Service in conjunction with ½ Cent Sales Tax monies. The Texas Forestry Service has been

issuing grants to those participants who, like the City of Hurst, will promote landscaping projects that will reflect positively on existing and future neighborhoods, businesses, and public areas. Although we have a fine established tree population within our City, we can always benefit from the addition of new trees. Planting trees now is a sign of caring for your present environment as well as the environment of the future for your children. Trees help provide a quality of life in Hurst second to none. Plant trees to continue that quality of life Hurst is known for.

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Tree Guide

Tree Selections

The trees in this guide were chosen because of their ability to thrive in the soils found in Hurst. We are fortunate that Hurst has somewhat sandy and slightly acidic surface soils that allows us to grow several more tree species than our neighbors to the east and west. For this reason, more pines can be planted in Hurst opposed to other areas.

The tree and leaf diagrams are intended to give you a general idea of the form of the tree and the shape and texture of the leaves. Some species of trees listed will provide subtle differences in form and leaf structure to add variety and interest to your landscape.

Terms and Phrases to Remember

Balled and burlapped: Refers to the method of digging a tree, keeping the root system in a ball form, and wrapping the rootball with burlap or other material for transport. Be certain that all ropes, nylon ties, etc. are removed from around the trunk at the time of planting.

Container: Generally refers to the plastic bucket trees can be grown in. Buckets come in a number of sizes and colors. Some common sizes are 5, 10, and 20 gallons, and they are found in retail nurseries.

Deciduous: Refers to those trees that drop their leaves in the fall.

Evergreen: Refers to those trees that remain green and hold their leaves throughout the year.

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Afghan Pine



Pinus eldarica

Height: 30-40' Spread: 20-25'

Growth Rate: Moderate

Evergreen

The Afghan Pine is a pyramidal shaped pine commonly used as living Christmas trees. They can serve as a thick natural screen to block bad views. It can be found in containers or balled-and-burlapped. This species will not tolerate heavy lawn irrigation.

Bald Cypress

Taxodium distichum

Height: 60-70' Spread: 30-40'

Growth Rate: Moderate

Deciduous

The Bald Cypress is one of the few cone-bearing trees that drops its leaves in the fall. While this tree does well in dry soils, it does need supplemental watering under dry conditions. The Bald Cypress has a tall, pyramidal form with rust colored foliage. It can be found in containers or balled-and-burlapped.



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Bradford Pear

Prunus calleryana

Height: 20-35' Spread: 20-25'

Growth Rate: Fast

Deciduous

This is a very popular ornamental tree planted for its spring flowers, glossy green foliage, and bright fall colors. The Bradford Pear maintains a fairly round crown and has very few pests. It can be found in containers or balled-and-burlapped.

Bur Oak

Quercus macrocarpa

Height: 60-80' Spread: 30-50'

Growth Rate: Moderate

Deciduous

This is probably the Oak tree with the largest leaf and acorn. The leaves reach up to 12 inches long and are very lobed. The bark is very rough on the Bur Oak, and it does not have many common pests. It can be found in containers or balled-and-burlapped. This tree is very resistant to oak wilt disease.



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Cedar Elm

Ulmus crassifolia

Height: 40-60' Spread: 30-40'

Growth Rate: Moderate

Deciduous

The Cedar Elm is a very tough native tree that does very well in both wet and dry soils. The Cedar Elm produces a yellow fall foliage. Its moderate growth rate might suggest planting a larger specimen. It can be found in containers or balled-and-burlapped.



Cherry Laurel

Prunus caroliniana

Height: 25-40' Spread: 20-30'

Growth Rate: Fast

Evergreen

The Cherry Laurel is a small broad-leafed evergreen with year-round glossy green foliage that produces masses of white flowers in the spring followed by bluish-black fruit in the summer. It can be found in containers or balled-and-burlapped.



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Chinese Pistache

Pistacia chinensis

Height: 35-40' Spread: 35-40'

Growth Rate: Moderate

Deciduous

This is an excellent medium-sized shade tree that produces beautiful fall foliage. The Chinese Pistache is a drought tolerant tree with very few pests. It can be found in containers or balled-and-burlapped.

Chinquapin Oak

Quercus muhlenbergii

Height: 60-80' Spread: 30-40'

Growth Rate: Moderate

Deciduous

This species of tree is not commonly found in Hurst, but it can be grown quite easily. The Chinquapin Oak leaves are dark green with an undulating edge. This is another very attractive shade tree with very few pests. This tree is in the White Oak group and is also resistant to oak wilt disease. It can be found in containers or balled-and-burlapped.



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Crapemyrtle

Lagerstroemia indica

Height: 15-20' Spread: 10-15'

Growth Rate: Moderate

Deciduous

This specimen is a striking summertime bloomer that comes in a variety of colors. The Crapemyrtle has an interesting tree trunk texture when maturity is reached. A drawback to the Crapemyrtle is its susceptibility to low temperatures. It can be found in containers or balled-and-burlapped.

Eastern Red Cedar

Juniperus virginiana

Height: 40-60' Spread: 25-30'

Growth Rate: Moderate

Evergreen

This is a cone-bearing evergreen that produces a fairly symmetrical “Christmas Tree” shape. It needs very little care and can be grown with existing rainfall. The Eastern Red Cedar must be monitored for bagworms. It is best purchased in containers or dug in the wild when very young.



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Green Ash

Fraxinus pennsylvanica

Height: 40-50' Spread: 20-30'

Growth Rate: Moderate

Deciduous

A good upright shade tree for the standard residential lot. It has brittle wood and can be bothered by borers. It can be found in containers or balled-and-burlapped.

Japanese Black Pine

Pinus thunbergii

Height: 25-30' Spread: 25-35'

Growth Rate: Fast

Evergreen

The Black Pine is an excellent accent pine with a nice horizontal form. This tree needs ample room for spreading. It also produces small cones. It can be found in nurseries in containers or balled-and-burlapped.



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Lacebark Elm

Ulmus parvifolia

Height: 30-50' Spread: 30-40'

Growth Rate: Moderate

Deciduous

This is a light-textured spreading shade tree with a lacy-patterned bark on older tree trunks. The Lacebark Elm is a drought and disease tolerant tree that produces a colorful display of yellow leaves in the fall. It can be found in containers or balled-and-burlapped.



Live Oak

Quercus virginiana

Height: 40-50' Spread: 40-50'

Growth Rate: Slow

Evergreen

This Oak is more tolerant of colder temperatures compared to its other family members. It is recommended to plant larger specimens because of its slow growth rate. It can be found in containers or balled-and-burlapped.



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Southern Magnolia

Magnolia grandiflora
Height: 60-100' Spread: 30-50'
Growth Rate: Moderate
Evergreen

The Southern Magnolia is a stately broad leaf evergreen tree that produces large white flowers in the summer. It is commonly grown with a very low branching habit. A plus to the Magnolia is that it has very few pests. It can be found in containers or balled-and-burlapped.

Mexican Plum

Prunus mexicana
Height: 10-15' Spread: 15-20'
Growth Rate: Moderate
Deciduous

The Mexican Plum is a small tree that produces many white flowers in the spring. It is considered drought resistant by many, but can be bothered by fall web worms and tent caterpillars. It can be found in containers or balled-and-burlapped, or it can be dug in the wild in the winter.



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Pecan

Carya illinoensis

Height: 125-150' Spread: 50-100'

Growth Rate: Moderate

Deciduous

The Pecan Tree is the State Tree of Texas. It provides excellent shade tree for large residential lots. The Pecan tree requires fairly regular insect control (tent caterpillar) in urban landscape. It can be found in containers or balled-and-burlapped.

Redbud

Cercis canadensis

Height: 20-30' Spread: 20-30'

Growth Rate: Moderate

Deciduous

Small accent tree that produces lavender, pink, or white blooms in early spring. The average life of the Redbud is rather short, typically between 15-20 years. It can be found in containers or balled-and-burlapped.



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Sawtooth Oak

Quercus acutissima

Height: 50' Spread: 30-40'

Growth Rate: Fast

Deciduous

The Sawtooth Oak is a relatively new species to the area. It has long, glossy serrated leaves that hang on to the branches during the winter. It is also noted for being a fast growing tree. It can be found in containers or balled-and-burlapped.

Shumard Oak

Quercus shumardii

Height: 50-80' Spread: 40-60'

Growth Rate: Moderate

Deciduous

This is a very popular oak for most of East Texas. The Shumard Oak develops a round crown in maturity and is noted for its excellent fall colors and abundant acorns. It can be found in containers or balled-and-burlapped.



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Slash Pine

Pinus elliotii

Height: 75-100' Spread: 20-40'

Growth Rate: Fast

Evergreen

The Slash Pine is one of the few East Texas pines that will grow in Hurst. This pine is a very tall species, and its growth capabilities should be noted when planting. It can be found in containers or balled-and-burlapped.

Sweetgum

Liquidamber styraciflua

Height: 70-90' Spread: 30-60'

Growth Rate: Moderate

Deciduous

The Sweetgum is well known for its colorful fall foliage and spiny fruit. It maintains a fairly pyramidal shape when young, but it changes to a wide crown with age. Fall web worms are a common pest to the Sweetgum. It can be found in containers or balled-and-burlapped.



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Water Oak

Quercus nigra

Height: 50-60' Spread: 30-40'

Growth Rate: Moderate to Fast

Deciduous

The Water Oak is another one of the East Texas Oaks that can be grown in Hurst. This is another excellent shade tree that should be given plenty of room to spread. The Water Oak is noted for its ability for rapid growth. It can be found in containers or balled-and-burlapped.

Yaupon Holly

Ilex vomitoria

Height: 15-20' Spread: 10-15'

Growth Rate: Moderate

Evergreen

The Yaupon Holly is a small evergreen tree used for accent purposes because of its ability to be sheared into formal shapes. The female variety produces bright red berries that are very attractive to birds. It can be found in containers or balled-and-burlapped.



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Tree Maintenance Requirements

Under Section 24-21 of the City Code, the City of Hurst has proclaimed that it is a code violation to fail to maintain a tree, shrub, or any other growth that potentially “obscures a motor vehicle operator’s view of any traffic control devise or street sign or otherwise create a traffic hazard.” For this reason, it is recommended that trees should not be planted in the right-of-way, unless they are planted a minimum of 25 feet apart. If the property owner wishes to plant a tree or shrub in the right-of-way, it will be their responsibility to trim and maintain the tree or shrub so that no traffic hazards are created. As a guide, it is desirable to prune limbs between the heights of 2 feet and 9 feet above the curb level so as to eliminate visibility obstructions. The above stated heights allows for optimal viewing perimeters for motor vehicle operators. For specifics as to the height at which these trees must be trimmed and other regulations, please contact Code Enforcement at 788-7088 or visit the City’s web site at www.ci.hurst.tx.us and reference Part II, Chapter 24, Article I, Section 24-21.

Undesirable Tree Species for Hurst

Each of the following species offers various potential problems (i.e. excessive surface roots, dripping sap, etc.). Please check with your local nurseries regarding these potential problems.

American Elm

almus americana

Fruitless Mulberry

morus alba (fruitless)

Arizona Ash

fraxinus velutina

Mimosa

albizia julibrissin

Cottonwoods

populus deltoidses

Sycamore

plananus occidentalis

Special thanks to Ricks H. Pluenneke, Ph.D.

Fellow--American Society of Agronomy

Past President--Texas Urban Forest Council

Member--National Professional Certification Board for Horticulturists (ASHS)

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Planting Guide

The best time to plant trees in our area is in the fall, especially if you are planting a balled or burlapped tree. If you are planting a container-grown tree, you can plant it at any time of the year, but again it is normally more successful to plant in the fall.

Evaluate your planting site: Have you considered the mature size of the tree for the site in which you will be planting? Will the mature limbs interfere with your house? Will the mature height interfere with overhead electrical or utility lines? Will the limbs overhang the sidewalks for which you will be responsible for the maintenance?

Tools needed: You will need a good shovel and/or spade, rake, water hose, and mulch.

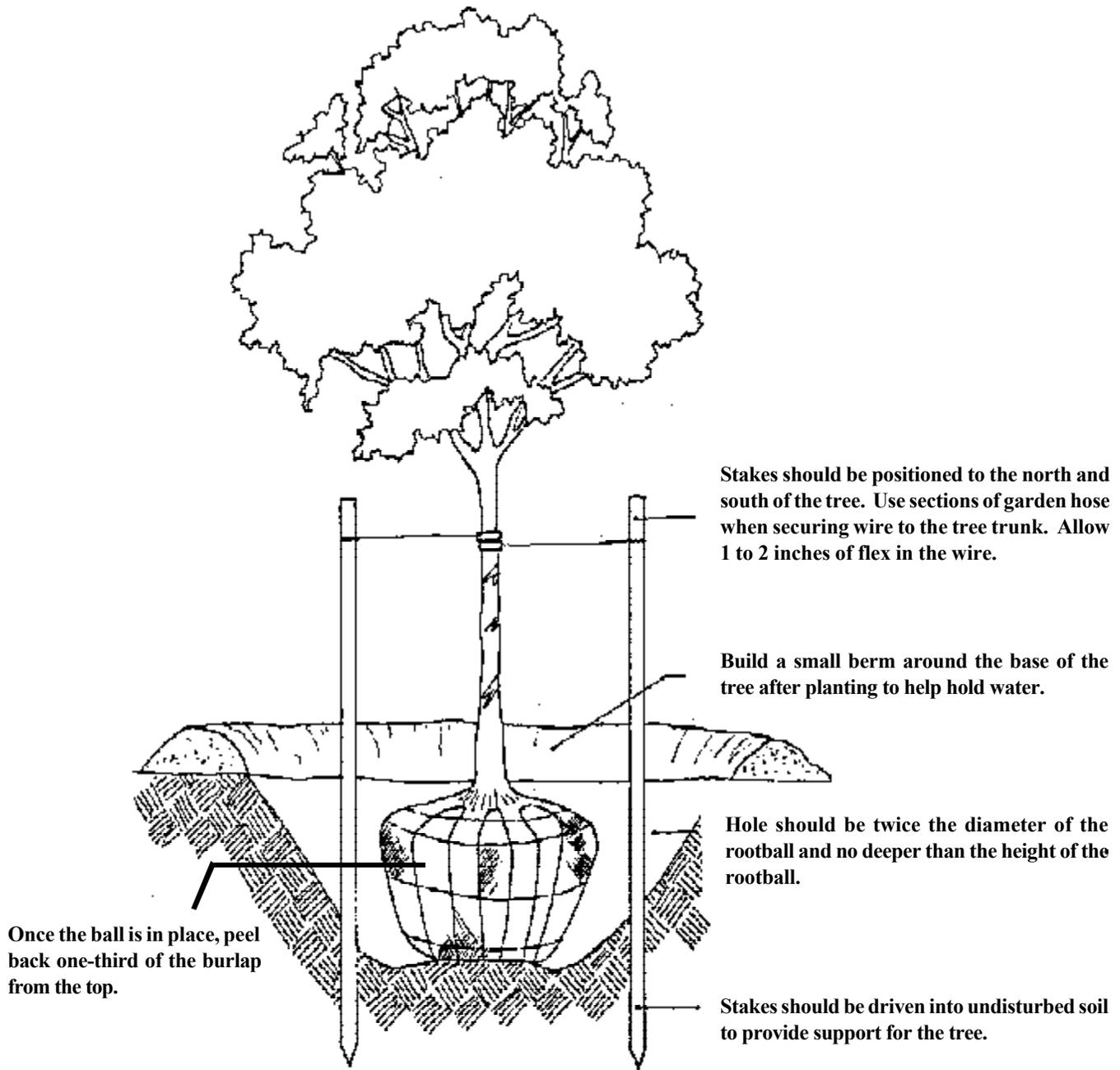
Digging the planting hole: Dig the hole roughly twice the diameter of the rootball of the tree you are planting. For example, if you have a rootball 18" wide, you should dig a hole 36" wide measured at the top of the hole. As for the depth of the planting hole, dig no deeper than the height of the rootball.

Planting the tree: Carefully remove the tree from the container or remove wire or plastic wiring from around the balled or burlapped tree. Plant as quickly as possible, and when transporting the tree, move it only by the rootball only. Place the tree in the hole, situate the tree in a way that pleases you, then check to ensure that the top of the rootball is level with the planting hole. Be sure to remove any restrictions supporting the rootball. If sandy soil was on the surface and clay beneath, return it in that order. Do not put mulch into the hole; instead, place the mulch on the surface.

Backfilling, watering, and mulching: Backfill the planting hole with the soil you removed while being particularly careful not to shovel any rocks, grass, or weeds into the hole. When you have filled the hole two-thirds, begin filling with water and, using a stick or shovel handle, work the water in the soil to remove air pockets and help settle the soil around the rootball. Continue backfilling until the hole is filled and you have approximately one inch of soil over the rootball. Build a circular berm around the top of the planting hole to aid in holding water. Finally, apply two to three inches of mulch over the planting hole to aid in water retention.

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Staking: Stake the tree only if the tree crown is too tall or heavy (as with young Slash Pines) or the possibility of shifting due to high winds or heavy rains is great. The trunks of young trees are actually strengthened by the action of the wind. If staking is necessary, follow the directions provided in the tree detail below.



Tree Planting Detail

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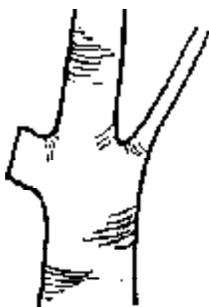
Tree Care

The first year: The first year of a tree's life is the most important. You will need to monitor soil moisture often, especially during the summer months, but be careful not to over-water the tree. The mulch placed over the planting hole will greatly reduce the risk of the new tree drying out.

Fertilization: Your new tree will not need any fertilizer because it has a limited root system, and fertilizer could actually damage the tender root system. After the first year, you may fertilize lightly with a 10:10:10 or 13:13:13 fertilizer followed by a good watering. Fertilize two or three times during the growing season. For instance, early April, late June, and October would be ideal times for fertilization as root growth continues throughout the winter months.

Trunk protection: To protect your tree from possible damage from mower or line trimmers, place a trunk guard around the base of the tree. Several commercial brands are available, or you can make your own by taking a 6" section of PVC drain pipe and slicing it lengthwise. Place each side of the PVC sections around the base of the tree. As the tree trunk increases in size, you will need to remove the guard. Be sure to monitor the guards to ensure fire ants do not take up residence.

Pruning: Pruning will probably be required sometime during the life of the tree to remove dead, diseased, or damaged limbs that prohibit the growth of the rest of the tree. Using the diagrams below, one will be able to gauge how close you should prune limbs to the trunk. Use sharp, reliable tools when pruning. Sterilize your tools with a 10% solution of bleach before you begin and especially when you move to the next tree you are pruning.



Incorrect--
Too much stub



Correct



Incorrect--
Too close to the
trunk

The Benefit of Trees

Aesthetics: Trees can provide aesthetic improvements to the residential landscape with the shadows they cast, their colorful flowers and foliage, interesting bark textures, and branching patterns. Trees can be beneficial to frame and screen views. These and other aesthetic qualities of trees are important in maintaining or increasing property value.

Shading and Cooling: With the proper placement of shade trees, the homeowner can achieve some cooling benefits. By placing trees on the south, southwest, and west sides of a house to shade the roof and walls, surface temperatures can be reduced by as much as 20 degrees. Shading an air conditioning unit will not only improve the unit's efficiency, but it will also extend the life of the unit. A large shade tree is also an ideal place for one to relax and cool off on a hot summer day.

Air Cleansing: The planting of trees helps to clear the air of dust. Trees, as well as other plants, produce the oxygen we breathe while absorbing carbon dioxide.

Wildlife Refuge: Trees provide shelter and habitat for a large number of birds and mammals in the urban environment. A variety of animals choose certain trees in which to feed and raise their young. Planting trees that produce nuts and small fruit that will attract urban wildlife.

History: Trees can provide a historical reference to our lives. Trees can be planted in remembrance of a friend or loved one, or can be planted to celebrate a new life. Being the longest living plant in our landscapes, trees will be around to commemorate the events of our lives.

Provided to the citizens of Hurst by the City of Hurst through a grant from the Texas Forest Service.

