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Majestic oak trees grace McAllen's 10th St.



FLORA FACTS

Scientific Name: *Quercus virginiana*

Common Names: Live Oak

Family: Fagaceae

Live Oak Readily Available in LRGV

The natural range of Live Oak is quite large; it extends through many of the coastal southern states and is the state tree of Georgia.

This natural range barely extends as far south as Willacy and Hidalgo Counties. Thus, it's unlikely that you'll find Live Oak growing wild in the southern reaches of the LRGV, though you'll find many specimens in local neighborhoods.

Live Oak becomes more common in the wild as one travels north through the South Texas Plains and Texas Coastal Bend. Fred B. Jones describes the occurrence in the Coastal Bend as: "frequent on coastal sands from Aransas Refuge to Baffin Bay, often forming dense woods and thickets, also widely scattered inland on sands or sometimes other soil, generally where there is an abundance of surface or subsurface moisture." (*Flora of the Texas Coastal Bend*, 1975.)

In addition to Live Oak, Jones lists Laurel Oak, Bur Oak, Blackjack and Post Oak as native to the Texas Coastal Bend. Only the Live Oak is native to the four-county area known as the LRGV.

A detailed description of Live Oak is a challenge beyond my grasp. Both leaf shape and size are extremely variable, as are other characters. Some experts recommend acorn characteristics as the easiest way to identify an oak.

Dr. Al Richardson, botanist, comments: "You picked a good (subject) for complexity. The oaks are a strange group, different species hybridizing freely and producing fertile offspring."

The range of Live Oaks described above by Jones has hybridized for centuries with a more widespread colony located further inland. Taxonomists generally consider these as the same species, but different subspecies.

Any Live Oak that you buy or grow from seed could be the hybridization of several different species or subspecies of Oak. Comparing the Live Oaks in your yard or neighborhood with a field guide description may leave you with more questions than answers regarding the tree's identity.

Yet most folks around here know a Live Oak when they see one. Dr. Richardson comments: "There are many species that are easily recognized by ordinary people. But non-specialists tend to ignore fine differences that throw the specialists into a tizzy."



There are many reasons why Live Oak has become a favored tree for residential landscaping in coastal areas. Salt tolerance is one key factor. The tree has been successfully grown in urban areas where air pollution, poor drainage, compacted soil and/or drought are common. Leaves are retained through winter until new leaves emerge in spring. Live Oak is majestic, with a crown that can spread up to twice the tree's height. It is relatively fast-growing, yet long-lived, with lives being measured in centuries.

In selecting a planting site for Live Oak, one should note that the crown may spread from 60 to 100 feet. Many yards are too small for a tree of this adult size.

Live Oaks tend to develop surface roots. In time, surface roots will lift sidewalks, curbs and driveways. Max Pons, Director of Texas Nature Conservancy's Southmost Preserve, advises deep watering to avoid or minimize surface root formation. Mike Heep points out that adding soil to cover surface roots may kill an adult tree.

Deep watering can be accomplished in some places by the prolonged steady drip of a hose. In a front yard elevated above the street, water easily runs off the yard's surface into the gutter.

Months ago, I found a deep root watering device at Home Depot. It is a hollow, pointed probe with attached handle, and fits on a garden hose. Now I'm able to water our grapefruit trees without the constant need to mow adjacent grass. The watering probe I found requires a bit of maintenance, as it's easily plugged by clay when driven into the soil. An ice pick or length of coat hanger wire work pretty well to clear out the plug until water flows freely again. The watering probe can be positioned at the tree's drip line and rotated around the periphery. This deep-root watering method requires many trips into the yard to move and unclog the watering probe, but our trees are looking better for the effort.

In selecting a planting site for Live Oak, here are some suggestions. Good drainage is preferred. Partial shade and full sun are tolerated. Clay, loam, sand, acidic, occasionally wet and alkaline soils are tolerated. Drought tolerance is high once the tree is established. Aerosol salt tolerance is high, while soil salt tolerance is moderate.

A weed barrier is advised, to avoid germination of multiple seedlings from the acorns a Live Oak will produce. Oaks also reproduce from the roots, and whole colonies of new trees may arise around a parent. Mowing is the simplest solution I've found to prevent the formation of such an Oak "Motte."

Five years of pruning are required if an upright, single-trunk specimen is desired.

Animals will be attracted to the Live Oak, especially squirrels, whether you want them or not. Green jays visit my yard regularly when acorns are ripe. A number of other birds also eat acorns. In areas where cars have mashed them into crumbs, you'll often find English Sparrows and Doves having a meal. Live oak is also the larval food plant for the white hairstreak butterfly.

Several local organizations offer good advice on what trees to plant, when to plant and how to care for them. Valley Proud Environmental Council <www.valleyproud.org> is one of these. Native Plant Project <www.nativeplantproject.org> limits their scope to plants which are native to this area. Both of these organizations provide extensive information in printed form as well as on their respective websites.

National organizations will flood your mailbox and the local news media with Arbor Day promotions as spring progresses. Most will advise you to plant trees in May, celebrating national Arbor Day. Rest assured that locals know what they're talking about when they advise you to plant trees in February, well ahead of the blistering heat we experience in May.

Psychologist Brent Evans, who helped to found Cibolo Nature Center in Boerne, uses the Live Oak to form connections between young and old. Nursing home residents, who can no longer stoop and bend to plant things in the earth, grow seedlings of the Live Oak. They present these seedlings to youngsters, who then plant them.

Trees are good therapy for all of us. Gazing through their leafy canopy to view the sky reveals an ever-changing scene of beauty. Planting and caring for a tree connects us to the earth in a very special way.

Technical assistance by Mike Heep, native plant nurseryman and UTPA Instructor. Mrs. Mild holds a Masters degree in Biological Sciences. She may be contacted at RioDeltaWild@aol.com or ACAS, PO Box 531582, Harlingen, TX 78553.