

Live Oak



Quercus virginiana

Family – Fagaceae (Beech)

Genus – *Quercus* (Oak)

Species – *Quercus virginiana* (Live Oak)

History and Value:

The live oak is the ultimate southern shade tree. It is grown widely as a landscaping tree in many cities, as it tolerates automobile exhaust and forms stately canopies over streets and roads. The tree crown is very dense, making it valuable for shade, and it is evergreen, or nearly evergreen.

The wood is hard and strong. Dried live oak wood is among the heaviest of any tree in North America. There is no better wood for fuel or for charcoal cooking. During the time of wooden sailing ships, it was the preferred source of the framework timbers of ships, using the natural trunk and branch angles for their strength. The US Navy bought large tracts of live oaks for the exclusive use of the government's ship builders. The USS Constitution was constructed from live oak wood harvested from Georgia, where it is the state tree.

Native Americans extracted an oil from the acorns.

Tree Description and Habitat:

The live oak is known by many common names and there are different recognized varieties, like the Texas live oak, *Quercus fusiformis* (a.k.a. *Q. virginiana* var. *fusiformis*) and the sand oak, *Quercus geminata* (a.k.a. *Q. virginiana* var.

geminata). Although it is fast growing, it is very long lived. Trees in excess of 500 years were once common. It is variable in size depending upon its location, ranging from low-growing shrubs to magnificent spreading specimens. Trees growing in the open can reach 50 feet in height with a crown of 150 feet or more. Branches tend to grow low to the ground and spread before growing upward.

Live oak is an American native ranging from Virginia south to Florida and west to Texas. It can grow in moist to dry sites, but does best in well-drained sandy soils and loams. It can withstand floods, hurricanes, fires, as well as coastal salt spray and moderate soil salinity.

Live oaks are very easy to care for, requiring little watering until 4 or 5 feet tall, then no watering at all. In addition to propagation from acorns, they sometimes sprout from roots. Because live oaks are susceptible to freeze damage they are primarily a southern tree. Another major concern is oak wilt which has devastated many trees in central Texas, but to date there have been no reported cases in Milam County.

www.texasoakwilt.org

Leaves:

Leaves are stiff leathery in texture. They are 2 to 5 inches in length and ½ to 2 ½ inches wide, elliptical and concave, curling underneath at the edges. The upper surface is dark shiny green, and the underside is dull grayish green. Leaves remain on trees through the winter, falling as new leaves emerge during the spring.



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Flowers and pollination:

The flowers, typical of oaks, are catkins that hang down 2-3". They appear in very early spring and dust the countryside with yellow pollen. Pollen is dispensed by wind during April.

Fruit: Acorns are $\frac{3}{4}$ to 1 inch long, broadest at the base to almost uniformly wide and rounded out to the pointed tip. The area outside the cap is brownish-black, or purplish-black, but the $\frac{1}{4}$ of the acorn within the cap is a lighter brown color. Acorns occur solitary or in clusters of three to five nuts. They are sweet and edible and a preferred food source over other types of acorns by many types of wildlife.



Bark: The bark is dark brown to red-brown to gray. It is thick and longitudinally furrowed, eventually becoming blocky.



Twigs: Twigs are slender, gray and pubescent, with small blunt, multiple buds.

