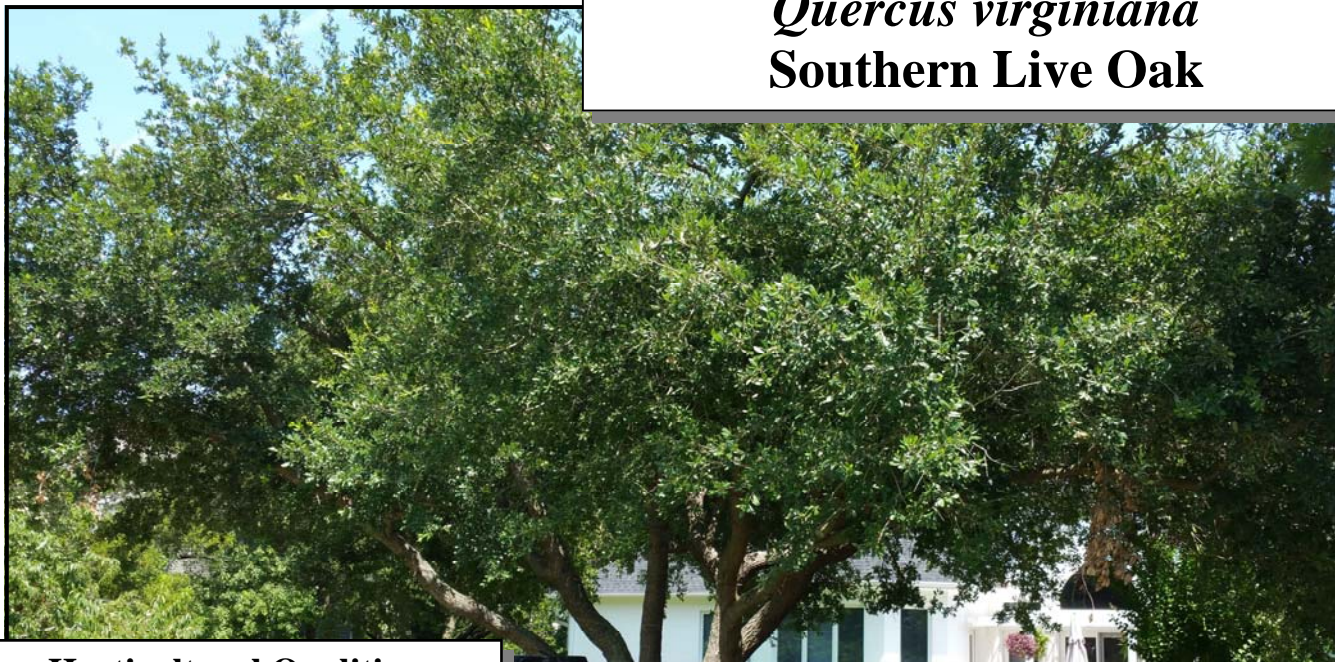


Arid Zone Trees



Quercus virginiana
Southern Live Oak



Horticultural Qualities

Quercus virginiana
Southern Live Oak

Foliage: Evergreen

Mature Height: 40' - 60'

Mature Width: 40' - 60'

Growth Rate: Slow to Moderate

Hardiness: 5-10 degrees F

Exposure: Full Sun

Leaf Color: Dark Green

Shade: Dense

Flower Color: Dark Green

Flower Shape: Nondescript

Flower Season: Spring

Thorns: None

Propagation Method: Clone/
Seed

Sizes Available: 25 gallon



www.aridzonetrees.com

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Quercus virginiana Southern Live Oak



Southern Live Oak, *Quercus virginiana*, has been part of the southwestern landscape palette for decades. While native to the southeastern US, it can be found growing wild along the coastal plains of the Gulf of Mexico and into Texas. Often described in the literature as evergreen, Live Oaks shed leaves in spring just prior to the emergence of new leaves. Drier, colder climates may contribute to greater, more seasonal defoliation.

Trees initially grow at a fairly rapid rate that slows as trees mature. Thick, darkly colored, vertically fissured bark is typical on maturing trees. Younger trees have relatively smooth bark. A dense canopy of deep green, leathery leaves, with a shiny surface and gray green bottoms, generate abundant shade, nearly year round. Live Oaks are incredibly long lived with some of the oldest specimens in the US estimated to be several hundred years old. Given this long life, mature height and spread are a function of age. On average trees can reach 50' tall with 80' wide canopies. No specimens this large have been yet found in the southwest. Estimates suggest that trees reach maturity in about 75 years. Small, brown flowers are inconspicuous, and wind pollinated in spring. Acorns fall in autumn and serve as a food source for many animals. Studies suggest that trees are cold hardy to 5 - 10 F.

Southern Live Oaks offer a durable, shade generating, typically single trunked tree to add to our desert palette. Trees respond well to drip irrigation in desert settings and have proven to be well adapted to desert soils and climate. In well drained soils and with proper irrigation, root systems are well distributed and shallow. For young trees, root growth and size is not necessarily reflected in canopy mass. In the

wild, these oaks display a variety for forms from single trunked to massive, spreading low breaking specimens that can reach 80' wide. Nursery grown specimens, for landscape plantings, tend to be single trunked. This form is ideal for streetscape and parking lot planting, as theme or perimeter plantings and screens, at entry monuments or pedestrians areas. They have also been used in golf courses, public parks and open spaces within residential communities. There is a clear need and place, within the designed landscape, for multiple and low break specimens that, up till recently, have not been available. Pruning of maturing trees, to lift up the scaffold branches, improves view lines, pedestrian access without reducing canopy shade.

Southern Live Oak can be propagated from seed and cuttings. There have been many Live Oak hybrid cultivars patents and marketed. Many of these are not currently commercially available or produced in limited quantities. Seed grown trees exhibit inconsistent horticultural traits, as would be expected from collected, potentially hybridized seed. Such selections can vary from massive spreading canopies to upright traffic/pedestrian friendly specimens. At present, seed propagated trees are the most readily available in Arizona wholesale production. In Texas you can find limited numbers of cloned cultivars. AZT has already begun an extensive screening and evaluation program to identify source trees to include in our 'Variety AZT' development program. It is our intension to bring a cloned Live Oak to the market within a few years that will have all the uniformity and superior horticultural properties you have come to expect from 'Variety AZT.'

Interesting Facts

The durability of Live Oak is legendary. The hull of USS Constitution, nicknamed "Old Ironsides," was build of live oak and survived naval battle cannon fire during the War of 1812. The scientific name *Quercus virginiana* was officially named in 1768 and means "fine tree of Virginia". <https://www.nwf.org/Wildlife/Wildlife-Library/Plants/Southern-Live-Oak.aspx>

Cultural Practices

Foster the development of a more dispersed root system and reduce the risk of wind throw by arranging irrigation emitters at varying distances from the trunk to encourage roots to "seek out" water and nutrients. Irrigation emitter arrangement along with other information on irrigations practices for desert trees can be found at www.aridzonetrees.com and click on the FAQ link.

Prune as needed to reinforce the structure and form of the tree. Periodic thinning is the most desirable method of pruning. Avoid hedging or heading back desert species, as this will only stimulate excessive branching. Do not remove more than 30% of the canopy during the summer as this can lead to sunburn injuries that can later be invaded by wood boring insects. Always use clean, sharp tools that are cleaned regularly in a 10% solution of bleach. For detail pruning guide see www.aridzonetrees.com and click on the FAQ interactive button.



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