

STORM DAMAGE

Due to the structure of the tree and the leaves, live oaks are cited as being resistant to hurricane wind forces and survive with only minor to moderate damage. In instances when a tree has been uprooted, arborists have been able to successfully lift some of these uprooted trees back into place (in cases where prompt actions take place and when carefully designed, cable support systems can often be applied - and are associated with relatively minimal root damage). Should branches be damaged from a storm or other man-generated activity, consult a certified arborist to advise on the best and proper way to remove or prune a large branch.

CABLING & BRACING

Sometimes when the tree grows in such a way that it can't support the weight of some bigger branches, a cabling system is necessary to take some of the stress off of those bowing branches. Cabling can also be added to reduce the load on a limb with rot and actually preserve the limb. If you think your tree needs cabling and/or bracing, contact a certified arborist.

SUMMARY

In closing, following the key components of proper planting in great soil, giving it the right amount of water and space, training through pruning, avoiding compaction above the roots and wound prevention, you will be rewarded with a beautiful shade tree that adds to the value of your property. However, sometimes it is necessary to remove a tree from where it is located. There are two options available. One is to hire a company to come and remove the whole tree and "donate it" to be planted at another location, more suited to its size and needs. If you need help in finding a new location for your tree, contact Friends of Live Oaks at our website and we can offer assistance. Make sure that the last resort is to have the tree cut down. If you have to take down a tree, check out this website for local businesses that maybe interested in salvaging, milling and/or using the wood: (<https://treesvirginia.org/services/directory>).



LOCAL RESOURCES

Where to buy live oaks locally:

Southern Branch Nursery
1412 Benefit Road
Chesapeake, VA 23322
(757) 373-7763

Four Seasons Nursery
961 South Military Highway
Virginia Beach, VA 23464
(757) 250-9069

Tidewater Trees- Sales and Transplant
5700 Fitztown Road
Virginia Beach, VA 23457
(757) 426-6002

Information and resources from planting to caring for your trees:

<https://dofvirginia.gov/urban-community-forestry/urban-forestry-homeowner-assistance/>

Finding an arborist:

<https://www.treesaregood.org/findanarborist/findanarborist>
<https://www.asca-consultants.org/default.aspx>

Tree salvaging:

Garrity Custom Sawing
<http://www.sawyersite.org>
(757) 717-3183



This document has been prepared in part with funding provided by an Urban and Community Forest Assistance Grant to Friends of Live Oaks from the Virginia Department of Forestry and the United States Department of Agriculture Forest Service.



FRIENDS OF
LIVE OAKS

A HOMEOWNER'S GUIDE



PROMOTE • PROTECT
PRESERVE • PLANT

THE SOUTHERN LIVE OAK is a majestic tree that can be the centerpiece of home landscapes if you live along the coast. This tree is known for its longevity and durability. Providing this popular shade tree with ongoing care will keep it healthy and looking beautiful for generations. The key components to good management of a live oak throughout its life are proper planting in great soil, giving it the right amount of water and space, training through pruning, avoiding compaction above the roots and prevention and proper care of wounds.

PLANTING



Live oaks are native to the coastal areas of Virginia, but can be planted further inland and do well in urban environments. Planting in the late fall will allow a quick root growth. It is best to plant field grown, root pruned, hardened young trees for the best success. If possible pick a tree grown as close to where you live so that it is already somewhat adapted to local climate conditions. Plenty of water paired with good soil drainage, in a large planting area is ideal. Make sure your planting location is large enough to accommodate the tree's mature size. Do not plant too close to curbs, sidewalks or driveways. Although the roots will grow under curbs and sidewalks when planted in confined spaces, making them thrive in urban spaces, the roots may eventually grow large enough to lift and crack surfaces. Avoid underground and overhead utilities and have the site checked first - call Miss Utility 811. The ideal planting location is in full sun to partial shade with moist, acidic soil made up of sand, loam and clay. However, live oaks can tolerate alkaline soils, salt spray and drought. When planting, do not amend the planting hole soil and do not fertilize in the first growing season. For specific planting instructions, see the Friends of Live Oaks website: <https://friendsofliveoaks.org/category/faq/> After planting, use a thin layer of a lightweight, non-compressible organic mulch over the planting site, leaving six inches cleared from around the stem base. Make sure the tree has plenty of room to spread by not planting it under utility lines, light posts, etc. Take special care to not place too much mulch around the tree - instead think of a small donut-like shape when placing mulch which can help hold water near the tree.

SOIL & COMPACTION

In general, oaks are considered to have some of the more sensitive root systems, so damaging live oak roots can wreak havoc on the tree. A significant portion of live oak roots exists in the upper 12 inches of the soil. This is crucial for the tree's access to the oxygen that is vital for respiration. This is why we tend to see live oak roots emerging from the ground with offshoots - or suckers - more than in many other species. It is important to have good soil drainage at all times. Therefore, you must minimize the compaction of the soil around the roots.

Covering the understory with dense layers of soil or synthetic barriers can pose significant harm to the live oak by depriving the roots of oxygen. Further, construction should not be done within the dripline of the tree, which is the outermost circumference of its canopy. Concrete, gravel, pavement and similar hard surfaces will restrict root growth, often making it necessary to cut the roots. It is best to avoid circling the entire exterior of the dripline with hard surfaces, as the root system typically expands two to three times outside of this area. While the tree can still survive if only a small portion of its root system is damaged, extensive damage to the system will have severe consequences on the overall health of the tree in the longer term. The tenacity of a live oak will not allow this tree to go down without a fight if construction occurs nearby. It is common to see sidewalk sections uplifted around a live oak, as roots in search of oxygen rise to the surface. You can prevent compaction by adding a fence or shade-tolerant plant materials to prevent vehicular parking, string trimmers and pedestrian traffic from damaging the root system. The safest way to manage the understory is light mulching, such as applying pine straw or allowing the fallen leaves to collect and naturally provide an organic mulch. Regardless of mulch type, too much will cause the roots to grown upward, making the tree lose the anchorage that keeps these trees resistant to high winds and storms. Therefore, no more than 2 inches of mulch material should be applied each year, and it is important to limit mulching if the previous year's mulch has not significantly decomposed. Certain plants can be safely planted in the understory. Those include native groundcovers with low sun requirements. Turfgrasses are not recommended below the canopy of live oaks because a healthy tree will not allow enough light for the grass below to thrive. More importantly, installation of grasses is usually done via sod, which introduces more soil than is preferred to cover the root system. A healthy root system will allow your live oak to respire more efficiently and remain anchored in the landscape, keeping this iconic tree in its place for decades to come.

GROWTH

Young trees grow up to three feet each year and the trunk increases about one-inch diameter under nursery conditions. The growth rate slows with age. As one of the longest-lived oaks, the Southern Live Oak may live 200-300 years. On a good site, a live oak should reach mature size in under 75 years.

FERTILIZATION



Once the tree is planted, establish a routine maintenance plan. In natural conditions, live oaks may not require fertilization, but in a managed landscape live oaks benefit from a slow-release fertilizer containing nitrogen, phosphorous and potassium. A 30:10:7 (nitrogen: phosphorous: potassium ratio) of nutrients will help maintain the proper

fibrous root hairs that absorb water and nutrients from the soil. With slow-release, you will only have to fertilize about every 2 years.

PRUNING



Live oak trees can live for such a long time, so it is very important to develop proper trunk and branch structure early in the life of the tree. To do this, you will need to reduce or remove multiple trunks that compete with the leader. Also, you should prune branches that form narrow angles with the trunk. These are more likely to create a split from the tree as it ages. A dominant central leader will provide the tree with strong branch attachments and an overall structure that will minimize wind damage. Prune the tree annually for the first 5 years, and then every 3 years until it reaches 30 years old. Inspect the canopy on a regular basis. If it looks like limbs are becoming too heavy at the ends, selectively thin those to lighten the load and prevent limb failure.

PESTS



Live oaks are usually pest-free. Occasionally mites infest the foliage, but they are of little concern in the landscape. Galls cause homeowners much concern. There are many types and galls that can be on the leaves or twigs. Most galls are harmless so chemical controls are not suggested. Scales of several types can usually be controlled with sprays of horticultural oil. Aphids can cause distorted growth and deposits of honeydew on lower leaves. On large trees, naturally-occurring predatory insects will often bring the aphid population under control. Boring insects are most likely to attack weakened or stressed trees. Newly planted young trees may also be attacked. Keep trees as healthy as possible with regular fertilization and water during dry weather. Should you notice this problem consult a certified arborist for assistance.

DISEASE

In Virginia, the Southern Live Oak is usually disease-free. However, there are some diseases you might encounter. Canker diseases can attack the trunk and branches. Keep trees healthy by regular fertilization. Prune out diseased or dead branches. A large number of fungi cause leaf spots but are usually not serious. Rake up and dispose of infected leaves. Powdery mildew coats the leaves with fuzzy growth resembling white powder. Shoestring root rot attacks the roots and once inside moves upward, killing the cambium. The leaves on infected trees are small, pale, or yellowed and fall early. There is no practical control. Healthy trees may be more resistant.