





Live Oak Overkill?

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To obtain a C.O. (certificate of occupancy), developers and builders are required to provide a minimum number of shade trees on a home site. One canopy tree is required for every 3,000 square feet of parcel area with a minimum of 2 trees per lot and a maximum of 15 trees per lot (45,000 sq. ft. or more). Many people mistakenly believe that live oak, *Quercus virginiana*, is *the* only canopy tree allowed per the Collier County Land Development Code Requirements, Division 2.4.

Far from it, see http://colliergov.net/planning/landscape%20web/developm.htm for more details as well as the native plant list, with some cold hardiness information, at that same web page.

Typical Florida yards may be 1/3 to ½ of an acre or smaller. Once the house is plopped on the plot of land, available landscape area really gets tight. Live oaks are long lived and eventually may attain a height of 60 to 80 feet and they are described as sprawling, with a canopy spread of 60 to 100 feet. Anyone that has observed these picturesque trees in New Orleans or central Florida recognize live oak as a tree of imposing stature; this is an estate tree or a tree that that looks magnificent in a pasture or wide boulevard plantings. Of course it takes decades to reach the majestic size range. However, this is a relatively fast growing tree and in some neighborhoods, after 10 to 15 years, the front view of a home is obscured. Look at some of the realty pictures from these older neighborhoods, the front of the house isn't even viewable through the thicket of live oaks.

To keep live oaks within bounds, some people resort to "roundovers" or lollypops and other poor pruning nightmares that develop yard waste that takes up landfill space. Even when the correct pruning technique is used, called canopy reduction, live oaks

do not take well to it as decay may enter large (greater than 5 inches diameter) branches that are cut.

Another concern with so many live oaks is that many neighborhoods are prime for a horticultural plague. A cardinal rule of thumb is to avoid planting too much of one variety or species of a particular plant. This is called a monoculture. If an outbreak of an insect or disease arrives on the scene that happens to thrive on live oaks as a host, the landscape will suffer due to the loss of these trees. Some diseases that became devastating because of a monoculture situation were Dutch elm disease, palm lethal yellowing (note: unfortunately the Malayan dwarf strains and 'Maypan' variety are susceptible to this disease) and then there is oak wilt disease (*Ceratocystis fagacearum*) which is a deadly disease in the Midwest and Texas. Recently, sudden oak death, a fungal, *Phytophtora* sp., caused disease, has killed thousands of coastal live oaks in California.

Many new housing developments in the county are using live oaks as the featured canopy or shade tree. The landscape code leaves the tree species choices open to allow for species not listed, but the focus is on native plants. The formula with code required canopy trees is that, "75% of the trees shall be native species". The code also will allow for a grouping of 3 palms to substitue for one canopy tree. "Exceptions will be made for *Roystonia* spp. and *Phoenix* spp. (not including *roebelenii*)." Palms can be used for up to 30% of the canopy tree requirement. Residential shrub selections are not covered by this code. The county web site lists 21 species that are large trees and 15 tree species that are listed as medium to small. So there are other smaller, interesting species to choose from that will meet county approval for the minimum (required) code tree requirements.

Think of using willow bustic, wild tamarind, Dahoon holly or Simpson stopper or blolly (may not be cold hardy east of HW 41) as smaller canopy trees that fit into the typically smaller Florida landscape. For plant pictures, see: http://www.plantatlas.usf.edu/

This presents a challenge to landscape architects, nurserymen and homeowner associations to look at the huge selection of other possibilities. Plants that we consider shrubs can develop into medium sized canopy trees. Some examples are buttonwood (*Conocarpus erectus*), stoppers (*Eugenia*), pigeon-plum, lancewood, and Walter viburnum to name a few.

Also consider nuisance characteristics of your tree selection. Live oaks can produce an abundance of acorns some years that attract birds and make a mess (see photo). Several caterpillars, including the pinkstriped oakworm will leave tell-tell signs of their feeding activity that can stain and mess up the driveway. Just when you thought it was safe to go out barefoot and get the morning paper!





The pinkstriped oakworm can also leave frass messes on your car or in your driveway.

For the 25% non-native trees that are allowed as canopy trees, after you have your required number of native trees, consider some of these for diversity: cassia, tabebuia, ylang-ylang; Japanese privet or glossy privet, and powderpuff shrub. Other characteristics to consider are flowering and whether the tree is evergreen. Don't forget fruit trees, but you need to watch placement to avoid fruit mess. Consider mangoes, sapodilla, grumichama and many others.

Look for pictures and scientific names of the trees mentioned and many more in, 'The Trees of Florida' by Gil Nelson (1994, Pineapple Press).

Doug Caldwell is a Certified Arborist and the commercial horticulture extension agent with the University of Florida Collier County Extension Service. The Cooperative Extension Service is an off-campus branch of the University of Florida, Institute of the Food and Agricultural Sciences and a department of the Public Services Division of Collier County government. E-mail dlcaldwell@mail.ifas.ufl.edu; call 353-4244. Extension programs are open to all persons without regard to race, color, creed, sex, handicap or national origin. For updates on the Southwest Florida Horticulture Learning Center visit: http://collier.ifas.ufl.edu