

# Planting and Caring for Palm Trees the Right Way



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What tree more typifies a tropical environment than a palm tree? There are over 3,000 kinds of palms, and many of them can be grown in the southeastern U.S.

The first consideration is the temperature range where you live. Many palms cannot take temperatures that drop below 32 degrees for more than a few minutes. However, there are also many palm species that can tolerate temperatures that dip below the freezing point for a few hours.



Phoenix sylvestris, Silver Date palm. Photo: Chris Runge, Landscape Concepts

There are palmate (fan-shaped fronds) varieties, such as *Trachycarpus*, *Chamaerops*, *Rhapidophyllum*, *Nannorrhops*, *Serenoa*, *Sabal palmetto*, *Trithrinax* and *Washingtonia*. Pinnate (feather-shaped fronds) varieties include *Jubaea*, *Butia*, *Phoenix* and *Syagrus*.

Some palms can love an environment, while others struggle in the same one. Take the Canary Island Date palm, which hates the south Florida coastal environments. Many times they are yellow to orange in color due to fertilizer deficiencies, or are in decline from attacks by pathogens and insects. Their cousins, Medjool and Silver Date palms, on the other hand, love the environment. They can take the climatic ranges in humidity and salt spray, and do well in alkaline soils.

The Chinese Fan palm, which was, and can still be, a desirable ornamental palm in south Florida, has now escaped captivity and has been listed as an invasive plant.



Bismarckia nobilis, Silver Select Bismarck palm. Photo: Chris Runge, Landscape Concepts

## Planting and care

The key to a palm tree's success is the care it receives during removal and transportation, the root ball it is delivered with, the depth of planting, and proper staking and watering.

While still at the nursery, the palm tree will require special attention from the grower. They will need to correctly prune and fertilize the tree. When removing the palm from the nursery row, care will need to be shown to cleanly cut the roots, not ripping it from the earth. The trunk will need to be protected from scarring by using burlap and a padded tree sling, not steel chains, to lift the tree. Once loaded on the truck, the tree will need to be securely fastened (again, without chains) and the bud and crown of larger palms supported by wooden bracing. The key is to deliver the tree in the same condition in which it was growing.

The size of the root ball is directly related to the height, caliper and density of the head of the palm tree. If a root ball is too small, there will not be enough viable roots for it to survive; too large a root ball and the tree becomes impossible to move. (See sidebar for details.)



Proper excavation and sizing for the scale of the root ball. Photo: Chris Runge, Landscape Concepts

The root ball should be tight and compact, with no sand or dirt falling off, and ragged root tips extending from the soil. Where specified as balled in burlap, the root ball should be securely wrapped and pinned with burlap. This protective wrapping needs to be removed prior to planting.

Once planted, and depending on the size, the palm needs to be properly staked. The trunk should be once again wrapped with burlap, then wood blocks attached on top of burlap with stainless steel banding. Wooden bracing works best for supporting a palm tree during the grow-in period. These braces can range in size from three to four pressure-treated 2x4s to four pressure-treated 6x6s for large critical palms. The bracing is then nailed into the wood blocks, not the tree. The braces should stay on a minimum of six months to as long as one year to ensure the tree's full establishment.

There are two reasons to brace the tree. The first is liability. You would not want a 6,000-pound tree falling on a home or homeowner. The other reason is survivability. For many palms, once the palms roots are cut they do not form root caps and generally cease to function.

Only the roots contained within the root ball are providing the translocation of valuable water and nutrients. If the tree is not staked, it will rock back and forth in the soil and, as the new root caps emerge from the root ball, they will be snapped off. Then the process must start all over in perpetuity until the palm tree dies.



Correct installation and proper handling by Haupt Nursery, Inc. Photo: Chris Runge, Landscape Concepts

Palms need substantial amounts of water after installation, at least daily for 30 days, and then two to three times per week for the next 60 days. Once established, most palm trees do well on naturally occurring water sources and supplemental irrigation.

Palms can be heavy feeders and require 5 to 20 pounds of fertilizer per tree, up to four times per year. The general rule of thumb is 1.5 pounds of nitrogen per 100 square feet of canopy of tree. Using the 8 percent rating for the product below, 1 pound of 8-2-10 contains 1.28 ounces of nitrogen, hence, 18.75 pounds of 8-2-10 needs to be applied to reach a rate of 1.5 pounds of nitrogen per 100 square feet of canopy.

The fertilizer you choose should also carry the correct balance of micronutrients. Palms need a balance of NPK, iron, sulfur, magnesium and manganese. Most fertilizer companies carry a product labeled as “palm fertilizer” already containing the correct balance of elements.

Once it’s growing, you eventually have to trim the tree. The only fronds that should be removed from the tree are dead ones. The tree knows when enough is enough and some palms, such as *Cocos*, *Pseudophoenix*, *Acrocomia*, *Adonidia*, *Archontophoenix*, *Chrysalidocarpus* and *Roystonea*, are actually “self-trimming” in that they shed the old fronds on their own. This is not to say that in cases where the fronds infringe against hardscape or walkway spaces they should not be trimmed, they should just not be over-trimmed, which is a serious maintenance concern.

Root Ball Size		
Overall Height	Width of Ball	Depth of Ball
15 feet	8 inches	12 inches
15 to 25 feet	10 inches	18 inches
26 to 30 feet	12 inches	24 inches
30 feet	14 inches	24 inches