



Stephen &amp; Kristin Pategas

## in the garden *by Stephen and Kristin Pategas*

### Frozen

Central Florida has experienced numerous life and economy changing freezes since Europeans inhabited the area. The most talked-about freezes by current inhabitants are still the back-to-back freezes of 1894 and 1895 when early settlers lost their citrus groves and livelihoods. Due to the loss of citrus this was the only time the area experienced a severe loss in population. For us, our signature freezes were in

not tropical garden paradise. While icicles still hung from irrigated plants, we toured landscapes and took notes about which “cold hardy” plants were damaged by the cold. Citrus trees were killed or frozen below the graft to the sour root stock, hibiscus were dead and many other ornamentals including ligustrum trees and viburnums which created privacy were severely damaged. When the sun came out, bark popped off of frozen trunks and limbs of bottlebrush trees. Trees and plants continued to show the horrific effects for months. At that time we developed our cold hardiness threshold rule – in a garden we design, no privacy plantings, major specimens or more than 25 percent of all plantings should be non-cold hardy.

Fast forward 25 years and we haven't had another major freeze. Once again, South Florida plants have established

a toe hold in our gardens and many homeowners are surprised when a frost appears and the lawns or tropical plants turn brown. Climate change is creating a warming influence globally, but in Florida will it eliminate cold weather or more importantly the hard freezes? In December of 2010, Orlando had an average monthly temperature of 52.0 degrees which was 11 degrees below normal. This was the coldest December on record (since 1948) and the previous low was in 1989. While we avoided a hard freeze that month, it was just plain miserable for humans and many plants.

There are a substantial number of tropical looking plants that we can use in Central Florida. Many of them won't make it through hard freezes but most can handle what the last 25 years has thrown at us. Our 25 percent rule is now creeping closer to 15 percent. For that super-lush tropical look (unless you want to be liable for plant replacements) we suggest you find a good warm micro-climate on your property or head to points far south in growing Zone 10b.



1883, 1885, and 1889. We arrived in Central Florida in July of 1982 expecting a perennial tropical paradise. On Christmas morning in 1983 we awoke to rolling brown-outs with almost every garden plant dead, dying or damaged. The Frost Warning Service established in 1934 totally missed the forecast so even Florida natives were in shock. Our beloved hanging spider plant basket purchased at the UMASS plant sale and driven down in our van was...toast. No one had warned us there had been a hard freeze in January of 1981 just 18 months before our trek south and many more (1894, '95, '99, 1917, '34, '40, '57, '62, '77, '81) over the previous 100 years. Welcome to Florida!

After the subsequent 1985 and more devastating freeze of 1989 we wondered exactly which plants would thrive in what we realized was obviously a sub-tropical, sometime temperate and definitely



Left, oranges litter the ground after the 1895 freeze. (Photo credit, State Archives of Florida.) Middle photo: Iced-over pentas in December of 2010. Right, Cold hardy to Zone 8b, the pindo palm has tropical looking feather-like (pinnate) fronds.

Photos by Stephen G. Pategas, Hortus, Oasis.