

Unofficial Report, TPPD Workshop November 18, 2011
By Richard Formica

What is TPPD?

TPPD is Texas Phoenix Palm Decline a bacterial disease that is killing our Sabal Palms. And, unfortunately, the Tampa Bay Area is a hotbed of the disease.

On Friday, November 18th, I attended an all day workshop at the County Extension Service on County Road 579. Speakers were from the New College of Florida, the University of Florida, The Florida Department of Agriculture and Consumer Affairs, Landscaping Businesses, the County Extension Service and a local City's Parks and Recreation department.

Ph. D Michael Andreu, from the University of Florida, hosted the workshop and opened the session talking saying the Sabal Palm has economic, cultural and social value to Florida. To begin giving the details about these parts of Florida life he introduced Mr. David Fox from the University of Florida's School of Forest Resources and Conservation.

Mr. Fox said the Sabal Palm and its relative's the Cabbage and Palmetto Palma have unknown life spans and are more like a plants rather than a trees as they have no rings in their stems (trunks) like trees. There is no doubt it they are an abundant tree, but little is known about their ecology or physiology. Their "native" range covers 95% of the Florida peninsular and their horticultural range is between temperatures of 15 and 20 degrees. They have no winter dormancy and are resistant to fires, hurricanes and flooding. But, is it a "keystone" species? We have "always" known about the Sabal Palms importance to community appearances, Native American history, local animals and vegetation, but to what extent do they provide food, shelter and "services" to local social and economic systems? These are some of the unknowns that are only now beginning to be studied. The Palm is a commercial and charismatic tree. Commercially it provides jobs for growers and landscapers, it is our State Tree and its likeness is on the State Seal, coins and a myriad of printed souvenirs. Imagining what will happen if the Sabal Palm succumbs to TPPD is hard to fathom. How will their loss affect the structure of our forests? What niches will be vacated? Can changes in management practices help control the spread? These and many more questions are finally being addressed; as Mr. Fox said in concluding, "notice how we don't get interested until it begins to affect the economy."

Mr. Jono Miller, a Director of Environmental Studies at the New College of Florida in Sarasota was introduced next to also talk about the economic and cultural importance of the Sabal Palm. Landscaping and tourism are both part of the economic picture involving the Sabal Palm. Coupled with the planting of palms at nearly every new construction site are the nurseries that raise palms for the landscaper. An interesting statistic concerning the survivability of planted palms shows that, lately, five percent of newly planted palms are not surviving their one year guaranteed time period; whereas until several years ago only one percent of newly planted palms were not surviving. Is the cause TPPD? The answer is unknown. But landscape architects may be seeing the handwriting on the wall as fewer palms are being included in new plans. Of course tourists expect to see palms when visting Florida. They also expect to be able to buy products made from palms, especially products made from palm leaves like hats and baskets.

Culturally the palm has always been part of Florida history. We still do not know the exact life span of a Palm. Estimates range as high as 200 years. Stories, drawings, paintings and finally photographs abound, though throughout State history showing the Palm. The Palm is now officially the State Tree, its image appears as part of the State Seal and on the State Quarter. The Palm has appeared in many movies; one well known location was at Silver Springs and one starred Elvis. Mr. Miller concluded his presentation by saying maybe the tendency to over prune palms is contributing to the spread of TPPD. He said one should never cut off green fronds as chemicals are released from the stems that attract Palmetto Weevils.

Dr. Nigel Harrison from the University of Florida, Plant Pathology Department was introduced next to speak about the pathology of palm diseases and the diagnostics of TPPD. The causes of problems that affect palms are numerous, there include bugs and weevils; root and stem rot; nutritional deficiencies and saltwater intrusion. TPPD apparently differs from “yellowing disease as the bacterium involved with TPPD are different from those associated with yellowing disease. As for the vector or the means of transporting or transferring TPPD from one palm to another; it appears several forms or types of insects are possibilities. Dr. Harrison said TPPD is fast acting and seems to take out immature palms (immature was not defined.) more so than well-established palms The loss of the palm’s fruit is a helpful diagnosis. A complete diagnosis requires holes be drilled in the trunk and samples be microscopically examined. Eight palm species are known to be affected. Research is underway to find quick and accurate ways to determine if affected trees are suffering from TPPD or yellowing disease. The ultimate economic impact is unknown. The locations of diseased palms are spotty, but it is spreading uncomfortably rapidly.

After Dr. Susan Halbert, from the Florida Department of Agriculture and Consumer Services was introduced, she began by telling us about the locations of the disease, where it seems to be spreading and the possible vectors or responsible creatures doing the spreading. The current locations include, but are not confined to Lee, Hillsborough, Pinellas, Polk, Sarasota and Manatee Counties. The disease was first noticed in the Ruskin area in 2006. The cause is attributed to a group of phytoplasma type organisms that appear to be transmitted by planthoppers or leafhoppers. Because so much is unknown about TPPD more management and care of the sites where the disease appears is needed. Areas around affected trees need to be kept free of debris. Studies need to be conducted to determine the source of the palm and the exact numbers and types on insects in and around it. More information is needed! Any regulations enacted to protect the palms must be balanced and fair so as not to negatively impact nurseries and landscapers

Mr. Rob Northrop, Extension Agent from the University of Florida, Hillsborough County Extension Service was introduced after a lunch break and the opportunity to explore the Extension Service’s eco-friendly location. Mr. Northrop’s presentation was about Palm decline, primarily, in Hillsborough County. It was local horticulturalists that apparently first noticed the problem in the Ruskin area in 2007. Included in the problem area was E.G. Simmons park. This park was created by filling in areas of Tampa Bay. The palms planted in the park are now mostly dying. Along a section of Brandon Parkway another die off was documented. Here it seemed like every other of the many newly planted palms were affected. The questions that came up was it insects causing the problem; was it nutrient problems; were the affected palms native or “imported;” was the problem environmental or a management problem; and did the “location” of the palm-surrounded by grass or in more native like forest area-make a difference? Because of the severity of the problems and the many unknowns molecular level sampling was begun in

an attempt to identify the cause or causes. This is still going on today. It is hoped the greater genetic diversity of native palms versus nursery grown palms might supply some answers.

Mr. Bryan Dick from the Lakeland Parks Department was introduced to give another local perspective on the problem. He said Lakeland first noticed the problem in 2006 and wondered if maybe the hurricanes of 2004 may have started the infections. His department documented that if palms with 25 percent or less of their leaves affected were treated with antibiotics there was a chance the palm would survive. But if more than 25 percent of the palms leaves were dead or dying it was too late to initiate treatment. Treatment required drilling holes in the trunk of each palm and injecting the antibiotic. A minimum of 3 treatments a year was found to be necessary. This is very expensive. Lakeland had nearly 8000 palms and the estimated cost for treating them was nearly 7 million dollars. Treating them all turned out not to be a recommended option, so as budgeting permits only the more expensive palms in selected locations will get treated.

This ended the planned presentations, but before a question and answer session ending the workshop, Dr. Andreu opined some thoughts: what don't we know and what do we need to know? It is obvious, he stated, we need to nail down the source or sources of the infections. He also asked, do infected or dying palms contribute to the infection of other palms nearby; should a dead palm tree be removed or should it be left to visually send a message to the "public" and are there less invasive, more cost effective treatment options available?

One of the first questions was do you (to the presenters now taking questions) know an elected representative who knows what TPPD means? The consensus was while one or two know what it means, by and large "they" do not seem to care. Because the palm is not a commodity crop, the public's finances and health gets more attention. This is not to say the Sabal Palm is not important to Florida, it is a sight tourists expect to see, it is on the State Seal and it provides economic benefits to planners, growers and landscapers. The problem is just on a politician's radar – yet. A question I asked had to do with the usefulness of the public being aware of the problem and being on the lookout for affected palms. I first, briefly, described the THAN sponsored Tree Watch Program and asked if such a program would or could be helpful spotting diseased palms. Several presenters responded enthusiastically saying they thought it was a good idea. Dr. Andreu asked me to speak with him after the workshop about this idea. On this interesting note the workshop concluded.

More information about TPPD, including a map of counties impacted by the disease may be found at: <http://edis.ifas.ufl.edu/pp163>

http://www.freshfromflorida.com/pi/enpp/ento/tx_phoenix_palm_decline_info.html

After the workshop I did speak with Dr. Andreu. I again briefly described what I knew about the THAN's Tree Watch Program. I said it was still in its infancy and there as a much more knowledgeable person heading the effort. He suggested if there is interest in adding inspections for TPPD to the program to contact him at: mandreu@ufl.edu. He stressed, any palm inspections should include being on the lookout for too much pruning. The details of THAN's Tree Watch Program participants getting involved needs to be worked out. So as they say, "stay tuned".