

CARMEL AT VANDERBILT LAKES

PALM TREE DISEASE

OVERVIEW

There are 87 Queen Palms located around the property in front and at the rear of homes, at the main entrance and along Winthrop Circle. Although most of these trees were planted at about the same time, there is great diversity in relationship to height, trunk length and girth and health. The community is concerned with the overall health of the trees and especially the presence of Ganoderma Fungus, a pathogen that is lethal to palm species. Additionally, available replacement trees are a concern since the available planting spaces are more suitably sized for palms or small hardwoods.

INSPECTION

It is my opinion that the majority of the trees look better this year than they did last year. Nutritional deficiencies were evident last year and advise to correct was given. Although past problems related to lack of Manganese or Potassium could be responsible for the group problems and sizes in general, most of the current problems look like Boron deficiency. The irregular shape of the leaflets along the palm petiole and the frond configuration point to Boron problems.

I found 16 trees that in my opinion show nutrient problems and should be considered for a better feeding program or considered for removal. The addresses will be shown in the text at the end on a separate page. Feeding these trees should be done either through the application of a granular product, a water soluble liquid product or a combination of the two methods.

A granular fertilizer should be a "Palm Special" that is higher in Potassium and micronutrients such as magnesium, manganese, boron and sulfur. Each individual tree should receive about 5 pounds of product and this should be done 3 to 4 times per year. The material should be broadcast around the base of the tree but not directly on the wood or the roots of the tree.

Liquids are just as effective and can be used as long as the proper rates of the product are applied. The most common problem with either product is that they are under applied and therefore ineffective when it comes to delivering what the tree needs to stay healthy.

GANODERMA

As mentioned in the Overview, Ganoderma is a lethal pathogen of all Palms. For some reason, it is far more common in Queen Palms but don't be fooled into thinking it cannot attack Royals, Foxtails or other palm species. As hosts go, it can attack healthy or unhealthy trees and can live in the soil around the roots for years after the palm is gone. It can also be present in the soil yet none of the trees show signs of infection!

Armed with this knowledge, it would be foolish to think that Queen Palms killed by this disease could be replaced with other Palms. The limited area certainly warrants the use of Palms; however, the best solution would be some type of small scale hardwood like Ligustrum, Orange Geiger, Tabebuia 'Ipe' or Barbados Flower Fence.

It may be wise considered proactive to consider removal of the Queens now with a solid replacement plan of Palms and Hardwoods but as I stated earlier, there could be Ganoderma Fungi in the soil that has not affected the trees yet so the use of Palms would always be a roll of the dice.

SOLUTIONS

1. Remove Queen Palms as they die and replace them with hardwood species that will fit into the surrounding area. This plan could be modified to also phase out or remove weaker or smaller Queen Palms that are not aesthetically pleasing. A list is provided of possible candidates.
2. Remove weaker Queen Palms plus any others of you're choosing at this time and replace with a pallet of both Hardwood and Palm trees. The use of both types of trees would be in situations where a Hardwood just won't work and future problems with Ganoderma would not be as devastating if only a small number of trees could be infected.
3. Devise a plan for a full scale removal of all Queen Palms throughout the Community and replace with Hardwoods or a mix of Hardwoods and Palms.

My feelings are more along the line to replace the weaker trees now. There are enough choices and diversity in smaller hardwoods where the Communities appearance would be improved. Placing a Palm Tree here and there would not hurt as long as cheaper species are used and at least placed in areas where there is no evidence the disease exists at this time.

Removal of all trees and replacement would be an expensive undertaking for the Community which I don't recommend because there will always be the concern of Ganoderma or a new disease at some future date that could damage Palm species.

Addresses of Queen Palms Showing Nutrient Deficiencies

28728	28760	28788
28724	28762 (2)	28786
28722 (2)	28772	
28718	28776 (across street)	
28706	28777	
26712	28781	

Weaker or Smaller Trees to Consider For Replacement

28720 -- Very short and could be replaced with no visual loss

28714 - Very short by the street

28757 -- Has two very small trees in front

28763 -- Very small with nutrient deficiency

28778 -- Very small and unhealthy looking