

## Subject: Frost Damage

In the last week we have experienced an unusually long and cold week with hard freezes occurring in many locations including the Kings Point community. These freezes can have a short and long term affects on our landscapes. Our POC contacts and homeowners will have many questions as they start to notice the change in the landscape. I wanted to provide a few answers to some of the possible questions that maybe asked.

**St Augustine Lawns:** The freezes are no big deal most years because lawns are semi dormant and freezes are hardly noticed by our clients and homeowners. However; this time lawns were fully green and even growing, so freezing temperatures will make some big changes in the lawn appearance. Although lawns will be damaged, this for the most part will be just a temporary setback for healthy lawns. In light frosts and freezes the upper blades of grass are apt to freeze when the temperature drops below 32 degrees. As ice crystals form in living tissues they break cell membranes and kill the cells. The first sign of this type of damage is a blackening of the leaves which shows the morning after the frost. You are apt to think that something black like oil has been applied to the lawns. Within a few hours these black areas dry out and turn brown. The browned tissues are dead and the lawn will remain brown until warm weather returns and new leaves grow.

A single freeze event is not apt to kill St Augustine unless temperatures drop below 28 degrees for several hours. These hard freezes can kill St Augustine runners causing dieback of large areas of the lawn. However, repeated light freezes in late winter and early spring can kill St Augustine by causing it to use all its stored food reserves before it can replace brown leaves. It will require a few weeks of warm weather to determine the extent of freeze damage and we are not totally out of the woods on winter injury until sometime in March. As long as you have some green runners with white health tissue you are still OK.

Many turf areas in Kings Point have been hit hard with the recent freezes, especially the wide open areas with very little protection from trees and buildings. ValleyCrest will continue to monitor all turf areas throughout the community and apply best maintenance practices to help with the recovery process.

**Shrubs and Trees:** It takes a pretty hard freeze to damage woody plant material. Plants from hardiness zone 9b and 10 are the most sensitive. Plants that have survived in our landscape for several cold years may be totally devastated by these freezes. Hibiscus, Ixora, Gold mounds, Plumbago and Arborcola have been damaged in many Associations. Foxtail palms are apt to have bud damage from the freeze and so will Adonidia palms. Hardy plants should recover quickly when warm weather returns.

**Some plants may show delayed damage:** The effect of the freeze may not show for several weeks on some plants. These are plants that will die from the stresses of recovery. St Augustine may appear to recover but can be killed by the next frost.

**What can we do?** Beyond covering cold sensitive plant material there is not much we can do. Recent rains should have created good soil moisture conditions so drying of plants during a few days of cold weather are not apt to be a problem. Many plants that were covered by homeowners still received a significant amount of damage do to the extended freezing temperatures.

Refrain from pruning ornamentals until we are certain the threat of frost is over. I know your next question will be regarding the exact date. Well, we need to be somewhat flexible. Most experts agree the threat of frost is over in Florida sometime in middle March. I know it is difficult to see the landscape looking so poorly but it will not take long before things are green and blooming again.

Before pruning back plant material, be sure to make the cut into live wood. Do not remove living plant parts that contain stored up food reserves. Remember that pruning scars will only heal if the cuts are made into living tissue.

Cold injury may appear as a lack of spring bud break on a portion of or all of the plant. Some may show an overall weak appearance. The outer branch tips maybe damaged, while older wood can be free of injury.

The "line" between dead and live wood will eventually be "marked" by the growth of a new bud. If you are still not sure, a small scrape of the bark with a sharp knife will show either a green or darkened growth layer. Cold injured cambium layers under the bark will be black or brown in color and live tissue is green. Prune these branches behind this point of discoloration.

ValleyCrest will continue to implement all best management maintenance practices to help restore the landscape back to the way that you have been accustomed to seeing it as the warmer weather returns, thank you for you cooperation.

John Cornelius

**ValleyCrest Landscape Maintenance**