

## Frost –damage Shrubs

Frost damage in plants results from the liquid inside individual cells freezing and forming ice crystals. The crystals then rupture the tough cell walls. When the cell walls open the fluid inside will not be contained so when the ice melts the fluids simply drain out causing the classic “cooked spinach”, wilted look.

Freeze damage is progressive within plants. The softest tissues like leaves and tender new shoots and hurt first. Tougher stem tissue and buds down from the tips withstand more damage but are not immune if the temperatures are lower and the duration is longer. Limp, dry and brown leaves damaged from frost stand out easily. Damage to stems and buds remain hidden for the most part.

Recognizing how far down the stem damage has occurred takes a trained eye or luck. Tissues may appear undamaged but the damage hides latent until the spring flush of growth.

With this in mind, the wise gardener waits until the new growth starts in the spring (March to April) to find the point along the branch where the damage progressed. The site along the branch where the buds break out in new spring growth, marks exactly where the damage stopped.

One more important thing to remember: the more severe the damage the longer it takes for the older buds to emerge. Young, undamaged buds break and grow early. Buds in older parts of the plant need more warmth and other stimuli to begin to grow.

When you find the exact point down the stem you can make the appropriate decision as to where to prune. Either cut about ½ inch above the bud if it’s going in the right direction or go farther down and find another bud going in a better direction and cut it the same way.

This extra care and proper cutting helps the plant by directing its growth initially thus relieving in later fix-up cuts that weaken a plant. Remember pruning is tough on plants. It removes leaves that make energy for the plant and the plant must expend energy to heal the wound.

So, fewer and better cuts cause the least damage to plants.

## Lawn

St. Augustine grasses, including Floratam and Palmetto, have a low cold tolerance. In some areas of southwest Florida, it is not possible to have an attractive, green lawn throughout the winter. Injury occurs at low temperatures even in the absence of freeze and frost. Cold damage affects the leaves, runners and roots. If one of more of these essential organs fails, the grass declines leaving the whitish-brown to dark brown necrotic areas.

For now, abstain from increased daylight with trigger St. Augustine grass from semi-dormancy state to more active growth.