

Frost Damaged Plants

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Phoenix got frosted! January 2007 saw some of the coldest temperatures in Phoenix in twenty years. Whenever we get temperatures in the low to mid-twenties it can really devastate our landscapes. Many frost-sensitive trees and shrubs can survive freezing temperatures for a night or two, but lower temperatures are deadly for many non-native and even desert-adapted flora. Some areas of Phoenix got down into the teens! That's a recipe for widespread frost damage in the Valley of the Sun. Unfortunately, frost covers or Christmas lights don't help much when temperatures drop that low.

Well, what do you do now with your plants? Here are some tips. First, you should wait until after February 15th to trim back dead leaves and branches. This is the average last day of frost each year in the Phoenix area. If you prune before the 15th, there is a risk of another frost and worse damage to your plants. The dead leaves after a frost provide some insulation against more cold temperatures. Speaking of insulation, consider foliage as a plant's winter coat. For this reason, never trim frost-sensitive plant varieties in late fall or winter. And after a frost, leave the dead foliage on until after February 15th.

February 15th. Barring a forecast for more cold weather, you can begin Spring pruning at this time. Some small shrubs and ground cover can be radically pruned back to stubs. You can also try to cut them back selectively, retaining as many live branches as possible, but if they can stand to be cut back further, they will often re-grow more uniformly and the pruning is simpler and faster. How you trim them depends on the type of plant and the extent of damage. Some plants can sustain heavy pruning. Others are more sensitive. Consult your local arborist or nursery for guidance on plants that can sustain radical pruning.

How to check on the extent of damage: With trees it is even more important to know how far you can trim them back. To determine the extent of damage, you can do two things: Investigate on your own after February 15th or wait until your tree re-foliates. If you don't want to or can't wait because you need your landscape back to normal sooner, this is an easy way to find out how far the freeze affected your plants: Starting at the smallest dead branch tips, use your thumbnail or a small knife to scratch the bark to determine the color of the underlying tissue. If the cambium below the bark remains green, the tissue is alive; if brown or black, it likely is dead. Continue on to larger twigs, stems and branches until you find green cambium. When you find the green tissue, you can safely remove the damaged foliage outside that area. Some tree and shrub branches are hard to tell. If in doubt, consider them alive. You can always prune

them out later. Remember to check branches on all sides of the plant. Some can be more damaged than others in protected areas.

A second method: The other option for determining the extent of damage to your plant is to wait until bud break. For some plants this may be right around February 15th. For other plants it may be several weeks later. At bud break, trees and shrubs re-foliate and let you know exactly how deeply they were damaged. The branches that are dead will not re-foliate and you can simply cut back just above where new growth emerges. On some trees you may be surprised that just leaves and small stems were damaged. If this is the case, those leaves will dry out and drop, the tree will re-foliate and you may not need to trim at all. Other times there may be slightly more damage and longer dead leafless branch tips. You need to decide whether to cut them or leave them. If you can stand to live with dead branch tips for a year or more, new growth can eventually grow past the dead ends. This usually is best for larger trees that are difficult to reach and with less than 12 inches of dead tips. If your damage is deeper than a foot into the tree's interior, it may be best to go ahead and prune the dead branches. Also, you should prune them if you don't want to look at dead branches all year.

Avoid heading cuts: Be sure, when pruning out dead branch tips, to avoid heading cuts if possible. Heading cuts result in a flush of new disorganized growth from the ends of each cut branch. This is another reason not to prune lightly damaged branch tips unless you have to. Alternatively, hire a trained arborist who can make proper pruning cuts. Avoid shearing.

Look out for sunscald: Although trimming out dead branches dramatically helps improve the appearance of frost-damaged trees and shrubs, remember that your plants will now be more exposed to sun without the normal protection provided by their foliage, even dead foliage. The shade provided by dead branches and leaves may give needed protection to your plants while new foliage gets established. Especially keep this in mind with sun-sensitive plants like citrus. Maybe it would be best to live with the deadwood until the re-growth is healthy. Then remove it incrementally as new foliage grows up and into the dead branches. The aim is to protect the sensitive bark and other interior parts of the plant as hot temperatures arrive. And you can provide that protection by live branches or dead. Plants with south or west exposures are most vulnerable to sunscald.

Some helpful remedies: While your trees and shrubs are recovering, you can encourage healthy re-growth by irrigating carefully. A Spring fertilizer application with nitrogen would also be helpful, never more so than now when lush and vigorous re-foliation is so needed.

If you have any further thoughts or questions, give us a call. We're here to help get your trees back in shape as soon as possible!

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