

Preventing toppled trees

Those of us who live and garden in the desert need to be prepared for difficult weather conditions in every season. Not only must we face the challenges of dry air and wide temperature ranges, we must also be ready for the exertion of strong winds. Because deserts tend to have few large items (such as forests) to interfere with them, winds can bluster across wide areas. On the positive side, we have come to rely on them to blow away some of our worst air pollution, but violent winds can also devastate landscapes.



One form of landscape trouble often blamed on the wind is toppled trees. While it is not impossible for this to occur, fierce winds may not necessarily be the cause. Many people have already heard that it is essential to plant a tree or shrub in a well-prepared site.

Something as simple as digging the right sized hole can often prevent tree loss.

When starting the process of planting, first look at the part of the tree that will go into the soil – the root ball inside the nursery pot. The size of that root ball will determine how large to make the hole. For instance, if it is a foot tall, then make the hole a foot deep, and not deeper. The width of the hole is at least as important – it should be three to five times the width of the root ball. That may seem to be a huge expanse, larger than many guidebooks recommend, but with our soil, this will give the roots ample space to spread.

Carefully spread the roots out without breaking them. Do not leave them tied together with metal or plastic, which will not decompose in our lifetimes. Frequently, trees fail or fall because the roots continued to grow into an ever-tightening ring, an event called “girdling”. Such roots can neither anchor the tree in the ground nor extract nutrients and water from the soil.

When it comes to refilling the hole around the tree, there is more than one school of thought. Some people insist that only the soil initially dug out of the hole should be used. Most Southern Nevada horticulturists, however, believe that local soils have such low fertility levels that they need at least some amendment.

If you decide to go with the majority opinion, add a small amount of soil conditioner (compost) or slow release fertilizer to the soil at the outermost part of the hole, not just around the root ball. That will encourage the roots to grow.

All life depends on water. Water is critical everywhere plants grow, but in the desert, it is up to the gardener to provide it. Many local trees planted in lawns received the bulk of their irrigation from lawn sprinklers. This is not enough, especially when turf grass has been removed. Trees will suffer unless many more emitters are added. Watering deeply encourages roots to grow deeply. This is a key to getting trees firmly anchored in the soil, resistant to buffeting from winds.

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