

## How to Conserve Water AND Save Your Plants

Well, the drought continues with no real end in sight. We cannot and should not waste water, but we don't want our plants to die either. So what are homeowners to do? Fortunately there are a number of things we can do that might help.

As the drought continues, different plants will suffer to different degrees. In general, the least xeric and most recently planted plants will suffer the most, followed by established plants native to higher rainfall areas, followed by well-established native plants, and finally xeric (drought-tolerant) plants from more arid areas such as West Texas.

So, for instance, shade-loving plants such as American beautyberry and wild red columbine, or plants native to wet areas such as buttonbush, will be the first to become stressed, as will any newly planted tree or shrub. Most established native trees and shrubs may have put out less growth and smaller leaves than usual, but will likely survive with little if any attention. Cacti and succulents and plants such as cenizo and zexmenia will likely survive without any help from us.

Since we live in an area that has, and will continue to have, limited water availability, we need to do everything we can to conserve water. That means using the water we do use in the most efficient manner possible. One of the first things we can do is to know how much water a plant needs and where, when and how often to water it. There are some rules of thumb to go by here.

Small trees, especially newly planted ones, should have 6 to 8 gallons of water per trunk diameter inch per week. So a tree with a 2 inch diameter trunk should have 12 to 16 gallons of water each week. These are optimum amounts for good growth. When water is limited, you can probably get by with somewhat less water and still keep it healthy. Larger, more established native trees can go longer between watering, maybe only once every 2 or 3 weeks in dry summers, and no extra water other times.

For smaller shrubs or perennials, decide how much water you think they need based on how large they are, and water them for the appropriate time. Then check a few days later. If they are wilting, you need to water them longer.

Assuming you are using a hose-end nozzle to do the watering, you need to know how much water it puts out. You can get an empty gallon milk jug or five gallon bucket and time how long it takes to fill it, so you know how much time it takes to water each plant.

Water only once a week. Watering lightly daily or every 2 or 3 days is a waste of water (except for newly planted perennials). Also, don't water the foliage, it doesn't help and may harm the plant. Water under the dripline (the circle under the tree just under the

outermost leaves), not around the trunk. The feeder roots are mostly concentrated in that area.

Don't be fooled by some of the drizzles or light rains we get. Anything less than a quarter inch is pretty much useless as far as most trees, shrubs and perennials are concerned.

If you have too much mulch, brush it away from the area you are watering so you can get the water to the mineral soil where the roots live, not just on the top mulch. You can rake the mulch back after watering. If you don't have mulch covering any bare ground, get some....it is the best thing you can do for your plants.

The best watering system by far is drip irrigation. By positioning water-emitting half-inch or quarter-inch in-line tubing (I would recommend you avoid any sprinkler/sprayer type emitters) around flower beds, shrubs and trees, you can not only know exactly how much water each plant is getting, and adjust it if necessary, but the water drips directly on the soil with the absolute minimum amount wasted.

Drip irrigation systems are fairly inexpensive and easy to put together. One source of information and equipment is [www.dripworks.com](http://www.dripworks.com), but there are many other sources.

I'm sorry, but I have no good suggestions for lawns. The only native turf grass, buffalograss, goes dormant in times like this and looks dead, but will come back with rain. Bermudagrass probably will as well. My best advice is to have as little lawn as possible.

Until next time...

Jim Stanley is a Texas Master Naturalist and the author of the book "Hill Country Landowner's Guide". He can be reached at [jstmn@kctc.com](mailto:jstmn@kctc.com). Previous columns can be seen at [www.hillcountrynaturalist.org](http://www.hillcountrynaturalist.org).