

Saving Water and Plants in the Hot, Dry Summer

The following column is one that I first wrote several years ago, during another hot, dry summer. Unfortunately, our climate conditions have not changed, nor have the ways to save water, so it seemed appropriate to run it again today.

By now most all the native grasses have gone dormant, many forbs and some shrubs are beginning to wilt and a few are dropping leaves. The urge, of course, is to water everything heavily and often to keep everything green and “happy.” But, living in a semi-arid region as we do with increasing numbers of neighbors who also want to water “heavily”, we simply don’t, and may never, have enough water for everyone to do that. So, we all have to conserve water, to make do with less. Here are some things to think about in terms of water use and plant survival.

All water that evaporates, either from sprinklers, from the leaves of vegetation, or from the surfaces of driveways, walkways, or the street is wasted. The evaporation rate from sprinklers is highest during hot, dry, windy days as well as from sprinklers that put out a very fine spray. Evaporation is least during the evening, night or early morning, cloudy and calm days and from sprinklers that put out large droplets.

Drip irrigation is best because it places the droplets directly on the ground or on the mulch where it is needed without wetting the leaves of vegetation or spraying water onto sidewalks or the street. It also puts the water out slowly so it can all soak in and not run off. Soaker hoses do the same thing.

Most watering occurs on lawns, and that is also where the most water is wasted. To begin with, St Augustine lawns require huge amounts of water and thus are really not suited for areas with our rainfall pattern, so the biggest water-saving thing you could do is to switch from St Augustine to Bermudagrass or Buffalograss.

Bermudagrass, although not a native, requires significantly less water than St Augustine and if necessary, you can let it go dormant and it will green up again when our rains return. Buffalograss, a native, requires even less water than Bermudagrass and never requires fertilizer. It too can go dormant and green up again when it rains so you can stop watering at all if restrictions require it.

On the subject of lawns, most people mow their lawns much too short, thus reducing the amount of leaf area to shade the ground. On hot, dry days, we lose a lot of water from evaporation of moisture in the ground, and the hotter the ground, the more evaporation. Letting the grass grow longer (and not catching it and throwing it away) makes for more leaf litter which shades the ground better making it cooler, and this reduces evaporation. Watering longer but less frequently gets more water down deeper where there is less

evaporation and it makes the plants grow deeper roots that allow them to better tolerate droughts.

Don't mow by the calendar! If the grass stops growing, stop mowing!

If you are just putting in a lawn or redoing an existing lawn, installing below-ground drip irrigation is something to consider as it can be part of an automated system that doesn't waste water to evaporation and all of the water goes exactly where it is needed.

Flower beds or areas under trees with no lawn or living ground cover should always be covered with some kind of mulch, preferably tree leaves but any organic mulch is better than nothing. But don't have so much (over 3 inches) that short rain showers just wet the mulch and never reach the ground.

Only water trees out under the dripline, not adjacent to the trunk.

Installing drip irrigation systems or even just simple soaker hoses in flower beds is the best way to keep them watered without wasting too much water. If you are watering by hand, try not to spray water on the leaves of the vegetation, but rather direct the water as close to the ground as possible.

Finally, any water you capture by a rainwater harvesting system, or even just in a rain barrel, would otherwise just run onto driveways and off of your property. Capturing water when it rains allows you to water things later without "using" any city or well water at all—and your plants will be the better for it.

Most importantly, accept the idea that we should all practice as much water conservation as possible, in wet times as well as in dry times.

For those readers around Kerrville, I am available at Riverside Nature Center, from 10 to 12 on Fridays, to answer questions one-on-one or discuss nature issues.

Until next time...

Jim Stanley is a Texas Master Naturalist and the author of the books "Hill Country Ecology," "Hill Country Landowner's Guide" and "A Beginner's Handbook for Rural Texas Landowners." He can be reached at jstmn@kctc.com. Previous columns can be seen at www.hillcountrynaturalist.org.