

It's a Drought – What Can We Do?

In spite of the recent rains our long term prognosis is still for the drought to continue. Even with the rains, plants do not recover from the heat stress quickly, especially trees. This issue's topic "It's a Drought – What Can We Do?" came about when the HDROA Board met to ask the Landscape Committee questions about their landscape assessment. Board member Jay Hartfield asked this very relevant question and I began to ponder it because it was such a good question. Here a few of my thoughts.

Turf. One of the heaviest users of water is turf. If you use your lawn area for recreation, then blue grass is still your best choice. But most homeowners overwater their blue grass. If you're watering daily, water every other day for a little longer - say 20 minutes or until the water runs off. You want to train the roots to grow deeper where it's cooler. You could even add another day between cycles and see how the turf looks. When you step on the grass and your footprints remain, that's as low as you can go. Grass should bounce back if it's being properly watered.

Mowing height is also important. During a dry period you need to raise the blade height so you let the grass grow higher and don't scalp the roots. Mowing too close causes the crown area of the turf grass to be more exposed to the sun and it can dry out and/or die. A mulching mower is another option to help retain the moisture in the soil so the water "goes farther". Be sure the blades are kept sharp too, because blades of grass recover more quickly with a sharp cut.

If you have dry spots in your turf, check that the irrigation spray is evenly distributed. To determine if your irrigation has uniform distribution, build a grid of collectors (e.g. tuna cans or similar) and measure to see that each collector is getting the same amount of water. Adjust heads if they are not. Also all heads should be the same brand - spray head specifications vary by manufacturer. Mixed brands don't play well together. The Bernalillo County Extension agent can help audit your irrigation (243.1386) if you feel you have serious problems.

Also, make sure your turf areas are well weeded. Weeds can "steal" water from grass.

Another option is to remove the grass. If you don't need it for recreation, either change it out for low water plants or put in a native grass meadow.

Meadow or Native Grass Areas. For my native grass meadow (a mix of buffalo, blue grama, and wildflowers) I water it once a week for 20 minutes when the temperature is above 85 and once every two weeks in fall and spring. For the blue grama and purple prairie clover even that is too often. I cut the meadow to about 4 inches **once** each spring. I would leave the meadow untouched if the purple prairie clover didn't reseed like crazy.

If you have a natural area around your home, leave it unmowed and unwatered. You'll be surprised how much better it looks. And if you're concerned about fire, include a few water holding plants in it or provide a hardscape feature (driveway, gravel dry stream, wall) that would slow a fire down. Remember that living material is a better fire retardant than dead material even if it's short dead material!

At the beginning of the monsoon season – after the first rain - you can seed some native grasses and wildflowers with a little compost topping to keep the birds from eating the seed. Let nature provide the water for germination. This will provide some shade for nearby tree and shrub roots, reduce maintenance, and save some soil.

Irrigation/Watering. You can conserve water when irrigating by changing your controller seasonally; by turning it off during winter and watering manually once a month on a warm day. Spring and fall should

be set for the same frequency. I usually water most zones once a week for 30 minutes or even less often (but not less than 30 minutes each time) as we approach December. Summer, starting when temperatures go over 85 degrees, I water three times a week for 30 minutes. Always in the morning so the leaves can dry in the sun. Note the controller is just a small computer. If you can learn to use your oven, microwave, washer and dryer computers or even drive a newer model car with navigation, the irrigation controller should be a snap to understand!

Other ideas include: plugging drippers where there are no plants, checking the irrigation zone by zone to see that there are no leaks. You can check irrigation emitters to see that they are working and/or provide a more effective method of irrigation, e.g. spiral leaky hose or inline drip, placed at the drip line and out for trees and shrubs. You may also need to clean the filter. All of these make a good winter activity on warm days or spring when it's really too early to put plants out.

Many people are watering their trees, but not at the drip line where the feeder roots are. If emitters or bubblers are still located near the trunk, water is wasted and tree roots go unwatered.

Pruning. You can also limit pruning when it's hot. A plant needs more water to recover after pruning because it now has fewer leaves to generate food. Prune just dead wood or wood that gets in the way and is hazardous. Retain as many leaves on each plant as possible. If the plant doesn't need the leaves, it will choose to drop them. You don't need to make that decision!

And when it rains - if we get at least 1/2 inch - skip one cycle of irrigation. Just turn it off so it doesn't run when water isn't needed.

Remove weeds. Weeds steal moisture from nearby plants, on the other hand they also provide some level of ground cover. You need something covering the soil or it blows away.

Mulch. Mulch, an above soil cover of wood chips or gravel, helps retain moisture in the soil, reduces erosion or soil loss, and moderates ground temperatures. Leaf litter does this in nature and for this reason I would recommend less cleanup of leaves. The leaf litter also returns nutrients (especially minerals) to the soil. At least 3 inches and more often 4 inches deep is best. However, don't create a mulch volcano around the trunk or stem. Bugs and diseases occur behind the mulch.

Capture Water. Consider ways you could capture and store water. Try to keep as much rain as possible on your property and keep the water from running into the streets. Remember it's free. You could create swale-like streams that meander around the plants or you could create ponding areas around plants that like more water, like trees. The idea is to slow water down so you don't get erosion and you keep the water on your landscape. You could also get rain barrels. Place them at the canale closest to where you want to use the water.

Remove Debris. After a fire, water runs off the landscape and soil is eroded. So remove debris that's out in the open and reduce fire danger. But do keep the leaf litter around the base of plants if you can.

Plant Conversions. Change out high water plants for lower water plants. Many native plants use less water than traditional landscape plants and they handle the lack of humidity and the temperature volatility better. You might also create an area with agaves, cacti, and yuccas that live primarily on natural rainfall. However, avoid cacti in areas where trash blows since the spines catch things like plastic bags, cups, and other blowing stuff.

Soil Improvement. If you're using plants that need it, add compost to your soil. This will increase the water holding capacity and also provide nutrients to the roots. With many native plants this is not needed and will actually make them grow woody/larger. Creating beds and grouping "like water needs" plants in them allows for easier maintenance and more efficient irrigation.

Containers. If you can't resist the higher water plants, localize them in containers where you can control how much water they get. An olla is a nice way to water a pot.

This article has been about my ideas. Let me know what you do and I'll include it in another article. We can all work together to reduce our water use and still have attractive landscapes.