

Smart Irrigation in the Hot Summer Garden

by Rebecca Miller-Cripps

In last week's column we talked about evapotranspiration, the movement of water from the ground into the air. Water evaporates into warm air or wind from a surface (such as the soil surface in your garden). Plants take water up through their roots, use it in metabolic processes, and release it as water vapor through their leaves (transpiration).

Throughout the Sierra foothills, July is the month with the highest average rate of evapotranspiration. This makes sense when you consider the recent high temperatures we've been having. The Irrigation Association designates July as "Smart Irrigation Month," with good reason. If you go to the website www.smartirrigationmonth.org and click on "basics," the headline reads "**Don't Send Money Down the Drain! Learn to water smart to save money this summer**".

According to the Irrigation Association, "Most homeowners overwater their yard, unwittingly wasting money every time they take out the hose or turn on the sprinklers. Adopting water-savvy habits not only helps reduce this waste, it saves money while promoting a healthier lawn and landscape."

Right Plant/Right Place: One water-saving recommendation is to plant turf and landscape plants that are adapted to the climate and conditions where we live. Currently, Tuolumne County Master Gardeners are testing three varieties of buffalo grass in our demonstration garden. Buffalo grass, a North American native prairie shortgrass, has a thin, dark green blade that creates a very attractive turf, but tolerates receiving very little water and fertilizer. If given minimal fertilizer, it needs to be mowed infrequently. For a meadow look, it doesn't need mowing; for a neater look, it can be mowed once a month.

Mulch, mulch, mulch, mulch: Consider applying a few inches of mulch to the soil surface around thirsty plants. Mulch cools the soil temperature, reducing evaporation, which allows water to remain in the soil for a longer period of time where plant roots can find it. Mulch on the surface can reduce water use by up to 50%.

Some additional tips from the Irrigation Association:

Inspect your irrigation system monthly; adjust sprinkler heads. Look for leaks, broken sprinkler heads, and misaligned heads. Flush out clogged drip emitters and micro-spray heads. Often water isn't being applied evenly; although the sprinklers are running, some areas may be getting too little water. Adjust sprinkler heads so that areas that don't need water—*asphalt, sidewalks, streets and roads*—aren't being watered. "Urban drool is not cool!"

Consider "smart" technology or a rain shutoff switch. There are climate and soil-moisture sensor-based controllers that will evaluate and calculate a watering schedule based on conditions in your microclimate. And rain shutoff switches can be retrofitted to your current irrigation system, thus saving money and water when it rains.

Consider low volume drip or micro irrigation. Gardens, trees and shrubs can all be irrigated using drip emitters, micro spray jets or bubblers. Low volume systems irrigate slowly, allowing water to be absorbed by our clay soils, and minimizing evaporation, runoff and overspray.

Water only when needed. A caller to the Master Gardener office described watering landscape plantings twice a day. As it turned out, all the shrubs and groundcovers were low water users and could probably survive the entire California

summer without water. Learn the kinds of plants in your landscape and their water needs. Water deeply and let the soil dry between waterings to discourage weed growth, disease and fungus.

And one last tip—go to www.ipm.ucdavis.edu and click on “UC Guide to Healthy Lawns” to learn more about irrigating your lawn. Or go to www.tudwater.com and click on “Conservation” to learn more about water savings outdoors. **YOU CAN CALL MASTER GARDENERS AT 533-5696. WE WILL COME TO YOUR HOUSE (FOR FREE) AND HELP ANALYSE YOUR WATER NEEDS.**

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