

water conservation



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Master Gardener

QUESTION: Will you share some practical ideas on how to effectively water my garden and landscape plants this summer without ending up with an expensive water bill?

ANSWER: This question is probably on the minds of many gardeners this time of year. The focus needs to be on the right amount of water, the timing of watering and the method that the water is applied.

Hopefully you planted your summer garden in soil that was well-amended. The addition of rich, organic compost will help trap moisture and encourage deep root formation in plants. Biochar aids soil fertility, and this highly porous charcoal also helps the soil retain water.

Just as important as soil amending, you need to provide a thick layer of mulch. A 3 to 5 inch layer of mulch will reduce evaporation by 70%. Apply mulch evenly and leave a few inches bare around the base of your plants. Mulch has the added benefit of reducing the amount of weeds that will compete with your plants for water and nutrients.

Giving your plants the right amount of water should be a thoughtful process. You need to avoid overwatering. Too much water can kill plants. Roots need air as well as water. The soil should never be soggy. Soggy soil can favor diseases and pests such as slugs, snails and earwigs. Too much water during the ripening period of fruits and vegetables such as tomatoes, melons and sweet corn can impair flavor and quality by reducing sugar content.

On the other hand, frequent, light sprinkling needs to be avoided. For plants that are established, it is best to water slowly, deeply, infrequently and directly to the root system. This allows the water to actually soak into the ground instead of running off the surface.

There is an easy method to test the moisture in your soil. Take a large straight blade screwdriver and poke it into the soil about 2 inches. The drier the soil, the more resistance you'll feel. If you are watering properly, you will be able to see signs of moisture 2 inches down.

You can also purchase an inexpensive soil moisture meter and simply

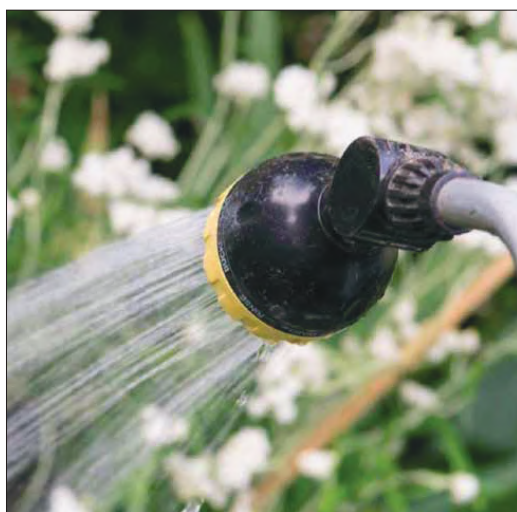


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If you choose to water by hand, make sure your hose provides a slow stream of water.



PHOTO COURTESY OF BONNIE COURTER

Drip systems are very effective and those with individual emitters spaced along the hose are the most efficient.



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You can purchase an inexpensive soil moisture meter and poke it into your soil to test for proper irrigation.

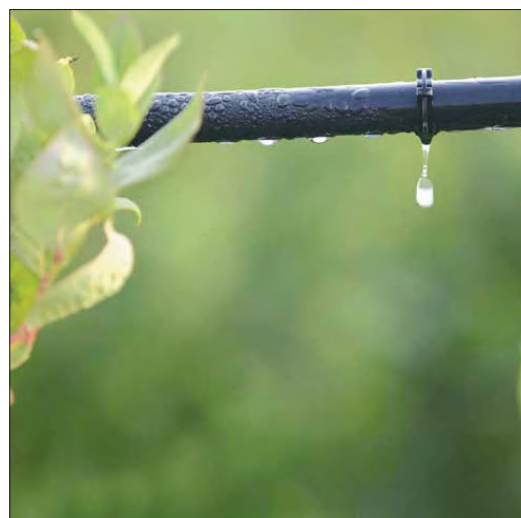


PHOTO COURTESY OF THE ALABAMA COOPERATIVE EXTENSION

Many gardeners use a soaker hose for proper watering, which will slowly release water along its entire length.

poke that into the soil.

The best time of day to water is early in the morning or late in the day when temperatures are lower, humidity is higher and the air is calmer. Avoid watering bare areas of the garden, and focus your watering at the base of your plants. There are several methods to accomplish this task.

If all you have is a simple garden hose, make sure it is providing a slow stream of water. Many gardeners use a hose-end attached sprinkler, but this is not efficient because water is lost to evaporation, and water may be applied to areas where nothing is growing, inviting invasive weeds.

Drip systems are very effective and those with individual emitters spaced along the hose are the most efficient. A word of warning though, check your emitters frequently because sometimes the head will get

clogged or just pop off. Drip systems are an excellent method to water vegetable gardens grown in soils with higher levels of organic matter.

Many gardeners use a soaker hose which will slowly release water along their entire length.

Another option is to apply water below the soil surface. You could purchase olla clay irrigation pots. You can also make your own below the soil surface watering containers by punching holes in the bottoms of juice or coffee cans. Once the holes are punched, push the cans 6 to 12 inches into the soil. Fill the cans with water. The water will seep out the bottom into the soil directly surrounding the plant roots. This is an excellent method to reduce evaporation.

If your watering system is on some sort of timer, great! However, if not, then set a timer on your phone or

write yourself a note when you have water running outside. It is so easy to waste water when you come inside and just forget that water is running until hours later. Believe me – this has happened to me more than once.

If you concentrate on providing your plants with the right amount of water, the timing of watering and the method that the water is applied, you will water more efficiently, save on your water bill and still grow a healthy garden.

Do you have a gardening or insect question? Contact the Douglas County Master Gardeners at douglasmg@oregonstate.edu or 541-672-4461 or visit 1134 SE Douglas Ave., Roseburg. Douglas County Master Gardeners are trained volunteers who help the Oregon State University Extension Service serve the people of Douglas County.