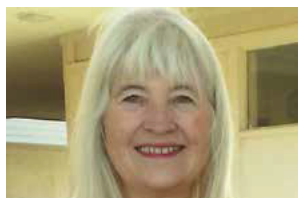


Ways to water your garden without breaking the bank



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Question: With these hot summer days, I am watering more than ever. I want to keep my vegetables well-watered so I can enjoy the fresh bounty, but my water bill is expensive.

I have two goals. I need to use water more efficiently to keep my plants growing and at the same time reduce my water bill. Do you have any practical suggestions?

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.

If you can follow a few simple steps, you will water more efficiently and save many gallons of water over the course of the summer growing season.

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 3-5 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.

Keep an eye on your mulch layer. It can form a crust that prevents water from getting to the roots. If a crust forms, break it up with a rake to allow water in.



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An inexpensive water moisture meter is one way to test soil moisture.

Giving your plants the right amount of water should be a thoughtful process. Vegetables need about 1 inch of water a week from April to September, depending on weather and stage of growth.

You need to avoid excessive 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. In the case of tomatoes, they tend to split as well if overwatered.

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. After watering to a depth of 5-6 inches or to the root depth, don't water again until the top few inches begin to dry out.

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 two inches. The drier the soil, the more resistance you'll feel, allowing you to actually see if the soil is moist two inches below. You can also purchase an inexpensive water moisture meter with a probe attached that can be poked 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, thus encouraging weeds.

Drip systems are very effective and those with individual emitters spaced along the hose are the most efficient. Drip systems are an excellent method to water vegetable gardens in soils

with higher levels of organic matter. Soaker hoses slowly release water along their entire length and are another efficient method of watering.

Another option is to apply water below the soil surface. You could purchase ollas, which are 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 6-12 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 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 question? Contact the Douglas County Master Gardeners via email at douglasmg@oregonstate.edu, by phone at 541-672-4461 or visit 1134 SE Douglas Ave., Roseburg.