

## by Carol Ann Harlos

A dear friend asked me to water the plants on their property when they were away. She said "I really should pay you for your time." When I asked why she replied that she spent several hours watering the various gardens each day.

A man called Master Gardener HotLine and said that several of his young trees were losing leaves. He feared they were dying. I asked if they were all the same tree species. He said "No." I asked him to tell me if he watered them. He said "Of course! Every day."

I woman complained that her roses didn't show any signs of black spot on the leaves. The leaves weren't curled and had no holes. Yet the roses looked droopy. She watered for a few minutes each day.

All the above are well-intentioned gardeners who love their plants, work hard on their gardens, and care if the plants die. However they don't understand the relationship between roots and water. Roots grow where the water is. If water only soaks down to a depth of half an inch that's where the roots will be. The closer the roots are to the surface the more easily they can dry out and die. I water each garden on our property once a week for approximately two hours. If I want to find out how far the water has penetrated the soil I dig down and take a look. Our trees benefit from a trickle hose placed at the base and allowed to water very slowly over a period of several hours.

None of us wants to waste water however. So we must learn to be "water smart". What kind of soil do you have? Does the water take a few minutes or a few hours to soak into the soil? Do pools of water form? If you wish you can measure the amount of water applied to a garden by using an empty can or other container and measuring the depth of the water after sprinkling. (I cannot lie ... I never do this!) Do keep in mind that different plants have different needs. Vegetables for example benefit from about an inch of water per week. However if the weather is extremely hot you may still notice some wilting. Check the soil to see if it has dried out a few inches below the surface before you water again. The addition of organic material such as compost or wellrotted manure increases the moisture holding capacity of soil. A layer of mulch also lessens evaporation from the soil.

Please don't go to the other extreme and water log your soil. Waterlogged soil doesn't allow roots to absorb oxygen leading to death. You are all familiar with water logged house plants and "sour soil". This can occur in your garden as well! You can also use a soil moisture sensor to see if it's time to water. (I don't do this either!)

Keep an eye on what is happening in the garden. Moisture is important at various stages of plant development. For example vegetable plants will lose their flowers in extreme dryness and high temperatures. Result: no peppers or tomatoes or eggplant or beans.

You can use soaker hoses. But you still need to check how much water your plants are getting.

Photo credit: University of Rhode Island https://web.uri.edu/riss/take-action/ simple-steps-at-home/around-the-yard/ Ideally you could use a garden wand to bring water directly to the crown or the base of your garden plants. This is unrealistic for many gardeners but if you have the time it is an ideal way not to waste water.

What about your outdoor potted plants? If possible pick up each pot before you water. You get to know how heavy a pot should feel if the soil inside the pot is thoroughly moistened. Water slowly until the soil is moistened and water comes out the bottom.

Some people have told me they don't want a high water bill. That is truly a personal decision. It is a balance between what you are willing to spend on water and what you are willing to spend replacing your plants.



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