

Water is Life

Once the weather gets warm, people start calling in to report serious problems with their plants. Careful questioning reveals that over 75% of these problems are the result of improper watering techniques.

Whether you plant annuals, perennials, herbs, or nursery stock, you **MUST** be sure to pay attention to proper watering techniques during the first year of their life in your garden or the plants will fail to thrive and possibly even perish! Watering plants sounds simple enough, but it can be one of the trickiest and most deceptive activities that you can do in your garden! You must water DEEPLY twice a week for the first three weeks and at least once a week thereafter for the first growing season to ensure success with your new plants. We often have extended periods of severe drought in Connecticut, in spring or fall as well as summer. Be sure to monitor this and be aware of just how much rain has fallen in your yard each week.

The best tool a gardener can have is a rain gauge. Although countless fancy models are sold in every gardening catalog, the basic premise is to put out a container to catch rain and measure the number of inches received. Most perennial gardens thrive on an inch of rainfall per week. Since that only happens in a perfect world, we as gardeners have to take up the slack. The first step is to honestly assess how much rain has fallen. Even if we have three cloudy, cool, drizzly and uncomfortable days in a row, we may actually only receive less than an 1/8 inch of rain during that period. Never assume that a day of showers has soaked in enough to water your garden.

The worst thing that you can do is to lightly "sprinkle" the plants and the surface of the soil each day when you get home from work. Although this may feel good psychologically, it isn't doing the plants any favors! Light watering causes all roots to grow up to the surface. Once there, they are apt to dry out much more often as the heat of the sun will simply desiccate them each day . . . and you are caught in a vicious cycle of constant watering and wilting! Instead, water deeply so that the water penetrates down into the root zone, at least 6" or more. For shrubs or large perennials, the ideal way to do this is to put the hose at the base of the plant and turn it on to a low trickle. WALK AWAY from the plant and leave the water on for at least one half hour. Be sure a well of soil has been created around each shrub so that the water isn't all running away from the plant and truly does soak down into the ground. When you are done, if you aren't sure how deeply the water has gone, take a trowel and dig down. It should penetrate 6" or more down to the root zone.

Overhead sprinklers often look and feel like they are watering the garden, but you would be surprised how long you have to leave them on in order to really saturate the root systems. Put out a cup and catch the water from an overhead sprinkler. How many hours does it take to accumulate one inch in that cup? They are very wasteful of water as well, as they often reach outside of the garden to the driveway or sidewalk. Watering from above poses other problems, too. If you put sprinklers on your garden at night, you dramatically increase the opportunities for fungus on your plants, especially roses and phlox. Always water in the morning. Finally, sprinklers miss plants. In our shade garden, the water hits the leaves of the giant 'Big Mama' hosta and rolls away. Big Mama

doesn't get a drop. It also hits the two tree trunks, and all of the plants behind the trunks are missed as well.

Lawn irrigation systems cannot be expected to water a perennial garden. They are on a different time schedule - they usually come on every night for 15 minutes or a half hour, which isn't nearly enough for the deep watering needed. Overhead pop up sprinklers also beat the plants in the gardens, and night watering increases the incidence of plant disease. I can always tell by the look of a garden if the customer is using a lawn irrigation system. The plants show it.

A better system is to use soaker hoses. These are laid on the soil surface and covered with mulch. Some people even bury them beneath the soil, especially on steep hillsides. Water oozes out of the pores in the hose very slowly, deeply soaking the soil. You leave these hoses on for many hours, but they actually conserve water because so little water comes out at a time. Because the water doesn't migrate very far from the hoses, the secret to installing them is to weave them very tightly among the crowns of the perennials or shrubs. We pin them down with landscape fabric staples to keep them in place. After installing them, run the water for a few hours, then dig around to see how deeply and how far the water has penetrated. You may need to add more hoses or run the system longer. Once you have figured it out, THEN bury the hoses. Leave them in place all year round. If you accidentally break them or dig into them while gardening, simply use a hose repair coupling to fix them. You don't even have to bring them in for the winter! Most systems only have enough water pressure for 100-150' of soaker hose. Large gardens may need more than one "run" of hoses, irrigating a section at a time. Soaker hose systems can be put on a timer, making them virtually worry-free.

If you are on a well and can't run a hose for more than 15-20 minutes, let the well recover and then turn it back on the same garden or individual plant again. Do this until that one garden is deeply watered. The next day, water a different garden.

Your best friend in a drought is healthy soil. Be sure your soil contains plenty of rich organic matter, usually in the form of compost. This can be top dressed and scratched in around existing plants and added as you prepare the soil every time you install a new plant. If you don't have a working compost pile (shame on you, it's so easy to do) you can buy compost in bags or in bulk for this year. Compost is a plant's best friend. It holds nutrients and water in the soil and makes the plants much more tolerant of stressful, low water conditions. Another important friend for your plants is to mulch. Use shredded leaves, shredded bark, shredded straw, any organic material that will cover the soil, reduce surface evaporation, hold in the precious moisture, and break down to add further organic matter to the soil structure. In addition to using compost and mulch to enrich the soil and hold moisture, you can also use seaweed as a foliar spray or worked into the soil in a granular form to help increase the plants resistance to dry conditions.

If you think about how plants work, these techniques will make sense. If you implement them, your gardens will be much healthier

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