

WATERING 101

During the 'dog days of summer' we can experience several hot days of little to no rain causing our plants to stress.

As we do with our frost warnings in early spring and late fall, we thought it just as important to explain proper watering techniques through this e-newsletter with Watering 101.

Watering trees, shrubs, evergreens, lawns and other in ground plantings is simple:

Apply sufficient water so that the soil around the roots is thoroughly moist (about 8-15" below soil surface), and then allow to dry enough so that some air can penetrate the root ball area. Roots, like leaves, need oxygen and too much continuous water prevents the soil from "breathing". The larger the plant (more roots), the more water it requires to saturate the root area and the longer it takes for the soil to dry sufficiently between watering.

Moisture also depends upon the rainfall, temperatures, soil and wind conditions. Plants should receive an average of one inch of rainfall per week. A rain gauge will help you monitor rainfall. Watering of containers and hanging baskets is a bit different and will be explained below.

Here are a few tips so you can have happy, properly watered plants and a beautiful garden.

Watering tools:

The use of spray nozzles, like the ones you use to wash the car or hose down the sidewalk, are not the best tools to use for watering the garden areas or hanging baskets. They cause too much splash and wetting of the leaves, even if you direct it toward the soil. The splashing also can spread certain soil borne diseases, especially in tomatoes, impatiens, petunias and flowering vinca. Also, they give you a false sense of watering because the soil surface appears wet, but that moisture does not penetrate very far down into the root area. That results in the plant wilting sooner than it should.

We also do not recommend the use of overhead sprinklers like the ones used for lawns or kids to run through. These are very wasteful, as far as water usage goes, because too much evaporates even before reaching the garden. Even worse is the fact that it wets the leaves of all the plants, which created the environment for diseases to form, and rarely penetrates the soil deep enough to thoroughly wet the roots before it runs off.

We recommend the use of soaker hoses whenever possible. These use a much lower volume of water with better results by oozing out a slow drip of water that penetrates deep into the soil rather than running off and away from the plant roots. Plus, you don't have to stand there and get bit up by mosquitoes. You can go do other chores or just sit back and enjoy an ice cold beverage while it runs itself. Let the soaker hose run for 3-4 hours at a time and you will only have to do this once a week, or maybe twice in hot windy weather and if there is no additional rainfall.

The other method is to lower the flow rate of your garden hose to a very slow trickle and lay the hose near each plant, allowing it to deep soak for 15-30 minutes per plant.

Dramm Watering Wands are recommended for use on containers, hanging baskets, window boxes, etc. With the correct water pressure, they provide a thorough yet gentle water flow with no splashing. They come in various lengths for hard to reach places and the on/off switch allows you to stop the water flow quickly and easily in case you get interrupted.

Timing:

Watering in the morning is important for two reasons: (1) to provide sufficient water for the plant to utilize going into the heat of the day and (2) to insure that all the leaves and soil surfaces are dry by nightfall to prevent disease problems. High moisture and humidity combined with cool temperatures produce the perfect environment for many leaf, flower and stem diseases, i.e. powdery mildew, grey mold, leaf blight, fruit rot.

Watering newly planted trees:

After your first initial watering when first planted, the tree should be soaked again three days after planting. During the first year, large trees should be soaked every week, unless there has been a heavy rainfall of 1" or more during the week. The second year, watering once every two weeks, unless there is 1" of rain. **During periods of extended drought, water thoroughly once a week.** Continue this watering routine through the middle of November or until the ground is frozen.

The best method for watering trees is to place a hose at the perimeter of the root ball and let the water soak slowly into the soil. Move the hose to ensure watering on all sides of the root ball. Approximately one hour of water should be sufficient, but you may need more or less depending on tree size. Do not spray the foliage.

Watering newly planted shrubs:

Shrubs may be watered individually by soaking the soil around each plant. For large plantings of shrubs, a soaker hose may make this task easier. Shrubs should be watered three times a week for the first 6 weeks, and twice a week for the rest of the season. During periods of extreme heat, wind or drought, you may need to water daily especially on smaller material (1-2 Gallon). As with trees, you can skip watering when there has been 1" of rainfall during the week. Continue this watering routine through the middle of November or until the ground is frozen.

TIP: How long do you consider a newly planted tree "new"...Well, for every 1" of diameter you will need to care for the tree for 1 year plus 1. *Example:* 3" diameter tree trunk, 3 years plus one so 4 years. A 2" tree is 3 years. etc.

Groundcovers, Perennials, and In-Ground Annuals:

Newly Planted - Soak the soil to a depth of 6" by hand watering with a Damm watering wand. These plants have small root systems, so be sure to give them plenty of water during the first two weeks. Soaker hoses can make proper watering easier. Weather conditions dictate the frequency of watering. We highly recommend Bonide Plant Starter™ to get these plants off to a good start.

Established Gardens - will follow the general rule of thumb above, 1" of water a week. Continue this watering routine through the middle of November or until the ground is frozen.

Hanging Baskets:

In the early spring season, watering 2, or maybe 3 times, a week is sufficient. We recommend the weight method of lifting the pot with one hand; if it is heavy, it does not need water yet. If it is light weight, the water has been used up and the plants need a good drink. (Water weighs 8lbs per gallon) You should apply nearly 1 gallon of water each time so it runs out the bottom of the pot. As the plant matures and grows bigger and the summer temperatures heat up and winds get stronger, watering frequency will increase to daily. As with in-ground plants, be sure to water first thing in the morning for the same exact reasons: provide moisture to the roots before the hot sun arrives and prevent disease problems. Late day watering breeds grey mold and powdery mildew. Both start down near the soil level and causes browning of stems and leaves on petunias, lobelia and fuchsia.

Containers:

The same rules apply to container gardens as we mentioned above with the baskets except very large containers, 20" or bigger, and those in shaded area will not need water as frequently if they are watered thoroughly. If the containers are too heavy to

test by lifting or moving, take an unpainted dowel rod and stick it into the soil to the bottom of the pot, leave for 5 minutes and pull out. You should be able to see the moisture line on the rod, similar to checking the oil level in your car.

Fertilizing Hanging Baskets and Containers:

Daily watering leaches out all nutrients from the soil, so it is critical to replenish these with fertilizer. We recommend using Jack's Petunia Feed™ on a constant liquid feed program, which means every time you water also fertilize. Use a large, clean garbage can with a lid (to prevent evaporation) and make up 5-10 gallons of fertilizer at a time so it is ready when you need it. (Often time you just don't feel like making up a batch at a time, right?) Water the basket first and then dip your watering can in the bucket and water it again with the fertilizer water.

Remember, plants are like people; they can survive on water alone, but are much healthier with food!

Call us with any questions you may have! We are here to help you be successful gardeners!



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