

Lawn & Garden Care

Please note: Newly planted plants always require more water during their first year. If you have any questions about proper watering, feel free to talk to our perennials experts.

A luscious green lawn and healthy vibrant trees, shrubs and plants all are a sign of a well-tended yard. A beautiful flower or vegetable garden is a wonderful complement to any home. These things are as much an investment in one's home as siding or shutters.

One key to a world-class yard and garden is knowing how to water effectively. How do you how much and when to water? There is really no single answer. Weather conditions, soil composition and the types of plants, shrubs and trees you wish to grow all must be considered. Here is some information about soil and watering strategies that can help you grow a gorgeous, green lawn and a bountiful flower and/or vegetable garden.

Climate

On a hot, sunny day in midsummer, the average lawn uses 125 gallons of water per 1000 square feet. The same lawn on a cloudy day uses as little as 10 gallons of water. Mature trees can consume up to 15 gallons of water per hour on a hot day. Any plant exposed to hot sun, low humidity and strong winds will evaporate large amounts of water that must be replaced or it will quickly die. Grass is particularly susceptible since 85 percent of a grass plant's bulk is water.

Plant

A good drenching once or twice a week is better for your lawn than daily light sprinklings. Deep watering produces strong, deep root systems that can safely withstand drought. To help build such a root system requires consistent, thorough soaking of the soil, to a depth of 6 to 12 inches. An even, intermittent sprinkling over a period of hours is the best for deep penetration. A steady stream of water from the garden hose, for example, will only wet the surface and mostly will run off.

Soil Type

There are three distinct soil types - clay, loam, and sandy. Each has a different ability to absorb water and therefore your watering strategy will be determined in part by the type of soil you have. Coarse sandy soil has large air spaces that quickly fill with water, but also lose water quickly to the subsoil, requiring shorter more frequent watering. Heavier clay or silt soil has numerous smaller spaces that absorb water slowly and hold it longer than sandy soil. Loam type soil falls in between holding water longer than sandy soil, but not as long as heavy clay soils.

How do I know when to water?

Most lawns need 1 to 2 inches of water per week, depending upon the climate and soil conditions. In dry areas, a regular watering at least once a week is important to maintain good plant health. (Of course, watering isn't necessary if heavy rain has fallen.) During spring and fall, or in cooler, wetter regions, look for signs that watering is needed. A slower rate of growth, changes in the color, loss of resilience (such as footprints showing in the grass) are all signs that the yard, shrubs or trees need water. You also can check the soil 2 to 6 inches below the surface. If the soil is dry and crumbles easily, then it is time to water.

The soil should always have time to dry between watering. Too frequent watering produces wet areas that make the plants susceptible to lawn diseases, insects and drowned root damage. As the soil is left to dry fully, roots will grow deeper, looking for water below the surface. Roots need to absorb small amounts of oxygen from air spaces in dry soil are warmed by the soil as it dries. Plants respond best when the water penetrates below the top few inches of soil. Light watering produces shallow roots in the upper few inches of the soil, which causes them to dry quickly. In addition, many weeds have shallow roots that thrive on moisture near the surface.

What is the best time of day to water?

Early morning is the best time because water pressure is high and the temperatures are generally cooler. Less water will evaporate and it will soak into the ground better. Late afternoon is the next best time, but be sure that it is early enough for the leaves to dry before full darkness. Watering at night is not recommended because the lawn and

other plants stay wet for a longer time, which leaves them susceptible to lawn diseases. Midday watering does not damage the plants, but in the hottest part of the day, a great deal of water evaporates before it soaks into the soil. In extremely high temperatures, the water falling on plant leaves can damage them.

How much is enough water?

The amount of time it takes to apply 1 inch of water will soak deeply into the soil to a depth of about 6 to 8 inches. 1 inch of water is equivalent to 623 gallons per 1000 square feet. Water should be applied no faster than the soil's ability to absorb it. If the water begins to run off before the inch has been applied, stop sprinkling until it is absorbed, then continue.

How long does it take to water?

The amount of time it takes to apply 1 inch of water per square foot your lawn depends on the size of the hose, the water pressure and the type of sprinkler. There are number of ways to figure out just how much water your sprinkler applies.

Find the gallons per minute (GPM) flow rate from the manufacturer, which generally appears on the sprinkler's package. Multiply the square footage of the area being watered by .62 gallons or 1 inch of water per square foot. For example: If you have a 10 x 10 foot area to be watered, which equals 100 square feet, you multiply 100 x .62 gal. = 62 gallons. This is the amount of water that area needs per week. If you divide the number of gallons you've determined is needed for the area by the GPM of your sprinkler, you can figure out how many minutes of watering will be needed to perform the job properly.

A less mentally challenging way is to collect the water in a glass set in the middle of the area being sprinkled. Turn the sprinkler on and watch the time it takes for an inch of water to gather in the glass. For the most accurate results, place a container at different locations in the sprinkler's coverage area and average the results.

Buy a flow timer, also called a water timer. This timer measures the actual water flow and is calibrated in 100 gallons. It can be set from 100 to 1500 gallons to give you the

water needed for the square footage covered by the sprinkler. Use the formula above to determine the number of gallons needed.

Test the soil 2 to 6 inches below the surface to make sure it is dry before watering. Water for 15 minutes and then retest the soil. Repeat until the water has penetrated to the depth. Keep track of the time of the time it took and that is the amount of time it takes to water.

Following these general guidelines will get you started on the right path to develop beautiful flower and fruitful vegetable gardens as well as a lawn that rivals any in your neighborhood. Experiment with what works best for you, keep good records and develop a regular watering schedule.