

WATERING GUIDE

SOIL TYPE RANGE

PLANT	CLIMATE	SOIL TYPE RANGE		
		CLAY (Slow absorption, high holding capacity)	LOAM (Moderate absorption, medium holding capacity)	SANDY (Fast absorption, poor holding capacity)
Established Lawns	Temperate	Water 1" slowly, 1/2" at a time, every 7 to 14 days	Water 1" at one time, every 5 to 10 days	
	Hot & Dry	Water 1" in 2 or 3 applications every 3 to 4 days	Water 1" in 1 or 2 applications every 2 to 3 days	
Newly Seeded Lawns	Temperate or Hot	Water daily until run off	Water 2 or 3 times a day until runoff	
Shrubs & Trees	Temperate	Water 1", 1/2" at a time every 7 to 14 days	Water 1" at a time every 7 to 10 days	
	Hot & Dry	Water 1" in 2 to 3 applications every 4 to 7 days	Water 1" in 2 to 3 applications every 3 to 5 days	
Roses & Flowers	Temperate	Water 1/4" to 1/2" every 7 to 10 days	Water 1/4" to 1/2" every 3 to 7 days	
	Hot & Dry	Water 1/2" every 4 to 7 days	Water 1/2" every 2 to 3 days	

NOTE: On roses and flowers try to water roots only if possible to avoid plant damage.

Vegetables & Small Fruits	Temperate	<ul style="list-style-type: none"> •Water young plants weekly to a depth of 3 to 4 inches •Water mature plants once or twice weekly to a depth of 10 to 12 inches. The critical period is just prior to flowering and as the fruit sets. •Reduce water to tomatoes and muskmelons as fruit matures to avoid splitting. •Generally, vining crops need more water than root crops. 		
	Hot & Dry	<ul style="list-style-type: none"> •Increase watering frequency at each stage. 		

WATERING

WATERING OUTDOOR PLANTS

The signs of a well cared for yard are a green, weed-free lawn, healthy trees and healthy shrubs. They are an investment in the value of your property and should be protected.

The question of how much to water and how often has no single answer. It depends on weather conditions, soil composition and the plants themselves.

Consider:

1. Weather - on a hot, sunny day in midsummer the average lawn uses 125 gallons of water per 1000 sq. ft. The same lawn on a cool cloudy day uses as little as 10 gallons of water. Mature trees can use 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 from the soil or it will die. Grass is particularly susceptible since 85% of a grass plant's bulk is water.

2. The Plants - 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. This requires long, thorough soaking of the soil, ideally to a depth of about a foot, but at least 6 to 8 inches. A steady stream of water will run off. An even, intermittent sprinkling is best for deep penetration.

3. Soil Type - 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 but hold more water than sandy soil. Clay soil should be watered slowly but less frequently. Loam type soil falls in between, holding water longer than sandy soil but not as long as heavy clay soils.

Let the soil dry between watering. Roots will grow deeper, looking for water below the surface as soil dries. Roots need to absorb small amounts of oxygen from air spaces in dry soil and are warmed by the drying soil. This also discourages weeds which are often shallow-rooted.

Light watering produces shallow roots in the upper few inches of soil that are subject to rapid drying. In addition, many weeds have shallow roots that thrive on moisture near the surface. Too frequent watering produces wet areas susceptible to lawn diseases, insects and drown-root damage.

WHEN TO WATER

When Needed - Most lawns need 1 to 2 inches of water per week depending on water and soil conditions. Nature supplies water as rain or dew but sometimes does not supply what is needed. In dry areas, a regular watering of at least once a week or more is important (skipping days when it has rained heavily). During the more moderate spring and fall or in cooler, wetter regions, look for signs that watering is needed. A slowing of the growth rate, changes in color or loss of resilience (footprints showing in the grass) are signs water is needed. Check the soil two to six inches below the surface. If the soil is dry and crumbles easily, it is time to water.

What Time Of Day - Early morning is best because water pressure is high, it is still cool so evaporation is low and seepage into the soil is best before the sun bakes the ground hard.

Late afternoon is the next best time, but be sure that it is early enough for the leaves to dry before nightfall.

Night watering is not recommended because the lawn and other plants stay wet for a longer time, promoting lawn diseases.

Midday watering usually does not hurt anything, but in the heat of the day a great deal of water is lost to evaporation before it soaks into the soil.



HOW MUCH?

How Much Water - If nature has not supplied water as rain, applying approximately 1 inch of water is a general rule of thumb. This will give deep penetration of the soil to a depth of six to eight inches. One inch of water or rain is equivalent to 623 gallons per 1000 sq. ft. Water should be applied no faster than the soil is able to absorb it. If water begins to run off before one inch is applied, stop sprinkling until it is absorbed and then resume.

How long will applying 1 inch of water take? This depends on the size hose, pressure and type of sprinkler being used. There are several methods for determining how much you are applying. **1. Do The Math** - Find the gallons per minute (GPM) flow rate of the sprinkler being used from the package of the manufacturer. Multiply the square footage to be watered by .62 gallons or 1 inch of water per square foot. Example: 1000 sq. ft. x .62 gal. = 620 gallons. This tells you how many gallons of water you need to apply to the lawn. Divide that number the GPM of your sprinkler and you can figure how many minutes to water.

2. Collect The Water - Place a cup or glass in the middle of the area covered by your sprinkler, turn water on and watch the time. Measure water in the cup until 1 inch is collected. This is the time you need to sprinkle. The best accuracy is obtained if you use several containers at different places in the sprinkler's coverage pattern and average the results.

3. Buy A Flow Timer - Often called water timers, these units actually measure water flow. They are calibrated in 100 gallons and can be set from 100 to 1500 gallons to give you the water necessary for the square footage covered by the sprinkler. Use the formula in #1 to figure the gallons needed.

4. Test Soil - Test the soil 6" or more below the surface to make sure it is dry. Turn on your sprinkler and periodically test the soil 6" down until the water has penetrated to that depth. Keep track of how long it took and use that as the time you need to water.

KNOW YOUR LAWN

In the end, the most important factor is knowing your soil type and average weather. Many areas will need more or less watering than recommended here. Experiment with what works best in your area, keep good records and develop a regular watering schedule.