



LAWN WATERING TIPS

nutri-lawn®
ecology friendly lawn care

Watering the lawn is so often taken for granted. Not surprisingly, its one of the most important things a healthy lawn depends on.

Inside you'll learn:

- The Importance of Watering
- How to Determine Watering Requirements
- When it's Time to Water
- General Watering Guidelines
- Effective and Efficient Watering Practices

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IMPORTANCE OF WATER

Determining Water Requirements

It goes without saying, water is one of, if not the most important requirement the lawn depends on to maintain healthy growth. Without adequate water the lawn will become drought stressed and die. Many factors need to be taken into consideration when determining the lawns water requirements. As a general rule, most turfgrass species require about 1" of water each week to maintain healthy growth.

It would be impossible to define a watering schedule that would be perfect for every lawn, but examining 3 key factors that can have the most significant impact on determining water requirements is a good place to start.

Soil Type

Identifying the soil type is a very important first step in determining how much water a lawn requires. Clay, Loam, and Sandy soil types all require different amounts and frequency of water. Adjusting a watering schedule based on how each of these soil types perform retaining and absorbing moisture is the most difficult part.

- **Clay** soils are composed of very fine, compacted particles that tend to retain moisture very well, however clay absorbs water very slowly and runoff can become a problem. Light and infrequent watering is best for clay soils.
- **Sandy** soils are composed of coarse, porous particles that tend to absorb water very quickly, however sandy soils don't retain moisture very well and require more frequent watering.
- **Loam** soils offer the best of both worlds. The composition allows for optimal absorption and retention of moisture. Deep and infrequent watering is recommended.

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IMPORTANCE OF WATER

Determining Water Requirements



Turfgrass Species

It is important to identify what grass species a lawn is made up of. Different grass species require different amounts and frequency of water to remain healthy and avoid signs of drought stress. This amount can be significant and it often explains why sections across a lawn can look much different even when they are receiving the same amount of water as other sections. Many home lawns are a mixture of different grass species so much so that some areas may require significantly different watering requirements.

Fescue grass species generally require less frequent water, have good drought tolerance and signs of stress take longer to appear.

Kentucky Bluegrass and Perennial ryegrass species generally are less drought tolerant than fescue and require more frequent watering. As a result, signs of stress show up much more quickly.

Weather

Weather and environmental conditions play a critical role in determining how much and how frequent a lawn requires watering. It is important to pay close attention to weather conditions and adjust the watering schedule based on factors such as temperature, humidity, wind, and natural rainfall. These variables alone, or in conjunction with one another can have a major impact on the lawns water requirements. In general, the lawn will require more, and more frequent water when temperatures are hotter, humidity is higher, winds are stronger, and when natural rainfall doesn't happen regularly.

Micro climate conditions should also be monitored closely. A lawn that is growing in shade vs. lawn fully exposed to sun may require different watering practices.

Evapotranspiration rate is the term used to measure and estimate how much water the grass plants lose through their leaves each day. Evapotranspiration rate is measured in inches and a high ET rate indicates the plant will require a larger amount of water to replace the water that was lost. The most efficient watering practices are designed to only replace the plant with the water it lost. This drastically improves water conservations and help eliminate unnecessary overwatering.

WHEN IT'S TIME TO WATER

The exact science of determining when, how often, and how much water a lawn requires can be very scientific. This can make watering problematic for the average homeowner even when something like turning on the water seems so simple. Permanent wilting point is a term defined as the minimal point of soil moisture the plant requires not to wilt. If moisture decreases below this point the plant wilts and can no longer recover. Looking at the lawn a little closer can help determine when its time to water.

Screw Driver Test

A good way to monitor soil moisture is by inserting the end of an 8" screw driver into the soil. Its important to know the water that is being applied is also being absorbed. If the screw driver can penetrate at least 6 inches you know the soil is effectively absorbing water.

Rain Gauge

Most grass species require about 1 inch of water each week. Installing a rain gauge to measure the amount of natural rainfall and irrigation water will help ensure the lawn is getting what it needs.

Dry Spots

Look for visual signs of stress across the lawn. More often than not, the grass will speak loud and clear when drought stress is setting in. Early signs on stress can be identified by localized dry spots, wilted discoloured grass and noticeable foot printing when the lawn is walked across.

Weather Forecast

Paying close attention to weather forecasts can help you decide if you should wait to water when rain is expected, or water right away if rain is not in the forecast.

Watering Cycle

Some municipalities enforce watering bans or restrictions. It is very important to schedule your lawn watering requirements in accordance with these restrictions.



GENERAL WATERING GUIDELINES

There are several important guidelines to remember when watering a lawn. Although it may appear as easy as turning the water on and walking away, effectively watering the lawn is a bit of an art. Keep in mind some basic recommendations that can be helpful and ensure effective watering is taking place.

Apply 1 Inch

Only water when the grass needs it. Most grass species require about 1 inch of water each week to sustain healthy growth. Water 1 or 2 times each week depending on soil conditions.

Deep and Infrequent

This encourages grass roots to grow deep into the soil. Deeper roots allow plants to better survive stressful periods as the top surface of soil begins to dry out. Light frequent watering promotes shallow rooting and leaves the plants susceptible to drought conditions.

Water Early Morning

Watering before the sun comes up is the most ideal time. Watering at night leaves the grass plant moist for an extended period of time and susceptible to harmful diseases. Avoid watering during the day as this increases the risk of excessive evaporation.

Increase Frequency

Adjust the watering schedule throughout the season, especially when the lawn is most actively growing. If weather conditions become extreme and drought pressures exist more frequent applications will be required.

Water Evenly

Sprinklers can do a very effective job supplementing the lawn with water in between natural rainfalls. Placing and pointing sprinklers in the wrong area and direction can be very ineffective if the lawn is not watered evenly. Randomly placing rain gauges or empty tuna cans across the lawn can help you measure and ensure each area receives equal water.

Avoid Overwatering

Only replace the amount of water that was lost by the plant. Overwatering does more than just run up water bills and deplete water supply. Grass plants become weak and more susceptible to insect and disease pressures.

Hand Water

Many lawns have problem areas that require more water than the rest of the lawn. Watering these areas by hand with supplemental water may be required.

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LAWN WATERING TIPS

EFFECTIVE & EFFICIENT PRACTICES

Portable Sprinklers and Irrigation Systems



When natural rainfall isn't timely or sufficient enough, the lawn requires supplemental watering to remain healthy. This can be accomplished using two different methods. Portable sprinklers or permanent in-ground irrigation systems are the most common ways to effectively and efficiently water the lawn.

Portable Sprinklers

Portable sprinklers are attached to the end of a garden hose and offer a fairly inexpensive method for watering a lawn. Portable sprinklers come in a wide variety of options depending on the size, shape, layout, and unique characteristics of the lawn.

Selecting the right type for a lawn can save a lot of time, effort and valuable water. The most common types are: Stationary, Impact or Rotary, Oscillating, and revolving. Watering a lawn using one of these types of sprinklers usually involves manually turning it on and off and moving it around the lawn to cover all areas.

Irrigation Systems

Irrigation systems are permanent and buried in the ground with pipes supplying water to each sprinkler head. Permanent irrigation systems are the most expensive option for watering a lawn. Investing in a well designed, high quality irrigation system provides many benefits including the convenience and efficiency when it comes to watering a lawn. Many irrigation systems have programmable watering schedules that adjust automatically based on evapotranspiration rates and rainfall. This automation helps conserve water.