



Home Grounds Fact Sheet

Watering Lawns

You can have a nice lawn and conserve water, too. You must know the best and most effective way to water your lawn. First of all, adhere to any lawn sprinkling restrictions that are in effect in your village, city, town or county. These laws have been developed to protect our water supply for future generations. Water is a precious commodity, so we should do what we can to conserve it. Don't worry that your lawn is going to suffer because you can't water it every day. You will have a better lawn without daily irrigation!

If you have an automatic irrigation system, the first thing you should do is put it on manual instead of automatic. If you insist on using the timeclock, you should definitely have a moisture sensor hooked up to your system. This device will prevent the water from going on when it is raining. These steps will save a lot of water. Every year a tremendous amount of water is wasted because lawn sprinklers are operating in the rain.

Sprinklers aren't needed when there is enough rainfall. If you keep your system on manual, you might consider putting it on automatic only if you're going to be away for a few days. Don't be fooled by the fast, flood-like rains from a summer thunderstorm. These storms last for short periods of time (usually an hour or less) and most of the water runs off, resulting in little to no value to the turf or landscape plants. Conversely, prolonged periods of steady rain can be great for the lawn since much of that water will get to the roots.

Setting your sprinkler system on manual also allows you to control the amount of water your lawn is getting. Generally, Long Island lawns need between 1" to 2" of water per week and it doesn't matter to the lawn whether the water comes from natural rainfall or an irrigation system.

The amount and frequency of irrigation varies according to soil type, temperature, height of the grass, amount of rainfall, thatch, grass type, humidity and whether the lawn is growing in the sun or shade. In general, each 0.2" of water applied to the soil moistens to the depth of about 1". Thus, one inch of water goes to a depth of about 6" which is the depth many turf roots are. 1.5" would cover a depth of about 8".

Lawns growing in sandy soils require more water more often than lawns growing in heavier, clay-type soils. Temperature is also an important factor in determining the amount of water a lawn needs. Generally, the hotter it is the more water is needed for the grass to grow and maintain a healthy vigor. Mowing height is another consideration. It's best to keep the height of cut at 3" all year long. At this cutting height, the grass will have a deeper and better root system that will make for a healthier and more drought-tolerant lawn. Rainfall is also a factor. If your lawn gets enough rain, no irrigation is necessary. You can tell how much rain your lawn is getting by using a rain gauge. You'll get a good idea of how much supplemental irrigation is needed by looking at the calibrations (markings) on the gauge.

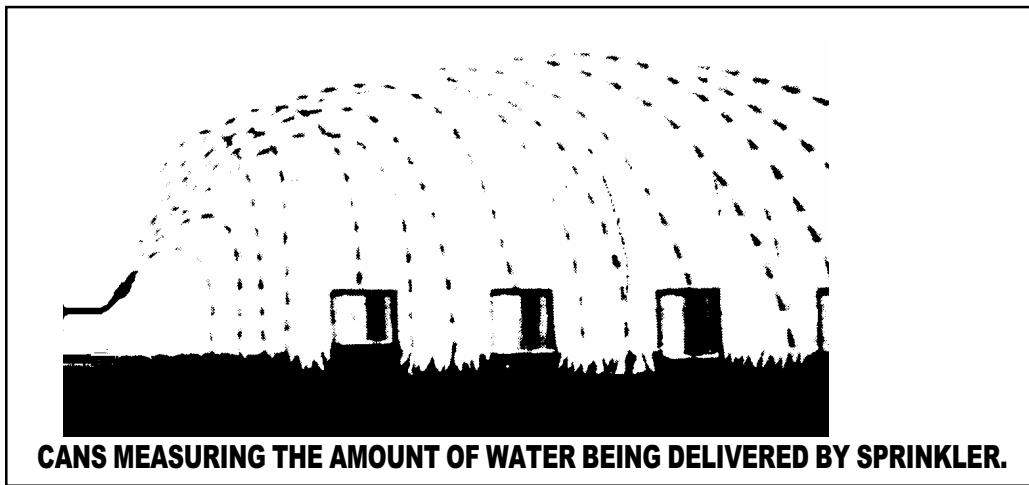
It's difficult to say for how long you should water your lawn. Each irrigation system is different and the water pressure in every household can also vary. The best thing to do is put a few coffee cans under the sprinkler and see how long it takes to get the desired amount of water in the cans. If you get an inch of water in an hour or less, your sprinklers are putting out water too fast. Your lawn isn't getting the full benefit of the water because the thatch and soil can't absorb it that fast. It should take several hours to accumulate an inch of water in the cans.

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CANS MEASURING THE AMOUNT OF WATER BEING DELIVERED BY SPRINKLER.

Many people are accustomed to watering their lawn for 15 to 20 minutes each day. This is not the best way! The water doesn't get down in the soil far enough to do a lot of good, and encourages the roots to stay closer to the surface. Less frequent and longer periods of irrigation promote deeper and more extensive roots that make for a healthier lawn.

Thatch, a spongy layer of dead plant parts just underneath the grass, can play a very important role in how effectively water is taken up by the roots. It can inhibit the flow of water to the roots. If the thatch layer is dry, it takes a long time to become wet again, like trying to wet a dry sponge. Dethatching or even aerating can be helpful in allowing water to get past this layer. This procedure should only be done in the spring or fall. Not all grasses produce thatch; perennial ryegrasses and tall fescues are not thatch producers, but Kentucky bluegrasses and fine fescues are.

The type of grass can be another factor in determining the amount of water needed to produce a quality lawn. Not all grasses require an inch or two of water. Tall fescues and fine fescues get along with much less and, depending on the variety, some do well with little supplemental irrigation at all once they're established. For more information on grass types and varieties, consult Home Grounds Fact Sheet C-1-6, "Grasses for Low Water Usage."

Sun versus shade is another consideration; lawns in full sun need more water. Lawns also need more water on windy days. Another tip

to help you to conserve water is to avoid watering during the hot part of the day. While this doesn't hurt the grass, the evaporative losses are slightly higher then.

Night watering is a controversial issue. Most people don't like to irrigate at night because they feel they'll be creating an environment for diseases. But this isn't always the case. A rule of thumb is that it's generally better to water your lawn during the hours of 5 a.m. to 8 a.m. Irrigating during these hours has the least effect on disease development. It is also the most efficient time of the day to water. If you stop irrigating by 9 a.m. the grass blades will actually be wet for a shorter period of time. The force of the irrigation water during this early morning period will actually knock the dew off of the grass, allowing them to dry more quickly. If you were to irrigate earlier in the evening, the grass would stay wet during the irrigation period and all night long, resulting in a nice environment for diseases to germinate and grow. There is less chance for fungi to develop if you water between 5 a.m. and 8 a.m. because the lawn is being irrigated at a time the grass is usually wet anyway.

Never mow your lawn when it's in drought stress because you might lose it. It's better to irrigate it first and mow it the next day. Also, don't mow off more than 1/3 of the grass blade at any one time and don't fertilize during periods of drought. Lastly, have your soil tested to see if it needs limestone. It is suspected that lime can help the grass tolerate short term periods of water stress.