How to Water Your Lawn Efficiently



For many, a lush, green lawn is a symbol of proud homeownership as well as a pleasant place on which to relax or play. Lawns, however, require a lot of water--water which, depending where you live, may be in short supply. This article discusses some strategies you can use *right now* to reduce your water use and keep your existing grass healthy. To learn about other options to make your lawn more environmentally friendly, or to discover sustainable alternatives to lawns, please explore the related wikiHow articles.

[edit] Steps

- 1. **Find out if your community has watering restrictions.** Many communities have responded to water shortages by implementing laws that restrict how many times per week residents can water their lawns, or for how long, and/or at what times. If you live in such an area, this article can still help you, but be sure to abide by the restrictions.
- 2. **Water only when your grass needs it.** Water conservation isn't the only reason to limit the amount of water you give your lawn. Overwatering is also bad for your lawn's health and can contribute to the development of fungus and disease. Many people, however, don't know that they're overwatering. Some types of grass require more water than others, and environmental factors, such as temperature, humidity, and wind, can dramatically affect how frequently you need to water your lawn. Fortunately, the most accurate way to determine whether your lawn needs water is also the easiest: just look at the grass. When grass needs water, it will begin to take on a blue-gray tint, and the older leaf blades on the plant will begin to curl up or wilt. In addition, footprints will remain on the grass for longer than usual, as the grass won't "bounce back." When 30-50% of your lawn shows these symptoms, it's time to water.
- 3. **Water deeply to encourage deep root growth.** Frequent shallow waterings encourage weed germination, and they also cause the grass plants' roots to grow shallow, leaving the

plant more susceptible to drought and to certain diseases. Watering only when your grass really needs it encourages the roots to grow deeper, but only if you apply enough water each time to penetrate the root zone. The most accurate way to determine the depth of the root zone is to dig a small hole and measure how far the roots go down. Alternatively, you can follow these general approximations: if you have a bluegrass lawn, each watering should moisten the soil to 6-8 inches, while for most other grasses, the water should penetrate 8-12 inches. You can determine how long to leave the sprinkler(s) on by using one of the following methods.

- Turn on your sprinkler for 15 minutes. After 18-24 hours, find out how deep the water soaked in by digging a small hole in the watered area or using a probe (a probe will push easily through damp ground). You can also push a shovel into the ground and use it as a lever to spread the soil apart enough so that you can see several inches below the surface. Once you see how deep the water went in 15 minutes, you can calculate how long you need to leave your sprinkler on. For example, if the soil is damp to 4 inches below the surface and your goal is to moisten the soil to a depth of 8 inches, you'll need to leave the sprinkler on for 30 minutes (2 X 15 minutes) each time you water.
- Estimate how much water you'll need based on your soil type. In general, 1" of water will penetrate sandy soils to 12", loamy soils to 6-8", and clay soils to 4-5". Using these estimates isn't quite as accurate as digging, but it's pretty close, especially if you have a good knowledge of your soil composition. To figure out how long you need to keep your sprinkler or sprinkler system on, calibrate your sprinklers.
- 4. **Water early in the morning.** When you use sprinklers, some water evaporates before it hits the ground. On a hot, windy day, the amount of water that never reaches your grass can actually be quite substantial. To reduce loss to evaporation, water sometime between 4 A.M. and 9 A.M., when the air is still cool and the wind is usually at its calmest.



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Aim your sprinklers to water the lawn, not the sidewalk or street. Slight adjustments to your sprinklers can save a lot of water. Ideally, you shouldn't water your sidewalk, patio, street, or driveway at all.

6. **Avoid creating runoff.** Even with sprinklers correctly targeted at the lawn, many people water until (or even after) water begins to run off the grass and into the street or driveway. This can waste a lot of water, and it isn't doing your lawn any good. If water starts to run off your lawn before you've been able to give it a deep watering, turn off the water for 15-20 minutes to let the ground absorb the water, and then continue watering as needed (rotating a sprinkler between one area and another will also do the trick). Some soil types absorb water

more slowly than others, but runoff can also be caused by excessive thatch buildup, which can promote disease--and which is sometimes caused by routine overwatering.

7. **Let the rain do your work for you.** Nothing looks more wasteful than running your sprinklers while it's raining. If your sprinkler system is on a timer, get and install a rain sensor that automatically turns the water off when it rains. If possible, also avoid watering if rain is expected later in the day or during the next day. Your grass should be fine, even if it looks stressed. Use a rain gauge to determine how much rain you received, and then water a bit more only if needed.



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Water problem areas by hand. Many lawns have one or two spots that require more water than the rest of the lawn. A south-facing slope (or, in the Southern Hemisphere, a north-facing slope), or an unshaded area in an otherwise shady lawn are two common examples of these "problem areas." If you water your entire lawn every time you need to water these hot spots, you'll likely overwater everyplace but these spots. Instead, water them by hand or use a separate sprinkler that's not attached to the rest of your irrigation system.

[edit] Tips

- Concerned about water conservation? Ditch the lawn. Unless you live in an area with enough year-round precipitation to keep your grass healthy without watering, lawns tend to waste a lot more water than other landscaping options. Consider not having a lawn at all. Lawns are high-maintenance and use a great deal of water. Could you replace your lawn with drought-tolerant landscaping or a native or lower water use plant?
- To check if soil in the root zone is adequately watered, squeeze a handful of it into a ball. If the ball is damp and holds its shape, the soil is properly watered. If the soil crumbles or appears dry or dusty, it's underwatered, and if you can squeeze water out of the ball, the soil is overwatered.
- If you live in a climate with moist, mild winters and dry summers (i.e. a Mediterranean climate), consider letting your lawn go dormant in the summer. You'll have a beautiful green lawn for most of the year without having to water your lawn at all. The grass will go brown in the heat of the summer, of course, but it will green up again when the weather changes (though some types of grasses may require reseeding in spots). This technique has become somewhat fashionable among environmentally conscious residents in parts of the U.S. Pacific Northwest.

- Grass that is overwatered will often exhibit some of the same symptoms as grass that needs water. If you notice the symptoms but the soil is damp, hold off on watering.
- While deep watering will help your grass become more drought resistant, watering
 enough to moisten the soil below the root zone is unnecessary and wasteful, as the grass
 won't be able to access moisture deeper than its roots.
- Local extension services or water conservation authorities can provide additional information on how to water your lawn and on other techniques to save water while keeping your lawn looking its best.
- Aerating your lawn once a year can increase the soil's infiltration rate (the rate at which it absorbs water), and reduce runoff problems.

[edit] Warnings

- Watering in the evening is not recommended. It reduces evaporation (like watering early
 in the morning), but because the above-ground portion of the grass plant stays damp all night,
 it can encourage the development of turf-grass diseases.
- Newly sodded or seeded lawns require more frequent watering than mature lawns.
 Established lawns with patch diseases may also benefit from more frequent waterings.

[edit] Related wikiHows

- How to Grow a Lawn Easily
- How to Save Water
- How to Calibrate Your Sprinklers
- How to Create a Weed Free Lawn Without Using Harmful Chemicals
- How to Change the String on a Lawn Trimmer

[edit] Sources and Citations

- New Mexico State University
- University of Minnesota Extension Service
- Colorado State University Extension Service
- University of Missouri Extension Service