

Water Quality and Your Lawn

Did you know?

You have a water purification system right outside your door — your lawn.

You may already know that well-maintained lawns and landscapes can add 5 to 7 percent to a property's value. But did you know that a dense, healthy turf is an environmental hero? According to a Gallup survey, a growing number of Americans, 23 percent, do recognize the environmental benefits of turf. *You can do your part for the environment in your own yard!*

A key environmental benefit of a healthy lawn is improved water quality. Lawns help keep our lakes and streams clean by allowing rainwater to filter into the soil rather than running into storm sewers, sometimes washing away valuable soil. Healthy, dense lawns absorb rainfall, preventing runoff and erosion.

According to scientific research, turf promotes high populations of microorganisms in the thatch layer and topsoil. These microorganisms break down impurities, making turf an excellent water filter.

Studies at several nationally recognized universities have documented that well-managed turf has the greatest capacity for absorbing and holding water than any other ground cover. The result is less runoff, and better water quality.

In the pamphlet "Healthy Lawn, Healthy Environment," the Environmental Protection Agency noted turf's environmental qualities: *"Thick grass prevents soil erosion, filters contaminants from rainwater, and absorbs many types of airborne pollutants, like dust and soot. Grass is also highly efficient at converting carbon dioxide to oxygen, a process that helps clean the air."*

What can you do to encourage and nurture your lawn's environmental qualities?

Practice preventive turf health care today. Here are a few pointers:

- **Soil.** Consider having your soil sampled and analyzed. Make sure your soil has the correct pH level and key nutrients for healthy growth.
- **Grass.** Only use brand name, improved variety mixtures or blends that grow well in your climate, meet your quality expectations, and can accommodate your lawn activities (like heavy use by children at play).
- **Mowing.** Mow at the highest recommended height and mow often, never removing more than one-third of the leaf surface. Keep lawn mower blades sharp and grasscycle. Grasscycling, or leaving clippings on the lawn when you mow, allows nutrients to return to the soil. Make sure you don't leave clippings on the pavement where they can wash off into a water source and contribute to urban water pollution.
- **Watering.** Rule of thumb: water deeply but not too often. In general, watering should moisten the soil to a depth of 4 to 6 inches. This requires an application of a half-inch of water on coarse, sandy soil, and one inch on heavy- or fine-textured soil. Too much water can cause water quality and grass problems, increasing the chance of fungus or runoff, and leaching of nutrients. And, it's a waste of our precious water resources.

- **Fertilization and pest control.** Apply the right amount and kind of fertilizer and pest control products at the right time, and only when needed. Follow *all* label instructions and precautions.

More helpful tips that protect water resources

- Calibrate your fertilizer spreader.
- Calibrate your water sprinkler using tin cans spaced throughout the lawn to estimate how many inches of water is applied to the lawn per minute.
- Measure your lawn properly before any application. Don't exceed the per 1,000 square-foot recommendations for each lawn care product.
- Make sure you don't get a product on the pavement where it can wash off into a water source. If you do, sweep or wash it back onto the lawn.
- Identify any weed, insect, or disease before selecting a treatment method. If using pest control products, consider spot applications when necessary.

If you need advice or assistance with proper turf management practices, contact your local county cooperative extension service or a lawn care provider. Before hiring a professional to help maintain your lawn and landscape, check out the company's credentials and references.

REMEMBER: By following proper turf management practices, you can enjoy your lawn and its environmental qualities!

Supporting Organizations for "Water Quality and Your Lawn"

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Water Environment Federation

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