

Healthy Lawns, Healthy Waters

A GUIDE TO EFFECTIVE LAWN CARE FOR THE CHESAPEAKE BAY WATERSHED

Did you know?

There are 3 million acres of turf in the Chesapeake Bay watershed. Half of all lawns are fertilized, mostly with synthetic chemical fertilizers; half of those lawns are overfertilized. (Source: Center for Watershed Protection survey)

Steps for Healthy Lawns and a Healthy Bay

Test your Soil: Find Out What Your Lawn Needs

Testing is one of the most important lawn care steps, and one of the most frequently ignored. Soil test bags and supplies can be obtained from your local Cooperative Extension office or one of their recommended laboratories.

- Base phosphorus fertilizer on soil test recommendations. Without a soil test, don't assume an established lawn needs phosphorus fertilizer—most do not. Most fertilizer companies are in the process or have already removed phosphorus from routine lawn maintenance fertilizer.
- Sometimes just adjusting the pH will take care of many lawn problems, such as sparse growth or weeds. Apply lime (preferably calcitic limestone) to raise soil pH; apply iron sulfate or sulfur to lower the pH. (The ideal soil acidity range is 5.8-6.5.) Organic options to change pH include organic matter such as compost and mulch (slowly lowers pH) and wood ash (raises pH).

Feed the Soil to Feed the Lawn: Fertilizers and Compost

BUYING YOUR OWN FERTILIZER

If you buy your own fertilizer, the most important thing you can do to protect water quality is apply it according to the directions on the bag. Legislation that has been either passed or that is under consideration in most Bay states provides consumers assurances that application rates recommended on fertilizer bags are based on the latest science designed to grow healthy grass while avoiding pollution. Experts suggest that established lawns need no more than 0.7 pounds of water-soluble nitrogen per 1000-square feet in any 30-day period. Applying any more than this risks pollution and is unnecessary for growing grass.

APPLYING FERTILIZER

In addition to following the directions on the bag, avoid applying fertilizer:

- before a heavy rain.
- during the winter months when grass isn't growing.
- to frozen ground.
- on paved surfaces.
- within 15 feet of waterbodies, including conduits such as storm drains.

BASIC FERTILIZER TIPS

Remember that the best time to apply fertilizer to your lawn is in the fall, when grass is putting energy into growing roots that support healthy growth in the warmer months. Use a drop spreader—it provides better control than a rotary spreader.

Don't forget to leave lawn clippings on the ground when you mow. This contributes to healthy growth and recycles fertilizer so the lawn needs less additional fertilizer.

Organic fertilizers are great for soil quality, but if you use organic fertilizers, like compost, keep in mind that a soil test is important to prevent build up of phosphorus in the soil that can slowly leach out when it rains, contributing to water-quality problems. A soil test can help you determine whether your lawn needs phosphorus. If your lawn tests in the high or very high range for phosphorus, consider applying nitrogen fertilizer only to prevent phosphorus pollution.

FOR A NEW LAWN

Before establishing a new lawn, have the soil tested and incorporate compost thoroughly into the soil. Minimum depth of incorporation should be 6 inches.

IF YOU USE A LAWN CARE COMPANY

Here are some questions to ask and things to keep in mind:

- Are they licensed with the state? In most Bay states, fertilizer companies must comply with the law to safely apply fertilizer.
- Will they take a soil test and base application of fertilizers on the results? Will they explain the results to you?
- Do they have non-toxic weed control options?
- Do they apply fertilizer to your lawn before a heavy rain or during winter months? If so, select another company.
- Let them know you want to protect water quality. What strategies do they use to apply fertilizer that protects streams, rivers, and the Chesapeake Bay?
- If you see fertilizer on paved surfaces after your lawn company has visited, contact them immediately. Trained professionals will correct this problem right away and should avoid having it happen in the first place.



CHESAPEAKE BAY FOUNDATION

Saving a National Treasure

COMMON ERRORS IN APPLYING FERTILIZER

- Applying without first getting a soil test
- Applying too much fertilizer (at higher than recommended rates)
- Applying to a lawn that is not actively growing
- Applying at the wrong time of year
- Applying just before heavy rain is forecast
- Applying to hard surfaces like sidewalks, driveways, and streets
- Applying with a rotary spreader (a drop spreader offers better control)

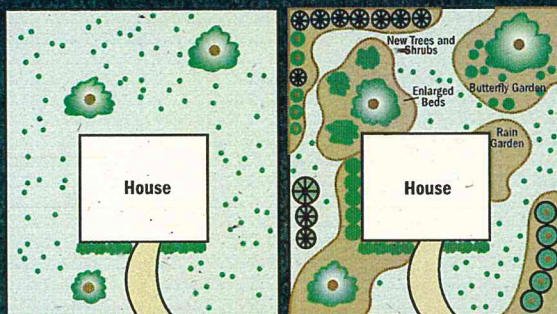
Watering your Lawn

If you choose to water your lawn:

- water only as needed (dig 6" down and check moisture levels in the soil);
- water in the morning to reduce evaporation and the spread of disease;
- water slowly and deeply; and
- if you use automatic sprinkler irrigation, make sure it has sensors to turn off automatically when moisture levels are adequate.

Reduce your Lawn

Vast expanses of lawn often become the default for landscaping when homeowners don't know what else to do with their property. But how much of the lawn do you actually use? Are there better ways to beautify your yard?



BEFORE: 1000 Square Feet of Lawn

AFTER: 400 Square Feet of Lawn

REDUCE YOUR LAWN AND INCREASE NATIVE PLANT AND WILDLIFE DIVERSITY BY FOLLOWING THESE STEPS:

- Enlarge flower and shrub beds using the "lasagna approach:" mow the lawn at the lowest setting and lay 5-6 sheets of newspaper down thoroughly, cover with 2" of mulch, and plant flowers and shrubs through the holes in newspaper.
- Extend mulched areas around trees to create tree "islands," and mix in a few native shrubs to add variety.
- Don't grow grass under trees (it competes with the trees for moisture and nutrients); lay down mulch or chopped leaves instead.
- On slopes, plant shrubs or clumping, no-mow native grasses such as switchgrass; their deep roots will hold soil

and reduce runoff. Mowing on steep slopes can also be dangerous.

- In wet areas and near downspouts, create a rain garden or small wetland garden by planting native species of wetland plants and shrubs.
- Plant grass substitutes and native groundcovers like Allegheny pachysandra, Pennsylvania sedge, or purple lovegrass, that require little or no mowing.

Mow High and Leave the Grass Clippings on the Lawn

Raise the blade on your mower so that you cut the grass 2½" to 3½" high—this ruler can serve as your guide. Most homeowners stress and damage their lawns by cutting too close to the ground.

Taller grasses:

- shade out weeds and help prevent their germination;
- allow roots to reach deeper, improve water infiltration, reduce runoff; and
- stay green longer during drought.

After mowing, leave the grass clippings on the lawn. These cuttings provide up to half of the nitrogen your lawn needs each year. And it's free!

Sizing up your lawn:
How tall should
you let your grass grow?

IDEAL RANGE

For more resources and information, go to cbf.org/landscaping.