

Environmentally Friendly Lawn

A Common Sense Approach to an

In Search of the Perfect Lawn

American homeowners apply ten times more fertilizer, herbicides and pesticides to their grass than farmers do to all their crops. This over indulgence results in chemically dependent lawns, which affects humans, flora and fauna beyond the limits of the sidewalk. Consider a more sensible approach to lawn maintenance. You can reduce environmental impacts *and* produce an attractive lawn.



Get to Know Your Soil

If you are applying fertilizer or lime to your lawn without first understanding your soil's requirements, you are probably wasting your hard-earned money. For no more than \$10, you can purchase a soil test kit (accompanied by complete sampling instructions) from your County Cooperative Extension Office and learn all that you could possibly want to know about your lawn's soil strengths and weaknesses. Penn State's Agricultural Services Lab will test your soil sample and return the results to you with information regarding the steps you should take to bring your soil to ideal growing conditions. (At this price, why not spend an additional \$10 and get a second soil test kit for your vegetable garden or perennial bed?)

Discover the Wonders of Lime

If you feel compelled to put something on your lawn each year, try lime. Most soils in southeastern Pennsylvania are acidic; lime helps to neutralize the acidity. A balanced pH (a measure of soil acidity) will improve the availability of nutrients, encourage thatch decomposition and benefit soil micro-organisms, all of which are essential to the soil's health and fertility.

Lime can be applied to your lawn area any time of

the year. Because it takes several months to be fully incorporated into the soil, however, it is best applied in the fall. For turfs, pelletized limestone is preferable to pulverized limestone. The pellets spread more evenly with less dust. (The soil test that you conduct will reveal the amount of lime required to bring your soil to optimal levels.)

Put On Your Top Dress

Consider applying a 1/8"-1/4" top dressing of a thoroughly decomposed organic matter such as garden compost, well-seasoned manure (never fresh), municipal leaf compost or recycled municipal waste, commercially known as "Earthmate," to your turf. This will improve soil drainage, add organic nutrients and improve your soil's capacity to hold water.

Timing is Everything

If you are going to apply fertilizer, timing is everything. The ideal periods for application take place between the last lawn mowing and Thanksgiving and the first two weeks in September, when fertilizer will feed the roots (bottom growth), not the leaves. Effective lawn feeding after Thanksgiving is often hampered by wintery conditions, during which time precipitation will wash the fertilizer into local streams, contributing to waterway pollution.



Spring fertilizing encourages leaf growth (top growth) and feeds weed species. (This only makes pesticide manufacturers and mower jockeys happy.) If you must fertilize in the spring, do it in early May. Never fertilize in the summer. Most lawn grasses are cool season species, which die back during the heat of the summer.

You Bet Your Grass

Select grass species that are appropriate for your expected usage area and environmental conditions. Different grass species were developed for different purposes. Some species thrive in shade, others in high traffic areas, still others in formal settings. If in doubt, contact your local Cooperative Extension agent for suggestions.

Read the Label . . . Follow the Directions

Read and follow the directions for whatever product you select. Lawn care products are designed for specific rates of application. Exceeding the recommended application rates will not produce a better lawn, it will just dispense more chemicals where non-targeted species (like your kids and pets!) can be affected.

Less Is Better

Think about planting ground covers, a wildflower area, or simply leaving a section of the yard unmowed for wildlife. Discover the beauty of grasses, as they change in color and texture over the course of the season. Enjoy the wildlife that will be attracted by the food and cover. You might just be delighted with the results. If you aren't, you can always put it out of your misery with a weedwacker.



Cut It . . . Don't Beat It to Death

Sharp mower blades produce a cleaner cut that slices through grass rather than pulling it by the roots. A sharp blade will give your lawn a more uniform appearance. In addition, sharp blades help extend the life of your mower because the engine will not have to work as hard to produce the same results.

Raise It Up

Set your blades for a mowing height that will remove only the top one-third of the grass. Higher settings allow the grass species to compete effectively with lower growing weed species. Higher growth also shades the ground from the sun, reducing moisture requirements. Begin the season mowing at 2.5", then gradually raise the mower height as the warm season continues to 3.5" in the heat of the summer.

This publication was funded by a generous grant from the Rohm and Haas Company



Tune It Up

A well-tuned lawn mower engine burns cleaner fuel and reduces emissions. Also, more horsepower can be applied to cutting the grass instead of running an inefficient engine.

Forsaking Horsepower

If you have a small lawn, consider a manual-reel mower. Newer models no longer resemble the heavy clunker that your grandparents shoved around the yard. (And think about the exercise benefits!)

Clip and Save

Turf clippings are mostly composed of the grass's leaf tissue and thus decompose rapidly. Penn State researchers recommend that clippings be left on the lawn where they can contribute a substantial amount of nitrogen and other nutrients to the soil, thus reducing fertilizer requirements.

When either inclement weather or a busy schedule prohibits timely lawn mowing, don't worry about the large clumps of grass that might remain after mowing. These clumps can be used to mulch around trees or in the garden. Better yet, they can be recycled into the compost pile for later use.

Develop a Wilder Aesthetic

Someone once said that "wildflowers are weeds with press agents." Are no dandelions worth the expense and potential side effects of dangerous chemicals? Birds, plants, animals, and our children vote "NO."

For more information, contact one of the local Penn State Extension Service Office locations:

Bucks County

Neshaminy Manor Center
Doylestown, PA 18901-2896
215-345-3283
Email: BucksExt@psu.edu

Delaware County

20 Paper Mill Road
Springfield, PA 19064
610-690-2655
Email: DelawareExt@psu.edu

Chester County

Government Services Center
601 Westtown Road, Suite 370
West Chester, PA 19380-0990
610-696-3500
Email: ChesterExt@psu.edu

Montgomery County

1015 Bridge Street, Suite H
Collegeville, PA 19426-1179
610-489-4315
Email: MontgomeryExt@psu.edu

This brochure was prepared by Drew Gilchrist, of Natural Lands Trust, with help from Penn State University and Montgomery County Cooperative Extension Agent Nancy Bosold.