



# LAY DOWN THE LAWN: PROTECTING WATER QUALITY

Is your lawn a healthy, diverse, green ecosystem, pleasant to the eye with low cost, and ecologically sound maintenance? Or is it an economic and environmental liability due to overfertilizing and overwatering?



## LAWN FACTS



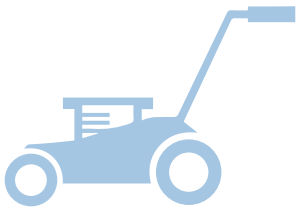
According to a study by the Center for Watershed Protection in Ellicott City, Maryland, nearly 90% of residents in the Chesapeake Bay Watershed have a lawn, and the amount of turf that is fertilized in the Bay Watershed is equivalent to 800,000 football fields.



In Maryland alone, homeowners spend an estimated 72 million hours collectively each year on lawn care.



According to industry estimates, there are more than 50 million acres of managed turf in the U.S. By comparison, the total watershed area of the Chesapeake Bay is just over 40 million acres.



One hour of pushing a new, gas-powered lawn mower around your yard produces about the same amount of pollutant emissions as driving your car for 50–70 miles.

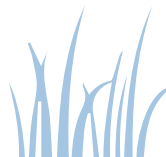


### **Don't bother with herbicides.**

An average acre of soil contains more than 200 million 'weed' seeds in the top six inches of soil. Don't get involved in a battle you can't win, and remember that the naked eye generally cannot distinguish between a perfect lawn and one containing a few weeds.

### **Lawns are not sponges -**

Recent research indicates that half of all rainstorms produce at least some runoff from lawns, and about a third of all lawns are so compacted during construction that they have the same hydrologic properties as concrete.



Cool weather grasses, like ryegrass or Kentucky bluegrass and some fescues, go dormant and brown in the hot summer months and should not be watered.

The choices we make in maintaining our lawns can make a real difference in the health of our streams, rivers, and the Chesapeake Bay.

- Be a careful consumer.** Read all product labels carefully. If the product has too many warnings on the label, consider a safer alternative.
- Check the weather forecast before you fertilize or spray.** If rain is expected within the next 24 hours, delay application until the next dry period.
- Never apply herbicides or insecticides within 5 feet of pavement.** If you must remove weeds near pavement, simply pull them by hand. Rinse out applicators away from paved areas.
- Keep the fertilizer spreader in the garage.** Many people never fertilize and still have green lawns. Have your soil tested to determine whether you need to fertilize. Fertilize in the fall, not spring, using slow release forms of nitrogen. Aerate your soil to reduce compaction and help lessen fertilizer run-off from your lawn.
- Mow Higher and Less Frequently.** Experts caution that cutting grass too short is the second leading cause of problem lawns. You can control weeds by shading them out. Set your mower height to three inches and you will have fewer weeds.

- Reduce your turf area.** A great way to save time and energy is to reduce the turf area on your property by about 5% each year. Start with the soggy and steep areas that are difficult to mow. Dig out the lawn and replace it with ornamental beds or a rain garden.
- Don't overwater the lawn.** Established lawns will survive a few weeks without rain. Too much water results in excessive leaf and weed growth, depleting a lawn's energy reserves and weakening its disease resistance.
- Select a good natural lawn company.** About 25% of us use the services of a lawn care company to take care of our yards. Look for a company that conducts soil tests and uses organic fertilizers and natural pest management techniques. Make sure the firm and its personnel are licensed and certified by the Maryland Department of Agriculture's Pesticide Regulation Section.
- Mow and go- leave clippings to build better soil.** Don't bag, rake or remove grass clippings. When clippings are left in place they break down and return to the soil, adding organic matter and fertility for a healthier lawn. This process of "grasscycling" can provide 25% of your turf's nitrogen needs.

## ALTERNATIVES

In place of some of the more common, toxic lawn care materials, attempt to use these safer alternatives.



### INSECTICIDES

- insecticidal soaps
- pyrethrum rotenone and neem
- horticultural oils
- Bt (*Bacillus thuringiensis*).



### NATURAL FERTILIZERS

- cottonseed meal
- blood meal
- bone meal
- fish emulsion

**But be cautious; even if a product is less toxic, it can still be overused.**

**Resources** // University of Maryland Extension



*Tips for Green Leaders in Frederick County* is a publication of the Frederick County Division of Energy & Environment. For more information on this topic and about our programs, visit [sustainablefrederickcounty.org](http://sustainablefrederickcounty.org), email us at [sustainability@frederickcountymd.gov](mailto:sustainability@frederickcountymd.gov), or call 301.600.1416. Sustainable Frederick County is on [Instagram](#), [Twitter](#), and [Facebook](#).