

Homeowner Guide for a More Bay- Friendly Property

Bay-Friendly Lawn Care

Lawns make up a significant portion of individual properties and have been shown to produce more runoff than their forested counterparts. A recent research report by the Chesapeake Bay Program recommends ten practices that can make your lawn more Bay-friendly (USWG, 2013: <http://chesapeakestormwater.net/training-library/urban-restoration-techniques/urban-nutrient-management/>).

1. Maintain a dense cover of grass or conservation landscaping to reduce runoff, prevent erosion, and retain nutrients

Dense grass or plant cover helps to reduce surface runoff. Regardless of whether it is fertilized or not, lawns with poor turf cover have a high risk for nutrient loss, especially if soils are compacted or slopes are steep. Any bare spots or eroding areas should be re-seeded, and may require some soil amendments, spot fertilization and, in extreme cases, stabilization with a biodegradable erosion control cover.



2. Reduce or Eliminate Fertilizer:

- ***Choose not to fertilize, OR***
- ***Adopt a Reduce Rate/Monitor Strategy, OR***
- ***Apply less than a pound of Nitrogen per 1000 square feet per each individual application.***

You have three fertilization options to reduce the risk that fertilizer from your lawn will reach the Bay, depending on the conditions of your lawn and your aesthetic preferences.



The easiest strategy is to not fertilize at all, which makes sense for lawns that are relatively flat and mature, and have a dense grass cover. This strategy relies on soil mineralization, lawn clippings and atmospheric deposition to supply the nutrients needed for growth, but should NOT be used on lawns that have poor turf cover or exposed soils.

The second strategy relies on a "reduced rate and monitor" fertilization approach. In this strategy, you only apply one-third to one-half of the recommended application rate on the fertilizer bag label, and then monitor how your lawn responds over the next couple of

Homeowner Guide for a More Bay- Friendly Property

months. If you are unsatisfied with the look of your lawn at that point, you can always re-apply fertilizer at the smaller dose. More is not always better; your lawn may look just as healthy as it does at the full application rate.

The third strategy is to fertilize at the recommended nitrogen fertilization rate but split it into 3 or 4 small doses during the growing season. Individual application rates should be no more than 0.9 pound of nitrogen per 1000 square feet of lawn in most parts of the Bay watershed

When assessing your property, we recommend that you measure your lawn area which will help you to figure out how much fertilizer you will need to apply.

If you choose to fertilize, the following practices can further reduce the risk that fertilizer you do apply ever reaches the Chesapeake Bay.

3. Do not apply fertilizers before spring green up or after the grass becomes dormant

Researchers have concluded that the highest fertilizer loss occurs in the winter when grass is dormant. In the northern part of the Bay watershed, dormancy usually begins around Halloween, whereas it begins around Thanksgiving in the southern part of the watershed.

4. Maximize use of slow release N fertilizer

The risk of nutrient loss during the growing season can be further reduced if you buy slow release fertilizer products. Check the bag label when you shop to see how much water insoluble nitrogen or WIN it contains -- at least 20 to 50% of WIN is generally desirable.

5. Immediately sweep off any fertilizer that lands on a paved surface

Rotary spreaders are the most common method to apply fertilizers and can broadcast fertilizer granules beyond the lawn and onto the street or driveway where they can be washed away in the next storm. Some experts think as much as 2 to 4% of applied fertilizer can be washed away in this manner. If you are buying a new spreader, consider models that have side broadcast deflectors that can sharply reduce off-target fertilization.



Homeowner Guide for a More Bay- Friendly Property

6. Never apply fertilizer within 15 to 20 feet of any water feature and manage this zone as a grass, meadow, or forest buffer.

The risk of nutrient loss is also high when fertilizer is applied close to water features such as swales, drainage ditches, streams, shorelines, sinkholes and wetlands. So it is a real good idea to create a "fertilizer-free" buffer zone around these water features, and manage this area as a conservation landscape.

Even if you don't fertilize your lawn, there are still other good practices to make your yard more Bay-friendly.

7. Keep clippings and mulched leaves on the lawn and keep them out of streets and storm drains



Lawn clippings are an important nutrient and organic matter source which can enhance the health of your soils and your lawn. Using a composting lawn mower to keep the clippings on your lawn adds about one pound of N per 1000 square feet of natural (and free) fertilizer to your lawn each year.

You should treat lawn clippings and tree leaves as if they were a bag of fertilizer, and strive to keep them on your lawn, and out of the gutter, street or storm drain system and never, ever dispose of yard waste in a ravine or near a stream.

When you rake your leaves in the Fall, it is good practice to run over them with your composting mower to mulch them into small fragments and add them to your compost pile in the backyard. Come late Spring, they will decompose into a fine organic mulch that you can add to your rain garden or conservation landscape as a top dressing (assuming that you turn over the pile every couple of months).



Homeowner Guide for a More Bay- Friendly Property

8. Set mower height at 3 inches or taller



Maintaining taller grass produces a deeper and more extensive root system which allows for increased nutrient uptake and reduced lawn runoff volume. The deeper roots also reduce the need for supplemental irrigation during times of drought, suppress weeds and increase turf density.

9. Use other practices to increase the porosity and infiltration capability of your lawn to treat stormwater.

Disconnecting your rooftop downspouts and installing practices like rain gardens have been shown to increase your lawn's ability to retain and manage stormwater on-site.

10. Consult with your local extension service office or lawn care company to get the best advice on how to have a Bay-friendly lawn, which might involve a soil test analysis.

Many lawn care professionals can help you achieve an attractive and Bay-friendly lawn, given your type of grass, soil conditions, shading, and your landscape preferences. Some good links to for expert help to reach your lawn goals can be found in Appendix E.

Finally, if grass doesn't grow well in portions of your yard, then consider mulching or conservation landscaping. Check to see if you have invasive ground covers such as English ivy and periwinkle that can quickly spread into natural areas and are so shallow-rooted that they can't prevent soil erosion. If possible, try to remove these invasive spreaders and replace them with turf or conservation landscaping.



Conservation landscaping provides colors throughout the year