

Fall Lawn Care and Local Water Quality

Maintain Your Lawn without Contributing to Pollution of the Bay

The onset of fall in Maryland brings football, crab feasts, crisp air and seasonal lawn care, such as reseeding, raking, dethatching, and fertilizing. It's important to note that the way we care for our lawns can impact the water quality of local waterways, which includes the Chesapeake Bay.

The quantity of various lawn fertilizers applied by homeowners on nearly 1,300,000 acres of residential lawns, in conjunction with the amount that is used to maintain the estimated 1,500,000 acres of planted croplands, constitutes a major source of nutrient pollution in the Bay. Lawn fertilizer accounts for approximately 44% of all fertilizer sold in Maryland!



The Maryland Lawn Fertilizer Law established in 2013, regulates how, when, and where fertilizer can be applied in efforts to protect the Chesapeake Bay from excess nutrients introduced by non-agricultural sources, such as golf courses, parks, recreation areas, athletic fields, businesses, and residential lawns. The following application restrictions are enforced by the Maryland Lawn Fertilizer Law:

- Fertilizer cannot be applied within 15 feet of waterways or within 10 feet of waterways if a drop spreader, rotary spreader, or targeted spray liquid is used for application.
- Homeowners and professionals are not to apply fertilizers between November 15 and March 1.
- Fertilizer cannot be applied when heavy rain is predicted.
- Fertilizer may not be used to de-ice walkways and driveways.
- Phosphorus may only be applied to lawns when a soil test indicates that it is necessary or when a lawn is being established, patched, or renovated.

Homeowners in the Chesapeake Bay watershed must remain vigilant in proper lawn maintenance, as it may be the most impactful action we, as members of the community, can take to improve the health of the Bay. Following the recommendations below will help protect local waterways, and cut costs to YOU, the homeowner!



Set mower height to 3 inches or higher: Remove no more than 1/3 of the grass height at each mowing. Taller grass slows the rate of runoff and results in a deeper, denser root system. Dense roots absorb more water, reduce irrigation needs, reduce lawn runoff, prevent erosion, and suppress weeds. Let established lawns go dormant during the hot, dry summer months.



Retain and Reuse lawn clippings: Lawn clippings decompose quickly, providing important nutrients for your lawn, and settle to create an organic layer on the soil that encourages stormwater infiltration. Retaining lawn clippings can drastically reduce the need for nitrogen fertilizers, saving you money and decreasing pollution potential to local waterways. It's a win-win!



Skip the spring. Fertilize in fall (if at all): Check your lawn's soil chemistry via a soil test to ensure fertilizer is needed. If it is, ensure you read and follow all directions on the fertilizer bag and apply only the minimal amount necessary. Lawn fertilizers contain nutrients that are beneficial to your lawn (in moderation) but not to water quality. Rainwater runoff from fertilized lawns can make its way to local waterways. The excess nutrients introduced by contaminated runoff promote algae growth. Algae, in turn,

blocks sunlight from reaching underwater grasses, which are a critical part of the Bay's ecosystem.

Leave the leaves and grow a garden: Instead of bagging leaves in the fall, rake them into your gardens where they will decompose and enrich the soil. If you're tired of mowing the lawn, leave the leaves all winter to smother the grass. In the spring you'll have a nice new area to plant a garden filled with native plants. Native plants reduce the need to fertilize, create native habitat, and reduce runoff because of their large root systems.

Consider Decreasing Your Lawn Size (and Maintenance!) with Sheet Mulching:

Also referred to as lasagna composting, sheet mulching is a cold composting method that turns grass areas into vegetable or perennial gardens. Benefits include reduced lawn care, improved soil structure and reduction of household waste by way of recycling organic material. Fall is the best time to begin sheet mulching

as the materials break down over the winter making the area ready for planting in the spring. The basic technique involves placing alternate layers of carbon materials and nitrogen materials directly onto the prepared soil. Layers should be equal to allow for even decomposition and approximately 1-inch in depth. For specific steps to achieving optimal compost as well as for ideal sources of carbon and nitrogen materials visit the link on sheet mulching below. Sheet mulching is a slow process; a compost bed may take 6 months or longer to decompose enough for planting. Start your sheet mulching bed this fall and enjoy your new garden this coming spring!



Visit the following websites for more information on lawn care and the MD's Lawn Fertilizer Law:

https://mda.maryland.gov/resource_conservation/Documents/fertilizerwebpage.pdf

<http://www.stormwater.allianceforthebay.org/take-action/habits-to-help/lawn-and-garden-care>

Visit the following website for more information on sheet mulching:

<https://extension.oregonstate.edu/gardening/soil-compost/sheet-mulching-aka-lasagna-composting-builds-soil-saves-time>

Check out some of our past environmental bulletins on similar topics here:

<https://code200-external.gsfc.nasa.gov/250/environmental/environmental-bulletins#general-env>

