GROWING GREEN
SUSTAINABLE & BAY-FRIENDLY LAWN CARE

Having a healthy lawn that’s good for you and the rivers is easier than you think.
Try Sustainable Lawn Care

- There are 3 million acres of turf in the Chesapeake Bay watershed*
- Most Marylanders live within a 15 minute walk of a stream
- Half of all lawns are fertilized
  – Mostly with synthetic chemical fertilizers
  – Half of those lawns are over-fertilized*
- What we do in our yards affects our waterways

*Center for Watershed Protection survey
Keep It Tall & Let It Fall

• Mow lawn no shorter than 3½ inches
• Leave grass clippings on the lawn
Raise Your Mower

• 3½ Tall Lawn
  – Outcompetes weeds by shading them out and preventing their germination
  – Keeps sunlight and wind from drying soil (grass stays green longer during drought)
  – Roots reach deeper, improving water infiltration, reducing runoff

• Grass Cut Too Short
  – Is weak and unable to getting ahead of the weeds
  – Is a leading cause of problem lawns
    (note: the last few cuts in the fall can be slightly shorter to prevent over-wintering diseases)
Leave Grass Clippings

• Grass clippings are good for your lawn and your wallet
  – Could meet most of the nutrient requirements of any lawn (that’s free organic fertilizer)
  – Builds soil and will not create thatch
  – Frees you from hours of bagging and preserves landfill space

• Double-cut your lawn or use a composting/mulching mower

• 60% of Bay residents practice grass recycling
Know Your Soil

- No lime or fertilizer should be applied, except as indicated by a soil test taken within one year of the proposed application.
- Soil testing is an important step and frequently ignored:
  - Less than 10% of Bay residents have their soil tested.
  - Soil testing determines your lawn’s specific needs:
    - Testers often discover they need far less fertilizer than they thought, or that other soil amendments (such as lime) will do.
    - Excess fertilizer is wasted material (and money) and, ultimately, ends up in our waterways, directly impacting water quality.
  - Testing: Bowen’s Farm Supply, Annapolis:
    - Inexpensive and quick, results can be provided via email.
    - Ask for organic recommendations.
Fertilizer

• If soil test indicates fertilizer is needed, use only slow-release, organic fertilizers
  – Organic fertilizers feed and build the soil, which then feeds the lawn
  – Synthetic chemical fertilizers feed the lawn directly and excess unused nitrogen runs off or leaches into groundwater
  – Organic fertilizers make use of by-products of other industries

• Fertilizers should be composed of at least 65% slow-release nitrogen.

• Recommended fertilizers include organic plant- and animal-based products, like
  – Chicken poop
  – Compost
Fertilizer Application

• Apply fertilizer only when grass is actively growing
  – Optimum time for the lawn and
  – When there will be little or no waste
    o Cool season grasses in the fall
    o Warm season grasses in the summer (up to 4x/year)

• Measure your yard
  – Lawns are commonly over-fertilized because lawn size is over-estimated
  – No more than one pound of fertilizer per 1,000 square feet should be applied per year
  – Apply EXACTLY as directed—more is not better
Hit Your Target

- When spreading fertilizer, target the lawn
- Carefully apply fertilizer only where it will be effective (not the driveway or sidewalk)
  - Fertilizer that lands on impervious surfaces is more likely to end up in our waterways
  - Fertilizer can damage concrete and blacktop surfaces
  - Do not use a rotary spreader to apply fertilizer, a drop spreader is better (more control)
Watering

• Water lawns infrequently, but thoroughly
• Water only as fast as the ground can soak it up
• Early morning is the best time to water
• If you use automatic sprinkler irrigation, install sensors to turn it off automatically when moisture levels are adequate
• Summer droughts and high temperatures are common
  – Let your cool season lawn go dormant in summer
  – It will begin to brown at the top, but retain healthy roots
  – Fall’s rain and cooler temperatures will turn your lawn green again
Pesticides

• Pesticides misuse is a primary source for pesticides migrating off lawns into streams
• Pesticides drift on impervious surfaces
• Applying before rain is another way for pesticide contamination
Integrated Pest Management

• To combat pests, use Integrated Pest Management (using low-impact, non-damaging tactics)
  – Begin with over-seeding and
  – Core aeration

• Pesticides shall be used only as a last resort after specific pests have been identified
  – Only natural remedies such as Milky Spore should be used for general application
  – Other treatments should be used only on a spot-treatment basis
Weeds

- Broaden your definition of lawn to include weeds that perform desirable functions
  - Legumes like clover fix atmospheric nitrogen (naturally add nitrogen to the soil) and grow where grasses may not perform well
  - Clover nectar attracts butterflies
  - Weeds provide habitat for beneficial insect predators
  - Ladybugs feed on dandelion pollen and clover
- By adding compost and soil amendments, you can change the conditions of the soil to improve grass growth and inhibit weeds
Herbicide

• Avoid use of “Weed & Feed” products
  – EPA estimates over 5 million pounds of hazardous synthetic herbicides are applied to lawns this way every year
  – Adds products to entire lawn, not just problem areas

• Herbicides should not be used for general application and should be used only on a spot-treatment basis.

• Use non-toxic weed-control methods:
  – Remove weeds by hand
  – Spray with 10% strength vinegar solution
  – Burn weeds with a propane torch (not poison ivy!)
  – Spread corn gluten meal on established lawns to prevent weeds seeds from germinating
Corn Gluten Meal

• Use ONLY corn gluten meal for pre-emergent weed prevention
  – Non-toxic by-product of cornstarch and corn syrup production and used as animal food (reduce exposure if allergic to corn)
  – Prevents sprouting seeds from developing normal roots, making them susceptible to dehydration
    o Common weeds affected: crabgrass, creeping bentgrass, dandelions, smart weed, purslane, Bermuda grass, and more
  – Established plants are not affected
  – Can cost a little more, but a Growing Green lawn should require little in the way of subsequent applications
• Contains nitrogen—take this into account when determining fertilizer needs
• Apply in early spring when forsythia blooms (best) or in fall, following the heat and dryness of mid-summer
Check the Weather

• Do not apply fertilizer or pesticides within 12 hours of a predicted rain event.
• If products haven’t had time to break down and be absorbed by the lawn, rain can wash them directly into our waterways.
Maintain a Buffer

• Lawns with water access should have a 6 foot (min.) buffer between the lawn and the body of water
  – Serves as a waterway’s final defense from stormwater run-off
  – Acts like a sponge, slowing down run-off and removing nitrogen, chemicals, and other pollutants

• This buffer should be a NO PESTICIDE / NO FERTILIZER ZONE
Consider Shrinking your Lawn

• Less mowing
• More time to do everything else
  … like relax
• Naturalized areas and beds make space for more native plants and trees
  – Benefit wildlife diversity and beneficial insects
  – Don’t grow grass under trees—it competes with them for moisture and nutrients
For more info

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