

What is a Healthy Lawn?

A well-nourished lawn has the right balance of nutrients and soil conditions to support active plant growth with strong root systems.

Lawn Care Basics:

To grow, grasses have two requirements:

- ✓ **Top Soil and Organic Matter** promote deep root systems and prevent erosion during rain.
- ✓ **Basic Nutrients** sustain and nourish the soil. In particular:
 1. **(N) Nitrogen** helps give turf its green color and promote root and shoot growth.
 2. **(P) Phosphorus** assists in healthy root development and early plant growth.
 3. **(K) Potassium** fosters disease resistance, winter hardiness and drought tolerance.

Too little of these nutrients result in yellow malnourished lawns with a higher susceptibility to disease.

Too much of these nutrients can lead to serious long-term damage to your lawn.

How Can You Promote a Healthy Lawn?

1. Test Your Soil

Testing your soil provides valuable information about pH, lime and fertilizer requirements needed for your lawn type. Soil tests should be taken every 3 to 4 years. Maryland Extension provides homeowners with a list of soil testing

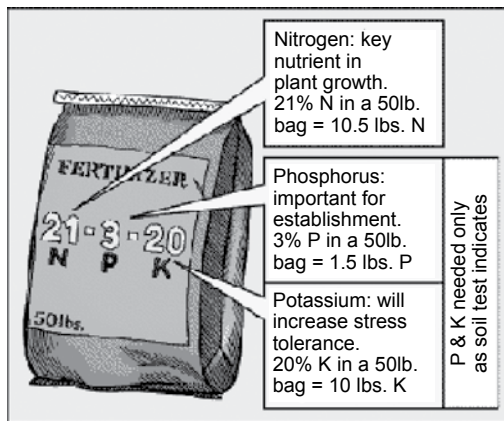
resources. Call the Home and Garden Information Center at 1-800-342-2507 or visit www.hgic.umd.edu.

2. Fertilizer Alternatives

- Mowing the right way reduces the need for watering and fertilizers, and prevents weed, pest and disease problems. Mow with sharp blades when grass is dry and remove no more than 1/3 of the leaf blade at one cutting.
- Instead of bagging, mulch grass clippings and leaves into your yard. As they decompose, they will slowly release nitrogen and reduce the need for fertilizer.

3. Use Fertilizer and Lime Wisely

Follow specific fertilizer and lime recommendations provided in your soil test results and apply in the fall. To prevent stream pollution, avoid applying fertilizer to the frozen ground and 48 hours before a forecasted rain.



Making sense of fertilizer labels
<http://mobygarden.wordpress.com>

- Fertilizer packages are labeled with three numbers that indicate the percentage, by weight, of nitrogen, phosphorus and potassium. Never apply more than a pound of soluble nitrogen per 1,000 square feet of land at a time.

- Lawns grow best in slightly acidic soils (pH 6-6.8). Following lime recommendations for your lawn will allow it to absorb additional micronutrients (manganese, zinc, iron, etc).
 - If hiring a landscaper, consider one that uses natural techniques and stay informed about their nutrient management practices.
- ### 4. Reduce Pesticide Use
- Not all pests are bad. Worms maintain healthy soil, and certain weeds and bad insects have natural predators like ladybugs, lacewings and beetles. Pesticides often kill these good insects along with the bad.
- Instead of pesticides, try removing insects and weeds by hand or using water to spray them away.
 - Use native grasses, like Red Fescue, Zoysia and Kentucky bluegrass, that are likely to be better suited to our clay soils and local environmental conditions.
 - Use pesticide alternatives or less toxic chemicals like insecticidal soaps to kill pests. For example, corn gluten controls weeds and B.t. (*Bacillus thuringiensis*) controls caterpillars.
- ### 5. Pick slow release, water insoluble fertilizers and organic alternatives (like alfalfa meal) to minimize:
- burning of roots caused by excess salt build up.
 - weed growth from too much phosphorus.
 - leaching of nutrients into local waterways.

Why Use Less Fertilizer on Your Lawn?

- **Reduce Maintenance Costs**

The average cost of lawn care ranges from \$1,440 to \$1,800 per year, of which a major portion is attributed to fertilizing. By recycling grass clippings, homeowners can save money on fertilizer costs.

- **Maintain a Healthier, More Attractive Yard**

Over-fertilized lawns become fertilizer-dependent lawns with less of a natural ability to self-nourish. Excess fertilizers not only promote quick unnatural growth spurts, but may also unintentionally foster weed growth and shallower, less drought tolerant root systems.

- **Reduce Pollution into Streams and Chesapeake Bay**

Ultimately fertilizer nutrients not taken up by the grass, run off into storm drains when it rains, causing nutrient pollution and excess algae growth in local streams and tributaries to the Chesapeake Bay.



Lawn Care Resources:

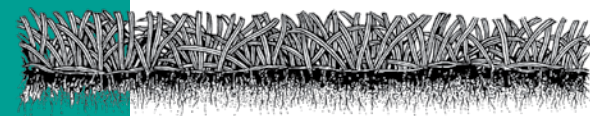
- The University of Maryland Extension has information on lawn establishment, fertilizers and pesticide alternatives: www.hgic.umd.edu
- Montgomery County Division of Solid Waste Services has information on grasscycling, composting and where to pick up free compost bins: www.montgomerycountymd.gov/yard-trim.
- Maryland native plants and grasses: www.nps.gov/plants/pubs/nativesMD/pdf/MD-Piedmont.pdf.
- The Bay Wise Maryland Yardstick Challenge assesses your lawn practices and identifies environmentally friendly changes you can take to benefit local waterways: www.hgic.umd.edu/_media/documents/publications/bw2.qxd.pdf.



City of Rockville

Grass Roots: Make Your Grass a Little Greener

Sustainable Lawn Care Tips for Your Backyard



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Environmental Management Division
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