

USE THE FOLLOWING TABLES TO DETERMINE NITROGEN NEEDS FOR ESTABLISHED LAWN:

POUNDS OF NITROGEN PER 1,000 SQUARE FEET
 if the fertilizer has **less** than 50 percent slowly available nitrogen

	Fine Fescue Tall Fescue Perennial Rye	Kentucky Bluegrass	St. Augustinegrass Bermudagrass	Centipedegrass Zoysiagrass
September	1	1	0	0
October	1	1	0	0
Early Nov.	1	1	0	0
April	0	0	1	0
May	0 - .5	0 - .5	1	1
June	0	0	1	0
July/August	0	0	1	1
Yearly Lbs. N/1,000 sq. ft.	2 - 3.5	2 - 3.5	2 - 4	1 - 2

POUNDS OF NITROGEN PER 1,000 SQUARE FEET
 if the fertilizer has **more** than 50 percent slowly available nitrogen

	Fine Fescue Tall Fescue Perennial Rye	Kentucky Bluegrass	St. Augustinegrass Bermudagrass	Centipedegrass Zoysiagrass
August 15	1.5	1.5	0	0
October 1	1.5	1.5	0	0
April	0	0	1.5 - 2	1.5 - 2
May 15	0 - 1	0 - 1	0	0
June	0	0	1.5 - 2	0
Yearly Lbs. N/1,000 sq. ft.	3 - 4	3 - 4	3 - 4	1.5 - 2

(Dark green areas denote optional or secondary applications.)

HOW MUCH SHOULD I PUT DOWN?

		lbs. of NITROGEN desired per 1,000 sq. ft.	
		0.5	1.0
Fertilizer analysis	Approximate ratio	lbs. of FERTILIZER per 1,000 sq. ft.	
5-10-5	1-2-1	10.0	20.0
10-10-10	1-1-1	5.0	10.0
12-4-8	3-1-2	4.2	8.3
16-4-8	4-1-2	3.1	6.2
20-0-16	4-0-3	2.5	5.0
23-3-7	8-1-2	2.2	4.3
28-0-12	7-0-3	1.8	3.6
38-0-0	1-0-0	1.3	2.6
46-0-0	1-0-0	1.1	2.2

*Always read and follow instructions on the fertilizer bag.

REMEMBER, the best fertilizer for your lawn has a **SLOWLY AVAILABLE** nitrogen source. "Slow-release" nitrogen sources are usually stated on the label, possibly as **WIN** or *water-insoluble nitrogen, sulfur-coated urea, natural organic nitrogen*, etc.

HINT: For uniform fertilizer application, apply half in one direction and the other half in a perpendicular direction.

WHEN TO WATER

Established plants need less water than do new plants. So save your water for new plants, and let it sink in slowly and over time. Cool-season grasses go dormant under heat and drought stress, which may make the lawn turn brown. The lawn isn't dead; it's just "resting."

To keep your lawn from dying during dormancy, apply approximately 1 inch of water once a month, either through irrigation or rainfall, and don't mow until the grass begins to grow again. The worst thing you can do is to apply inadequate amounts of water during a drought; it is better to leave it alone than to lightly irrigate it on an infrequent basis.

These guidelines cover just the basics for having a healthy attractive lawn that protects Virginia's waters. Your actions do make a difference. For ideas to make your home landscape more environmentally sound, contact the Virginia Department of Conservation and Recreation or Virginia Cooperative Extension.

Virginia Cooperative Extension



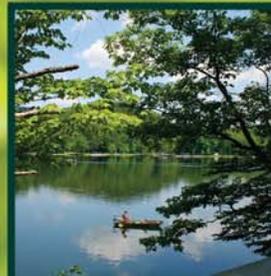
VIRGINIA STATE UNIVERSITY



Virginia Department of Conservation & Recreation
 State Parks • Soil & Water Conservation • Natural Heritage
 Chesapeake Bay Local Assistance • Land Conservation
 Outdoor Recreation Planning • Dam Safety & Floodplains

TIPS

on keeping your lawn GREEN... and Virginia's waters CLEAN



1-877-42-WATER



THERE ARE MILLIONS OF LAWNS IN VIRGINIA. IMPROPER OR EXCESSIVE FERTILIZATION OF THESE LAWNS CAN ADD POTENT CHEMICALS TO VIRGINIA'S WATERS.

Nutrient runoff pollution is the most severe problem facing local waterways. Runoff that carries excess nitrogen increases the growth of algae and reduces water clarity, which stresses underwater plant and animal life.

Runoff from your property can enter one of more than 3,000 creeks and rivers in Virginia. The health of Virginia's waterways begins in your backyard.

You can have a great yard and, at the same time, protect local water quality. Follow these simple steps recommended by the Virginia Department of Conservation and Recreation and Virginia Cooperative Extension.

CHOOSING THE BEST GRASS HELPS THE ENVIRONMENT

When lawns struggle, the natural reaction by most homeowners is to apply more water and fertilizer; rarely does this strategy work. The first important step in having a healthy, great looking lawn is selecting a grass that is best adapted to your region. Cool-season grasses are well adapted across much of the state. Warm-season grasses are well-adapted to the southern Piedmont and Tidewater regions of Virginia. Contact your local Virginia Cooperative Extension office for more information on choosing grass for your area.

GROWING A GREENER LAWN

Mow high with a sharp blade: 2 to 3 inches for cool-season grasses and 1 to 2 inches for warm-

season grasses. Don't mow more than a third of the grass blade.

LEAVE CLIPPINGS ON YOUR LAWN – they reduce the need for nitrogen fertilizer as much as one-third. If clippings clump, spread them over the lawn with a rake or pick them up and make compost.

HINT: For a dark green lawn, select darker grass varieties. They require less nitrogen and water.

FERTILIZER GUIDELINES

Fertilize when grass is actively growing and can take up the nutrients. Look for fertilizers with a high percentage (30 percent or higher) of slowly available nitrogen. It releases fertilizer slowly, and your lawn makes better use of it.

NEVER apply more than 1 pound of soluble nitrogen per 1,000 square feet at a time. More is not better. Lawn fertilizer is applied in pounds per 1,000 square feet. To determine square feet, multiply the length by the width of the area to be fertilized.

NEVER apply fertilizer to driveways, sidewalks or roadways. Sweep or blow fertilizer spilled on hard surfaces into the turf.

DOES MY LAWN NEED FERTILIZER?

The best way to determine if your soil needs fertilizer is to **TEST** your soil. Information on soil testing is available through your local Virginia Cooperative Extension Agent. It's easy and inexpensive. Test results will include recommendations on amounts of plant nutrients and lime that would help your lawn. Soil tests do not determine how much nitrogen to apply. See the chart in this brochure for nitrogen recommendations.

The soil test will tell you about phosphorus and lime needs. Established lawns need little or no additional phosphorus. Lime may be needed to maintain the soil pH for healthy grass. For new seedlings where lime is recommended, incorporate the lime into the topsoil for best results.

I DON'T FERTILIZE NOW... SHOULD I START?

Ask yourself, "Am I satisfied with my lawn as it is?" If the answer is yes, then you probably don't need to fertilize now. However, a minimum application of nutrients on lawns with cool season grasses in the fall or warm season grasses in the summer will maintain a healthy lawn, which will enable it to tolerate harsh winters and dry summers.

If you regularly fertilize your lawn, **PROPER** and **TIMELY** fertilization can be good for both your lawn and the environment. There is less chance of nutrient and soil runoff to surface waters from a healthy stand of grass than from one with thin grass coverage. Healthy lawns have fewer disease, insect and weed problems, reducing the need for pesticides.

WHEN TO FERTILIZE

This depends on the type of grass and the appearance – color, density, uniformity – you want. Late spring through summer is best for warm-season grasses, like Bermudagrass and zoysiagrass. September through November is best for cool-season grasses like tall fescue, Kentucky bluegrass and perennial ryegrass. If you don't know what type of grass you have, ask your local Extension Agent or a landscape professional.

NEVER FERTILIZE WHEN GRASS IS DORMANT (BROWN). Cool-season grasses may go dormant in hot summers, while warm-season grasses are dormant after a hard frost.

HINT: For dark green turf, a good alternative to nitrogen is the periodic application of iron.

FERTILIZER APPLICATION EQUIPMENT AND METHODS

Nitrogen fertilizer will generally "green up" a lawn. Therefore it is important to apply fertilizer uniformly. Use a drop-type or rotary spreader, and be sure to overlap adequately. Check the applicator setting often to be sure you're applying fertilizer at the proper rate. You should not apply fertilizer by hand.