How Best To Fertilize Your Lawn

*Improve turf quality as well as protect the environment with proper fertilization*

1. Follow the NYS Nutrient Runoff Law.
2. Apply nitrogen (N) to meet your needs AND protect the environment.
3. Never apply more than 1 pound of N per 1,000 square feet per application.
4. Focus on fall fertilizer applications.
5. Leave grass clippings.

There is no benefit to applying more fertilizer than your lawn requires.
Proper fertilizer applications will improve the quality of your lawn, crowd out weeds and help it withstand and recover from wear and tear as well as heat and drought. Remember, over fertilization can be harmful to both your lawn and the environment and it wastes money.

If your lawn is thick with desirable grasses, has color that is pleasing to you and an acceptable level of weeds, your lawn does not need any additional fertilizer at this time. Your lawn is getting enough nutrients released from the previous fertilization, the soil and the clippings left after mowing.

If your lawn is thinning out, bare soil is apparent and weeds are taking over it, it is time to adopt practices that promote thicker turf. A thick lawn can help reduce leaching of nitrates into the groundwater as well as reduce soil erosion and runoff that can move nutrients off site. A thick lawn will also increase the water available to your lawn by allowing more water to infiltrate into and be retained in the grass canopy and soil.

**Follow the law and best practices when applying fertilizer.**

Never apply fertilizers to frozen ground or water logged soils. Application of any fertilizer on lawns is prohibited between December 1 and April 1. (November 1 to April 1 for Suffolk County, November 15 and April 1 for Nassau County, and other locales may have more restrictive laws.)

Application of any fertilizer within 20 feet of a water body is restricted; you must use a drop or shielded spreader and be no closer than 3 feet from the water.

Fertilizer spilled on impervious surfaces must be cleaned up immediately. Avoid using rotary spreaders near water or impervious surfaces like roads, driveways and sidewalks, especially if your spreader does not have a shield.

Do not fertilize if a heavy rainfall is expected within 2 days of application.

After applying fertilizer, lightly water the lawn with about a ¼” of water to wash the fertilizer off the leaves and into the soil.

**Fertilize less when grass clippings are left and in the shade.**

Returning the grass clippings to your lawn can eliminate the need for any phosphorus fertilizer and reduces the need for nitrogen fertilizer by 25 to 50 percent.

Parts of your lawn that are shady need about half the amount of nitrogen fertilizer as the sunny parts, so fertilize them less.
Nitrogen fertilizer sources to protect water quality.
You can find information about the source of fertilizers on the fertilizer bag. *Slow release nitrogen sources* are less likely to leach and include coated products of urea (sulfur coated or polymer coated). *Water soluble sources* of nitrogen fertilizer (which can leach if improperly applied) include urea, ammonium sulfate, ammonium phosphates and natural materials including calcium and potassium nitrate (Chilean nitrate).

On **non-sandy soils** the application of no more than 1 pound nitrogen per 1,000 square feet should have at least 30 percent slow release nitrogen.

On lawns with **sandy soils** the application of no more than 1 pound of nitrogen per 1,000 square feet should be made with at least 60 percent slow release nitrogen to minimize leaching losses.

**Match the nitrogen fertilizer application with your lawn use and desired lawn quality.**
The kind of grass, intensity of lawn use, quality expectations, site conditions (sunny vs. shady) and maintenance practices (clippings left in place or removed) help determine the amount of nitrogen fertilizer needed.

**Good lawns** are usually not irrigated, do not receive pesticide applications, are mowed infrequently with clippings returned and don’t receive much use. These lawns may need no fertilization or at most one application of nitrogen per year.

**Better lawns** which receive more care and more use, may need up to two applications of nitrogen fertilizer per year (up to 1 pound of nitrogen per 1,000 square feet of lawn per application twice a year). Clippings are returned.

**Highest quality lawns** are often irrigated, are mowed regularly, may require pesticide applications and are used often for outdoor activities. These lawns may normally need two to three applications of fertilizer per year (up to 1 pound of nitrogen per 1,000 square feet of lawn per application two or three times a year) and occasionally up to 4 applications a year when in the full sun, heavily used and clippings are removed.

<table>
<thead>
<tr>
<th>Lawn Use and Desired Quality</th>
<th>Number of Applications (no more than)</th>
<th>SPRING</th>
<th>SUMMER</th>
<th>FALL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>April</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>early</td>
<td>late</td>
<td></td>
</tr>
<tr>
<td>Little lawn use and good quality (including shady sites)</td>
<td>0-1</td>
<td>&lt;--------&gt;</td>
<td>&lt;--------&gt;</td>
<td>&lt;--------&gt;</td>
</tr>
<tr>
<td>Little lawn use and better quality</td>
<td>1-2</td>
<td>&lt;------*--</td>
<td>--------</td>
<td>&lt;--------&gt;</td>
</tr>
<tr>
<td>Moderate lawn use and better quality</td>
<td>2-3</td>
<td>&lt;------*--</td>
<td>--------</td>
<td>&lt;--------&gt;</td>
</tr>
<tr>
<td>Little lawn use and highest quality</td>
<td>3</td>
<td>&lt;------*--</td>
<td>--------</td>
<td>&lt;--------&gt;</td>
</tr>
<tr>
<td>High lawn use and highest quality</td>
<td>4</td>
<td>&lt;------*--</td>
<td>--------</td>
<td>&lt;--------&gt;</td>
</tr>
</tbody>
</table>

<----- legally allowable fertilizing period  * recommended application time  ** preferred application time

Never apply more than 1 pound of nitrogen per 1,000 square feet per application and that fertilizer should have at least 30 percent slow release nitrogen if applied to non-sandy sites and at least 60 percent slow release nitrogen when applied to sandy sites.

Visit [gardening.cornell.edu/lawns](http://gardening.cornell.edu/lawns) for more lawn care information.