Fertilizer Tips for the Home Lawn

Fertilizing your lawn is a common practice. However, just because it’s a common practice does not mean that it’s done correctly. Applying the correct amount and applying the fertilizer correctly is very important. It’s necessary for several reasons. First, your lawn’s health depends upon applying the right amount of fertilizer. Too much fertilizer can cause excessive growth that may result in thatch build up and increased problems with insects and diseases; too little may result in sparse growth and increased leaching. Secondly, fertilizer that is applied incorrectly can cause potential harm to the environment. Allowing fertilizer to remain on hard surfaces (like sidewalks and roadsides) results in chemical run-off into our surface waters. In order to have the healthiest lawn possible, without negative environmental impact, it’s crucial to understand fertilizer application basics.

As consumers, we have many fertilizer choices. Many of those choices however are not appropriate for Northwest Florida lawns. According to Drs. Trenholm and Unruh from UF/IFAS, although there are a number of different types of fertilizer sold for home lawns, a few basics apply to all of them:
1. The three numbers on the bag represent the amounts of nitrogen, phosphorus, and potassium in the bag (N-P-K).
2. Look for a fertilizer with low amounts of phosphorus (P) for your lawn unless a soil test indicates the need for phosphorus.
3. Fertilizers with larger amounts of slow-release nitrogen are less apt to leach if mis-applied.
4. The potential for leaching or run-off is directly related to the amount of water, either from irrigation or rainfall, that is applied following fertilizing. Some irrigation is generally required to wash the fertilizer off the leaf blades, but too much can wash it past the root zone where it won’t be taken up. Apply about ¼ inch of water to properly irrigate fertilizer in.
5. The label is the law! Always read and follow instructions.
6. Fertilizer needs differ due to grass species, your location in the state, and your desired level of lawn care. Refer to fact sheets relating to your particular grass or go to http://turf.ufl.edu for more information on this.
7. Professional lawn care services that are licensed are required to receive training to renew their licenses. These companies have a wider variety of products, application methods, and greater expertise and therefore may apply fertilizer differently than recommended for homeowners.

There are six basic steps to correctly applying fertilizer to your lawn.
Step 1: Know how much fertilizer is needed for your grass species. The amount of recommended nitrogen depends on several factors including grass species, the homeowner’s desired level of maintenance, and local environmental conditions. Because of multiple variables, the amount of nitrogen is always presented as a range. Homeowners who prefer lower inputs (maintenance) should use the lower part of the range. UF/IFAS recommendations are as follows:

<table>
<thead>
<tr>
<th>Grass Species</th>
<th>Pounds of Nitrogen per 1000 sq ft per year</th>
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<tbody>
<tr>
<td>Bahiagrass</td>
<td>2-3</td>
</tr>
<tr>
<td>Bermudagrass</td>
<td>3-5</td>
</tr>
<tr>
<td>Centipedegrass</td>
<td>1-2</td>
</tr>
<tr>
<td>St. Augustinegrass</td>
<td>2-4</td>
</tr>
<tr>
<td>Zoysiagrass</td>
<td>3-5</td>
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Step 2: Know the square footage of your lawn. This step is often overlooked and people frequently guess their square footage. It’s very important to measure your turfgrass area and calculate the total square footage. Do not include landscape plants in the area to be fertilized when calculating lawn fertilizer.

Step 3: Understand your fertilizer analysis: The three numbers on every fertilizer bag represent nitrogen (N), phosphorus (P) and potassium (K)-- always in that order. The numbers represent the percentage of N, P (as P₂O₅) and K (as K₂O). Therefore, a 15-0-15 would indicate 15% nitrogen, 0% P₂O₅, and 15% K₂O.

Step 4: Determine how much slow-release nitrogen is in the fertilizer. This will require reading the fine print on the fertilizer label. The total amount of nitrogen is usually broken down into several forms. Look for words like “water insoluble”, “sulfur coated”, or “resin coated” to indicate slow-release forms. To reduce the potential for water pollution, look for high percentages of slow-release N. If using a fertilizer with at least 30% slow-release N or more, you can apply up to one pound of nitrogen per 1000 sq ft per application. If your fertilizer has less than 30% slow-release nitrogen, apply ½ pound of N per 1000 sq ft per application.

Step 5: Calculate how much fertilizer you will apply. Pounds of N per 1000 sq ft is NOT the same as pounds of fertilizer per 1000 sq ft. To determine how many pounds
of fertilizer contains one pound of N, simply divide your fertilizer’s nitrogen percentage into 100. A 15-0-15 fertilizer contains 15% N. Divide 15 into 100. It takes 6.67 pounds of fertilizer to contain one pound of N.

Step 6: Set your spreader. How many of you actually calibrate your spreader? Unless you are willing to perform a spreader calibration, its best not to rely on your spreader’s settings. The safest way not to over-apply fertilizer is to actually measure/weigh the amount of fertilizer needed for a specific section of your yard. Place that amount in your spreader. Set the spreader on the smallest/lowest setting. Begin applying in a north/south direction and cover your specific area. When you’ve completed that direction, you should still have fertilizer left. Turn around and begin applying in an east/west direction. Keep changing directions and applying until all the fertilizer is gone. This application method accomplishes several things. First, you will not over apply fertilizer. Secondly, you will not get streaks in your lawn. Lastly, its good exercise.