LURVEY
SUPPLYING LANDSCAPES

know & grow

Lawn Fertilization

How exactly do I fertilize my lawn?
There are actually 3 parts to this answer. First, choose a quality fertilizer, then apply the right amount (rate) and apply at the right time of the season. Quality nitrogen fertilizers should contain controlled-release nitrogen (see next question for more on this). The amount or rate of nitrogen to apply is about one pound of actual nitrogen per 1,000 square feet of lawn area (see question below for more on this). Finally, some suggested times in the season for northern Illinois would be early may, early September, and late fall (about Halloween).

What is the best fertilizer to use?
There is no one perfect or absolute best fertilizer to purchase for your lawn, but there are many good ones available. Nitrogen is the most important nutrient; percent nitrogen is expressed as the first number in the series of three on the fertilizer bag. What kind of nitrogen in the product is the key information, as there are fast-release and controlled-release nitrogen sources. To find the answer, look in the guaranteed analysis section on the back of the bag. Key terms to look for include controlled-release, slow-release, slowly-available, or water-insoluble nitrogen. Some specific types that may be listed include urea, sulfur-coated urea, polymer-coated urea, and IBDU (isobutylidenediurea). Several organic nitrogen sources are controlled-release. Most quality lawn fertilizers offer a balance of fast and controlled release sources to offer a fertilizer that will provide some quick color (without a big surge of growth) and some long-lasting nitrogen.

I don't want to burn my grass with high percent nitrogen fertilizer, so can I just use a 10-10-10 garden fertilizer?
The high percentage of nitrogen by itself is not a problem, assuming the amount put down on the lawn is adjusted accordingly. The higher the percent nitrogen the less product is needed on the lawn to supply the one pound per 1,000 square feet rate suggested. In addition, if the material is controlled-release, the risk of burning the lawn is low even though the percentage nitrogen in the product may be high.

Balanced fertilizers, such as a 10-10-10, have a N:P:K ratio of 1:1:1. The reason these are not suggested for repeated use on lawns is the amount of phosphorus applied, (when supplying the one pound of nitrogen per 1,000 square feet), becomes quite high. Excess phosphorus may lead to potential runoff problems and more weeds in the lawn. Also, many of the all-purpose balanced fertilizers have only fast-release nitrogen as the nitrogen component, so the risk of burn may be higher.

Are organic fertilizers better than conventional fertilizers?
Whether a fertilizer is organic or synthetic, after applied to the lawn it must convert to a form the plant can use. Once converted, the plant does not know the difference as to the nitrogen source. One of the advantages associated with organic sources is low chance of burning grass. Some synthetic fast-release sources have high salt levels that increase the chances of burning. On the other hand, most synthetic controlled-release sources are very unlikely to burn grass. A drawback of many organic nitrogen sources is the percent nitrogen is quite low, meaning it takes considerable material to be spread over the lawn to give the proper rate of nitrogen. Some materials, such as compost, are best used as a soil conditioner to improve soil quality, rather than to supply nutrients. Furthermore, most organic and some synthetic fertilizer sources rely on soil microbes to break them down to release nitrogen, so they do not work when soils are cold. So as you can see, there are trade-offs to consider when making these comparisons.

LURVEY
SUPPLYING LANDSCAPES

know & grow

Lawn Fertilization

How do I know how much fertilizer to apply?
As mentioned earlier, the suggested rate per application is about one pound of actual nitrogen per 1,000 square feet of lawn. If fertilizers were 100 percent nitrogen, which they are not, it would take a pound of fertilizer to apply this rate. Divide 100 by the percent nitrogen in the bag (first number expressed a whole number) to figure how much is needed per 1,000 square feet. For example, a fertilizer with 20 percent nitrogen would require 100/20 or 5 pounds of fertilizer product per every 1,000 square feet of lawn.

The next figure needed is the total area or square footage of the lawn. Take your total lot size and subtract everything not in lawn to determine this figure. An acre is 43,560 square feet, if you know your lot expressed in a portion of an acre. Then subtract the square footage of the house, driveway, gardens, patio, etc. The other way to figure is just to measure dimensions of the lawn areas and calculate as square feet. Once you arrive at the square footage in lawn, divide this by 1,000. Then multiply by the pounds of fertilizer needed per 1,000 square feet figured above. This gives you the approximate pounds of fertilizer needed to spread on your lawn.

Using the previous example of a 20 percent nitrogen fertilizer, let's walk through this. Dividing 100 by 20 gives 5, meaning 5 pounds of fertilizer is needed to supply 1 pound of actual nitrogen for every 1,000 square feet. If the lawn measures out to 12,000 square feet, dividing 12,000 by 1000 gives 12. Now take 5 times 12, which equals 60. This means it would take 60 pounds of fertilizer, spread over the 12,000 square foot lawn, to supply a rate of 1 pound of actual nitrogen per 1,000 square feet.
Finally, most fertilizer bags give a spreader setting guide, which is usually calibrated to supply the 1 pound per 1,000 square feet rate, to help homeowners apply the right amount. The product label may tell you how much area the product will cover.