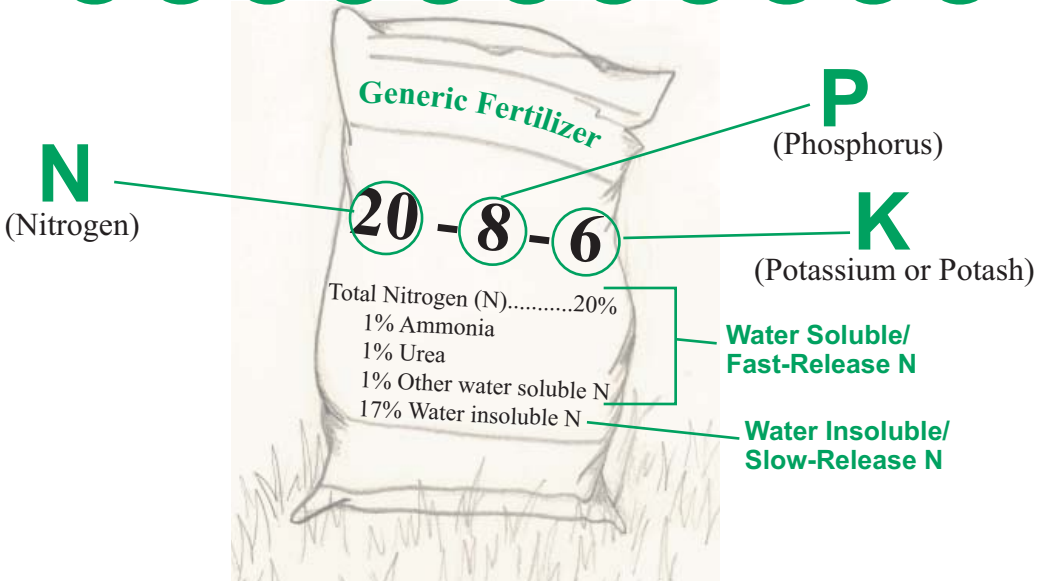




Lawn Fertilizers: Cracking the N-P-K Code

Healthy lawns throughout Long Island are successfully maintained with no or little fertilizer. Excess fertilizer can lead to more mowing, all sorts of disease problems in your lawn and can be harmful to wildlife and our bays. If you choose to fertilize, apply **no more than 1 lb. of nitrogen per 1,000 square feet of lawn per year.**^{1,2} How do you calculate how much fertilizer to put down to follow this guideline? Read on to crack the N-P-K code.



Every fertilizer bag has 3 numbers, the so-called N-P-K ratio. Nitrogen (N) is always represented by the first number, phosphorus (P) is second, and potassium (K) is third. For example, the hypothetical Generic Fertilizer above has a 20-8-6 N-P-K ratio, which means it is 20% nitrogen, 8% phosphorus compounds, and 6% potassium compounds. The remaining 66% of the mixture is composed of other materials, such as organic matter or salts.

Preferred Fertilizer Traits

- Organic
- Greater than 50% of the nitrogen is water insoluble/slow-release
- Pesticide-free

When to Fertilize

A single application of fertilizer is often most effective and efficient. Use organic or slow-release fertilizers whenever possible and apply in early fall, while the soil is still warm.

**Flip the card for a step-by-step guide to fertilizing your lawn
AND protecting water quality.**



Become a Peconic Partner for Clean Water!
Add your low maintenance lawn to our roster!
(Contact information on reverse)



Application Steps



A simple calculation based on the percent of nitrogen in the bag will tell you how many pounds of fertilizer to apply to achieve the application rate of 1 lb. of nitrogen per 1,000 square feet (ft²) per year.

1. **Calculate your square footage of lawn, if not already known.** Walk off or measure the length and width of your lawn in feet. Multiply length by width to calculate ft². Add ft² of small lawn areas together.
2. **Perform a simple calculation to determine how much fertilizer to apply based on percent nitrogen in the fertilizer and your lawn size.**

$$\frac{1 \text{ lb. nitrogen} \times 100}{\% \text{ total N in fertilizer}} \times \frac{? \text{ ft}^2 \text{ of lawn}}{1,000 \text{ ft}^2} = X \text{ lbs. fertilizer per year}$$

Example - for a 750 ft² lawn, using fertilizer with 20% N:

$$\frac{1 \text{ lb. nitrogen} \times 100}{20} \times \frac{750 \text{ ft}^2 \text{ of lawn}}{1,000 \text{ ft}^2} = 3.75 \text{ lbs. fertilizer per year}$$

Or use the fertilizer calculator on www.peconicestuary.org/FertCalc.html.

3. **Use a scale to measure the prescribed weight of fertilizer.**
4. **Load the weighed fertilizer into your drop or rotary spreader.** Set the spreader to the lowest setting, and go over the area multiple times until the fertilizer is all gone. Note: for large areas, you may have to divide the lawn into smaller sections to apply the fertilizer.

More is not always better - the fertilizer weight calculated to meet the 1 lb. per 1,000 ft² per year application rate should be the absolute maximum!

Other Tips for a Healthy Lawn & a Healthy Peconics

- Minimize lawn areas, replacing turf with native and/or non-invasive plantings.
- Use appropriate grass varieties (e.g., sun tolerant vs. shade tolerant). Fine fescue blends are best suited for low maintenance lawns.³
- Work to improve soil structure (soil aeration, optimize pH, and additions of organic matter, etc.).
- Leave grass clippings on the lawn as an additional nutrient source.
- Cut lawn no shorter than 3” to encourage deep roots.
- Don’t overwater lawns (excess irrigation causes soil nutrients to be lost).
- Test your soil annually before any application of fertilizer.
- Don’t apply fertilizers within 100 feet of surface waters or wetlands.
- Don’t apply fertilizers when the ground is frozen.
- Don’t apply fertilizers when heavy rain is imminent.
- Store any excess product safely, and do not apply just to “use it up.”



Notes

1. Rossi, F. 2005. Lawn Care Without Pesticides. Information Bulletin 248. Cornell University.
2. New lawns may need up to 3 lbs of nitrogen per 1,000 ft² per year.
3. <http://counties.cce.cornell.edu/suffolk/grownet/lawnmain/lomaitla.html>

