

Rising Fertilizer Prices and Turfgrass

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With contracts being signed for lawn care services this summer, homeowners might be surprised at the price. This is due to a number of factors, but the rising cost of fertilizer is key.

According to a December 9 Reuters article, “Global fertilizer prices have reached record highs this year, in part due to soaring prices for natural gas used to produce them, and severe storms in the United States that disrupted production”.

While not much can be done about rising costs, and lawn care services need to cover their costs, here are some turf fertilization points. I took these directly from our University of Nebraska-Lincoln publication on Fertilizing Home Lawns. The entire publication can be found at <https://go.unl.edu/ks50> .

Lawns need to be fertilized to maintain color, density, and vigor. The healthier and more vigorous a lawn is, the better it can withstand stress from heat, drought, traffic, and pets as well as compete against weeds, diseases, and insects.

However, while excess fertilizing can produce a dark green lawn, it is likely not the healthiest turf. Fertilizing in moderation to maintain moderate growth and good density is most effective for lawns.

Most homeowners want a dark green lawn which will require more fertilizer than a lighter colored lawn. However, applying more fertilizer also requires more mowing, irrigation, pest control, and other inputs.

The amount of fertilizer applied annually to a lawn depends on a number of factors. Fertilization programs may need to be adjusted to apply slightly more or less nutrients annually depending on the following factors.

Age and quality of existing lawn. A new lawn will need more fertilizer for the first few years to enhance density. Improving a neglected or thin lawn may also require more annual fertilizer for a few years. Annual nitrogen can likely be reduced with no consequences on ten year or older lawns.

In general, lawns require about three and a half to four pounds of nitrogen per 1000 square feet per year. The publication recommends applying about one pound in late August or early September, three-fourths to one pound in late May or early June and in mid to late October; and one to three-fourths pounds in late April.

Whether grass clippings are left or collected affects fertilizer amounts. Grass clippings are best returned to the lawn. When this is done, they add about one pound of nitrogen per 1000 square feet per year. If this is the case, fertilization rates can be reduced on these turfs.

Turf-type tall fescue performs better with less nitrogen than Kentucky bluegrass or perennial ryegrass. If you have a turf-type tall fescue lawn, know that fertilization rates can be lowered.

Weather can have an effect on amount of fertilizer needed. A rainy summer will stimulate growth and usually necessitate more annual fertilizer than a dry summer. The same holds true for irrigated versus an unirrigated lawn.

Turf grown on a sandy or heavy clay soil will need more fertilizer than turf grown on a silt loam soil. Loam soils have inherent higher fertility than sandy or clay soils. One must be careful about the rate of fertilizer on sandy soil due to increase loss from leaching.