

It's no secret the fluctuation in the cost of nitrogen prices the past few years has caused considerable concern in the golf industry. Reflective of oil prices, fertilizer prices began to climb during 2007 with a spike during the summer of last year followed by a collapse in price by the end of 2008. But even with the drop, I don't believe anyone thinks the price will remain low.

In an attempt to lower budget expenses, some golf course superintendents cut fertilizer applications drastically. Although not fertilizing saves money, it is not a sustainable practice from season to season. Nutrients, along with water and light, are the lifeblood of turfgrasses.

The cost of nitrogen and other nutrients has changed how some fertilizers are formulated and marketed. In an attempt to reduce the sticker shock for the price of a bag of fertilizer, some companies are adjusting the N-P-K ratios to lower the cost per bag. But now more than ever, you need to know *what* you're buying and its actual cost.

A hypothetical example is a 50-pound bag of fertilizer with an analysis of 18-6-12 that might have cost \$46 in 2008, but now costs \$38 with an analysis of 12-4-8. Which one is the better value?

Based on nitrogen, the first bag costs \$5.33 per pound of nitrogen while the second bag costs \$6 per pound. Hence, on more than 30 acres of fairway, where 4 pounds of nitrogen is applied per 1,000 square feet, the difference in price for the season is about \$3,500. In an economy where \$100 dollars is \$100, this hypothetical type of savings is significant.

The source of nitrogen is also a factor to consider in cost calculations. If one fertilizer contains a quick-release nitrogen source and a second contains a predominantly slow-release source, the response time needs to be factored in. For example, the cost of nitrogen needs to be calculated on a per-day basis for a quick-release source that provides a turf response for 28 days, and a slow-release fertilizer that provides a turf response for 60 days.

The Budget And The Fertilizer

BY KARL DANNEBERGER



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Obviously, there are other factors — like ease of application, frequency of application, rate, burn potential and the type of response one is looking for — that need to be considered. Actually, quantifying those factors from a cost standpoint, along with an agronomic and environmental cost assessment, is a powerful means of comparing products.

Again, a major means of reducing fertilizer cost is to skip applications. As previously mentioned, the elimination of fertilizer is not sustainable for high-quality turf. However, ranking the importance of fertilizer application timing can help reduce costs and help maintain turf quality.

Given plant growth curves, late-fall fertilization is an optimum application on cool-season turfgrasses. In general, given the advantages of late-season fertilization, many superintendents increase the late-fall rate and eliminate or reduce spring applications. The fall fertilization benefits include a quicker greenup in the spring that's maintained through late spring.

In all decisions, it's not just cost and agronomic benefit that should be weighed; the impact on the environment must also be considered. In situations where leaching might occur, the impact of late-fall fertilization applications should be assessed.

To golfers, cutting costs does not mean reducing playing quality on the golf course. In this economy, the challenge for superintendents is to deliver quality playing conditions efficiently — and in a cost-effective manner.

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