This article is written based on the presentation “Optimizing Fertility” given at the Sports Turf Association Ontario Field Day in September and deals with improving the efficiency of applied fertilizer and amendment products.

**Efficiency and Where Losses Occur**

Being well into fall, we are transitioning out of the season of “go, go, go” turf management where many days we are happy if we are able to perform the basic tasks ahead of the sports, both organized and not, played on our fields. The months ahead will be filled with repairing, replacing, purchasing and just simply recharging our own batteries in between spurts of snow removal. The fall and winter are also when many purchases of the necessary inputs such as fertilizers and seed are made. Hours will be spent looking over soil test reports, considering user group scheduling and looking at budgets, to decide on the right products to apply. Despite the best planning and products, losses in efficiency can still occur.

The following will look at where this happens and where management programs can be adjusted to make the most of the time and money spent planning fertilizer programs.

To best understand how to get the most of fertilizer and amendment applications, we must first look at where losses occur. The following points are presented in no particular order; they all directly contribute to less-than-expected results.

**Timing.** Apply fertilizers or amendments when they can be best utilized by the turf. Whether adding nutrients to the soil or directly into the plant by way of the foliage, you’ll want to plan your application based on when the applied nutrients are of most use to the plant. Consult the accompanying technical materials or fertilizer supplier for more information on timing.

**Imbalances.** Liebig’s Law of the Minimum states: “growth is controlled not by the total amount of resources available, but by...”

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