

Soil, Chemistry and Biological testing - are they necessary during these inflationary times?

The skyrocketing cost of materials we use on our golf courses is higher than at any time in our industries history. At the time that budgets were put together during the second half of last year [2007] no one could have foreseen the rise in cost of petroleum products by almost 100% or more, which resulted in the cost of the chemicals we use on our golf courses being raised accordingly. Some of the more affluent courses have been able to raise their budgets accordingly but they are the more fortunate ones with a sympathetic board or owner and the funds to do so.

The normal reaction to these skyrocketing costs has been to cut expenses somewhere. Most courses have reduced their staff and are taking a closer look at the products they are using. Some courses have even gone so far as to eliminate the monies they have budgeted for soil and chemistry analysis as well as reduced the amount of fertilizer and other chemical products which would normally be applied over the course of a year. Most courses have also reduced irrigation to save on water cost. Although these actions result in the savings of monies short term the consequences of some of these cutbacks can be long term devastating.

Over the last 10 years we have learned that by knowing what the conditions are that exist in our courses from a Physical, Chemical and Biological standpoint we can use that knowledge to apply the correct amount and type of chemicals that will best meet the needs of our plants. The physical properties knowledge allows us to aerify to the proper depth and with the most efficient size tine, and to fill the holes with the proper material or leave them open.

The most **effective and ineffective** irrigation is dictated by the physical properties of the soil we are trying to water into. **[NOT ONTO OR THROUGH]**

When we irrigate onto an area that is out of balance from a physical properties stand point we are wasting water. If the area to be watered is sealed off [less than 2" of infiltration rate per hour] from compaction, excessive thatch, high organic matter, high percent of fines in the sand or soil, etc. than the water cannot penetrate into the root zone system and will run off to the surrounding areas. If another area to be watered is too droughty [more than 20" of infiltration an hour] the water will pass through the area we are trying to water and in most cases out through our drains.

Not knowing what chemicals need to be applied and in what amounts and wasting water when irrigating, will normally result in more wasted dollars than the combined testing costs.

I recently visited with a superintendent in Florida who explained to me that his total budget was \$1,200,000 per year and that he budgeted \$6,000.00 per year for testing which amounted to ½ of 1% of his total budget. Another superintendent in the Midwest with a total budget of \$700,000 allocates \$3,500 a year for testing which also amounts to ½ of 1% a year of his total budget. They each felt that it was one of the best investments they make.

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