



TURFAX™

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JB Comments: TOPDRESSING

A basic principle of topdressing is to avoid a soil layering problem which blocks downward soil water percolation and the resultant impaired rooting. A situation commonly observed is where root zones on putting greens or sports fields have been constructed of the proper USGA particle size specifications. However, later an ill-advised decision is made to use a finer sandy root zone mix for topdressing. During the initial years rooting into the high-sand root zone is quite good. However, as the topdressing layer of finer material starts to accumulate the rooting tends to become more restricted to the upper layer with minimal to no penetration into the underlying high-sand root zone. Intensive coring will partially alleviate this problem situation, but the proper preventive solution would have been to utilize a topdressing material with a comparable root zone particle size distribution to that used in the original construction.

To ensure the topdressing mix is matched with the underlying construction, it is imperative that a physical soil analysis be obtained for the proposed topdressing mix. Subsequently, it should be done on each lot of topdressing mix or on the sand-soil-organic matter components at the time delivered.

I hope for a trend to using an organic matter component that has been composted to contain the maximum possible microorganism population representative of a quality-living soil. There is a lot of landscape organic debris from grassy areas, trees, and shrubs which is ideal to produce quality, living compost for use in topdressing. It can be particularly beneficial in the initial 4 to 5 years following original high-sand construction to accelerate the development of a living soil.

One final reminder is that when a pre-construction physical soil test is obtained, it is important that a chemical soil test be obtained at the same time to avoid potentially phytotoxic chemicals. I have observed both sports fields and golf putting greens where a physical soil analysis for the proper particle size according to the USGA specifications has been obtained, but no chemical soil test was requested. Later when problems developed, chemical soil tests revealed problems such as zinc (Zn) and copper (Cu) toxicities or a very high saline and/or sodium (Na) level. Unfortunately, the post-construction period when an actively growing turf is being maintained is a very difficult time to correct such problems. A preventive approach of pre-construction chemical soil tests is a much more sound approach that involves a very minimal cost.