



Trees and Government

A law has now been passed in the country of Greece specifying that no one may cut down a pine tree without permission from a government Forest Inspector, even if that tree is growing on their own property. Certainly trees are great, but the question can certainly be raised as to whether this is in fact excessive government intrusion. 

The Amazing Grass Plant

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References


1. Beard, J.B and R.L. Green. 1994. The role of turfgrasses in environmental protection and their benefits to humans. *J. Environ. Qual.*, 23(3):452-460.
2. Beard, J.B. 1994. Environmental protection and beneficial contributions of golf course turfs. Science and Golf II, Proc. 2nd World Scientific Congress of Golf. *E&FN Spon*, London, England, UK. 2:399-408. 

JB COMMENTS

Failure to Use Chemical Soil Test Findings

It is amazing how often I am called in for a technical assistance visitation to a turfgrass facility that is experiencing problems and/or even failure of the turf. Typically, in these situations there are multiple causes for the problem. One of these may involve the turfgrass nutritional strategy. It is not uncommon for the turf facility manager to have chemical soil tests analyses conducted for the problem area. Yet the individual does not implement changes in the fertilization program to correct the indicated individual nutrient deficiencies. The most common occurrences are deficiencies of potassium (K), magnesium (Mg), iron (Fe), and manganese (Mn). In contrast, there are situations where excessive levels of either copper (Cu) and/or zinc (Zn) are indicated, which are red flags that all applications of these two nutrients should cease in order to prevent potentially serious root zone toxicity problems.

Even though chemical soil tests are in hand, too many turf facility managers fail to implement the needed corrections. Why? Is it the failure to read and/or comprehend the soil test results, or is it a lack of confidence that the chemical soil tests are meaningful in the decision-making process to develop a fertilization program? My guess is the latter.

Perhaps some confusion is created by inadequate interpretation of chemical soil test analyses by the laboratory involved. It is important that all chemical soil test values be interpreted by a professional knowledgeable in turfgrass nutrition. A summary interpretive report should be included with the actual soil chemical analysis. This hopefully will aid the turf facility manager in implementing adjustments in the fertilization program, as well as providing confidence as to the importance of implementing the findings. 


ASK DR. BEARD

Q *The new cultivar planted onto a putting green is quite hard, with a high ball bounce that is causing complaints from the golfers. What is wrong?*

A I assume that the old greens on the golf course were constructed by what is termed push-up greens using nearby soil. Typically, such root zones have higher clay and lower sand contents. As a consequence, these greens are less hard, with a low ball bounce, which can be accentuated by excessive applications of water and/or an underlying thatch accumulation.

Typically, new putting greens constructed with a USGA specification high-sand root zone tend to be harder, with a higher ball bounce during the initial 2 to 3 years. Once an underlying root biomass and a modest surface mat accumulation form and are fully decomposed through intermixing of topdressing, the green will become softer, with fewer complaints from golfers. The decomposition of both the thatch/

mat and the underlying root biomass is accelerated if cultural practices are followed that stimulate the rate of development of a living soil, which has active microbial, fungal, and insect populations that maximize organic matter decomposition.

In your case, the contrasting situation between the new green and the older putting greens on the golf course creates distinct differential playing conditions among the greens. To summarize, it is not the turfgrass cultivar that is creating the so-called hard greens, but most probably it results from the underlying high-sand content root zone, which requires time to form a living, biologically active root zone which is less hard. 

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