## **Wisconsin Soils Report**



## Thoughts on the USGA Golf Green Specifications Controversy

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"USGA specs under fire, face change" read the byline of a recent article in the *Golf Course News* magazine. This has to be very disconcerting to anyone about to construct or reconstruct putting greens according to USGA specifications. My advice to anyone in this position is to proceed as planned and follow the specs to a "T". As has been pointed out many times before, the failure rate of such greens under proper management is literally zero.

What is the USGA greens controversy? It's a collection of concerns and frustrations seemingly without any central focus. In the construction of golf greens the main issues are the necessity of the coarse sand ("choker") layer, the inclusion or not of some soil in the rootzone mix to increase water and nutrient retention, and poor definition of what constitutes good organic amendment.

Testing of construction materials is another concern. Lab measurements have not been concisely related to field properties and are therefore suspect in the minds of some people. There are concerns about the consistency of test results from one lab to another and frustrations over the time it takes to get back the lab results.

Finally, there are doubts about the universal nature of the USGA specs whether or not the specs should be regionalized to factor in differences in climate, species of grasses grown, etc.

In my opinion, if there is a bottom line in the USGA spec controversy it is construction cost—not just the costs of materials and labor, but also the time consumed in locating and testing rootzone materials and mixes. Construction of USGA spec greens all too often turns into a very frustrating experience. The feeling of many people is that there have to be some alternatives.

What I find most disturbing about

this controversy is the attitude that everything is either black or white; that there are no shades of gray. This creates a stagnant situation in which battle lines are drawn and across which no meaningful dialog can occur. The end result is maintenance of status quo and stifling of the testing of new ideas and approaches that have potential for creating "gray zone greens specs". These specifications could have different costs associated with them from which architects, golf clubs and superintendents could choose according to budgetary limitations, anticipated golf course use intensity and membership expectations.

Perhaps the most insidious side of the black and white attitude is the mentality that unless putting greens meet USGA specs in all respects the greens are doomed to failure and that unless a golf course has USGA spec greens it is a second rate course.

My observations and logic tell me that there are many greens in the gray zone (i.e., they do not meet all of the USGA specs) that are admirably meeting golfer expectations and are not in a state of decline. Let us also recognize that USGA spec greens are not ideal in all respects. Without some native soil in them nutrient retention capacities are so low that compensatory action in the form of frequent applications of low fertilizer rates become a necessity. This is fine for the well-heeled golf courses, but what about those with limited budgets?

It is also a well established fact that golf scores skyrocket if the surface of USGA spec greens are allowed to dry out. The answer to this problem is to keep the surface moist and soft and, in the process, create near ideal environments for algae and moss growth.

I firmly believe that it is in the best interests of the USGA and golf per se for the Green Section staff to take the lead in seeking out alternative, "gray zone" specs for putting green construction. No one is in a better position to do so. I envision a two-pronged complementary approach involving the Green Section agronomists and turf researchers. I'd like to see the USGA Green Section staff sit down and devise a quality rating system for putting greens. The next step would be for their agronomists to take the time on their visits to golf courses to rate greens and document key greens in terms of factors such as quality of construction materials, mode of construction as determined from full profile samples, green age and cultural practices. In this way the Green Section could begin to define suitable alternatives to current specs as far as greens construction is concerned.

The Green Section staff also needs to sit down with a group of researchers and meticulously design a field experiment that systematically studies the effects of deviations from the USGA specs on putting green quality. The research could have other objectives as well. One could be to do what should have been done long ago—relate factors such as lab measures of percolation rates to field rates. Through careful site selection the suggested need to regionalize construction specifications could be addressed as well.

Finally, I believe the Green Section needs to play a role in the reevaluation of testing methods for greens construction materials, in standardization of test methods and in devising a process whereby labs are monitored for consistency in their test results. To say that current tests are the best available is akin to saying that over the past 30 years science has been static. It's time to turn some people loose on seeking out methods that can yield more reproducible results in shorter periods of time.