

The Stimpmeter: Another Perspective

by David R. Chalmers

Extension Agronomist, Turf

Before the stimpmeter was resurrected in the mid-1970's, it was difficult to accurately gauge putting green speed. It was left up to the golfer's perception which was, and still is subjective to putting skill. Now we have the stimpmeter available to accurately measure golf ball roll and never has such a turfgrass management operation held so much glamour with John Q. Public. The average golfer finds it difficult to understand the intricacies of putting green management (i.e., mowing, aerification, topdressing, vertical mowing, fertilization, irrigation, pest control, etc.) but he or she can understand how far a golf ball can travel after rolling down an inclined plane. The issue of whether or not to make the stimpmeter a part of the putting green management program has centered on the fear that putting green speed will become the most important measure of putting green quality. Because of this, the stimpmeter and its place on the golf course has been a very controversial topic. It's to the point now that some superintendents use it and make the readings known; others use it but don't advertise they are using it, while still others ignore its existence.

The current switch toward emphasizing putting green playability, of which speed is a component, is nothing new for some but long overdue for others. In the last 20 to 30 years, putting green management has gone from more art than science to more science than art. During this time there has been more and more reliance on the proven agronomic principles to produce quality turf. However, factors involved in agronomic and aesthetic putting green quality have rarely been quantitatively linked back to putting green playability (Table 1). Only since the stimpmeter has come back on the scene has research addressed the question of how common agronomic practices influence ball roll, something the discerning golf course superintendent has known all along.

Table 1. Factors involved in putting green quality

Turf Quality Factors	Playability Factors
Density	Trueness of ball roll
Texture	"Bite" or resiliency
Growth habit	Speed
Smoothness	Consistency
Color	
Uniformity	

Part of the problem of acceptance of the stimpmeter by golf course superintendents centers around a concern of how it will affect the golfers. Golfers already have a set of preferred golfing conditions etched in the back of their minds that either relates back to their game (what golf shots they can or cannot hit) or impressions on what a golf course should look like. Dealing with golfer's suggestions and how responsive the superintendent is depends on the type of golf facility (i.e., private country club, resort course, or daily fee public course), the source of the suggestion, and the superintendent's own common sense (agronomic and otherwise). After all, it is not the responsibility of the golf course superintendent to make up for the inadequacies of the golfing public through management.

Certainly the golf course superintendent is responsible for maintaining the best possible playing surfaces along with a fair challenge to the clientele within operating restraints. Making the stimpmeter a priority requires an understanding, by all of

those involved, of the agronomic and fiscal limits of the grooming practices that influence ball roll.

No longer is it sufficient to just ask "what height are you mowing your greens." Now we must also consider whether the mower is a triplex or a walker, frequency of cut, if solid or grooved rollers are used, if brushes or combs are used, and mower maintenance.

Topdressing has been applied for a number of reasons among which are: (1) to incorporate new soil into a green; (2) to smooth or true the surface; and (3) to aid in thatch decomposition. Applied more frequently at light rates, topdressing will help the grass to grow more upright enabling more effective clipping and better ball support.

Vertical mowing is no longer just a curative means of controlling thatch. If practiced on a regular basis in periods of minimum stress (i.e., spring and fall) and adjusted to just nick the green surface, vertical mowing can: (1) slightly thin the strand; (2) help prevent the blades from laying over; and (3) cut off any runners (stolons). The net result is a better putting surface.

Fertilization, especially the amount of nitrogen, influences the rate of growth which affects ball roll. Lowering the level of nitrogen fertilization will decrease resistance to ball roll and higher rates may need more grooming to perform in a similar manner. However, nitrogen requirement and its influence on putting green management varies greatly according to nitrogen source, frequency and timing of application, traffic, soil mixture, and bentgrass variety, etc. Drastic changes in the fertilization program should be avoided until the grooming methods (i.e. mowing, verticutting, and topdressing) have been explored for their combined influence on ball roll.

The stimpmeter was never intended to be used as a speedometer; only as a tool for a golf course to use to (1) determine an acceptable green speed for its clientele and (2) to reduce variability in speed between greens on a single course. The stimpmeter can also become an important tool for the undiscerning eye in how grooming practices influence ball roll. However, all of the grooming in the world won't be able to help a poor putting stroke, only practice. It remains to be seen if the stimpmeter will help make John Q. Public a better putter or have only a placebo-like effect on his psyche.

Credit: Tech Turf Topics



Randy Rogers (l.) receiving Diamond Award from Paul Mengle, Marketing and Sales Manager, Lebanon Chemical Corporation.