

# 1



## Problems Associated with Green Speed

*Nature abhors straight lines, uniformity, and regularity.  
Golf was originally played on land unaltered by the hand  
of man. To regain the original charm of the game a golf  
course should abound in curves, variations, and  
simple irregularities.*

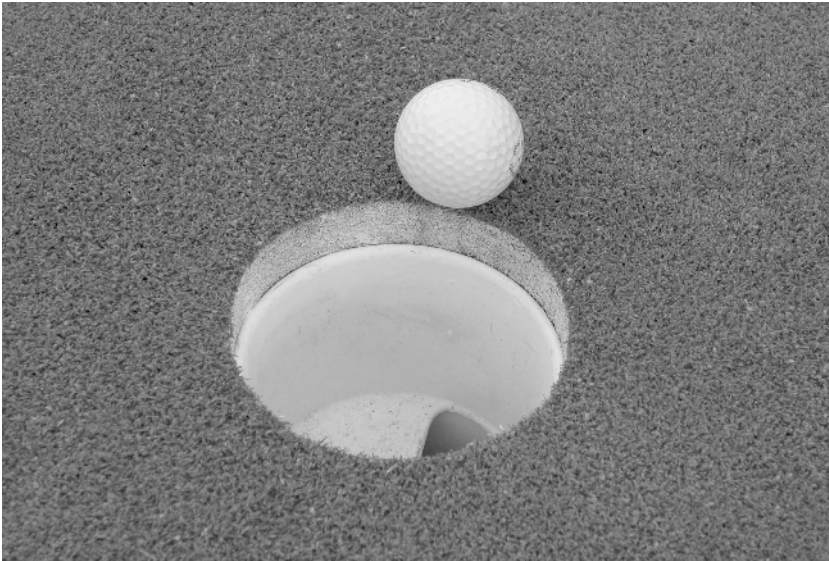
ANONYMOUS, 1929

### What Is Green Speed?

According to a Golf Course Superintendents Association of America (GC-SAA) survey, golfers consider green speed the number one factor to know about a golf course (*USA Today*, 2002). This fact alone indicates that golf course superintendents need a thorough knowledge of the factors that impact green speed. Unfortunately, deciphering the facts and fiction of green speed is no easy task.

Webster's standard reference dictionary does not define the term *green speed*, but the words *green* and *speed* have been inseparable in turfgrass writing for more than a century (ever since the rubber-cored golf ball replaced the gutta ball at the dawn of the twentieth century). "Green speed" typically indicates either how fast, or how far, a golf ball travels after it has been struck with a putter. Clearly, when the golfer is involved, the determination is highly subjective.

When a golfer feels that he or she has struck the golf ball with the proper impact and the golf ball ends up short of the hole, then the speed



**FIGURE 1-1.** *Undoubtedly there are some golfers who would think that this green is too slow, since the putt stopped short of the cup.*

of the green is considered slow (Figure 1-1). But, had the perfectly struck golf ball quickly rimmed the cup and not fallen in or rolled way past the hole, missing the intended break, the green would be considered fast. However, when the perfectly struck ball does indeed fall into the cup or comes to rest pin-high (indicating that the putt may have been slightly misread), the green speed is considered perfect. So, to the golfer, “green speed” is synonymous with how fast and/or how far the ball travels.

In 1937, Eddie Stimpson wrote, “It occurred to us that there was no way of measuring how fast putting greens are,” which was the catalyst for the invention of the Stimpmeter (Stimpson, 1937). Today the Stimpmeter is the universally accepted method of quantifying green speed. In fact, the Stimpmeter and green speed have become inseparable, as *green speed* has been defined as “a term used to describe the distance a ball travels on a golf putting green when released from an inclined plane called a Stimpmeter” (Hartwiger et al., 2001).

I offer the following definitions of green speed:

1. The perceived swiftness with which (or distance to which) a golf ball travels across the putting surface after it has been struck with a putter by a golfer

2. The average distance of six golf balls (three rolled in one direction and three rolled in the opposite direction) released from a Stimpmeter (or possibly any other agreed-upon inclined plane) on a golf course putting green
3. The following speeds of a ball, as measured with a Stimpmeter (USGA, 1996):
  - Fast, more than 8.5 feet; medium, between 7.5 and 8.5 feet; slow, less than 7.5 feet—for regular membership play
  - Fast, more than 9.5 feet; medium, between 8.5 and 9.5 feet; slow, less than 8.5 feet—for tournament play

The three definitions are accurate enough for our communication purposes. However, they create a conundrum, because although all the definitions may indeed be true, they can also conflict. Certainly, definition 1 is not always in agreement with definition 3, and definition 2 can be used to refute parties subscribing to definitions 1 and/or 3. This is part of the predicament for the golf course superintendent.

## The Best Laid Plans

The Stimpmeter in its present form was first released in 1978. One of the goals of having a device to quantifiably measure green speed was to set limits on the speed of severely contoured greens so that the golfer would have fair pin placements. Even though the United States Golf Association (USGA) warned that green speeds were not to be used for comparing courses, golfers demanded speeds equivalent to, or in excess of, those of neighboring clubs and in some cases wanted speeds they learned about while watching the PGA Tour on the weekend.

Some golf course superintendents have pushed the limits of turfgrass agronomy by decreasing the height of cut, fertilization, and irrigation without any valid research to guide them. Some, through trial and error, found success and contributed to how greens are managed today; others lost their jobs because agronomic errors caused them to lose grass or they were unable to produce the demanded speed. To this day, superintendents continue to experiment with management practices and/or products that supposedly increase green speed. Often these efforts are nothing more than a waste of both time and money.

In addition, the USGA, which released and refined the Stimpmeter, preaches about the perils of fast greens. Many superintendents would be

happy to heed these cautions, but in many cases, such warnings fall on deaf ears in green committee meetings. Other superintendents have stated that they want the USGA to “get up to speed.” Articles advising against green speeds faster than 10 feet are of little value to the superintendent who is paid to meet the demands of creating faster green speeds.

One of the original goals of the creation and release of the Stimpmeter was to allow fair pin placements on sloped areas; however, there is a current trend to “smooth out” the traditionally preferred contoured putting surfaces—all in the name of increasing green speed. Confusion, rather than communication, reigns. The question is, Why?

### Researcher-Superintendent Communication Problems

In many respects, the superintendent has gotten little help besides the warning, “speed kills,” meaning that it kills turf. Even when research has produced data that validates a safe method to increase green speed, a disclaimer is invariably attached, warning of the perils of fast greens. I must confess that I, too, have done this. I believe that there are two reasons for such caveats: (1) Space is limited for trade journal articles, and the writer often cannot thoroughly cover the intricacies of why some methods may or may not work on particular golf courses, and (2) no one wants to be blamed for dead turf. Thus, although the disclaimer “speed kills” is used with the best of intentions, it leaves a mixed message and, invariably, the superintendent holding the bag.

Moreover, a researcher knows that a proposal to study the intricacies of putting green speed must compete with other, perhaps more popular, endeavors in securing a research grant. For this reason, there is still a great deal of research that must be done regarding green speed.

Almost everyone has an opinion on green speed, and there are many people who are perpetuating the myths. Yet there are few who have treated green speed as a researchable issue. No one is really to blame, because all are well intentioned, but this is part of the reason that so many misconceptions regarding green speed persist.

To add to the confusion, when most turfgrass researchers present or write about data regarding green speed, they often use the term “ball roll distance” (I’m guilty here) because it is more scientifically accurate. “How can we call it green speed,” they question, “when the Stimpmeter measures *distance*?” This is true, but the same individuals often add the dis-

claimer “speed kills” in their papers, and the truth is that speed does not kill turf.

The vast majority of articles on the subject inform the superintendent about the perils of ever-increasing green speeds instead of giving pertinent information on *how* to manage their greens for speed. Furthermore, many articles make generalized statements that are flat-out incorrect and/or unsubstantiated.

Finally, consider the misinformation that is often spread during weekend golf on television. This erroneous information, given by well-intentioned, nonreliable sources, is repeated at green committee meetings, and the superintendent has few trusted sources to clarify the misinformation.

Given this entire scenario, it is little wonder that many superintendents pretend that they do not have a Stimpmeter and that others falsely inflate their green speeds to appease their clubs’ membership.

### Whose Golf Course Is It Anyway?

Joe Vargas of Michigan State University teaches his turfgrass students that, “if the members want you to dig a 4 by 4 by 4-foot hole in the middle of number one fairway, your job is to do it.” The point is that, after all, it is the members’ golf course, not the superintendent’s. The golf course superintendent is an employee of the golf course and has the responsibility of managing the grounds in a condition specified by the members.

When it comes to green speed, it can be near impossible for the superintendent to give the golfers the specified conditions. On the very same day that some golfers think the greens are too fast, other golfers think they are too slow. This variance alone clearly indicates a need for the superintendent to be in charge of the issue.

Certainly, there are numerous golf course superintendents who have been confounded by the desires of the golf course membership. Many superintendents originally went into the occupation because they wanted to work outdoors and to deal with meetings as little as possible. Sitting in and communicating during committee meetings were not among their objectives. According to a survey of USGA agronomists, the superintendent’s inability to communicate was the “major sin committed by those involved in golf course maintenance” (Blais, 1991). So, although it may be more pleasant to deal with their favorite golfers and avoid the others,

superintendents should be able to communicate effectively with all golfers.

In order to achieve what is best for the turf, it is vitally important that the superintendent be well versed on the subject. Because the members want what is best for their club too, such knowledge should be communicated to them.

The following are the three main points covered so far:

1. Green speed is the number one factor a golfer wants to know in regard to the condition of a golf course.
2. There are numerous misconceptions regarding green speed.
3. A golf course superintendent's inability to effectively communicate with his or her clientele (i.e., green committee, board, owner(s), golfers) has been pinpointed as the biggest problem between the superintendent and the clientele.

An examination of these three points leads to the conclusion that "the issue of green speed provides an opportunity for superintendents to shine as professionals, and to offer answers to this age-old debate" (Morris, verbal communication, 2002). Ultimately, the superintendent who is well versed on issues of green speed, citing research and articulating the facts through examples and common sense, will earn the respect of his or her clientele. But the superintendent who goes into a green committee meeting and says, "Speed kills" is not communicating very effectively.