Ups and Downs ...



How It All Began

by FRANK W. THOMAS Technical Director, USGA

> N EARLY 1976, Al Radko, then National Director of the Green Section, requested that an instrument be developed to measure the speed and hardness of greens. I designed four different instruments, each with an intricate ball release mechanism. These were all relatively complex designs with built-in potential for operator error.

> I was not satisfied, and so I looked at the Stimpmeter, a device invented in the mid-1930s by Ed Stimpson of Massachusetts. The concept he had was good. However, it had the same potential for operator error. I decided to modify his

design and had 15 of them built. The changes included a more precisely cut ball release notch, a V-shaped rather than round-bottomed chute, and an increase in the length of the device to develop enough roll that significant differences in green speed were measurable.

These first wooden prototypes of the re-designed Stimpmeter were used in 35 states, and the speeds of thousands of greens were measured with the device. Greens were also measured at five or six USGA championships. Based on the tests and with Stimpson's permission, the USGA decided to manufacture the Stimpmeter. There is no doubt in my mind that the Stimpmeter is the simplest, most accurate and operator-independent instrument we have to measure the speed of greens.

The principal purpose of the Stimpmeter is to allow golf course superintendents to evaluate the effect that different cutting heights, frequency of cut, winter feeding or other putting green management treatments will have on the speed of the green. On the other hand, one can say the Stimpmeter may become a measure of effectiveness of certain agronomic treatments, and can be referred to on a national standardized basis.

A second purpose of the Stimpmeter is to provide the green superintendent with a precise method of preparing the greens on a golf course for either membership play or competition play. He may want to have consistency in green speed or even design certain inconsistencies into greens. Some greens may need to be faster in some areas than others. With the Stimpmeter, he has this capability and does not have to rely on experience with regard to his impression of slow or fast. He can then plan his work accordingly.

The introduction of the Stimpmeter was also meant to be an early warning system. Why do the greens suddenly become slower or faster? The effect of the Stimpmeter as a diagnostic tool needs to be evaluated based on data, which, if properly documented and analyzed, would show certain correlations between speed changes and potential problems.

The Stimpmeter is a tool that can be used to prepare greens for specific speeds. "Prepare" means gradual preparation to achieve certain goals, not traumatic last-minute action that may cause undue stress. In many cases, due to the grass type, climatic conditions or the undulation of certain greens, one may want to reduce the speed of the greens, or at least maintain certain maximum speeds for those conditions.

The Stimpmeter was not designed to be a speedometer. This was, in fact, one of the major fears, and because we understood that it would inevitably be used this way, we tried to limit its use by allowing only golf course superintendents and our Green Section agronomists to have access to a Stimpmeter.

Fast greens are not always good greens; although, generally, the faster

the green, the truer the putting surface. Those same features that slow the ball are also those that deflect the ball. Based on experience, we have found that a green speed in the neighborhood of $9\frac{1}{2}$ to $10\frac{1}{2}$ feet provides an excellent putting surface for most championships. Greens with extreme slope need to be less than 10 feet, and flat greens may be greater than 10 feet. However, any green faster than $11\frac{1}{2}$ feet should be considered too fast for some championship play and dangerous for the long life of the green if proper attention is not given.

THE STIMPMETER is here to stay, we believe. Let's not misuse it! Rather, let us develop and promote the potential benefits it has to offer. A new instrument called an impact tester is now in the development stages. Once again, however, if it reaches the wrong hands, it may also be misused. The method of introduction must be carefully considered.

Tools to measure the quality of a green, from a player's point of view, will inevitably lead to sterilizing golf courses. This may be the curse of any new piece of equipment developed for the use of the golf course superintendent. He should have the ability to control the playing conditions of a golf course through good, sound agronomic management. He should not have to endure playing conditions that control him to the extent of having detrimental effects on the course.

A New Turf Menace

by JULIUS ALBAUGH Superintendent, Westmoreland C.C., Illinois

THE STIMPMETER has been cussed and discussed by golf course superintendents since its conception, and the controversy has grown with time. It has been a prime item of discussion during casual conversations, and at a meeting of golf course superintendents in Illinois in December of 1981, the Stimpmeter was discussed at length.

I am not saying that what has happened with the Stimpmeter was its original purpose, but rather I am pointing out what has happened because of its existence. First, let's take the issue of the Stimpmeter and the low-handicap golf club member. Agreed, the Stimpmeter was meant as a tool for the golf course superintendent, but it has happened that the golfer himself has acquired the instrument.

The following story may seem farfetched, but it actually happened in the northern suburbs of Chicago a few years ago. A member of the Grounds and Green Committee of a neighboring country club heard about the Stimpmeter. He purchased the device along with charts and tables. Instantly he felt he was an expert on judging the quality of putting turf. He began to experiment with his new toy at his home course, recording readings of putting green speed. After he had acquired many readings on his own greens, he decided to trespass on neighboring golf courses to compare Stimpmeter readings. I heard the fellow had visited my golf course, but I missed him! At a neighboring club he was confronted by the golf course superintendent and was lucky he was not shot!

In his spare time he visited a club or two a day, some in the mornings, others at night. He made some readings after a heavy rain, others under the driest of conditions. He did not know if the green had been mowed that day or double cut. He did not know the turfgrass variety or the height of cut. He did not know anything except how to roll a ball down an aluminum bar. When he had finished his readings, he compiled his so-called expert data and proceeded to hassle the golf course superintendent at his home golf course. It took some time, but the golf course superintendent