an then to find a way to use it to our advantage. I do not believe club members should use it for comparing their greens with the neighbor's or with those on TV. Frankly, I feel we must use it ourselves to compare our own greens, one with another, trying for consistency, but not with other clubs in town or across the country. Further, I believe the USGA recognizes that the differences in golf course location, terrain, budgets, and personal desire will dictate conditions and ultimately green speed. Further, the USGA's attempt to promote consistency within the same course is the primary and ultimate goal, not necessarily to match or duplicate the speed attained at other courses.

I've used and appreciate the Stimpmeter, but I encourage caution and restraint, especially in trying to duplicate the speed of greens at so-called championship courses. Let's agree to use this tool for our benefit and ignore the remarks made on TV that create competition for speed, just for speed's sake.

What causes a golfer, professional or otherwise, to believe he can stroke a putt so consistently that he could ever declare one green is faster or slower than another?

## Up with The Stimpmeter

## by STANLEY J. ZONTEK Director, North-Central Region, USGA Green Section

T STARTED OUT as a crude. wooden, homemade instrument to determine the rolling speed of a putting green. Like most inventions, it evolved from a rather simple idea, developed in the 1930s by Edward Stimpson, of Boston. Today, the Stimpmeter has become a controversial but very precise means of measuring putting green speed. In fact, Joseph M. Duich, of Penn State University, has detailed just how accurate the instrument is when properly handled. In carrying out field research to determine factors affecting putting green speed, Dr. Duich found Stimpmeter measurements statistically well below the accepted standard deviation figures commonly accepted for field research studies. Researchers have found the Stimpmeter to be an extraordinarily accurate device.

Accuracy, however, is not the basis of the contention swirling around the Stimpmeter. The problem lies in its improper use and misunderstanding of its purpose. Julius Albaugh, superintendent at the Westmoreland Country Club, in Wilmette, Illinois, has written an article explaining the concerns of some superintendents over the misuse of the Stimpmeter. He has raised valid questions. His article appears in this issue of the GREEN SECTION RECORD, as well as in other periodicals throughout the country.

As with any tool used in golf course maintenance today, the Stimpmeter can either be used properly or it can be abused. When the USGA began to produce them in quantity, in 1976, Stimpmeters were given free of charge to golf course superintendents only at clubs subscribing to the Green Section's Turf Advisory Service. Today, they are available for a nominal charge of \$25, but sales are still restricted to golf course superintendents or golf clubs. They are not sold to individuals. It was never the USGA's intent to make them available to the general public. They

Too much water affects putting quality and eventually grass quality.



were and still are only intended for the turf management professional.

The Green Section agronomists and course superintendents alike realize that most golfers want to putt on good greens, i.e., consistent, smooth, true-rolling, and green putting surfaces. Most golfers prefer greens that are not too fast or exceedingly slow. No one, at least in the past 50 years, has advocated playing the game on brown, scalped greens.

It was inevitable, however, that once a means for accurately measuring green speed became available, there would also be the need to establish certain ranges (See *Table 1*). The published ranges have been developed from extensive surveys and tests made on putting greens throughout the United States under all kinds of conditions and over a period of several years. Measurements were made at championship sites as well. Thus, the general ranges for putting green speed were determined and are published as part of the instruction manual for each Stimpmeter.

Never has the Green Section attempted to standardize or dictate putting green speeds for its member clubs. That decision must be left to each individual golf club through its green committee and its course superintendent. We also point out that there is an important distinction between the reported speed ranges for regular membership play and tournament play.

We believe that putting greens can be maintained without too much extra work in the medium fast to fast range for regular membership play without unduly stressing the grass under most conditions. However, this decision still rests with each individual golf club and is directly influenced by the character of the course, the maintenance budget and the wants and desires of players at that facility. If you ever hear that the USGA Green Section advocates 10-foot or 11-foot green speeds, don't believe it! It isn't true.

Unfortunately, the spoken word tends to become oversimplified as it is passed from one to another. To most novices, faster greens simply mean lowering the cutting height. The lower the cut — the faster the green. Right? Wrong! There is far more to it than that. Without any question greens have been scalped from the desire to achieve fast putting surfaces. But it does not necessarily follow that fast putting surfaces require scalped greens. The difference lies in management, soils, grasses, budgets, climate, and other variables.

TABLE I.	
Speeds for Regular	Membership Play
8'6"	Fast
7'6"	Medium-Fast
6′6″	Medium
5'6"	Medium-Slow
4′6″	Slow
Speeds for Tou	irnament Play
10'6"	Fast
9'6"	Medium-Fast
8'6"	Medium
7′6″	Medium-Slow
6'6"	Slow

ODAY, as a result of research like Dr. Duich's and the practical experiences of golf course superintendents and the Green Section agronomists, there is a greater appreciation of what goes into preparing greens for modern championship play without scalping or killing the turf. It is only in the preparation for certain USGA Championships that specific putting green speeds are established by the USGA Championship Committee. The courses where such events are played now work very closely and carefully with Green Section agronomists over a period of several years to have their course in the best possible condition. These courses have a higher than average maintenance budget, and everything peaks, including the incredibly fast green speeds, for the one week of the Championship.

It is interesting to note green speeds from major championships during 1982. The green speeds for the U.S. Open, held at Pebble Beach, California, ranged from 9'6" to 10'. For the Masters Tournament (a non-USGA event), the green speeds were over 11' on the average. Most of the commentaries support the viewpoint that, for the U.S. Open, the speeds were very appropriate, whereas, for the undulating greens of Augusta National Golf Club, the speeds were very fast indeed. Perhaps the pendulum may now swing back from the very high putting green speeds of recent years and come closer to the speeds found in Table 1.

There is a need for the Stimpmeter. It has a place on our golf courses. Let's not bury it. Let us not permit the few who have misused or misunderstood the Stimpmeter to destroy its value to golf and the golf course superintendent. Rather, let us understand it and use it for its intended purposes. If the green committee chairman or the golf course superintendent comes under pressure from the membership because of improper use or interpretation of the Stimpmeter, immediately call the Green Section agronomist in your area. He understands and he can help. He is there to assist you, and he can provide important information as it relates to putting green speeds and other agronomic difficulties. Together, let us work toward our common goals of smooth, true, and consistent putting greens that are properly paced.

John Zoller, Kent Davis, and Bill Bengeyfield using the Stimpmeter at Monterey Peninsula Country Club.

