Why Can't Green Speeds Remain Constant?

By David Oatis, regional director, Northeast Region

It's a beautiful fall day with cool temperatures and low humidity; you are playing golf and marveling at the condition of the course, particularly the pace of the putting greens. Some golfers might be inclined to just enjoy the moment. Others will wonder why the greens can't play like this all the time. There are a myriad of variables that affect turfgrass growth and putting green speed; and, what is possible to achieve at one time of year under certain conditions may be impossible at other times.

Unquestionably, the biggest variable affecting turf health and playability is weather. Air and soil temperatures both have a tremendous impact on turfgrass growth rates. So do moisture and humidity. Rain or irrigation events, particularly when combined with a fertilizer application, can stimulate extra growth. This effect can be magnified under warm conditions with the result being increased surface resistance and reduced ball roll. Similarly, hot, humid conditions cause turfgrass leaves to retain moisture and remain fat, and this also may result in reduced green speed. Conversely, dry, windy conditions can cause the turf to wilt which can reduce surface resistance and increase putting green speeds. Putting green speed will vary from day to day merely as a result of weather influences and the seasonal changes turf undergoes.

Maintenance practices also have major effects on putting green speed. Mowing and rolling operations increase putting green speed. Applications of topdressing, needed to dilute organic matter and smooth putting green surfaces, can initially slow putting green speeds. A day or two after a topdressing application, putting green speeds often get faster than they were prior to the application. The same often is true of vertical mowing and brushing. Practices that stand the turf up aid in controlling the development of grain and can improve the quality of cut, but these practices can slow putting green speed for a day or two before stimulating an increase.

Many other factors affect turfgrass growth. Growing environments, soil conditions, and applications of plant growth regulators, plant protectants, and fertilizer are just a few. Anything that affects turf growth is likely to affect putting green speed. Golf course superintendents constantly juggle maintenance practices with the weather to maximize playability and maintain consistency. Despite our scientific training, modern equipment and experience, it is impossible to maintain a consistent putting green speed every day of the season.
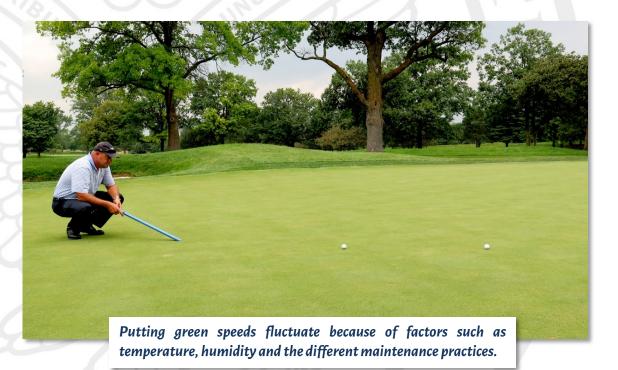
The question is, why would we want golf courses to play the same way every day? Adjusting one's game to the conditions and varying setup are some of golf's greatest attractions. Golf courses cost a lot to maintain, and if consistency is so important, a cheaper alternative would be to move the game indoors. Golfers could use simulators and hit off of artificial surfaces into nets in climate controlled environments. This would ensure absolute consistency and eliminate the variable effects that come from wind, rain, temperature, maintenance practices, course set up, etc.

Fortunately, most golfers believe that playing the game outside in a natural setting is part of golf's charm. Varying how courses play through setup and having to adjust one's game based on the weather and playing conditions makes the game infinitely interesting and challenging. Rather than considering green speed and other aspects of playability as factors that should be kept as constant as possible, look at their changing effects as a blessing that continually adds interest and new challenge to a wonderful game.

Putting green speeds fluctuate because of factors such as temperature, humidity and the different maintenance practices.