Consistency is a word often used to describe the playability and the quality of a golf course. As technology and knowledge about diseases, insects, ecology and biology of turfgrasses has continued to improve, the ability to provide more consistent playing conditions has become more achievable. This consistency however, comes at a economic, agronomic and environmental price. While some level of consistency can be achieved and is desirable, it is important to remember that the game of golf is played in an outdoor environment. Part of the challenge of the game of golf and what often separates the great golfers from the good, is the ability to adjust to ever-changing playing conditions. The golf course will change with prevailing environmental conditions and it is not the superintendent’s job to mask those conditions that differ from day to day through technology. Rather, the goal is to create a memorable and positive playing experience for the golfers.

Consistency of golf greens

The discussion regarding consistency on golf greens has changed greatly over the years. Originally, it centered around the amount of turfgrass cover compared to bare ground on the greens. It changed to describe how the ball rolled across the surface of the green. It then focused on whether or not the ball rolled. Later, it evolved to mean that the golf greens should roll the same speed from day to day regardless of time of year or environmental conditions. While the definition of consistency is inconsistent among turfgrass managers and golfers alike, it is something that is out of control with regard to expectations and cost.

Measuring Consistency

Many instruments have been developed to measure the consistency of golf greens. The most significant and probably the best known is the Stimpmeter. It is amazing that a simple metal bar with a notch in it has so much credibility. There are serious limitations with this device, including a lack of consistency between people lifting the bar and the fact that many golf courses lack areas large enough to get an accurate measurement.

The emphasis on firmness has brought about the use of instruments that measure surface soil moisture and instruments that measure firmness, such as the Clegg hammer and the TruFirm. While some of these tools have an agronomic value, the way they are being used today is as a measure of consistency and playability. Soil moisture meters can be an invaluable tool that aid in decisions regarding irrigation practices when water is measured at a depth similar to where roots reside. Although meters...
will never be as good as an experienced turfgrass manager with a soil probe. Many of the current probes only measure soil moisture in the top 3 cm and those measurements focus on playability. The dropping weight measuring devices such as the Clegg hammer and the TruFirm allow for a more direct measurement of firmness. These tools can also indicate excessive thatch or organic matter, although a soil probe is much better for that evaluation. These tools give the turfgrass manager more information about the greens and allow them to track patterns.

Where the modern measuring devices fall short is when they are used as a standard to achieve and to develop consistency from day to day or even throughout a day. Golf courses can rely heavily on the use of Stimpmeters and firmness measurements to track the consistency of the course. The measurements should not be used for day to day play, rather they should be used leading up to a big event to track progress. This allows the superintendent to see just how much impact each cultural practice they employ has on ball roll and it helps them to gauge what needs to be done to achieve the green speeds they want for the event. After a rain, greens are typically slower.

Using these tools help the golf course superintendent understand how, and for how long, these events impact ball roll and firmness and it allows them to adjust their management practices coming into a high profile event. When the conditions are expected to be the same from day to day, this goal is not achievable and often leads to greater economic and environmental costs as proper irrigation cannot be performed.

Some golf courses will notice with repeated measurements that some greens tend to be slower or faster than others. Often this discrepancy is due to different types of greens construction, and when this is the case, management should be done to overcome this difference. In some cases, the differences are due to various microclimates, than one without wind. Working towards evening out greens that are different for microclimates is not what the game of golf is truly about. In this case, the greens may be the same in the morning, but, by midafternoon the differences will be significant. The most common reason for differences has to do with the order the measurements are taken. Often the greens are assessed in the same order each time they are measured. Marked differences in surface moisture can occur over the course of an hour, especially in the morning. The first green measured will often be interpreted as being slower than the last. The biggest lesson here is that despite our best efforts, golf greens will be different from day to day for various reasons and that is part of the game of golf.

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