



*Taking a few simple measurements helps superintendents deliver better playing conditions and manage their resources more efficiently.*

## HOW DATA DELIVERS BETTER GREENS

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Collecting and analyzing data is an important part of decision-making in almost every industry, including golf course maintenance. With putting greens being the most important and intensively managed area of a golf course, it comes as no surprise that many superintendents focus most of their data collection on putting green performance. Here's how a few key measurements are helping your favorite greens to play their best.

### Green Speed

Superintendents use green speed measurements to help them achieve consistent and appropriate playing conditions in the most efficient manner possible. Using a USGA Stimpmeter®, or similar tool, a member of the maintenance team will roll several balls over a flat area on a putting green, measure how far they traveled, and then repeat the process in the opposite direction to calculate an average. Green speed can be measured on all the greens or on a representative sample to gain a better understanding of how the

greens are performing that day and over time. The data helps superintendents know whether certain greens need to be managed differently to achieve consistency and makes it easier to plan mowing and rolling operations. Where things go wrong with green speed information is when golfers use it to compare different courses or focus on achieving faster speeds regardless of the impact on playability or turf health.

## Soil Moisture

Deciding whether areas of a putting green need water requires more than a visual inspection. In the past, superintendents would remove a soil sample from the green and feel it to estimate the moisture content. While this method can be effective, it is also highly subjective. The development of portable soil moisture meters allowed consistent, objective measurements to be taken quickly and easily by any member of the maintenance staff. Some moisture meters can also be connected to GPS systems to create a daily map of soil moisture readings. Having this information ensures that water is only applied where it is needed, which improves turf health and makes it possible to deliver more consistent playing conditions. Soil moisture readings can also point to the need for wetting agent applications or drainage installation if certain areas remain stubbornly dry or wet.

## Clipping Volume

Superintendents have always kept an eye on the amount of grass clippings removed each time putting greens were mowed, but there has been a growing trend toward taking more careful measurements of clipping volumes. This is because the growth rate of the grass has a big impact on playability and maintenance planning. If the grass is growing too quickly, it will be harder to maintain green speeds and more aeration and topdressing may be necessary to manage organic matter accumulation. If the grass is growing too slowly, greens won't recover well from traffic and ball marks, and the turf may begin to thin out. Measuring clipping volume in carefully marked containers helps superintendents understand the growth rate that delivers the desired conditions and allows them to tailor their practices accordingly.

Today's superintendent has more data and analytical tools at their disposal than ever before. Regardless of which measurements they choose to focus on, know that this information translates directly to better playing conditions and more efficient use of resources. It is also important to recognize that all the data in the world is no substitute for a superintendent's experience and knowledge about how their course reacts to various stresses and situations. Recognizing when the numbers aren't telling the whole story is an important skill in today's world.