

NOVEMBER 2023 NEWSLETTER

TAKING MEASUREMENTS (PART 2)

This Newsletter is the continuation of the October 2023 Newsletter, and covers the measurements you can take on the green itself.

Starting with the soil, samples can be taken to determine, pH values, soil nutrient values and soil particle make up. All of these tests are available using a soil analysis laboratory. These laboratories can also do tests to determine the extent of nematode presence in the soil.

Whilst you are taking these samples to send to the lab, you can measure the grass root and thatch depths. Good healthy roots should be at least 75 mm and longer.

It is also possible to determine soil density and compaction, by measuring the amount of water soaking away in a given time period.

Specialist tools can also allow you to measure soil moisture content and soil temperature. The soil thermometer is a valuable means of determining when the soil temperature has reached at least 18 degrees Celsius, as this is the temperature that the grass plant begins to develop leaf area again. At this temperature successful and speedier greens renovations can take place. The moisture metre assists in two ways, ensuring that water is given to the grass plant when needed, and also helping to ensure that overwatering does not occur, both scenarios being detrimental to the health of the grass plant.

Green speeds can be determined by using a stimpmeter or by measuring the time a bowl travels 27 metres. The draw (grass) of a green can also be measured.

Once you get to mow, groom or renovate a green, you can measure the amount of grass removed, and although a little subjective the ratio between live (green) grass and dead grass removed. All these figures can help you determine growth rates and patterns. (See May 2023 Advisory bulletin)

You can also record the number of rink changes you make as well as the numbers of players using the green.

When watering the green you can set up small tins under the sprinkler system to measure the amount of water applied to the green to ensure that the correct amount of water is applied to the green (please refer to the March and April 2023 Newsletters for more information).



Finally, do not forget your greens levels. Using the Cubits levels program, you are able to determine a number of useful bits of information.

- Firstly, the program will give you the points score that is included in the overall grading of the green.
- Secondly it will produce a pictorial representation of the high and low spots on the green, which can be pinpointed with a high degree of accuracy.
- Thirdly it will provide an estimate of the top dressing you will need to get a perfect score of 30. In reality trying to level a green in one go would be extremely difficult bearing in mind that one should not add more than about 8 mm of top dressing to any part of a green, otherwise there is a distinct possibility of damaging the grass plants.

As you can see, there are a large number of measurements that can be taken, and recording these over a period of time will allow you to identify trends and patterns of growth etc., allowing you, the Greenkeeper, to make more informed decisions.