

FACTORS AFFECTING GREEN SPEED

Turf Care Department

July 2017



VARIABLES:

1. Mowing height of cut
2. Mowing frequency
3. Grass growth rate
4. Grain
5. Fertility
6. Thatch
7. Rolling
8. Weather - rain events.
9. Topdressing
10. Verticutting
11. Golf shoe tread type
12. Grass type: Poa Annuua vs. Bentgrass
13. Aeration
14. Plant growth regulators

Putting greens have a continually changing environment. As you can see from the list on the right, there are number of turf management practices and environmental conditions which affect green speed.

Our main objective for the greens is to maintain healthy turf while creating fair, enjoyable, and consistent playing surfaces throughout the season. This can be quite challenging given the number of factors which affect green speed.

There are several components to an ideal putting surface, green speed being affected by all of them. Resiliency, uniformity, smoothness, and firmness all contribute to the playability and overall speed of the putting surface. Resiliency is the green's capacity to absorb shock and to hold a properly hit shot. Uniformity is reached when each green on a golf course and all areas of each green putt the same. This is nearly impossible to obtain. It is an understatement to say it's difficult to manipulate 100,000 square feet of varying grass types and micro-environments into a single, uniform putting surface. Smoothness is a major component in green speed. A smooth surface generates less friction, and therefore causes less resistance to ball roll. A bumpy green quickly reduces speed. Firmness refers to the hardness of the putting surface. Typically, a firmer surface will produce faster green speeds. Firmness also affects the reaction of a golf ball landing on a green. A firm green will have a shot release further from the point of impact while a softer green will hold the ball closer to where it lands. There is a fine balance between maintaining a firm surface to promote green speed while having it resilient enough to hold a well hit shot.

We use many management practices to establish and maintain green speed. We are currently mowing 7 days per week and rolling every Monday, Wednesday, and Friday to maintain the smoothness of the greens. We apply a wetting agent (Revolution) once per month to promote surface firmness as well as uniform water distribution in the soil for plant health. We keep the grass leaves as upright as possible by brushing the greens as needed. We want the ball to roll on the tips of the grass and encounter as little friction as possible. We verticut the greens occasionally to encourage a more upright plant, and to eliminate any grain that may exist. Topdressing is done to promote surface firmness.

We aim to keep Brightwood's greens rolling between 8.5 - 9 feet when the grass is actively growing. We feel this is a reasonable speed given the contours and design of the greens, available pin placements, and the average golfer's skill set. We want everyone to enjoy their round and trust the course is set up in a fair but challenging manner.

