Speed alone does not make for a good green

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Despite what club members might say, there's more to a quality green than speed. Here are some management tips to keep your greens looking good.

The word fast has become synonymous with success. Fast cars, fast-track careers, even fast foods are associated with the good life. Speed also is important in sports. Baseball pitchers are evaluated on how fast they throw and football players on how fast they run the 40-yard dash.

In golf, successfully managed greens are often associated with speed. However, speed alone does not make for a good green. If a wide receiver cannot catch a football, his time in the 40-yard dash is meaningless.

The same is true in golf: the ultimate fast green would be as hard as a rock, smooth as glass and void from grass. No golfer would want to play on this surface. The terms "feel" and "touch" would be meaningless since making a putt would be a function of luck.

Clearly, green speed is important, but it's not the only component of a good putting surface.

Important elements of a good putting green are uniformity, smoothness, firmness and resiliency. The first three are associated with speed while resiliency governs the green's ability to hold golf shots.

Uniformity implies that each green putts the same. Nothing is more discouraging than putting on a fast green followed by a slow one. Uniformity is often difficult to achieve.

Variables such as location, construction, micro-environments and grass species make perfect uniformity unattainable. For example, greens may dry out at different rates or greens in the shade might putt faster due to the thinner less dense turf.

Smoothness is a major factor affecting speed. The smoother the surface, the less resistance to roll. If a green is not smooth, the ball will tend to bounce, thus stop quicker.

Firmness is associated with hardness. The firmer the surface, the faster the green. For example, a ball will roll a greater distance on the floor than on a mattress. Difficulty arises in attempting to maintain greens firm enough to promote speed, yet soft enough to accept a well-struck shot. Balancing these two qualities requires and understanding of your golfers' expectations.

In addition to uniformity, smoothness, firmness and resiliency, contour also must be considered in determining proper green speed. What constitutes fast greens on one course may not be the same on another.

For example, if two greens each roll nine feet as measured by the stimpmeter, and one is flat and the other severely contoured, the latter will be much more difficult to putt than the former.

Managing greens for proper speed means achieving a happy medium. Greens that are too slow are not fun to putt. Nor are greens that are too fast so that they eliminate the skill level required of golfers.

Management Strategies

Good putting greens have a number of components. To achieve fast uniform greens, proper cultural programs need to be practiced.

Reducing the mowing height will increase the speed. Lower mowing heights promote uniform and smooth surfaces.

Often the questions is asked "How low can we mow?" A more proper question would be: "How long can we stay?" In other words, the lower the mow, the shorter the interval at which the putting greens stay healthy.

The shorter you mow greens, the more likely the turf will become susceptible to temperature and moisture stress, disease pressure and damage through wear. Putting greens cannot be maintained at championship cuts indefinitely without turf loss or spending considerable money trying to prevent loss.

Care should be taken when mowing heights are reduced from normal cutting heights. An abrupt change can result in scalping and kill the turfgrass.

If mowing heights are lowered for a tournament under non-stress conditions, return to normal height when the event is over.

Care should be taken if height is to be increased under stress conditions. Research from the West and the Southwest has shown that increasing the height increases the water use rate.

Low mowing heights can cause restricted root systems. By raising the height under stress conditions, the root system may not be able to supply enough water to the additional tissue. It may be best to leave the cut low until the stress period has ended.

Frequent mowing promotes high shoot density and vertical leaf growth, which results in smooth, consistent greens. Varying the mowing direction daily also helps pro-

mote a more upright plant. Research has shown that a break in regular mowing can result in a brief, yet significant reduction in green speed.

Research at Ohio State has found that double cutting greens — mowing them twice a day — can significantly increase green speed. If pressure exists to increase the speed of the greens, double-cutting is an option to dropping the height of cut.

Grain appears when grass plants lie in different directions. In severe cases, shoots, stolons and rhizomes orient in various directions on the surface and interfere with the golf ball's proper roll.

Our work has shown that the difference of putting "with" moderate grain versus putting "against" the grain can vary as much as three feet. Effective grain control is a prerequisite for achieving uniform greens.

Verticutting helps reduce grain by promoting more upright growth and removing undesirable tissue. Verticutting is often done weekly during periods of active growth.

The challenge to improving green speed is knowing what practices will work for you and the same time providing a visually appealing and healthy turf.

Brushing is a common practice for reducing grain. Brushing is the process whereby a stiff, bristle-type brush is placed in front of the mower. As the mower moves across the green, the brush lifts the turfgrass plant up before it is cut. Brushing is effective but can cause damage to the plant.

The best time to brush is under conditions that promote turfgrass growth. Time interval between brushing depends on the severity of the brushing and how quickly the turf recovers. Avoid brushing in the turfgrass is under stress.

Thatch plays an important role in green speed and quality. A small amount of thatch provides a certain amount of resiliency. However, excessive thatch disrupts the firmness and smoothness of the turf.

Priority should be set to control or manage thatch at an acceptable level. Vertical mowing, topdressing and coring are effective means of minimizing thatch. They should be done as a regular maintenance program.

Topdressing smooths the surface and provides a firmer base. Frequent top dressing is a positive step in providing a uniform turf.

Although topdressing and brushing may initially slow down a green, eventually they will increase its speed.

The challenge to improving green speed is knowing what practices will work for you and the same time providing a visually appealing and healthy turf.

And finally, for all practices that are available for increasing speed, the environment plays the critical role in what you can and cannot expect and do.