
PUTTING GREENS

Grooming The Surface



Effects of frequent grooming are clearly evident when a bentgrass green receives regular attention (above) as compared to one which does not (opposite page).

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SOMETIMES IT seems that the art of turfgrass management is becoming more and more a science. With a host of insects and diseases to learn about, a large number of turfgrass cultivars to sort out, and many types of fertilizers and pesticides to evaluate, it is easy to understand how golf course superintendents can become absorbed in their efforts to produce turf, rather than to develop a playing surface for golf. Maintenance programs and budgets are sometimes too heavily weighted in favor of production, and little consideration is given to following through on the details which make a beautiful playing surface out of a healthy stand of turf.

The putting green is a good example. Only half the battle is won if healthy

grass is maintained through severe winters and hot summers, attacks of insects and diseases, and the traffic created by thousands of rounds of golf each year. The other half involves constant grooming in order to produce a consistently smooth and true putting surface. The art of turfgrass management can be developed to the fullest to achieve finely groomed greens. Fortunately, many techniques are available to assist the superintendent in this quest.

ONE OF THE best techniques for maintaining well-groomed greens happens to be one of the most basic. Greens should be cut frequently with a properly adjusted, sharp mowing unit. This may seem quite obvious, but it is,

nonetheless, a very common error. To begin with, each cutting unit should be carefully set and then checked routinely to ensure that the proper adjustment is maintained. Although a low cutting height is not essential for producing a well-groomed surface, other methods for reducing thatch and grain buildup will have to be followed more often on greens cut at $\frac{1}{4}$ inch or higher. Most superintendents who use both triplex and single-unit mowers for greens maintenance find that the triplex units must be set about $\frac{1}{16}$ inch lower than the single unit mowers in order to produce the same effective cutting height. The greens mower should be in good running condition, and the rollers and cutting units should be in proper alignment.



The need to maintain sharp edges on the cutting reel blades cannot be over-emphasized. Dull mowers produce a rough, leafy cut, and putting quality suffers. Cutting reels should be back-lapped several times each month in order to maintain a high-quality cut, especially when greens are topdressed frequently. Bedknives should be replaced several times during the season, depending upon the frequency of the aerating, topdressing and mowing programs.

Finally, only a program of frequent mowing will produce the expected consistency in a high-quality putting surface. Mowing three to four times each week is not enough, especially during the peak growing periods. Grass leaves lengthen considerably on days when the greens are not mowed, and the blades then tend to lie over, rather than be cut off cleanly. Leafiness and grain develop under this schedule of infrequent mowing. Most superinten-

dents find that they must mow five to seven times a week for best results.

A NUMBER OF accessories are available for the putting green mower; when they are used routinely, they help reduce or prevent the buildup of grain and excess thatch. The easiest of these to use are the devices which are permanently attached to the mower itself and, therefore, are used each time the greens are mowed. Perhaps the best known is the Wiehle roller, a special grooved roller which is used in place of the traditional solid unit on the front of the mower. This grooved roller has less of a tendency to mat the grass down before it is cut than the solid roller; the result, therefore, is a cleaner and closer cut.

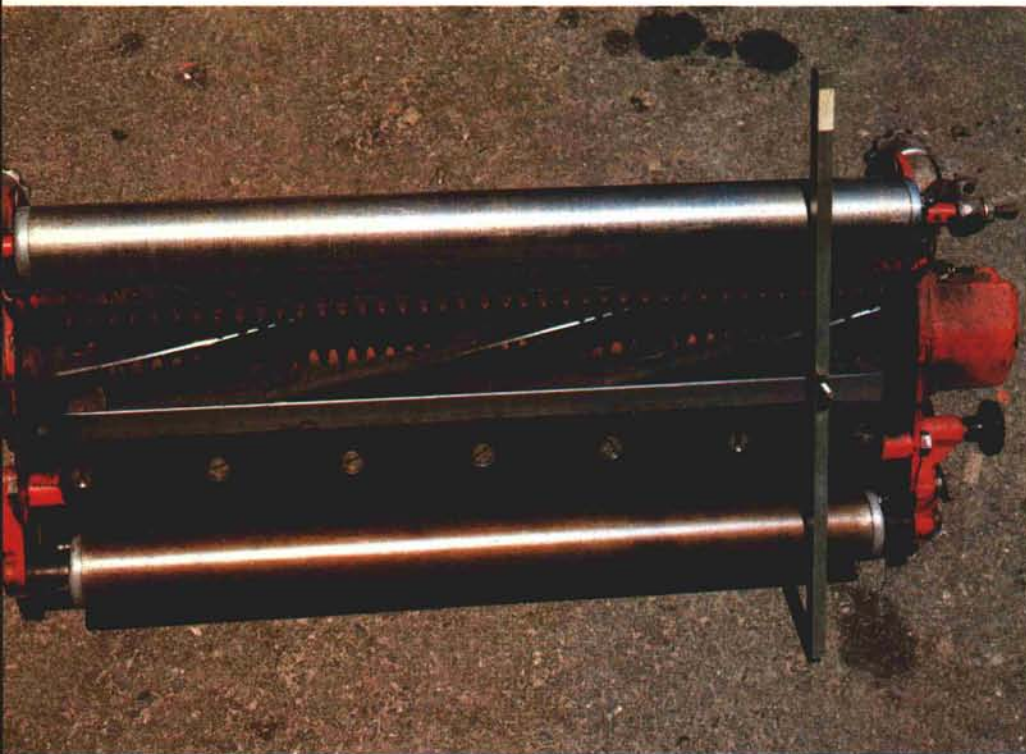
Some models have accessory brushes mounted to the frame that project in front of the mower. These brushes, made of wire or thin metal strips, fluff up the turf, especially the prostrate-type growth, before it is mowed. While

the brushes will show an immediate effect on grainy greens, regular use is necessary for the best long-term results. A comb works in a similar manner. It is simply a bar with rubber teeth, mounted between the front roller and the bed-knife on the mowing unit. The teeth project into the turf and fluff it up before it is cut.

The combs, brushes and Wiehle rollers are all relatively inexpensive and should be used in conjunction with each other and with other grooming techniques. Of the three, the brushes produce the most vigorous action, but they should be used sparingly during hot weather or other stress periods.

PERHAPS THE most effective means of grooming the putting surface is through regular vertical mowing, usually referred to as verticutting the greens. It involves the use of specialized mowing units with vertical cutting blades which cut down into the turf surface. This technique is based on the fact that the vertical blades will cut through and remove decumbent blades, thereby producing a smoother, truer surface. The secret of this operation is to set the units so that the blades are very shallow, just nicking the surface of the turf. If you can see the grooves the machine is making, it is cutting too deeply. Many golf course superintendents use 1/16 inch as their guide for this operation. It is recommended that verticutting be done several times a month, if possible, especially during the spring and fall when weather conditions are favorable. Some superintendents verticut as often as once a week, going in two directions each time.

An increase in verticutting in recent years is due primarily to the development of the triplex putting green mower. Special vertical mowing units can be used on these machines, making this operation easy, fast and convenient. It takes no longer to verticut greens than it does to cut them with standard reel units. Golf courses with two triplex mowers are able to follow up verticutting immediately with regular mowing, producing no inconvenience to the golfers. Courses which prefer to use single unit mowers sometimes purchase a triplex solely for verticutting.



Combs, which are attached just behind the front roller, groom the surface each time the greens are mowed.

A well-used set of verticutting units is a sign that greens will provide a smooth, true surface.



Vertical mowing units which attach to the triplex are fairly expensive, but they do have other uses; they can be used on tees and collars for grooming or for thatch control. They are sometimes used to develop a good seedbed in overseeding operations, or when renovation is necessary after turf is lost during winter or some other stress period.

A discussion of grooming greens would not be complete without mentioning the benefits of topdressing. Besides all the biological and chemical factors it contributes to the turf, topdressing also plays a major role in the development of a desirable putting surface. Best results are obtained when light quantities of topdressing are applied frequently. Several benefits result from this type of program. First, the grass is forced to grow more upright, resulting in a cleaner cut and reduced leafiness and grain. Second, the dragging operation, which usually follows the topdressing application, lifts many of the surface runners which are removed with mowing. The more often the greens are topdressed, therefore, the more grooming will occur. A lack of resources to purchase extra equipment or to topdress frequently is no excuse not to groom. Some superintendents do an excellent job of controlling grain and leafiness by simply dragging mats across the greens before they are mowed, accomplishing much the same effect as brushes. This is certainly an easy and convenient alternative which could be used by any club.

The best greens are developed through good agronomic practices which keep the turf consistently healthy and the constant use of grooming techniques which provide smooth, true putting surfaces, regardless of their actual speed. In spite of budget or labor restrictions, every club should groom its greens. Priorities may have to be better defined, but the greens, where half the strokes of a par round of golf are allotted, should receive the full attention of the golf course superintendent and the club. It is always helpful to remember that, despite the problems encountered in growing and maintaining turf, the interests of the golfer in the playing of his game must always be served.