

New turf 'groomer' keeps greens healthy

by Bill Webster

Seattle Golf Club wanted it all: faster greens for members and healthy turf, which means not lowering the cutting height. On the course's 19 sand-based greens, we use a variety of sound turf management techniques to promote the vigor of turfgrass plants while also aiming to improve the smoothness and speed of the green.

But in 1986, we introduced a new technique called grooming that played a major role in our quest for both green health and green speed. This grooming was performed with a new greens conditioner, called the Turf Groomer, a product of the Jacobsen Division of Textron Inc.

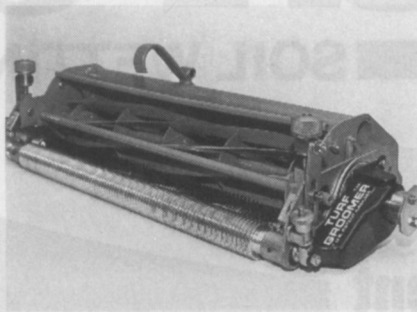
Grooming promotes the vertical growth of grass and eliminates grain by cutting horizontally-growing grasses and runners. Unlike verticutting, grooming does not disturb the soil surface. The material removed in grooming helps control thatch build-up. Grooming, in addition to many proven turf management techniques such as aerification, verticutting and topdressing, helped us to raise our mowing height without sacrificing green speed.

By maintaining a higher cutting height, we have also increased the effective rooting depth of the turfgrass, resulting in a healthier turf that is better able to withstand wear and environmental stresses.

Using the new greens conditioner, we have been able to get a smoother putting surface and faster speeds throughout the summer season, and we've been able to accomplish this while maintaining a mowing height of $\frac{5}{32}$ of an inch. In past years it was necessary to lower cutting height to $\frac{1}{8}$ of an inch or less to get the same speed characteristics.

Initial use of the Turf Groomer increased our Stimpmeter reading 11 percent. It also removed nearly three times the amount of clippings than had been removed by double-cutting at a lower height with a conventional greens mower.

These clippings included horizontally-growing grasses as well as a great amount of thatch-forming biomass. Throughout the summer months, the Turf Groomer was used twice a week, with the greensmower bedknife set at $\frac{5}{32}$ and the groomer depth varying from $\frac{1}{16}$ to $\frac{5}{32}$ below bedknife. At no time did we set the cutting depth below the soil surface. We were able to maintain green speeds of about nine



Some of the 522 blades that make the Turf Groomer a reliable means for increasing green speed without cutting greens lower.

feet with a single mowing six days per week.

No one tool is going to provide you with a superior quality green by itself. At Seattle Golf Club we use light but frequent (as often as every two weeks) liquid feeding applications of various nutrients on the fairly infertile sand-based greens.

We aerify two to three times per year and apply light, frequent sand top dressings. While we avoided verticutting during 1986 in order to effectively evaluate the use of the new greens conditioner, we will normally do this once every two or three weeks.

Grooming is not verticutting, as the knives are not meant to go below ground level. We maintain a regular schedule of verticutting to get down deeper into the turf and get out older leaves that have subsided into the crown area.

The smooth turf surface from the Turf Groomer's use is chiefly the result of more upright growth of the grass plants. Also, since the greens at Seattle Golf Club are more than 90 percent poa annua, we have seen significant improvements in green putting quality because grooming eliminates many of the poa seedheads in the turf.

When seedhead development is highest, we have used the Turf Groomer three to four times per week to control seedhead development and get better putting characteristics. Just as with any tool, use of the Turf Groomer should be governed by the principles of good turf management. By maintaining a higher cutting height and healthier turf, and by carefully controlling the depth setting, the Turf Groomer can be used often without any adverse effects. Of course, common sense tells us that this tool should not be used frequently at ag-

gressive settings during periods of environmental stress.

The Turf Groomer is a new product, so machine operators need to be educated in its proper use.

The first point to make is that the Turf Groomer is for use above soil level, and the verticutter remains the tool of choice for deeper penetration into the soil. While grooming does provide some of the benefits of verticutting and can be used to reduce the frequency of verticutting, it was never intended to replace the practice.

Another consideration is visual inspection of greens prior to mowing. This has always been of prime importance in order to reduce wear and tear on reels, but it becomes even more critical when using the Turf Groomer.

Debris such as rocks or spikes can bend the blades. If a blade is bent, the bent tip should be removed before damage is done to the roller. The loss of a few blades does not affect the performance of the groomer; there are 522 blades on the powered shaft.

Use of the Turf Groomer can increase the efficiency of the turf maintenance crew in a number of ways.

Since grooming works while you mow your greens, no additional labor costs are associated with it other than the time needed to change depth settings on the machine. Also, the grooming technique can easily be used on tees, which are often neglected due to labor limitations. Grooming immediately before topdressing applications increases their effectiveness. With two triplex greens mowers equipped with Turf Groomers, we are also able to adjust consistency from green to green.

Rather than simply increasing the speed of every green, we are grooming some greens more and others less in order to get a consistent green speed throughout the entire course. After more than a year of using the Jacobsen Turf Groomer, Seattle Golf Club members, Dr. Roy Goss of the Western Washington Research and Extension Center at Washington State University and Larry Gilhuly of the USGA Green Section have all had very favorable comments regarding the condition of the putting greens at the course. All agree that the grass density is as good as they have seen it in the past 10 years.

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