

Surround Your Greens With Quality

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YOUR TEST TODAY, class, involves two questions concerning turfgrass on golf courses. They are both very easy and 100% should be expected; however, a few of you may fall short of this goal. Good luck and remember, no cheating!

Question No. 1: What turfgrass areas are the most important from a playing and maintenance standpoint? Answer: The greens, of course. Congratulations, you have completed one half of your test perfectly.

The second half is tougher. Question No. 2: What areas are the second most important from a playing and maintenance standpoint? Answer: It's not the tees or fairways, and bunkers is only half right. The second most important locations are the areas around the greens, more commonly referred to as the *green surrounds*. While most of the single-digit players are lining up yet another birdie putt, the majority of players are faced with a delicate shot from a closely cut and often

wet apron, or an uncomfortable touch shot out of inconsistent tall grass to a tight hole location or, worst of all, a shot from bare ground that has occurred due to traffic damage.

We have all faced these situations, yet there are some basic programs that can and should be conducted to improve turf growth and playability in these important areas. For the sake of this discussion, let's look at four distinct areas surrounding the greens that

Heavily worn traffic areas — the scourge of green surrounds.



require closer attention: the apron, traffic zones, remaining rough, and bunker edges.

The Apron

Whether you consider the 20-yard area in front of the green as fairway or green surrounds, it is critically important to the play of the game. How many times have you been faced with firm greens and soft aprons?! Good luck, because luck will be a major part of this scenario. The aprons deserve and should receive practically the same programs that have been established for the greens. Though fertilizer requirements will vary with soil type, the aprons probably will need at least two aerations with large tines every year to relieve compaction and remove thatch. Even more aeration is needed if the apron is also a main entrance or exit area. Topdressing with an appropriate sand should then follow to fill 95% of the aeration holes.

In addition to regular aeration, light topdressing should also be conducted in conjunction with the green topdressing program, if possible. Applying $\frac{1}{2}$ cubic yard of sand for every 5,000-6,000 square feet every three to four weeks will aid the aprons in achieving firm conditions that are so important to keep the skill of chipping in the game.

Yet another important maintenance program for aprons is the control of thatch. While light vertical mowing practiced on the greens is generally not necessary, deeper vertical cutting of the aprons would be beneficial when conducted at the time of aeration. Combining these two practices in controlling thatch greatly minimizes disruption for the players and makes for much improved aprons.

Finally, the ability to apply and remove water is critical for apron maintenance. It is surprising, and a bit discouraging, to view so many golf courses that have not addressed the basic requirement of good drainage immediately in front of a putting surface. Don't overlook this area, as golfers can definitely tell the difference between mud and firm turf! This is especially true during the summer months when the irrigation system must supplement natural water supplies. If you have followed the basic programs of good fertility, aeration, topdressing, thatch removal, and mowing, then irrigation by hand can be minimized. If supplemental watering is necessary, try to maintain aprons on the dry side to encourage the pitch-and-run shot and eliminate rutting by mowing equipment or pull carts. Power golf carts should not be a concern, as a rigid policy of banning these four-wheeled turf assassins within 30-50 yards of the greens should be followed.



Special irrigation practices may have to be established to keep peripheral areas in good shape.



Clumps of different grasses can cause extremely difficult playing conditions.

Traffic Zones

We are all familiar with these locations. Every green has a tree, bunker, mound, or other feature that directs traffic to a small area. This location invariably suffers from severe compaction and, if not treated in an aggressive manner, complete turf loss. With

these areas situated so close to the putting surfaces, consistent care is required. Specific programs that should not be overlooked when dealing with traffic zones around the greens include:

1. Aeration. Traffic zones receive far more concentrated foot traffic than any other

area on a golf course. Although the amount of play will ultimately determine aeration requirements, you can expect to aerify traffic zones at least three or four times every year during the growing season. Cores should be removed, if possible, and holes filled with an appropriate sand topdressing material.

2. Overseeding. In cool-season areas, perennial ryegrass has proven to be the best grass to withstand heavy traffic loads; hence overseeding at rates as high as 7-8 pounds per 1,000 square feet is often encouraged at least three to four times every year.

requires a constant water supply for new seedlings. Water must be applied very carefully during the summer to maintain good growth, yet not create a muddy mess. The addition of low-precipitation irrigation heads is one method that has been successful in addressing this requirement.

6. Fertilization. The traffic zones require more frequent fertilization than other locations around the greens. An annual amount of nitrogen can be in the range of green requirements if the soil is a sandy loam, or slightly less if comprised of a native soil.

Remaining Rough

The largest portion of green surrounds is comprised of plain old rough turf. These turfed areas need minimal aeration, topdressing, dethatching, and traffic control measures. They do, however, require more fertilizer, drainage, quality irrigation, and pest control than other rough areas. Key programs or factors that often get overlooked include:

1. Turfgrass consistency. Although different grasses are acceptable in the roughs, the green surrounds require special attention. It is particularly difficult when *Poa annua* and bentgrass begin to invade a Kentucky bluegrass or perennial ryegrass rough immediately next to a collar. The same situation can also occur with common and hybrid bermudagrass. Depending on your budget, this issue can be remedied. The simplest approach is to lower the mowing heights to an intermediate level to reduce the differences between the growth characteristics of the different grasses. If this is not acceptable, then regular overseeding with or without chemical usage can be utilized to enhance the desirable species. Finally, resodding the problem areas has proven very effective.

2. Irrigation. The use of low-precipitation sprinklers on the contours around greens has proven very successful in minimizing excess water in bunkers while providing adequate moisture on slopes. If utilized, try to provide as much control as possible.

Bunker Edges

The green provides the main focal point for players, but it is the bunkers that truly accent or provide the framing for the target. Although bunkers are included in the green surrounds, their maintenance shall not be discussed. The edges of the bunkers, however, play an important role in defining the hazard perimeter. Whether the bunkers are edged frequently or maintained with a "natural" edge, it is critical to keep this delineation, since players cannot ground their clubs in a hazard.

Infrequent edging, poor hand raking techniques along the perimeters, exiting bunkers on a power bunker rake without removing excess sand, and the buildup of sand from frequent player use are all areas that lead to problems with bunker edges. If these four situations can be addressed in a programmed manner, you definitely will have an edge up on the competition!

The green surrounds constitute a very important part of every golf course, and they often do not receive the systematic approach normally associated with greens, tees, and fairways. Don't fall victim to this trap! Surround your greens with quality and your players will appreciate the results.



Extra aeration and proper irrigation often are required in green surround locations.

3. Topdressing. Traffic zones respond well to light and frequent topdressing, in addition to the sand applied after aeration. If possible, topdress the traffic zone as part of the green topdressing program, every three to four weeks.

4. Drainage. Although traffic zones are in play as much as the aprons, they are viewed close-up by more players. Good drainage is essential, and many golf courses have completely eliminated poor soil in traffic zones, added drainage, and reseeded or sodded. Regardless of the situation at your course, every traffic zone should have good drainage.

5. Irrigation. It is very difficult to maintain an area that is prone to compaction, yet

Phosphorus and potassium are also generally required in moderate amounts to encourage seedling vigor and root development.

7. The use of Crumb rubber. Recent research at Michigan State University indicates the possibility of using rubber in high-traffic areas to resist compaction. This same idea has been used with success using various organic products in Southern California on bermudagrass traffic areas.

8. Traffic control measures. If all of these programs do not produce good-quality turfs, then the traffic should be moved frequently to other areas by the use of ropes and signs. They may not be pretty, but they work!