

NOW YOU SEE IT, NOW YOU DON'T

Golf courses change imperceptibly over time. Many subtle changes directly impact play.

BY LARRY GILHULY



Ever see a magician make objects disappear and reappear? We marvel at these obvious tricks, try to figure them out, and usually just walk away shaking our heads in amazement. Golf course superintendents also are magicians, except they create playing surfaces that golfers try to figure out and walk away shaking their heads in frustration. Although superintendents are responsible for the entire playing surface on a day-to-day basis, Mother Nature, golfers, and the maintenance staff combine their forces every day to change how the golf course looks and plays. The changes are practically invisible, yet just as the magician can make things disappear and reappear in a short period of time, the above threesome can and does produce the same results over many years. Let's take a look at some of the most common changes brought on by maintenance, golfers, and Mother Nature.

INVISIBLE CHANGES ON THE GREENS

The putting surfaces on every golf course are an ever-changing product of turf growth and player traffic, with maintenance practices addressing these two factors. Golfers often seem to forget or not to think about the fact that the playing surface is alive, and they can do massive cumulative damage to plants that are being shaved just a bit higher than the best razors! So how do greens change over time, and what can be done to keep

them consistent? Here are two distinct subtle changes to watch for on your golf course that change how your greens grow and play.

- **Mowing practices.** Mowing is the most visual, yet one of the most common agents of change on putting surfaces from the first day of mowing. As maintenance personnel mow the outer perimeter of the greens, they generally are instructed to avoid scalping the perimeter collars. This leads to moving the mower (especially triplex units) away from the edge by minute amounts, adding up to inches and feet of lost putting surface over the years. This is usually accompanied by interesting green perimeter contours becoming rounded over time, resulting in loss of usual interest and good hole locations.

- **Shade vs. sun — watch the topdressing frequency.** One of the most common green maintenance practices is light and frequent topdressing. It generally is done every two or three weeks and is tied to the growth rate of the turf. Why is it, then, that greens in the sun and shade are topdressed at the same frequency when their growth rates are different? Ever notice that greens in the shade are sometimes much firmer than those in the sun? That is due to the lack of organic material created by the turf and too much sand being applied during regular topdressing. Try reducing topdressing frequency on shaded greens to match their slower growth rate, and you also will notice that ball marks will be easier to repair.

Maintenance personnel are told to avoid scalping the perimeter collars and, as a result, slowly move the green edge by minute amounts. Ultimately, greens lose their shape over time, but they should not be restored too quickly.

WATCH OUT FOR THE GREEN SURROUNDS

Although putting surfaces deserve very close scrutiny to maintain their consistency, the areas that surround the greens change more than any other location, with major supporting roles from Mother Nature, golfers, and the maintenance staff. Here are the three most common changes that occur around the greens, along with several methods to minimize their impact on playing conditions and turf growth.

- **Approach the greens with a sand aid.** It is amazing how much maintenance time is spent on greens and bunkers, yet one of the most important playing locations (aprons) receives little more than twice yearly aeration and topdressing. Shouldn't the area directly in front of the green receive practically the same program as the greens? What about those hole locations five paces from the front of the green? If you are maintaining firm greens, how can a player expect to hit shots into firm greens with soft aprons? The simple answer is to expand your light topdressing program onto your aprons as discussed in the November/December 2000 *USGA Green Section Record* article titled "Temporary Sanity."

- **Bunker mentality.** The most obvious subtle change that occurs daily near bunkers is the blasting of sand onto adjacent turf areas, where sand builds up over time and creates changes to surface contours and difficult growing conditions. If the blasting of sand is not addressed routinely, then sand buildup must be eliminated by removing the sod and underlying sand, recontouring the base, and resodding.

- **Don't dam your surface flow.** This subtle change is the result of the very program that is used to improve the greens — topdressing with sand! Since topdressing generally is dragged in a circular pattern, more sand finds its way to the perimeters of the greens. This extra sand often accumulates immediately next to the green, resulting in very slow growing "sand dams" that interrupt the flow of water off greens. There are several ways to avoid this situation, including the use of a blower to disperse the sand after topdressing, increased aeration of the collar without adding sand, followed by rolling, and very careful dragging following topdressing. If you currently have these dams, sod removal and lowering is the fastest and most effective approach; however, some superintendents have had success by physical removal with aeration or deep vertical mowing,



Over time, tee mowers can have the tendency to slowly change the tee mowing angles.

followed by rolling the collar or increasing topdressing on the green perimeters to match the height of the collar.

DON'T CROWN AROUND WITH THE TEES

Putting surfaces and surrounds deserve the most attention on a golf course, but tees receive the greatest amount of physical abuse. Aeration is required to relieve compaction and is an excellent way to reestablish turf, but filling divots is where the real action is in regard to invisible changes with the tees. Have you ever noticed how many tees become "crowned" over years of use? Think about it for a minute and the answer becomes obvious. Assuming your tees originally were relatively flat, golfers generally avoid tee markers and tend to use the center portions of tees. As divots are taken in these center areas, golfers or maintenance workers fill the divots with sand mix. The tendency is to put too much material in the divot scars, causing a crowning effect over the years. In addition, players avoid the downslope or upslope on the sides of the tees, which further adds to the crown in the center. Perhaps the only answer to this problem is to use a sod cutter and lower the center portion back to the original level. Or is it? Try moving the markers regularly to encourage more play on the sides of the tees, and apply extra topdressing on the perimeters of the tees to counteract the sand used for filling divots.

The other change on tees that greatly impacts playing conditions is mowing patterns. Just as the green mower is instructed to avoid scalping on



the edge, the tee mower is given the same instructions and produces the same predictable results. The mowing pattern can change over time and often will direct players to the right or left of the intended target. Course setup personnel or the tee mower then make the common mistake of setting the tee markers perpendicular to the parallel sides of the tee rather than perpendicular to the intended line of play. Periodically check this simple change to make sure the edges of the tees are properly aligned.

GOING OUT ON A LIMB

While the changes discussed previously are very slow and generally are created by golfers or the maintenance staff, Mother Nature really takes over when it comes to the slow and massive impact trees can have on your golf course. There are four basic areas that need to be addressed routinely to minimize this impact, or the option becomes the most controversial — tree removal.

- **Let greens see the light.** Small trees planted in the wrong area eventually become big trees that cast massive shadows on greens. In some cases, regular pruning allows enough light for good turf growth, but in many cases the trees slowly choke off the lifeblood of turf, resulting in poor putting surfaces. If all measures have been taken to improve a green and it still does not respond, deep pruning (about 6" below soil level) is required.

- **Let players enjoy the view.** In addition to growing taller, many trees can become very wide, slowly affecting shot values or ruining views of the course. In many cases, regular pruning is all that is needed, but in some cases trees need to

be removed. As trees are planted on the course, always think of what they will look like someday. Ask yourself, "Will it impact the play of the hole? Will it impact turf growth? Will it block a good vista?"

- **Don't get hung out on a limb.** Low-hanging limbs are a major problem for both the maintenance staff and golfers. Players should be able to find and identify their golf balls under trees, and be sure to raise the canopy high enough to allow for recovery back onto the fairway.

- **Get to the root of the problem.** While most tree issues are centered on the negative impact of shade, there are nearly as many problems created by roots. Regular root pruning needs to be practiced near greens, tees, and fairways, with a special emphasis on traffic zones, to improve the playing surface. However, trees that develop prolific root systems at the surface may need to be removed, as they pose a concern with equipment damage and possible physical harm to players.

THE GRAND FINALE!

Golf courses are always undergoing changes, some of which can have a negative effect on the appearance and playability of your course. Paying close attention to daily, weekly, monthly, and yearly programs conducted by the maintenance staff can

Extra care should be used around the green perimeters to avoid an accumulation of sand next to the outside green edge. These "sand dams" have the potential to interrupt the flow of water off the green.



minimize these subtle changes. Since Mother Nature and golfers are not going to change, the maintenance staff represents the only variable that can address these concerns. Now, if we could only figure out a way to have every golfer come away from the course with amazement!

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