## Fairway Contour Mowing

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OST GOLF COURSES like to offer their golfers an artistic contrast between the fairways and roughs, a feature that enhances the natural beauty of each hole. This is true especially if the fairway perimeters are curved rather than set in a straight line. This feature is termed contour mowing, and it is usually considered highly desirable by most golfers.

Historically, while the term "fairway" was understood to be the closely mown areas of the course — other than greens the word did not appear in the Rules. Even today, the Rules of Golf doesn't use the term. Between 1700 and 1850. golfers played principally on links courses adjacent to the coastline. Their fairways consisted of the native grasses, which were bentgrasses and fescues, kept short by the first greenkeepers, the grazing sheep, and rabbits. The deep, inescapable rough on either side of these fairways was spotted with heather, a woody groundcover, and gorse, a thorny bush.

The main route to the putting green was usually no more than 40 yards wide.

With such narrow fairways and difficult rough, slow play, injuries, and lost balls were an integral part of the early game. In the middle-to-late 19th century, as play increased at St. Andrews following the arrival of the gutta-percha ball, the fairways were widened, principally to prevent injuries. The heather was cut away in what was probably the first attempt to specifically shape the route between the teeing ground and putting green.

The fairways on British courses eventually became even wider, for two reasons. First, the gutta-percha ball traveled farther than the leather-bound feather ball, and therefore required a wider fairway. Second, since the guttapercha ball would not dent like the feathery ball, the players now had new clubs called irons. Playing with irons killed or injured much of the heather, and the fairway grasses spread into more of the links land. With more grasses on the fairways, additional men called greenkeepers were needed to help maintain these large areas between the tees and putting greens.

Even in the early days of golf, the primary goal with the tee shot was to aim at and hit the fairway. Later, more emphasis was placed on hitting a particular side of the fairway. Position became even more important as the fairway was perceived as the defense for the putting green. The reward for a well-positioned tee shot was a better angle to the putting green, and a well-designed fairway helped make the game even more interesting.

The first greenkeepers didn't have enough equipment or labor for intense maintenance; they believed the fairway grasses should take care of themselves. The low-maintenance approach worked quite well, given the acid, sandy soils and the temperate climate. These conditions caused the fairway grasses to grow very slowly in beautiful patterns.

MERICAN golfers expect and deserve top-quality fairways. With the availability of both better fairway grasses and equipment today, good quality fairway turf is within the grasp of most courses. These improvements



Today's mowing equipment creates dramatic patterns.



Contour mowed bentgrass fairway.

have also allowed today's golf course superintendents to shape their fairways to almost any pattern. There is no doubt that improved maintenance standards and enhanced fairway design can make a course more pleasing and challenging.

Probably the most dramatically designed fairways in the United States are on bentgrass courses. Many golf courses with bentgrass and *Poa annua* fairways are maintained with small three- or five-plex reel mowing units, and in many instances clippings are removed as well. Smaller mowers came into use as a response to the desire of golfers for tighter, drier fairway lies. Because lightweight mowing produces healthier turf as well as better playing conditions, both golfers and superintendents benefit from the program.

In conjunction with this new mowing program, fairway acreage has been significantly reduced, in part to lower costs. Though fairways have become narrower, smaller, more maneuverable mowers have led to more interesting mowing lines. Thus, these smaller mowers have dramatically improved bentgrass and *Poa annua* fairway design and maintenance. With healthier fairway turf, better playing conditions, and improved fairway designs, golfers now prefer less fairway turf and more rough on these bentgrass golf courses.

In contrast, bermudagrass golf courses have long provided the standard for excellence in fairway playing conditions. The bermudagrasses are considered the highest quality fairway turf, particularly the Tifway hybrid. However, bermudagrass maintenance and care is radically different from bentgrass and *Poa annua*. Bermudagrass golf courses normally will maintain more fairway acreage and use bigger and heavier mowing machines. Grass clippings are seldom removed.

There are agronomic reasons for these differences in mowing practices and care. During the active growing season, bermudagrasses require more frequent cutting than bentgrasses and *Poa annua*. Bent/*Poa* fairways are usually cut two to four times weekly, while bermudagrass fairways are cut four to six times a week. Also, the active growing season is much longer for bermudagrass golf courses. Bermudagrasses are cut nine to 12 months of the year, while the active growing season for most bentgrass and *Poa annua* golf courses is five to seven months.

Even though all turfgrasses respond positively to lighter mowing equipment, lighter mowers are not generally used on bermudagrass fairways because of their faster growth rate and longer growing season. A sharp seven-to nine-gang reel mower will still produce an excellent fairway surface on bermudagrass. These are the most efficient and economical mowers for open spaces like most fairways.

Nevertheless, there are times and situations when smaller three- or fiveplex unit mowers are helpful on bermudagrass fairways. Many golf courses do maintain approaches to putting greens and par-3 holes with the lightweight equipment. These machines are more maneuverable in restricted areas, and they allow the operator the flexibility to change mowing patterns more easily. Also, these lighter machines will cause less damage to wet or poorly drained fairways.

THE PREVALENT philosophy today with any fairway contour mowing pattern on both bentgrass and bermudagrass courses is not to make the game too difficult. The primary goal of any mowing design should be to provide enjoyment for the greatest number of golfers. Fortunately, there are only a few guidelines to follow to start a successful contour mowing program at your club:

1. Make the widest point of the fairway 170 to 210 yards from the middle tee, or wherever the majority of drives land. Fairway widths in these areas could vary from 35 to 60 yards, with the norm being 40 to 50 yards.

2. Narrow the fairway shape in the area from 240 to 290 yards off the tee, in the landing areas of the scratch golfer. A 30- to 40-yard width is desirable for these better players.

3. Start the fairway 50 to 75 yards from the regular tee. This gives everyone a chance to play from the fairway.

For the golfer to see differences between fairway and rough grasses from the tee, it is important to cut the roughs at least one inch taller than the fairways for bentgrass courses and three quarters of an inch taller for bermudagrass courses. It is also important not to let the rough grow too tall, especially bermudagrass rough, or the penalty for missing the fairway is too great. Many clubs now mow an intermediate or secondary rough adjacent to the fairway perimeter to reduce the penalty for barely missing the fairway. This is seen most often on bentgrass and Poa annua courses that have narrow fairways.

Bobby Jones felt the primary purpose of any golf course was "to give pleasure to the greatest possible number of players, without respect to their capabilities." A sensible fairway contour mowing program is one intelligent way for a golf course superintendent to implement this philosophy.