

SET IT UP RIGHT!

Routine turf management and course setup influence USGA Course and Slope Ratings.

by VIC CARDACE and CHRIS HARTWIGER

THE PRIMARY FOCUS of a golf course superintendent is maintaining a golf course that offers golfers the best possible playing conditions under the existing budget and location. Typically, keeping the turf healthy and growing receives most of the attention at a golf course. An aspect of course management often forgotten is how daily course setup and maintenance affect the USGA Course and Slope Ratings. Sure, it's easy to agree that higher rough and faster greens make a golf course more difficult, but what are the effects of a new tree planting or a different irrigation schedule?

Before discussing how maintenance practices influence USGA Course and Slope Ratings, it is important to understand a few of the hows and whys of rating a golf course. With this information, the golf course superintendent will understand not only how the golf course maintenance program is influencing scores, but also how to manage these factors throughout the year in order to keep the Course and Slope Ratings from fluctuating widely.

What Are Course and Slope Ratings, Anyway?

The USGA Handicap System was developed to make the game of golf more enjoyable by enabling golfers of differing abilities to compete on an equitable basis. A player's USGA Handicap Index compares his or her scoring ability to the scoring ability of an expert amateur on a course of standard difficulty. Because no two golf courses are alike, a means to quantitatively measure the relative difficulty of a course is needed to calculate a fair assessment of a player's ability. The USGA Course Rating is a USGA mark that indicates the evaluation of the course's playing difficulty for scratch golfers under normal course and weather conditions. It is expressed as strokes taken to one decimal place and is based on yardage and other obstacles to the extent they affect the scoring ability of a scratch golfer.

The USGA Slope Rating reflects the difficulty of the course for the players



Moving all the tees forward or back will change the effective playing length and USGA Course and Slope Ratings.

who are not scratch golfers. The greater the difference between the scores of the scratch golfer and bogey golfer on a certain course, the higher the USGA Slope Rating will be and the more strokes the golfer will receive.

Because the USGA Handicap Index is calculated based on an assessment of the difficulty of each course, the maintenance practices at a golf course influence both the Course and Slope Ratings. Therefore, it is important to understand how maintenance practices can change the way a golf course plays and how it affects these ratings. For most of the year, it is important to balance these factors to avoid large changes in difficulty or Course Rating. Maintaining a golf course in a manner different from when it was rated distorts a player's handicap and may necessitate the rerating of the course. Granted, special events may dictate a short-term change in course difficulty, but the long-term approach should be to maintain the course similarly to when it was rated. By understanding what management factors influence Course Rating and Slope Rating, steps can be taken to ensure that Course and Slope Ratings do not change much

over time as a result of maintenance practices.

The Effect of Length on Course Rating

A golf course is rated based on the effective playing length and playing difficulty under normal conditions. The effective playing length is the measured length of the golf course, adjusted by factors such as roll, elevation, forced lay-ups and doglegs, prevailing wind, and altitude above sea level that make the course play longer or shorter than its measured length. Increasing the effective playing length of a course by 22 yards adds one tenth of a stroke to the USGA Course Rating; reducing the length lowers the Rating by the same amount. Increasing effective playing length also raises the Slope Rating; adding 93 yards increases the Slope Rating by 1. Shortening the course reduces the Slope Rating similarly.

The most obvious way to increase effective playing length is to move all the tee markers behind or ahead of the permanent yardage markers. Placing tee markers 10 yards per hole behind the permanent yardage markers adds 180 yards to the effective playing length,

which in turn increases the USGA Course Rating by 0.8 of a stroke and the Slope Rating by 2.

Adding obstacles that force a scratch player to lay up short of a normal tee shot increases the USGA Course Rating. Similarly, removing obstacles so the scratch player can hit a full tee shot lowers the Rating. Building bunkers across the fairway 230 yards from the middle or back tees, or 190 yards from the front tees forces the scratch player to lay up and adds 0.2 strokes to the USGA Course Rating. The male bogey golfer hits an average tee shot 200 yards and a female bogey golfer hits an average tee shot 150 yards. Since the male or female bogey golfer would not need to lay up to a cross bunker 230 or 190 yards from their respective tees, effectively not causing the bunker to come into play, the Slope Rating decreases by 1. Building bunkers or transplanting trees at the corner of a dogleg that previously was routinely cut by the scratch player adds effective playing length to the course equal to the added yardage of the approach shot.

Softening fairways increases effective playing length; hardening them decreases effective playing length. If overnight watering is increased so fairway conditions change from average to soft, the USGA Course Rating is increased by about 0.2 of a stroke. If the increased watering changes fairways from firm to average, the USGA Course Rating goes up almost 0.5 of a stroke, and the Slope Rating increases by 1.

Changes in Obstacles

Generally, changes in obstacles on the course do not affect Course and Slope Rating as much as changes in effective playing length. However, there are a few examples of changes in obstacles that produce an increase in USGA Course Rating. The examples listed below all change USGA Course Rating by 0.1 of a stroke unless otherwise noted.

Fairway — Change the mowing pattern to decrease fairway width by 10 yards on four holes. Decreasing fairway width from 30 yards to 20 yards on *all* par-4 and par-5 holes adds more than 0.3 stroke to the USGA Course Rating and increases the Slope Rating by approximately 1.5 points.

Recoverability and Rough — Raise mower blades to increase rough height of cut by one inch on three holes. Increasing the rough height on *all* holes from 2½ to 3½ inches for a cool-

season rough such as ryegrass adds nearly 0.7 stroke to the USGA Course Rating and increases the Slope Rating by approximately 5.

Out of Bounds — Move the white stakes 10 yards closer to five fairway landing areas or greens.

Bunkers — Add 13 average bunkers, each in a strategic location, such as near the scratch player's tee shot landing zone (where none existed before) or closely bordering a green. These bunkers will add just over 1 to the Slope Rating. A smaller number of bunkers will produce the same result if they are deeper than three feet, have high lips, or must be carried to reach the target.

Green Target — Decrease watering the greens on 10 holes to change them from *soft* to *medium* or from *medium* to *hard*. Changing the holding properties of the greens on all 18 holes adds about 0.2 stroke to the USGA Course Rating and increases the Slope Rating by 1.

Green Surface — Lower the greens mower cutting height to increase the Stimpmeter measurement by 12 to 18 inches in eight greens. Speeding up all 18 greens by 1 to 1½ feet adds just over 0.2 of a stroke to the USGA Course Rating and almost 1 to the Slope Rating.

Finding a Balance

Maintaining an accurate USGA Handicap Index allows players of different abilities to compete against each other. As we have demonstrated in this article, there is more to maintaining an accurate USGA Handicap Index than making sure golfers submit all their

scores. The way the course is set up and maintained can change Course Rating by as much as plus or minus five or six strokes and Slope Rating by as much as plus or minus 20 strokes. A course that is set up and maintained to be easier or more difficult than the original Course Rating and Slope Rating will distort the player's USGA Handicap Index. This can cause difficulty when players from one course compete against players from another course.

Due to changes in climate throughout the year, it is not practical to think the golf course can play to a consistent level of difficulty throughout the year. Wet periods, dry periods, and other extremes can influence playability. With these inherent fluctuations, the turf manager needs to make sure course setup and maintenance remain consistent with the difficulty when the course was rated. It may be advisable to move tee markers up during wet periods or explain to the members how their new tree planting program will influence Course and Slope Rating. Understanding how course setup and management practices affect Course and Slope Rating is another way for the golf course superintendent to improve the overall golfing experience at his/her course.

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Moving out-of-bounds stakes 10 yards closer to fairway landing areas on only five holes will increase USGA Course Rating by .10 of a stroke.