USGA Green Section best management practices case study



Choosing the correct grass to plant on steep bunker faces will lead to better playing conditions and aesthetics while reducing long-term maintenance costs.

ZOYSIAGRASS BUNKER FACES IMPROVE PLAYABILITY AND REDUCE INPUTS

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ISSUE

Hermitage Country Club struggled to maintain their Kentucky bluegrass and tall fescue bunker faces during the hot summers. The bunker faces required a lot of hand watering and overhead irrigation to keep them healthy, resulting in wet bunker sand and golfer complaints. Despite the effort that went into maintaining the bunker faces, many areas had to be resodded each year to repair damage. Maintaining and repairing the bunker faces drew substantial staff time and financial resources away from the rest of the golf course and golfers were dissatisfied with the aesthetics and playability.



ACTION

After years of struggling to maintain cool-season turf on the steep bunker faces, the decision was made to convert the turf around the worst-performing bunker to zoysiagrass. This project would provide golfers with an opportunity to evaluate the look and playability of this warm-season grass. After a trial period, the facility could decide whether transitioning to zoysiagrass bunker faces would be an improvement. Zoysiagrass was chosen as an alternative to cool-season turf because of its summer reliability and the fact that it requires fewer inputs to maintain than cool-season grasses in the transition zone, especially on steep bunker faces. The demonstration project was a complete success and the decision was made to convert the remaining bunker faces to zoysiagrass as part of an ongoing capital investment project.

RESULTS

After the transition to zoysiagrass, the playability and aesthetics of the bunker faces improved almost immediately. The reduced water requirements of zoysiagrass meant that less overhead irrigation was needed for the bunker banks, resulting in drier sand and positive golfer comments about the improved bunker playability. Moreover, the total cost of bunker maintenance was reduced because zoysiagrass requires less water, fertilizer and pesticides than cool-season turf. These funds have been reallocated to other areas of the golf course, further improving playing conditions.

The only thing The Hermitage would have done differently is to have converted all the bunkers at once instead of performing the work over the course of a few years. Initially, golfers were not sure how well the conversion to zoysiagrass would turn out. After they saw the improvements however, they wished they would have converted sooner.