Debate

Good Ol' USGA stands the test of time

BY JIM MOORE

The USGA method is the most extensively researched style of construction, with scientific review ongoing to ensure it remains sound in the face of a rapidly changing industry.

The combination of a good economy and golf's increased popularity has resulted in unprecedented growth in golf course construction. All types of courses are being built — ranging from high-end facilities costing $20 million or more to the smallest kids' courses built for less than $100,000. Without question, this is one of the most exciting and challenging eras in golf's history.

With such a variety of courses being built, is it reasonable to expect one green construction method to be the most appropriate choice for every facility? It may surprise some to hear that the USGA Green Section does not consider its *Guidelines for a Method of Green Construction* the best choice in every case. There are courses where other construction methods can meet the modest agronomic demands placed on those particular greens.

For example, there's a great need for short courses across the country to give legions of young people who are learning the game a chance to play. The cost of building these courses can be reduced tremendously by using agronomic common sense. Greens that are mowed at three-sixteenths of an inch receive plenty of light and air movement, are designed with excellent surface drainage and are planted with turfgrass that thrives in the local climate. Hence, they need not be built to the USGA's rigorous guidelines.

On the other hand, those courses that must provide top-quality putting conditions day in and day out should not compromise on construction in any area, and most certainly not on the greens. Unsound green construction results in unreliable growing conditions, and frequently leads to legal disputes and loss of revenue.

Golf course builders, architects, superintendents, owners and ultimately golfers all depend on construction methods that work. They also need these methods to be well-documented so that they can be closely followed. The USGA and California methods of greens construction meet both of these needs, and therefore are the most commonly chosen. Both methods are offered to the game free of charge and are based on proven scientific principles. Both methods have their advantages and disadvantages. But which method is best?

There's no doubt the USGA method is superior. It has successfully stood the test of time, having been the most commonly chosen method for almost 40 years in all types of climates,

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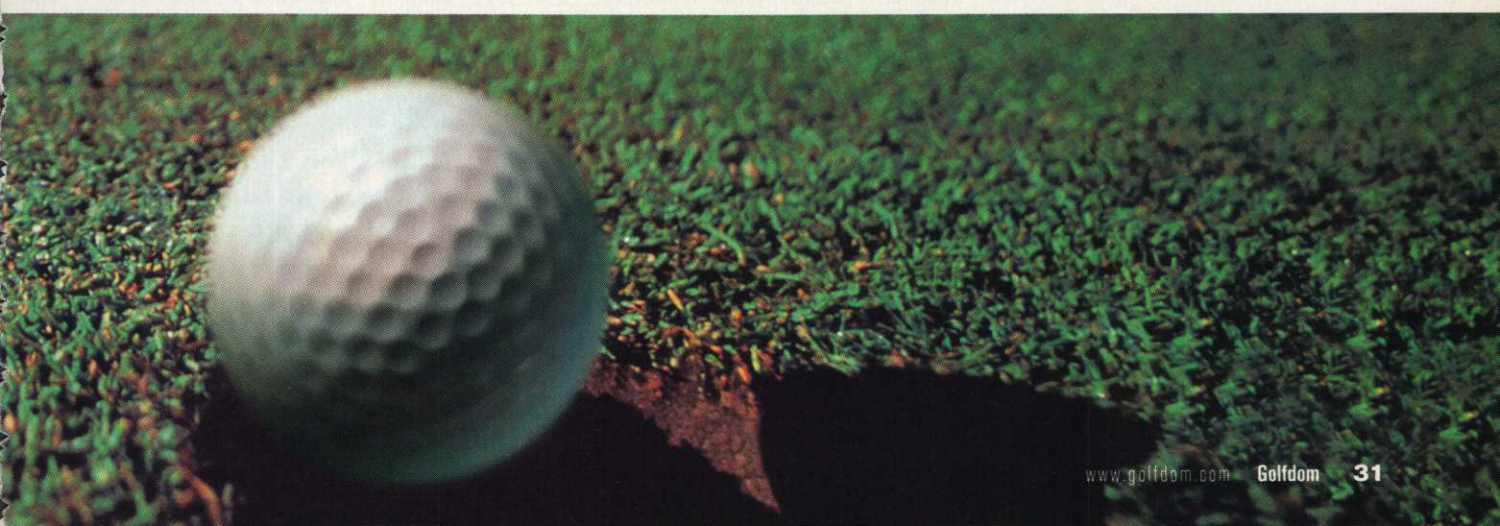

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water-quality situations and architectural styles.

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The parameters for sand and gravel selection are generous enough to allow a range of materials to be used, but still specific enough to ensure that agronomic parameters such as porosity and saturated conductivity are met. Research conducted on greens and root zones that meet USGA guidelines has indicated that, with proper management, nutrient and pesticide leaching can be kept to a minimum. The drainage and moisture-retention characteristics of USGA greens result in consistent playing quality in all types of weather.

My belief that the USGA method is the best method of green construction available does not mean that I feel the California method is agronomically unsound. It has performed well in certain parts of the country, particularly in the area in which it was developed. The lack of the gravel layer and use of straight sand allow for simpler, less-expensive construction.

Research limited on California green

Unfortunately, research on the California method has been limited since the method was introduced. Although the method has received recent attention, it has not been widely used in different climates, making it more difficult to evaluate its strengths and weaknesses over a range of conditions.

While leaving the gravel layer out does reduce cost, Ed McCoy's research at The Ohio State University indicates the benefits of this layer for equalizing moisture levels and more complete drainage.

For all these reasons, I believe those who desire the best putting surfaces possible would

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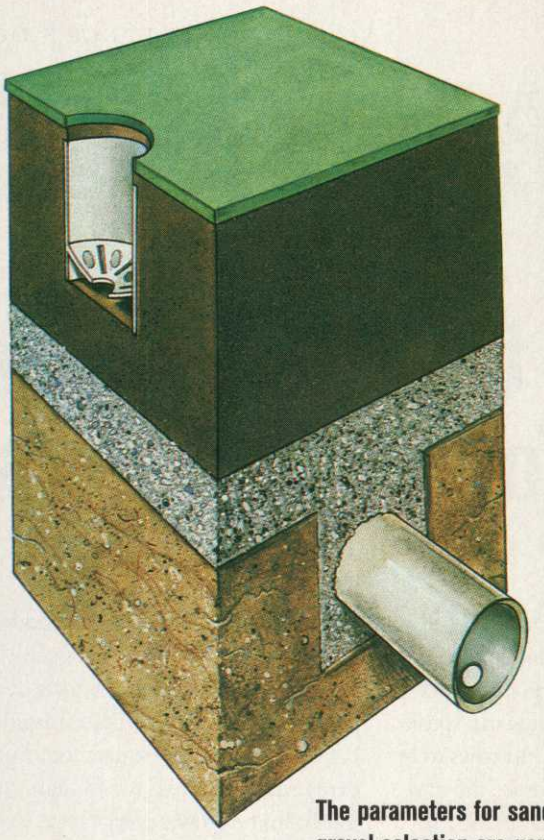

USGA

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be wise to choose the USGA method. Although I recognize that few courses have unlimited construction budgets, equally few courses should settle for anything less than the best when it comes to greens. The combination of past and continuing research, 40 years of success throughout several countries and proven agronomic strengths justifies the additional cost for those who expect the best.

Regardless of which method is chosen, it's critical to follow the respective guidelines. Modified California and USGA greens are true unknowns. The modifications typically involve the use of materials that fail to meet either method's guidelines. As a result, they frequently result in root zones far less favorable to top-quality turf.

It is unreasonable to expect one method to best fit every situation. My hope is that, as research efforts continue, the California method and other methods of construction will be more viable options.

This same effort will result in the USGA method becoming more affordable to all types of courses. This is entirely consistent with the USGA's goal to serve the game of golf and the Green Section's goal to do this through sound agronomic recommendations.

Jim Moore is USGA's director of construction education.