Making Golf More Affordable

Addressing issues that need to be considered by architects, builders, and golf course superintendents.

by JAMES F. MOORE

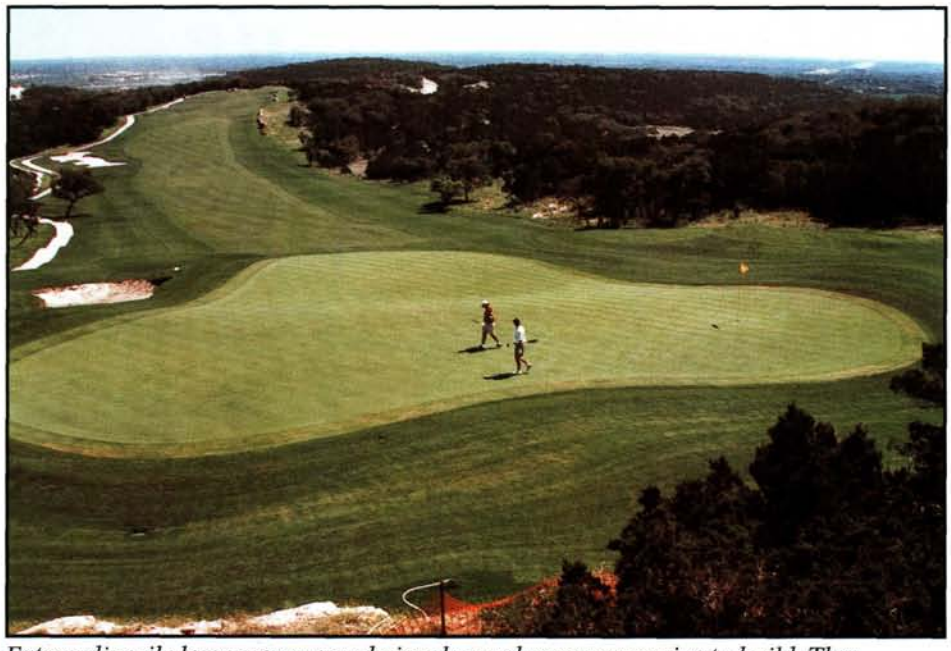
Large, highly maintained bunkers are beautiful — and very expensive to build and maintain. To keep construction and maintenance costs down, such bunkers should be kept to a minimum.

MANY OF US can remember Stanley Kubrick's tale *2001 — A Space Odyssey.* Periodically throughout the movie, a large, dark stone or monolith would appear to mark a critical moment in the history of mankind. While the movie may have dragged at times, those monoliths always got my attention.

It's too bad we don't have some sort of monolith to mark important events in the history of the game of golf — specifically in the history of golf course design, construction, and maintenance. Most of us can think of numerous times the dark, square stones would appear. One of the first sightings would have occurred when science provided turf managers with effective tools to combat weeds, insects, and disease organisms that beforehand pretty much had their way with golf courses across the country.

The monolith would have reappeared when in-ground irrigation systems made it possible to have good turf in spite of dry spells, especially in parts of the country where dry spells extended for years rather than months. Other monolithic events would include the introduction of mechanically powered construction and mowing equipment (putting the horse out to pasture), and the development of improved turfgrass varieties. And of course, the advent of formalized educational programs for turf managers would also be highlighted.

The most recent defining moment in the industry occurred when concerns arose over what impact golf courses had on the environment. Just like other major events in both the movie and our industry, there were individuals who were up for the challenges of change and those who were not. The most talented and professional architects, builders, and superintendents saw the



Extraordinarily large greens are obviously much more expensive to build. They are also more expensive to maintain, particularly when hand mowing is practiced. For most courses, greens need not be more than 5,000 square feet in area — assuming most of the area is suitable for hole locations.

environmental issue as an opportunity to display their skills. This was an opportunity to distinguish themselves from their peers. After all, if the job (whether it is design, construction, or maintenance) was always easy, anyone could do it. Such individuals profited greatly as a result of their ability to meet the difficult challenges of the environmental issues.

So what is the next industry-shaping event facing the game and business of golf? What is the next big opportunity for the talented to separate themselves from the pack? In my opinion, the next monolith would signify a return to *affordable golf.*

The growth in golf over the past ten years accompanied a favorable growth in our economy. As a result, many of today's golfers are willing to pay more than ever before to enjoy the game. It is not uncommon for a round of golf to cost more than $100 on an upscale, daily-fee course. While this might be on the high end, fees on all types of golf courses have increased. These increases are a direct result of the increase in the cost of building and maintaining golf courses — neither of which show any indication of decreasing. While today's golfers apparently are willing to foot the bill, what happens when the economy is not so robust?

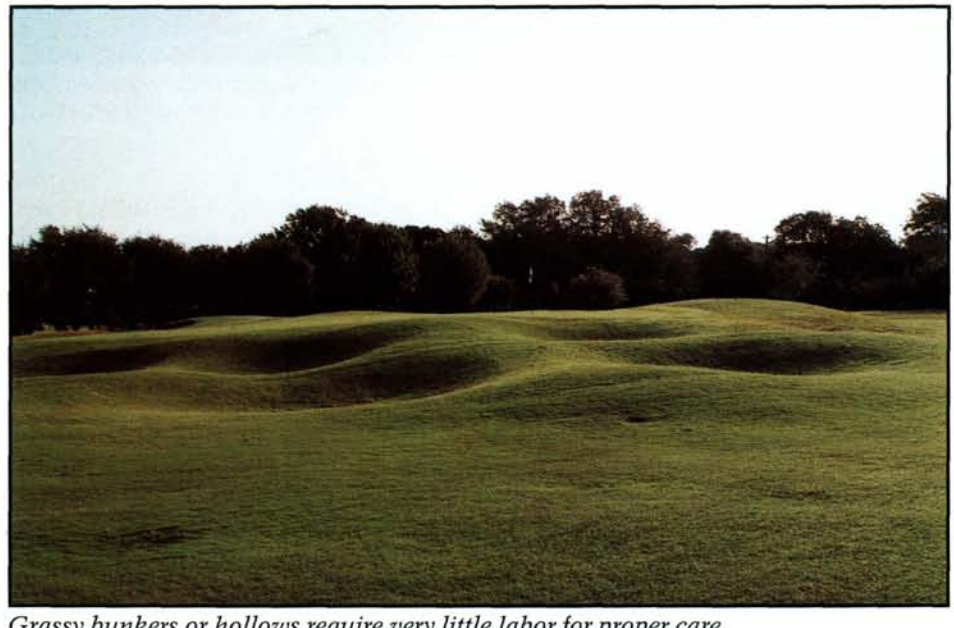
In addition, many of golf's newest players are coming from socio-economic groups that simply cannot afford to spend as much to enjoy the game. Finally, our senior population, traditionally avid golfers, will grow even faster in the future thanks to better health and the impact of the baby boom generation. Although there is a real need for affordable golf now, the need will grow tremendously in the near future. Those professionals in the golf industry who recognize this need have both the opportunity and responsibility to help ensure the future of golf. What can architects, builders, and superintendents do to make golf more affordable?

Architects and Builders

Design features and construction techniques obviously have a tremendous impact on how much it costs to build a new golf course or renovate the existing facility. What often is given too little consideration is their impact on annual maintenance costs thereafter. Here are just a few of the ways architects and builders impact the cost of golf.

• *Site Selection:* A lack of good topsoil, poor quality water, and poor growing conditions as a result of limited light and air movement all result in significantly higher maintenance costs. Selecting a site or a design that requires extraordinary earth moving greatly increases the cost of construction. Moving 500,000 cubic yards of soil during construction was considered excessive only a few years ago. Today it is not uncommon to move more than 1,000,000 cubic yards.

• *Features:* Although bunkers and mounds are important features on any golf course, they are expensive to build and maintain. The costs skyrocket when both the number and severity of these features increase, and they have increased dramatically in modern golf course designs. It is not uncommon to include in excess of 70 bunkers on new courses. Thanks to large earth-moving equipment, many of these same courses sport prolific mounding on virtually every hole. Both types of features are often constructed with such steep slopes that machine maintenance is no longer practical. As a result, constant shoveling of sand is required to replace



Grassy bunkers or hollows require very little labor for proper care. In many cases, they are equally as challenging as sand bunkers.

Golf course superintendents manage increasingly larger numbers of employees and equipment. This, coupled with golfer demands for near perfection in terms of turf quality, results in rapidly increasing maintenance costs.

the sand that washes off the faces of the bunkers, and hand mowing and trimming are required to maintain the turf on the mounding. Increasing the necessity for hand labor is the fastest way to increase the cost of golf course maintenance.

• *Green Construction:* Greens are expensive to build, and every opportunity to reduce costs should be considered when building the affordable golf course. However, poorly built greens are much more expensive to maintain over the long run.

Well-built greens can be kept affordable by using some common sense. For example, very few courses are so heavily played that the greens must be in excess of 5,000 square feet to endure the traffic — assuming the surface contours are kept moderate enough to allow most of the surface to be used for hole locations. There is a trend to build massive greens of 7,000 square feet, and some are much larger. Given the cost of green construction per square foot and the cost of maintenance thereafter, unnecessarily large greens make golf much more expensive.

There also is a trend to incorporate very expensive inorganic amendments into the green rootzone mixture. Although these amendments do have some redeeming qualities, they simply cannot be justified in terms of cost. By selecting sands that meet scientifically proven guidelines, amending those sands (when necessary) with inexpensive organic matter, and utilizing agronomically sound fertilization practices, there is no need for additional costly amendments.

Superintendents

I believe there has never been a time when golf course superintendents have played a more important role in the game of golf. The business of maintaining a golf course has become much more complex, requiring better-educated and more highly skilled turf managers. For the most part, today's superintendents have been up to the task. However, in my opinion, there are far too many superintendents who have lost sight of their primary mission — that being to protect the interests of their employers (ultimately the golfers).

In a recent *Golf Digest* article, Frank Hannigan quoted survey statistics gathered by the Golf Course Superintendents Association of America (GCSAA) regarding the increasing cost of golf course maintenance. These statistics indicated the average budget at 18-hole private clubs is now $635,930, a 163% increase since 1992, while inflation has been 2% to 3% per year (*Golf Digest*, January 2000).

Such a large increase in the cost of golf course care is due to a combination of factors. First, golfers simply expect more. In the not-too-distant past, golfers were most concerned about the quality of their greens. Today, the most common complaint voiced to the USGA Green Section agronomists as they travel the country is that the bunkers are inconsistent. Maintaining consistency in a hazard is expensive, particularly when you combine this need with the large numbers of bunkers on today's courses.

Secondly, everything costs more. With fairway mowers costing in excess of $40,000, computerized spraying equipment as much as $30,000, and even a walk-behind greens mower running more than $3,000, it is no secret why maintenance budgets have jumped.

Of course the biggest factor is the cost of labor. Maintenance staffs often include the superintendent, one or more assistants, a chemical technician, an irrigation technician, a mechanic (who also might have an assistant), a horticulturist, and perhaps a secretary. Add to this list 15 to 20 laborers and equipment operators, and it is easy to see why many courses now employ as many as 30 people on the golf course maintenance staff. Labor alone often pushes the maintenance budget above the $500,000 mark.

Superintendents also have a tremendous impact on the cost of golf by virtue of how they make their purchasing decisions. Like most technically oriented industries, there is no shortage of miracle products being touted to solve almost every problem in golf course maintenance. Invariably, these products have at least four things in common. First, they make fabulous claims which seldom, if ever, can be fully verified through unbiased scientific research. Second, in the absence of

More young people from widely varying backgrounds are being introduced to golf than ever before. They are truly the future of the game — assuming they have a place to play.

Soil moving is often the most expensive aspect of golf course construction. Deep cuts such as this require the movement of tremendous quantities of soil.

science, they rely on testimonials from turfgrass managers who have tried the product under uncontrolled conditions and are convinced it "has made the difference." Third, the products have great websites, which are usually full of even more fabulous claims and testimonials.

Finally, the products are usually expensive and, in many cases, only marginally effective. Before lending the product their name and often the name of the golf course at which they are employed, professional superintendents should keep in mind that they have a responsibility not only to their employers, but also to other golf course superintendents, to be completely honest in their recommendations of any product. It is worth keeping the following quote in mind: "A wise man may be duped as well as a fool, but the fool publishes the triumph of the deceiver" (Charles Caleb Colton, Lacon 1825).

There are plenty of opportunities for the golf course superintendent to help make golf more affordable, especially if he receives the cooperation and support of the players.

- Concentrate available resources on those areas that most directly impact the play of the game. Almost every golf course has acres of area that seldom come into play on which maintenance can be greatly reduced. Reduce fertilization and irrigation, and before long you will be able to reduce mowing. True, in many cases the area will be less attractive in some people's eyes, but significant savings can be realized in the process that can be passed on to golfers.
- Reduce costly hand labor as much as possible. The frequent mechanical trimming around lakes, bunkers, cart paths, and trees is tremendously expensive. Allowing buffer areas to grow around lakes not only reduces trimming, but it also helps to prevent runoff of chemical products from turf areas into water features.
- Consider a reduction in both the number of bunkers and the number of times the bunkers are raked. Daily raking is fine for those who can afford it, but for those golf courses anxious to keep green fees down, raking two or three times per week can save dollars. This does not mean the bunkers will be in poor condition — assuming that the golfers remember how to use a rake.
- Steep bunkers with sand flashed high on the faces are unquestionably beautiful — that is, when the sand is in the right place. Unfortunately, the sand moves off the faces in even a modest rain and subsequently must be hand shoveled back into place. It is not uncommon to find courses that spend far more labor hours moving sand around in bunkers than they do caring for greens.
- When making purchases for the course, superintendents should spend money as if it were their own. Many, if not most, of today's professional superintendents already do this. Unfortunately, there also are those individuals who are willing to experiment with other people's money. Most products have at least some merit. However, they should be critically evaluated in terms of efficacy and cost-effectiveness. No one in golf course management is in a better position to make such evaluations than the golf course superintendent.

Conclusion

I am not suggesting that all golf courses should be designed, built, and maintained as outlined above. There will always be courses where money is simply not a limiting factor. Likewise, there will always be golfers who are willing to pay whatever it takes to play a golf course that approaches their idea of perfection as nearly as possible. However, there are many, many more golfers for whom the cost of playing the game may someday be prohibitive, and their numbers are bound to increase in the future. The need for affordable golf represents a tremendous opportunity for architects, builders, and golf course superintendents who are up for the challenge.

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