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may have foreseen a day when putting surfaces could yield this sort of speed, but they surely didn't design their greens to accommodate it.

“They designed their greens based on what 'state-of-the-art' happened to be at that particular time,” says Greg Armstrong, who oversaw the 1996 regrassing of all 18 putting surfaces at Merion Golf Club’s East Course, in Ardmore, Pa. “I’ve seen old pictures showing pin positions in the front sections of certain putting surfaces here. If we tried to cup in those places today, we’d get thrown off the property.”

Tim Moraghan, director of USGA championship agronomy, is more to the point.

“I get a kick out of people who say, ‘This is what (Donald) Ross or (Alister) Mackenzie would have wanted.’ Well, how do you know? They’re not around for the asking,” Moraghan says. “Would George Thomas or Donald Ross build that sort of contour today, knowing they would feature today’s turfgrasses? No. These guys were too smart. If a club wants to rebuild and regrass with the new drought-resistant bents, that’s fine. Just don’t ask for 12-foot green speeds.”

Unfortunately, says Moraghan, most club members don’t understand this dilemma — or they refuse to accept it.

“I’m in a position to tell a membership they’re full of it,” Moraghan says. “But the superintendent is in a different position — one that we can all appreciate. He has three kids and a mortgage; he doesn’t want to tell members to take a leap. He’s between a rock and a hard place.”

Old days, new greens

In the Golden Age of Course Design (that amorphous period generally understood to be 1915 to 1935), the pre-eminent putting surface was South German bentgrass, which rolled anywhere between 6 and 9 feet. Without aid of the yet-to-be-invented Stimpmeter, architects from this period nevertheless factored this speed quotient into their greenshaping schemes.

Flamboyant contour and pitch (up to 6 percent and 7 percent) were routine during this period because South German bent rolled slow enough to provide a reasonable challenge. Also, these older greens were not constructed with any subsurface drainage; they drained fine, but they relied on their considerable surface contour to do so.

To put that 6 percent to 7 percent figure in perspective, modern architects — who work with today’s slickly spectacular bentgrasses — feel uncomfortable pitching greens at anymore than 2 percent.

Since no one today is regrassing vintage greens with anything less than the best possible bentgrasses, the current restoration craze would seem an opportunity to at least consider regrading some of these severe slopes. That would increase the number of cuppable areas, better distribute foot traffic, and soften the severity of slopes rendered some-what goofy by the speed of modern turfgrasses and the improvements in mowing equipment.

Yet, just the opposite is true. Driven by their need for speed and a decidedly orthodox design sensibility, club members insist that superintendents take the greatest of pains to maintain these “original” green contours, regrass with state-of-the-art bents and keep the putting surfaces Stimping at 11 and 12. The result? Greens that mid- to high-handicappers simply can’t handle; and greens that are difficult to maintain from a price and labor standpoint.

“The sad irony is that it’s the average player who’s demanding this situation,” Moraghan says. “Vijay Singh can handle greens like that, but you and I can’t. What’s more, superintendents are sometimes provided the technology, finances and labor to pull this off. In other cases, they aren’t. The superintendent says, ‘I can get you this speed, but I need more guys, more money and more equipment.’ But sometimes, even if he gets [all three], the speed requirements make that turf vulnerable to disease.”

‘It’s getting impractical’

In 1996, prior to regrassing all 18 greens at Donald Ross-Continued on page 43
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Circle No. 124
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designed Pinehurst No. 2, superintendent Paul Jett digitally mapped every putting surface to ensure that each contour would survive the process unchanged. The same digital process was employed at George Thomas-designed Los Angeles CC, where superintendent Bruce Williams recently oversaw a 36-hole green restoration project.

The membership at Merion East, a Hugh Wilson design, wanted the green contours unchanged, so Armstrong simply fumigated and regrassed. Still, the club digitally mapped the finished product to aid future restoration work.

"If you have greens that have been topdressed over the course for 70 to 80 years, the chance that you've got 'original' contours isn't very good." — Bruce Williams, superintendent at the Los Angeles CC.

At the Ross-designed Inverness Club in Toledo, Ohio, where superintendent Tom Walker is currently regrassing his 18 greens, green contours will not be changed. "We were determined that the putting surfaces remain as identical as possible to what they had been there before the regrassing," Walker says.

Walker didn't go digital, but he's confident the new surfaces are identical to the pre-construction contours, "plus or minus a quarter inch."

Superintendents are understandably reluctant to question their employers publicly when it comes to reconciling the issues of ever faster green speeds and the maintenance of

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How Far Do You Go?

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put them back as they were originally designed or built?

In addition to being a great architect, Ross was a practical man. He knew that eventually someone, usually a green chairman, would tinker with his course and change bunkering, rebuild greens, relocate tees and more. His problem with that was not that the course would be changed, but that there would be no continuity in the work that would take place.

Ross thought — and rightly so — that the ever-changing cast of green chairmen and other club officials would have a different view of what should be done and there would never be any consistency to the changes. His solution was to spend the necessary money to hire a bona fide golf course architect to oversee the changes and prepare a comprehensive long-range plan.

Exactness can spell disaster

Some of the greatest mistakes I've seen on the renovation/restoration of Ross courses came when rebuilding them "exactly" to the original Ross plans. I'm sitting in my office looking at old Ross drawings and contemplating the letters I might receive when I inform the lady members of a Ross club that I'm going to renovate (sorry, restore) that there will only be one tee per hole. That's the way Ross designed it, and that's the way I'm putting it back. I'm sorry, Miss, but you're going to have to play the 600-yard 7th hole from 590 yards.

Continued on page 44

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You ladies (and seniors, and juniors too) will just have to find a new course with four or five sets of tees. But before you drop out of the club, we will do some research and see if Ross himself blessed the addition of forward tees. If they were approved within the allotted "back time," they can be added to the restoration.

A few years back, a group of ASGCA members played an original Ross course that had been virtually untouched since its construction nearly 75 years earlier. The group wasn't particularly impressed with either the aesthetics or playability of the course. I got the impression the course would have made a great museum to honor one of our greatest architects—or would have made a great place to play using hickory shafted clubs and early generation wound balls.

As a modern venue, however, to be enjoyed by modern golfers using modern equipment, it didn't measure up. As architects, are we obligated to make museums out of all the courses designed by significant designers? It's probably a stretch to suggest that anyone wants to do that, but that's sometimes the impression we get.

Although I have focused on Ross, let's look at a few modern courses designed by significant designers to give us additional insight into the role of the original designer and subsequent work done by later architects. Let's start with one of the best—Augusta National.

I was fortunate early in my career to have completed numerous renovation projects at Augusta under the tutelage of George W. Cobb, who taught me most of what I know about golf course architecture. One of the more influential characters on my remodeling career was Clifford Roberts, co-founder of the club with Robert Tyre Jones Jr. Roberts was perceptive, and unlike many longtime members or administrators of golf clubs, he knew the course changed significantly just by the process of aging and routine maintenance.

When rebuilding the 12th green in 1974 and the 13th a year later, Roberts requested the contours be exaggerated, as he felt they had mellowed substantially by virtue of topdressing. He was correct.

I've worked on older courses where as much as 18 inches of topdressing created a "turtleback" on top of what was originally a large "platform" green. These types of greens were very much a part of the design philosophy of Seth Raynor, former associate of Charles Blair MacDonald. Sometimes subtle changes to a course, just through routine play and maintenance, add to its character. Sometimes changes take away from the character. Someone has to make that call, and I've found no better way than by using a professional architect working with club officials.

Maybe the most significant thing I learned about restoration and renovation as I worked on Augusta was not so much what to do, but how much a course can change or evolve in 40 years.

This point was driven home by a list of 112 major course changes at the club that had been completed by at least six architects from 1931 to 1978. You could add another several architects and 30 or more changes since then. Some of these include a redesign of the greens by Perry Maxwell (1937), rotating the direction and building the pond on No. 16 in 1946 by Continued on page 47

“original contour.” However, better than anyone, they see that golfer expectations are less practical and potentially more perverse (from design and playability perspectives) with every passing leap in technology.

"Not speaking from an architectural standpoint, but from facility management standpoint, the biggest thing I hear about [from members] is green speed," Walker says. "People are very much into maintaining or increasing that speed. Golf today is reaching unrealistic goals for green speed and it really hits home at older courses, where the green contours tend to be more severe."

“We had no intent to change the green contours to accommodate new grasses.”

TOM WALKER, Inverness Club
strong says he keeps Merion's greens at 10, with no directives (and few complaints) from the membership.

Williams, for one, believes golfer expectations can be managed. But he also believes there's an important difference between restoring a green's integrity and its purity.

"There's no question that when you deal with the new bentgrass varieties, it creates certain challenges for golfers and superintendents. We have a couple 6 percent slopes [at LACC], and it's more than most players can deal with," says Williams, who sees still more irony in the notion of "original" contours. "But if you have greens that have been topdressed over the course for 70 to 80 years, the chance that you've got 'original' contours isn't very good. Front to back, maybe. But internally, no chance."

Pinehurst No. 2 received scads of attention last summer for its green restoration, yet no one in any position of authority — at Pinehurst or the USGA — will seriously argue that those green contours (the ones so meticulously preserved during the regrassing) were the contours laid out by The Original Donald. For starters, the greens at No. 2 had been regrassed several times prior to 1996, and that process can alter contours considerably without the use of digital aids or the supreme commitment to maintain it. There's also the combined effect of topdressing over the course for 50 years.

Whether contours are truly "original" or whether restorations can plausibly yield something close to original is subject to debate.

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Continuity keys success
I don't recommend that many changes or that many architects, but Augusta operates much like the English clubs, as described by Donald Ross. These clubs have "club secretaries" who look after the club on a long-term basis and nothing is done without their oversight. Like the club secretaries, Roberts was the glue or continuity that held Augusta together.

I attended the Memorial Tournament at Jack Nicklaus' outstanding golf course, Muirfield Village GC in 1999. To my surprise, I learned that Jack had rebuilt the 8th through 14th green complexes in 1997 and 1998 and had added and repositioned many fairway bunkers. Practically all of the greenside bunkers were deepened. What a great improvement to a course most golfers would have guessed needed no improvement. The truth be known, Jack has continually tweaked Muirfield since its completion in the mid 1970's - not unlike Ross did at Pinehurst. When Muirfield is restored 50 years from now, what year do you choose to return it?

Muirfield and Augusta National are just two of the fine old golf courses that have been tweaked over the years. All of us could name a dozen others that have changed, and quite often the changes are what propelled the courses to fame.

Architect Ed Seay uses the expression, "it's just a golf course" - and he's right. We're all guilty of thinking that who we are or what we are doing is much more important than it is. When we have groups declaring that courses are shrines, they are dealing more with emotion than reality. As much as I love golf, golf courses, golf course architecture and Donald Ross, I try to keep them in perspective. The things that I hold reverent are not related to golf.

Golf courses are living entities that either get better or get worse. If your course is not constantly being improved, it's going backwards. Certainly, this does not imply you should constantly be changing your course on the whims of the green chairman or club president - or an architect for that matter. If your course meets the criteria and demands of the membership, no person should tell you to be unhappy with it. What it

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means is that you must realize that for golf courses to improve, you should constantly be working the little things that help the courses function better from physical or agronomic standpoints. Major changes certainly have a place, but as a general rule, these should not be tried by amateur architects or club members.

What was original?

Having defended restoration, it must be said that such work does bring up a lot of legitimate questions. Most professional architects understand the process by which golf courses age and mature, and certainly there can be intense disagreement between two architects. But to claim to know exactly what some architect had in mind – is ludicrous.

Certainly, in 99.9 percent of the cases, what is on the ground now is not what was on the ground 50 years ago. It’s important to examine golf course restoration work on a case-by-case basis, to find out about a club’s circumstances, history and future.

Let’s assume that all of your favorite architect’s courses changed from the time of his death (or before) until today, whether a conscious attempt to remodel them was made or not. For the sake of argument, let’s say that most of them were remodeled from 1947 until about 1970. Several of them were remodeled to speed play and reduce the number of hazards on the course (both for speed of play and maintenance).

In one case, the course went from a proposed exclusive country club to a moderately priced daily-fee venue. Many changes were made to accommodate the general public. Now this course is a private country club and plans are being made to restore it.

In a similar case, a once-private golf course is now a high-volume daily-fee course that generates a strong income. Is there interest in restoring the course? Is there interest in putting it back to what it was 60 years ago? No. It’s obvious from early photographs that it would not serve its purpose if it were put back as original.

Would I like to put it back like it was?

Yes, in as much as I would like to return the same flavor and character that was lost during other renovations.

One thing an architect must remember, however, is that a golf course belongs to its members. If they do not want to restore it back to its original form, the architect shouldn’t insist on it.

Although it’s reasonably easy to see that changes are often made for economic reasons, have you ever considered that changes are made because the club members did not like it, like a green had too much slope or a tee did not line up properly with a fairway?

I’m certain many changes were made to golf course features because members demanded them. It makes no sense to restore a feature that everyone hates. Again, we must assume even Ross wouldn’t want to antagonize paying clients by insisting they keep something that they did not like.

How about this restoration?

I enjoy architect Mike Hurdzan’s reply to club members who want to restore their old golf course. In his book, Golf Course Architecture (Sleeping Bear Press, 1996), he says a sure way to have any restoration plan rejected is to tell members the truth about what a restoration would involve.

In the example he uses, 150 to 200 large oak trees would have to be removed. Fairway irrigation would have to be eliminated. The forward tees would have to be removed. The greens would have to be mowed at one-quarter inch to duplicate the condition of the original course. The plush, tree-lined fairways and slick putting surfaces would have to be sacrificed to restore the golf course. Later, members realize they want improvements to keep the integrity and flavor of the original design, not a restoration.

There are many factors involved in the renovation/restoration of older courses. The one constant that every club should consider is — in the words of Donald Ross — “spending real money” to hire a professional golf course architect.

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Circle No 117
Golf’s Latest Flaw Is Literally Glaring

BY GEOFF SHACKELFORD

But like a junkie, the golfing public can be rehabilitated if the golf business would just stand up to this trend and say: “No more — this unnecessary fad is adding thousands of dollars to construction and maintenance budgets, and it wastes money.”

Worse than the financial implications, though, is the message to the environmental community.

The best golf courses blend into their surrounding environments to give golfers the feeling that they’re battling nature. It’s like the thrill people speak of when on fishing or hunting expeditions. It’s just you vs. Mother Nature and her elements. In other words, the best-looking layouts don’t have brown waste areas contrasting with blinding white bunkers, like all too many new courses create for intentional “effect.”

Incorporating blinding white bunker sand into environments where it didn’t exist before merely takes golf one more level away from that enchanting feeling of playing the game in a natural setting. Worse, the bright stuff provides another item of evidence that golf doesn’t care about fitting in — all because some golfers or courses want layouts to stand out and make a statement or be like Augusta.

It’s time for the golf business to take a stand and say no to its customers when it comes to the white sand craze. The use of offensively bright sand will prove over time to be a disastrous one for the business. It says to the world, “We just don’t care what anyone else thinks.”

Is that a statement golf can afford to make?

Geoff Shackelford’s latest book is The Golden Age of Golf Design. He can be reached at geoffshac@aol.com