

A wide-angle photograph of a golf course at dusk or dawn. In the foreground, a green fairway leads to a green with a white flag on a black pole. The middle ground features a large, multi-story clubhouse with a prominent tower and a balcony. In the background, a town with stone buildings and a tall, pointed church spire is visible against a clear sky.

# The great greens debate



*Many architects believe that the Old Course at St Andrews sets the standard for green design*

Adam Lawrence surveys golf architects to learn how they feel about the limitations that modern green speeds put on their ability to design interesting surfaces



**T**here are few things in golf that produce more controversy than severe green contours. Take the recent US Open at Chambers Bay; the steepness of some greens and surrounds, combined with bone hard ground, led a number of players and observers to complain that the surfaces were unfair, with balls that pitched close to the flag often catching slopes and rolling many yards away from their intended target.

Taking away the perfectly reasonable argument that players knew the slopes and rolls were there, and how firm the turf was, and should therefore not have been attempting to fly balls at pins, there is no doubt that the levels of conditioning that are commonplace on today's courses – with greens routinely being cut shorter than the architects of yesteryear would have contemplated, and, for big occasions, the grass being shaved to a point at which it can barely survive – do mean that really dramatic contours on greens can be problematic. The use of the word 'fair' is controversial in golf; there are plenty, including this writer, who would argue that it has no meaning; the golf course is the same for every player. That aside, it isn't hard to understand why levels of slope that,

when combined with very short grass, make holding a ball near a hole location next to impossible, are unpopular with most golfers.

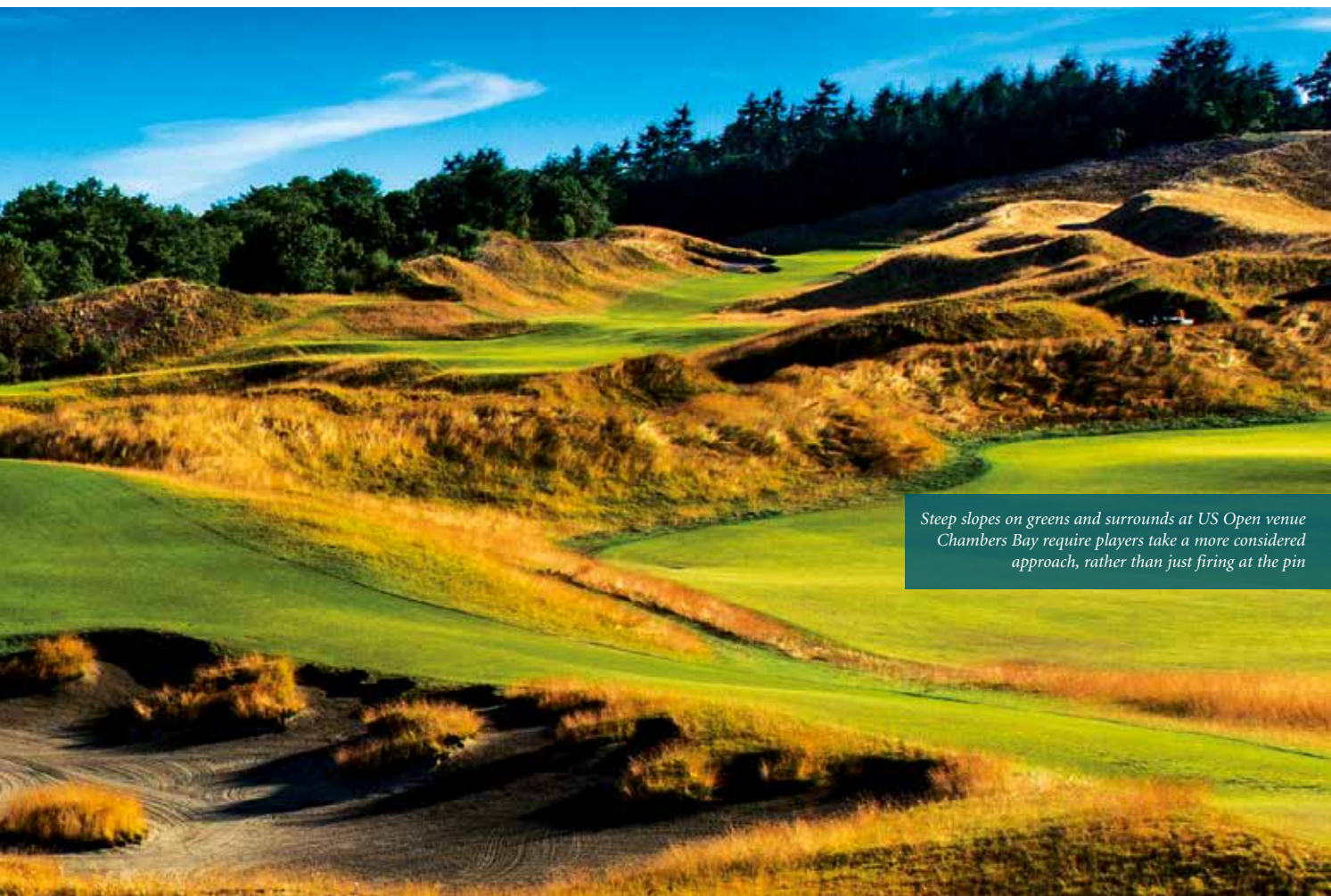
The problem is most intense at classic courses, those built back in the early part of the 20th century. The advances in greenkeeping over recent decades means lots of these greens are maintained day to day far faster than they ever would have been when originally designed. When such a situation leads to greens that are close to impossible to putt on, there is inevitable pressure to change them. Recently, leading renovation projects softening contours of greens on classic era course has been a key source of work for golf architects. Yet, at the same time, an increase in interest in the history of the profession and old-time golf has seen the birth of a new architectural discipline, that of restoring courses back to, or near to, the state their original designer left them in.

"Softening old greens, seemingly, has become a necessary evil," says architect Andy Staples. "We all know factors such as better turf grasses, far superior mowing equipment, better agronomic practices such as top dressing or rolling and more able superintendents are all factors that allow greens to be maintained at levels not accounted for when these greens were first

built. The problem with all of this, however, are these historic greens are becoming an endangered species. These projects are a source of much of the business these days (for me included) but the current pressure to change these slopes seems stronger now than in years past. Once you begin to talk slope, you then consider construction method, then turf type, and then boom! You're rebuilding the green. There really isn't a good solution. In my work, I'm trying to find ways to keep these greens intact, if not the entire green, then keep good portions of the green. These are also the greens that if done correctly, can push the limits on what is acceptable from a slope perspective."

"It's somewhere between a necessary evil and a bad thing," says Tom Doak. "The idea that you can fix any green to accommodate higher green speeds is a bad thing – just because you can computer model it does not mean you can get the green surface to fit in with the surrounds correctly, but the technology gives club members the impression that it can be done easily. On many older courses, the character of the course is in the greens, so rebuilding them should be a last resort."

Jerry Lemons says the problem is a lack of usable hole locations. "Higher green speeds



*Steep slopes on greens and surrounds at US Open venue Chambers Bay require players take a more considered approach, rather than just firing at the pin*

have reduced the number of hole locations clubs can use for tournaments and daily play," he explains. "Most greens designed before 1960 were really never intended to be maintained at 9+ green speeds."

"I'm currently working on a set of greens on a private club where a good portion of the pin areas exceed 7 per cent slope," says Andy Staples. "This is the first course I've seen that it is acceptable to bring your putter *and* your wedge with you once you've reached the green, in case you end up putting off the green! And the members think this is normal! In general terms, if I see anything over 5 per cent, I'm immediately concerned. For pins on greens with stimpmeter readings over 10.5, I try to hit slopes of less than 2 per cent with some movements within the green surface itself. The difficulty in generalising: a green with a 5 per cent cross slope is different than a green with movement left and right, up and down. This is where the fine line is drawn from a genius design and a big miss."

Is there any way we can drag ourselves off the speed rollercoaster, and stop making greens ever faster? There is a consensus among architects that this will be difficult. Staples says he thinks it is simply part of our nature. "You know, pushing limits is part of

## GREEN SPEEDS

# Keeping hold of contour



Photo: Eric Patrick

Gil Hanse, designer of the Rio Olympic course and Castle Stuart (pictured above) says that, although difficult, architects have to do what they can to fight the trend for ever faster and flatter greens. "We have tried not to get carried away with green speeds but rather focus on fun, interesting and consistent greens," he says. "It is really important to let people feel like they can make a putt and most people have problems when speeds get too fast for the design of the greens rather than what they see on television. As most golfers see this as the standard they then believe that their home course should meet these numbers and the race is on. This is

not a good thing for golf as it only leads to increased maintenance costs and increased difficulty for most golfers.

"We still hand rake our greens just prior to grassing. The thought is to spend ample time on hand-working the pinnable locations. With some strategically placed cuts and fills a small amount of contour can be created to add interest and course knowledge. Players should not be able to figure out greens or a course after only playing a few times. It really should be a life long adventure. If the speed trend continues then that aspect of golf will be lost and a big part of the game will be greatly diminished."

## Green contours



*The large greens at Tobacco Road (for perspective, note that the fifteenth, pictured, has a 3.5 metre flagpole) in North Carolina are complemented by extreme contour*

Photos: Mark Stewart/Tobacco Road Golf

human nature. How far can we span a bridge? How fast can we make a computer? How small can we make a long lasting battery? So green speeds to me are part of our quest to do things better, faster and more efficient, and I'm flabbergasted at how quickly the standards for fast greens have overtaken the industry," he says. "It's quite phenomenal what those in the turf industry have been able to do. The problem with faster greens is you tend to have less interesting greens. Pure and simple. So to me this is where architects have a say in what they will or will not be involved with. I don't think any of us would stand for designing a green as flat as a tennis court. So, where do we stop? It's hard to push back on progress, but I would say we should in this case. It comes down to education and changing the mind set of what is good and what isn't from a design perspective and being the leader in this regard. I've always been a fan of finding your steepest green, and deciding the speed of all 18 greens based on the manageable speed on that green. Or, I'm actually not opposed to varying speeds."

Fellow American designer Drew Rogers says: "Golfers are highly impacted by perception (among each other) and heavily influenced by what they see and read (television, professional golfers, golf magazines). As such, green speeds have become more and more a competitive issue among clubs – the speedier, the better. And it is speed that is winning above conditions and health. That always amazes me, as we see greens shaved to within a millimetre of their lives (no matter the conditions, whether dry, hot or wet) not only at professional level events, but every day at most clubs as well. Clubs aren't doing themselves any favours either when they post their daily stimpmeter readings – that is just an invitation for golfers to make judgments about greens and about factors that they know nothing about."



### TURFGRASS SPECIES

## Are new grasses the problem?



Turfgrass producers have responded to the desire for high speed greens by developing new species that tolerate being cut at especially low heights. Some designers highlight this as an issue – these grasses do not always perform so well when cut longer, so the super-fast greens are almost locked in. But others point out that turfgrass development has produced strains that require less water and have better resistance to disease and the incursion of unwanted species such as poa annua.

Gil Hanse is in this latter group. "The new grasses may be required to be cut lower but

they are also more drought tolerant and disease resistant and that is a good thing," he says. "I don't think the cutting height is a big issue if they are being used in the context of what they were developed for. It comes down to management practices and patience with members for course closures to handle maintenance. The newer grass varieties may be able to handle or require lower cutting heights but manageable green speeds can still be achieved. Plus, there is the leaf blade thickness argument which also has a lot to do with speeds."



*The sixteenth at North Berwick in Scotland “may be too much,” says Drew Rogers. “But I still enjoy the darn thing!”*

“Green speeds for the average golfer should be in the 8.5-9.5 range, depending on each individual course and character. Tournament golf is an entirely different game,” concludes Andy Dye.

So, how much is too much? Tom Doak says context is everything. “When you have a severely contoured green, you’re probably going to have some places where it’s impossible to putt close to the hole from the wrong side of the hole,” he explains. “The question is whether you’ve given the golfer the opportunity to stay on the right side of the hole, where that same contour is a backstop. My Lost Dunes course in Michigan, for example, is full of potential three-putt greens, but most holes have plenty of short grass around the green to give you room to play away from the severe contours inside the green. It would be a different story entirely if you had water right next to the green. Say, if the 15th green at Augusta was steeper and faster than it is, with the pond right in front so you couldn’t play short. Many very severe greens are still playable because there are counterslopes and sideslopes in other areas that can be used to slow up a putt or to avoid putting straight down the fall line. It’s just that many golfers fail to notice how to use these slopes.

“For sure, I’ve got more stomach for contouring greens than most other designers working today. One reason for that is that early in my career I was never concerned about hosting tournaments or having tournament-speed greens – my clients were just building courses for people to have fun

playing, so I put more contour in the greens, thinking they would not be maintained as fast as the best courses.

“By the same token, I was very familiar with the greens of courses like Augusta, Pine Valley, St Andrews, Pinehurst, Oakland Hills, and Crystal Downs, and knew I wasn’t building anything more severe than those. The standard for everyday green speeds has gotten faster than I imagined twenty years ago, and I’ve become a bit more conservative about them

**“If there weren’t greens that you could putt off, then what fun would that be? We’d have nothing to talk about!”**

as a result – plus nowadays I have some clients I have to take seriously when they say they want to host big events. But it’s still a matter of context. I can get away with more contour in my greens because my courses generally give you more room to play around them.”

What, then, serves as a good model? Andy Staples, asked to highlight severe greens that are effective, refers to some of the great classics. “I would say the greens at the Old

Course at St Andrews work really well. I understand the Eden green was changed but I still felt it was an awesome green at the right speed,” he says. “I’ve always loved the 14th at Augusta. To me many poor greens are result of random contouring with little understanding of how someone plays the game and how the green contour fits into the approach shot. A highly contoured green that is really good almost always is in response of the shot that is required and how the ball responds when it hits the ground, either inside or out of the putting surface. And, if there weren’t greens that you could putt off, then what fun would that be? We’d have nothing to talk about!”

Drew Rogers similarly says he looks to the classics. “I enjoy contoured green surfaces,” he says. “I like it when slopes feed into greens or there are slopes that contain portions of greens, or even fall off or deflect. I like to see contrast in the surface that clearly defines the cupping area and the sort of approach shot that is required. Many great courses have these kinds of contours, The Old Course at St. Andrews, for one. Shoreacres in Illinois is another. Oakmont’s greens have rather severe pitch. A green that I like, but may be too much, is the 16th at North Berwick in Scotland. The two decks (divided by a deep swale and steep slopes on all sides) are a great concept, but they seem to be a little too small, frankly, given the angle of the approach shot – even if it is a short pitch. The shot has to be judged perfectly to stay on the green. But I still enjoy the darn thing!” **GCA**