

The overall philosophy of a U.S. Open setup has not changed significantly over the last half century. Prior to the event, the golf course is carefully studied to ultimately provide conditions that test a player's accuracy, distance control, ability to recover from trouble, and overall shot-making skills.



# Preparing for Golf at the Championship Level

The facts about U.S. Open site selection and golf course setup.

BY MIKE DAVIS

**T**he U.S. Open Championship was first played in 1895 at Newport Golf Club, but, unlike today, preparation for the early Opens was minimal. In fact, the inaugural National Open Championship was postponed by a month when the USGA decided it was best not to compete over the America's Cup yacht race dates. Agronomic conditions of the courses were substantially different then — consistent and near-perfect playing conditions were not available. Furthermore, the USGA had little to do with the golf course setup; that was left to the host club.

Now let's fast-forward 112 years and see what happens in preparation for a U.S. Open.

Before a venue is selected to host a U.S. Open, it is carefully examined by the USGA to ensure it meets key criteria. First and foremost, the golf course must be of excellent quality and design. Can it be set up to adequately test the world's best players? If the answer is "yes," the USGA staff then thoroughly study the operational aspects of the site and local community. There must be enough land surrounding the golf course

for tents, operational compounds, admission entrances, and spectator transportation. The golf course must have enough space between and around golf holes for grandstands, TV towers, concession areas, and for the relatively unimpeded movement of thousands of spectators. Outside the golf course, we examine the potential space for parking upwards of 14,000 to 20,000 vehicles, the likely traffic conditions to shuttle spectators via bus between parking and the golf course, the availability of thousands of hotel rooms and a convenient airport, and the anticipated cooperation from the state and local governments, as well as the local business community.

The USGA Championship Committee generally awards U.S. Open sites six to eight years in advance. In addition to having the quality of the golf course and logistics analyzed, the Committee also takes geography into consideration. The national Open should and does move around to different parts of the country. A few of these golf courses have required rather substantial makeovers, both architecturally and agronomically, in order to obtain an Open bid.



For instance, Bethpage Black, site of the 2002 and 2009 Opens, had a complete facelift in the late 1990s, as did Torrey Pines, host of the 2008 Open.

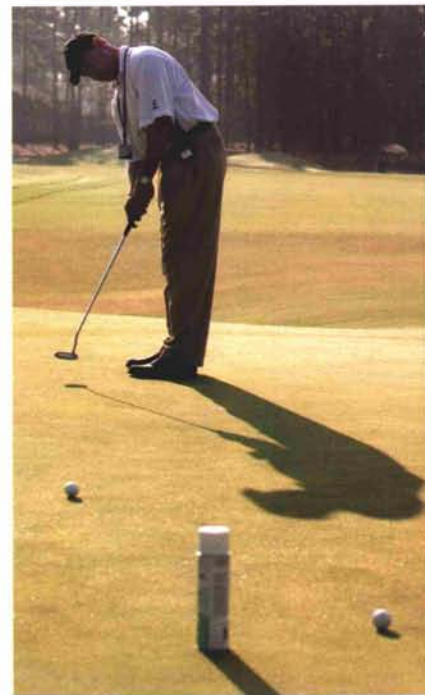
These two venues aside, the USGA generally prefers not to suggest or dictate architectural changes at Open venues other than when new championship teeing grounds or modifications to fairway widths and contours are needed. In fact, the USGA recommends widening fairways post-Open. Permanent course changes are decided and made by the host venue, with guidance from its architect of choice. Most of the USGA involvement with the Open setup revolves around agronomic preparation (e.g., determining various mowing heights, how much water should be applied to the course, etc.) and the selection of hole locations and teeing grounds.

So what is involved with a U.S. Open setup? What actually is the USGA trying to accomplish with this somewhat legendary brutal test of golf? The overall philosophy of a U.S. Open setup has not changed significantly over the last half century. Prior to the 1950s, the Open setup varied from year to year and seemed to be based on each host club's desires rather than a USGA mandate. Then in the 1950s, Richard Tufts, then USGA president and owner of the Pinehurst Resort, introduced what to this day is still the blueprint of a U.S. Open setup and test of golf. This plan called for firm and fast conditions, relatively narrow fairways, penal rough, and fast putting greens. The idea was to test all aspects of player shot-making abilities under difficult setup conditions. A by-product of this tough test was that players' mental and course management skills also were rigorously tested.

While the overall U.S. Open setup philosophy has not changed over the years, the actual setup specifications have evolved as the game has changed. As clubs have gone from wood to steel to titanium, and balls have evolved from gutta-percha to balata to the modern urethane-covered golf ball, the game and how it is played by the world's best have changed rather substantially. Additionally, the science, technology, education, and resources behind golf course maintenance also have changed how the game is played. With all these changes over the years, the USGA has attempted to evolve the U.S. Open golf course setup while staying true to Tuft's vision of a stern test of golf.

The first part of an Open golf course setup happens a couple of years in advance and involves analyzing how each hole should play ideally. What was the architect's intent for the hole? Where is the intended drive zone? Is the architect's original intent still valid, given the modern changes in golf equipment and agronomic preparation? If not, this change may support the cause for a new teeing ground. Was the approach shot designed for a long, medium, or short iron? Is the putting green open in front to allow for a run-in approach, or is it fronted by a hazard or some other obstacle? What are the ideal hole locations, and how do they relate to the overall strategy for a hole?

In an ideal championship setup, there must be a good balance — balance in long, medium, and short-length par 3s, 4s, and 5s; balance in a mix of holes where some are hard and others are relatively easy — par ought to be a good score on some holes, but the golf course most definitely ought to offer some birdie, perhaps even eagle, opportunities. Most golfers love risk-reward holes and, ideally, a championship test would have several holes that tempt the player. A par 5 reachable in two shots, and, if the course allows, perhaps even a drivable par 4, can provide interesting options. Winged Foot's sixth hole was a dramatic and drivable par 4 at the 2006 Open. In the final round, when there was a particularly inviting hole location, the majority of the players tried to drive the putting green. The result: many birdies, several eagles, and quite a few double bogies. Oakmont, the site of the 2007 Open, will have three risk-reward par 4s that can be driven under certain conditions. There should be balance in an Open so that both power and accuracy are rewarded, but neither overly so. Doglegs and different angles of play are tremendously underrated in today's game at the highest level. Offering incentive to players who can accurately curve their ball in either direction is a wonderful aspect of championship golf. Gradually bending doglegs mandate that shots either be curved or played at a certain angle and a certain distance. These types of doglegs challenge even Tour-level players. In fact, this may be one of the very few areas where modern equipment likely has had a negative



Hole locations are a critical aspect of the U.S. Open setup.



impact on the players' ability to score — the modern driver and ball make both distance control and the ability to “work the ball” somewhat more difficult.

Once the hole-by-hole analysis is done, the USGA then formulates a golf course preparation letter that is sent to the golf course superintendent. This letter outlines the mowing heights for fair-

ways, rough, collars, teeing grounds, and putting greens. The letter also addresses putting green speeds, changes to fairway widths and contours, bunker preparation, daily maintenance schedules, water management, and a myriad of other particulars relevant to U.S. Open golf course preparation.

The trademark of a U.S. Open course setup is difficult playing conditions. Perhaps more than any other tournament in the world, the Open rigorously tests a player's accuracy, distance control, and ability to recover from trouble. This is accomplished by providing relatively narrow fairways, penal rough, and firm and fast conditions. In other words, the margin of error for shot-making is lessened. Depending upon the length of the hole, the slope and contour of a drive zone, fairway widths for an Open will range from 22 to 34 yards. On a relatively flat and straightaway hole of medium length, 26 yards of width would be the norm. In the days of persimmon and balata, that norm would have been around 32 yards. The advances

in modern equipment have not only allowed for increased distance, but the players also are able to hit the ball straighter; thus the reason for the gradual narrowing of U.S. Open fairway widths over the past 15 years.

In the last couple years, the USGA has given considerable thought on how best to prepare the rough grass. Ideally and under Tufts' method, the rough should be at a height where players are penalized for errant shots, but not overly so. The USGA wants to test shot-making and reward recovery skills; thus “pitch out” rough really is not desirable unless the player misses the fairway by a significant margin. Jack Nicklaus, winner of four Open Championships, was a master at

recovery from U.S. Open rough. At Winged Foot last year, the USGA slightly altered its long-standing tradition of one stand of long, penal rough; graduated rough was introduced. This stepped-cut rough was adopted with a goal of better rewarding accuracy and more equitably penalizing inaccuracy. Two, rather than just one, heights of cut were used for the primary rough. The first cut closest to the fairway was approximately seven paces in width and was mown on a daily basis at 3.5 inches. At this height, the grass was low enough so players could play to the putting green, but high enough so their ability to control distance was lessened. The first cut was and is supposed to be a bit less penal than past U.S. Open rough. Outside the first cut of primary rough was a higher second cut. This rough, at 6-plus inches in height, more severely penalized the truly errant shots. In addition to the graduated roughs, the spectator rope lines were moved further away from the fairways so players who really hit an errant shot would less often get a fortuitous lie in grass trampled by spectators.

The putting green speed for each U.S. Open is determined by carefully studying the slope and contour of each of the 18 greens. This speed changes from year to year because the design of putting greens varies so greatly from course to course. Inevitably, one or two of the greens are more severely sloped or contoured than the others. Those greens ultimately end up dictating overall putting green speeds for all 18 greens. Flatter, less-undulating greens are prepped for faster speeds. U.S. Open putting green speeds vary from 10.5 to 14-plus feet on the Stimp-meter, depending upon the design of the greens. The USGA wants greens fast, but not so much so that good hole locations cannot be used. Fast greens require a deft putting touch and a great imagination when trying to recover from around the greens. The USGA also considers how wind might affect playability of putting green speeds. Pebble Beach, for example, is typically prepped a bit slower than the slopes would otherwise allow due to the likelihood of strong winds.

How are hole locations chosen? As anyone who has ever picked hole locations knows, setting 71 out of 72 good ones is not good enough. Fast speeds coupled with undulating and sloping putting greens can sometimes, as the USGA unfortunately has seen a few times, be the recipe for the dreaded bad hole location. The



U.S. Open rough always is a topic of discussion each June. The underlying principle is that a player should be penalized for an errant shot, but not overly so. In 2006, a step-cut graduated rough was introduced to more equitably penalize inaccurate shots.





prospective area for a hole location must be carefully studied. Knowing the amount of slope around a prospective hole, say within a 6- to 7-foot radius, is critical. In the last couple of years, the USGA has used a digital level to calculate the percentage slope. On the higher end of U.S. Open green speeds (13 to 14-plus on the Stimp-meter), we begin to be very cautious with a percentage slope greater than 2.4% or 2.5% within a 6- to 7-foot radius of the hole. When green speeds are on the lower end (10.5 to 11.5 on the Stimp-meter), percentage slopes up to 2.8% or 2.9% seem to be the cutoff mark. We also look for ample “roll-out” — the ability to stop a golf ball within 6 or 7 feet on the low side of the hole. More roll-out is given if winds are forecasted in the downhill direction. The other tricky part in avoiding a bad location lies in anticipating possible scenarios where green speeds might increase as the day goes on. Will conditions dry out? Could it get windy? Is there dew on the green in the early morning when the holes are being picked that might fool you into a dicey location? Was a chemical growth retardant used on the green?

Assuming four good hole locations can be found per hole, the USGA tries to balance these locations for each stipulated round. We are very

cognizant of balancing the lefts and rights, as well as fronts and backs, so as not to advantage or disadvantage a certain playing style. There is no attempt to make the final round any more difficult than the first round; however, there might be times when a dramatic (i.e., more risk-reward) location is saved until the final round. We also consider the approach shot being played. Will it be a long iron or a wedge? Firmness of the putting greens also must be strongly considered. Tucking a hole location right behind a front greenside bunker on a long, downwind hole may be too difficult, but placing a hole near the edge of the green may be fine when mostly wedges are being played for approach shots. Placing a hole location in the very back of a soft green on a short hole may be a great test of shot-making — can a player take enough spin off his golf ball to get it close, or will he risk going over the green by flying the ball the whole way to the back? We also believe it is okay to have one or two so-called “sucker” hole locations over the course of a championship as long as it doesn’t cross over into being unfair or downright goofy. These occasional “sucker” hole locations can test a player’s course management skills when it might be best to play an approach away from the flagstick.

Measuring the percentage slope six or so feet out from a prospective hole location can better ensure a fair setup.

Water management is one of the most crucial aspects of championship setup. Firm and fast conditions are ideal. It brings out a wonderful aspect of the game — what will happen when the golf ball lands. A player must plan for the bounce and roll. Firm conditions require a greater ability to control ball flight and spin. This is one reason the British Open is such a fascinating championship. In an ideal world, every U.S. Open would be played on a course built on a sandy-loam terrain like Pinehurst, Shinnecock Hills, Olympic, and Bethpage. These sites allow us to better control firmness even when Mother Nature is providing unwelcome rain. Most U.S. Open sites, however, are built on heavier soils that retain moisture much longer. That unfortunately means Mother Nature sometimes dictates softer playing conditions than wanted. The key with firmness is trying to provide fair conditions for the players. Ideally, the firmness of putting greens and their approaches ought to be consistent. The USGA works hard with the superintendent to provide firm approaches to the putting greens. Typically, every time greens are aerated or topdressed, the USGA recommends the same procedure for the approaches. It is downright unfair to provide greens that are too firm and won't adequately hold well-struck shots. This can be a tremendously fine line, especially when dew points are dropping or it gets windy.

The USGA's philosophy on bunker preparation for national championships differs somewhat from the norm. We still believe in the concept that bunkers are hazards. A penalty should be paid. Adapting to the look and feel of the sand ought to be part of the challenge. Bunkers should not always be perfectly prepared with firm, consistent sand. In fact, in the last few years we have purposely had the grounds staff soften up the bunker bottoms by vigorously and deeply raking. Softer sand translates into less ability to spin and control the ball. Could the players get the occasional "fried egg"? Yes, and the USGA believes recovering from a buried lie is still a skill required for playing the game.

Consistency of the overall golf course from day to day is part of the setup plan. For years the difficulty of the U.S. Open setup seemingly increased as the week progressed. Sunday's final round has many times played more difficultly, sometimes significantly so, than during practice rounds and early championship rounds. The

greens were faster, the rough was taller, and sometimes the course was firmer. The USGA has changed its philosophy a bit of late. We now strive for relatively consistent setup conditions for the whole event, including practice rounds. That is not to say we want the course to play exactly the same every day; adapting to changing conditions is part of the game. The real influence on change ought to come from Mother Nature, not from the USGA purposefully giving the players a golf course they have not seen before. It is the job of the USGA and the course superintendent to react to changing weather conditions and modify course setup accordingly. This sounds easy in concept, but it can be very difficult in execution. Sometimes the USGA has done an admirable job in this regard; a few times we have not. And when a course is set up to be as difficult as an Open, the margin for error can be razor thin. A wrong weather forecast or poor reaction to a good one can potentially push an otherwise fair but tough setup into an unfair setup where good shots are not rewarded.

There is one final question that often comes up about the Open test of golf — Is the USGA really after a winning score of even par? The simple answer is no. Windy and dry versus soft and calm conditions can make for a 15- to 20-shot swing in the winning score. The USGA obviously cannot control wind or rain. So, while an even-par winning total is not a goal, the USGA is genuinely focused on testing the players' shot-making and course management skills under the most rigorous and challenging setup conditions. Some years that test is more rigorous than others.

Moving the national open around to different courses provides a wonderfully interesting variety. It is apropos to say there are different courses for different horses. Some are long — Torrey Pines next year will be more than 7,500 yards; some are short — Merion in 2013 will play to around 6,900 yards. Some have large, relatively flat greens, while others are small and undulating. Some are open and subjected to strong winds, and others dogleg their way through towering trees. But they all end up one way or another doing one thing — identifying the national champion of golf in the United States.

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