

THE GEO-SAMPLER

Like many in the world of engineering and consulting, our summertime minds are filled with visions of new projects, completed projects and, well, golf. Here in the lab, we scratch our heads frequently when it comes to thinking about golf. We've come up with ways that technology and testing can help improve so many facets of daily life. Could technology help us improve our golf game, too? Heck, could it help us find our ball?

DUFFER'S DELIGHT: THERE'S AN APP FOR THAT.

Maybe it's your swing. Maybe it's your club. Maybe it's the course. Maybe it's what you had for breakfast. Or lunch. Or the night before. For more than a century, avid golfers have sought to identify the source of the weakness in their games and then, ways to improve it.

Whole industries were born of trying to invent and manufacture the perfect clubs. And balls. And apparel. And then the field of golf professionals was born. Golf lessons from pros. Golf lessons for pros. Golf lessons from pros who'd received golf lessons from pros.

In today's world - an era in which technological advances mean our phones take better pictures than our cameras, our cars parallel park themselves and, for whatever reason, we can record up to 12 TV shows at a time - golf has not gone un-technified.

Doppler Radar: it's not just for weather anymore

Top golfers like Tiger Woods, Adam Scott and Justin Rose are using launch monitors with Doppler radar technology, like Flight-Scope and Trackman to provide information not possible to gather with the human eye. Accurate data enables players and coaches to fix a swing and get maximum distance from every club in the bag. Just imagine what you could do if you knew the metrics of your ball speed, launch angle of the ball, path of the clubhead to ball, amount of backspin or clubface direction at impact. Yeah, just imagine.

Game changer

And then there's the nifty new digital-tracking system called Game



Golf. Available for \$249, it's remarkably simple. A golfer wears a lightweight sensor on his belt. Then, he attaches little red tags to the end of each club's grip. With each shot, the device is accurately recording the distance and direction the ball flies, while tracking your performance from tee to green. The device transmits data to your computer, too, so you can login, check against your dashboard of previously posted rounds and even let you 'share' with our community. Unless, of course, your game looks more like ours. Then, you'll just wonder why you're measuring this stuff in the first place.

The lab of our dreams?

It's somewhat reassuring to know that in other labs, elsewhere in the US, technicians are also thinking about golf. However, they're paid to do that. The USGA continually tests golf equipment for conformity to the rules. At 20,000 square feet, their recently renovated facilities are slightly larger than ours, considering there's also an outdoor test range that measures 325 yards long and 60 yards wide. They receive nearly 3,000 equipment submissions each year, including 900 different models of golf balls and more than 2,000 pieces of other equipment like club heads, shafts, gloves, tees, and devices like those mentioned above.

So, it seems technology, testing and golf can mutually coexist on a summer afternoon like this. Which leaves us with just one question. Where is that ball?

"It took me 17 years to get three thousand hits in baseball. It took one afternoon on the golf course."
—Hank Aaron



Golfer: Think I'm going to drown myself in the lake.
Caddy: Think you can keep your head down that long?

Golfer: Do you think my game is improving?
Caddy: Yes sir, you miss the ball much closer now.

Golfer: Do you think I can get there with a 5 iron?
Caddy: Eventually.

Golfer: You've got to be the worst caddy in the world.
Caddy: I don't think so sir. That would be too much of a coincidence.

Golfer: Please stop checking your watch all the time. It's too much of a distraction.
Caddy: It's not a watch - it's a compass.

Golfer: Do you think it's a sin to play on Sunday?
Caddy: The way you play, sir, it's a sin on any day.

Golfer: This is the worst course I've ever played on.
Caddy: This isn't the golf course. We left that an hour ago.

Golfer: That can't be my ball, it's too old.

Caddy: It's been a long time since we teed off, sir.

How to talk a good game.

A few terms that will make you seem like you know what you're doing.

Albatross Three under par score at a hole. Known as a 'double-eagle.'

Banana A slice, or shot that curves strongly left to right. For some reason, 'banana' always refers to a slice, although a 'hook' is simply a banana facing the other way.

Condor Probably the rarest of all scores in golf: four under par on a hole, ie a hole in one on a par five. Only four examples have ever been recorded, three of them by 'cutting the corner' on par fives with a dogleg, which considerably shortens the hole. Also called a 'triple-eagle' or double-albatross' in the US.

Dormie In match play, having a lead equal to the number of holes remaining to be played, ie. two up and two to play.

Four-Ball Group of two pairs of golfers recording the better ball score of each pair based on gross or net scores.

Gilligan The opposite of a Mulligan. When gilligans are agreed in a match, your opponent has the right to ask you to play a shot again

- typically a good drive or a long putt holed. Rare, but rewarding.

Jigger Name of an old club with similar loft to a modern 4-iron. Confusingly, it was also sometimes used to describe a short pitching club for work around the green, otherwise called a pitching niblick, or lofting iron, roughly equivalent to a modern pitching wedge.

Knife Golfing slang for the 1-iron. In the days when all iron heads were forged, they were often known as 'blades', and the 1-iron was the sharpest (and most dangerous to use) blade of all.

Lucy Rhyming slang:
Lucy Locket =
socket, or shank.
Arguably the worst
shot in golf.



Mulligan Chance to replay one's last shot, granted in a friendly game by an opponent. Not permitted in competition.

Niblick Old-fashioned Scottish term for nine iron.

Nobble To nobble is to top a ball, or catch it on the upper half, causing a low, weak, running shot, called a 'nobbler'

Sandie Term used when playing for money, betting against an opponent. Either a) making par on a hole after being in a bunker at some point, or b) getting out of a bunker and into the hole in two (an 'up and down').

Shank Shot struck by the hosel of the club which causes the ball to go sharply right. Also called a 'socket'.

Whif To swing and miss the ball completely. Counts as a stroke. Also called an 'air-shot', or 'fresh air'.

Whins Heavy rough

Worm-burner A topped, or thinned shot that runs along the ground, thus endangering the useful invertebrates that might be getting a breath of fresh air

Yips Chronic missing (or fear) of short putts, usually because of a nervous twitch. Very difficult to overcome, but can be alleviated by unorthodox grips or long (eg 'broom-handle' or 'belly') shafted putters.

ASHES, ASHES

What do you get when you burn coal? Ashes, of course. And here at Geotechnics, we test a lot of Coal Combustion Products during the course of a week. Fly ash. Gypsum. Bottom Ash. And we're happy to help our clients determine the unique qualities of each variety. To learn more about testing CCP's or ask a question to stump the expert, give Randy O'Rourke a shout at (412) 823-7600.



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