

IF YOU MUST PLAY ON SAND

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AT BEST, sand greens never have been and doubtless never will be more than a bastard child of golf; yet without doubt, climatic conditions and club financial conditions will foster sand green courses from now on until some miraculously found substitute for grass may replace them.

My golf work, for fourteen years, has been founded, fostered and grown on sand greens. I have often marveled after each round of golf played on grassed greens, how it is possible to shoot anything but subpar golf on sanded courses, usually almost totally devoid of traps, trees, water and bunkers—on greens where to miss a five to ten-foot putt is an exception rather than a rule. Yet, again, when I think of how from 175 yards the usual sand green looks about the size of a handkerchief and that to hit the green a man is more in need of a rifle than a golf club, it does not strike me so odd that the best of golfers can slip into the 80s.

How Sand Greens Compare with Grass

That idea leads me to a consideration of the size of sanded greens. Let us say, for an average, the diameter of a rounded green is forty feet; it would fit with room to spare in the northeast corner of an average grassed green. In a minor relation to this very fact I would like to, here and now, say that I have yet to hear a golfer, after placing his hand upon the soft and burning hot texture of a sand green or after observation and speculation on the sight of one, say, "Isn't that green beautiful." There is much meat back of that lack of esthetic appreciation of our sand green golfers for their greens.

Returning again to size. The first logical reason for the smallness of sand greens is that most all sand greens necessitate a flat, smooth surface from lie to the cup. To have a green of such dimensions that it may be necessary to drag a path sixty feet to a cup entails such work and drudgery that the golfers would rebel. Such dragging would also tend to pile quantities of sand either near the cup or near the edge of the green, according to which way the green was smoothed. Also, it would be difficult to drag in a straight line unless it was done from cup to ball

and the ball set to the line. This would automatically mean that eventually all the sand would be on the edge of the green rather than to be distributed equally over the green. This is in terms of a green 120 feet in diameter, with the cup in the center of the green.

It may be well to note here that daily, semi-weekly, or weekly change of cup location is impractical in sand greens because the base under the sand bakes to a hardness next to rock in the summer. It would require an excessive amount of work to change even nine holes. Besides, the average sand green is so small there is little premium on placement of a long shot to the green.

Next to size, the most unfortunate feature of sand greens is the monotonous regularity of their shape. In building and placing grassed greens, the practice is to conform with nature or to introduce artificial roll. But sand greens are almost invariably round, square, or rectangular. To save work they are made small, to save more work cups are set in the centers permanently, to defeat the erosion of nature they are ugly square, round or rectangular boxes in side hills. Each is perfectly flat.

Here's How Not to Build Them

The construction history of an average sanded course runs hand in hand with this story. A banker, a baker, a groceryman and a barber, all with a common love for our beloved game, put their heads together on why Hometown can't have a golf course. They select an available piece of land, usually unfit for farming, close to town and in some manner secure it either by lease or by floating stock. The money raised never is enough to buy the land.

After the lease of the land the crime begins. Nine holes are needed for a start and 160 acres provide plenty of room

to place nine holes in any fashion as may please this gallant four. Seldom does even one of the four have more knowledge of the game than of hitting a ball (and I did not say swinging). It doesn't make much difference where they start the course. The banker thinks it a good idea to start No. 1 down this side hill. (The banker is a topper and this means he is sure to get 200 yards with the best shot that he has.) Moreover he was the real support in the raising of the necessary cash to lease the property.

When this four reach No. 5, they run across a small dry draw and the barber thinks it might be nice to be confronted with a sporting carry, especially should there ever be some rain to fill the draw. The banker does not like this (it is changed later), but as they were all so nice about the start of No. 1 he will agree to this. When they get on to No. 6 and No. 7 they find themselves stuck a long way from the place they started. Which means a long 4-par up a side hill, followed by a 5-par, which wanders over the greater share of the 160 acres.

The only thing to do is to go back and relocate a few tees and cups until the way home becomes within reason. This means that the placement of about four out of the nine greens is an expediency and without architectural reason. It is silly to add that no relief map is on hand to help.

Thus were the original nine holes—the basis for the later development of eighteen—laid out, an unjust affliction to those who later entertained a desire to play golf and enjoy the privilege of the course. The scheme failed to provide a place for future clubhouse, the swimming pool, the tennis courts, the practice fairway and green.

Tells Plan

For Course Layout

Here is what should have been done: A relief map of the terrain can be drawn with a small amount of labor and from this we can capitalize on the flat hilltops and hollows for placement of greens to defeat erosion. We escape building up terraces and great amounts of resodding to get a level base, thereby preserving the beauty in nature rather than destroying it by digging holes and building mounds.

In laying the course for sand greens, green placement must be picked first—

then work back to the tee placement; it is far less work to build a tee than a green. This overcomes the first of our problems in making the green pleasing to the eye—a natural contour is controlled and utilized rather than artificially induced.

Greens Need Not Be Flat

Sand greens do not necessarily have to be flat, for they will support a slight grade without difficulty. Advantageous use of the natural roll will relieve monotony. In placing the green in conjunction rather than in opposition to the natural roll of the land—hill-top or depression—it will bring the only near approach to the harmony of grassed greens. Also, it avoids the necessity of building the greens round, square, or rectangular. The outer edge of the green can follow the irregular curvature of the natural location. This in turn gives opportunity to build larger greens, and to place cups in off-center positions to give a just premium to a well-placed shot.

The green placed on a hill-top has natural drainage; whereas the green in a hollow must be protected from side-hill drainage and erosion—that is, the wash of dirt and residue which will destroy the texture of the sand.

The simplest way to control side-hill wash is to place grassed traps about the green in such fashion that they serve not only as hazards but form a natural protection to the green. All such hollows should have open ends to permit natural drainage away from the green.

There is little or no room for sand traps near and about sand greens. Such traps destroy harmony by producing a desert effect—too much of the same thing. A sand green destroys an equivalent amount of vegetation—to add a number of sand traps furthers this destruction.

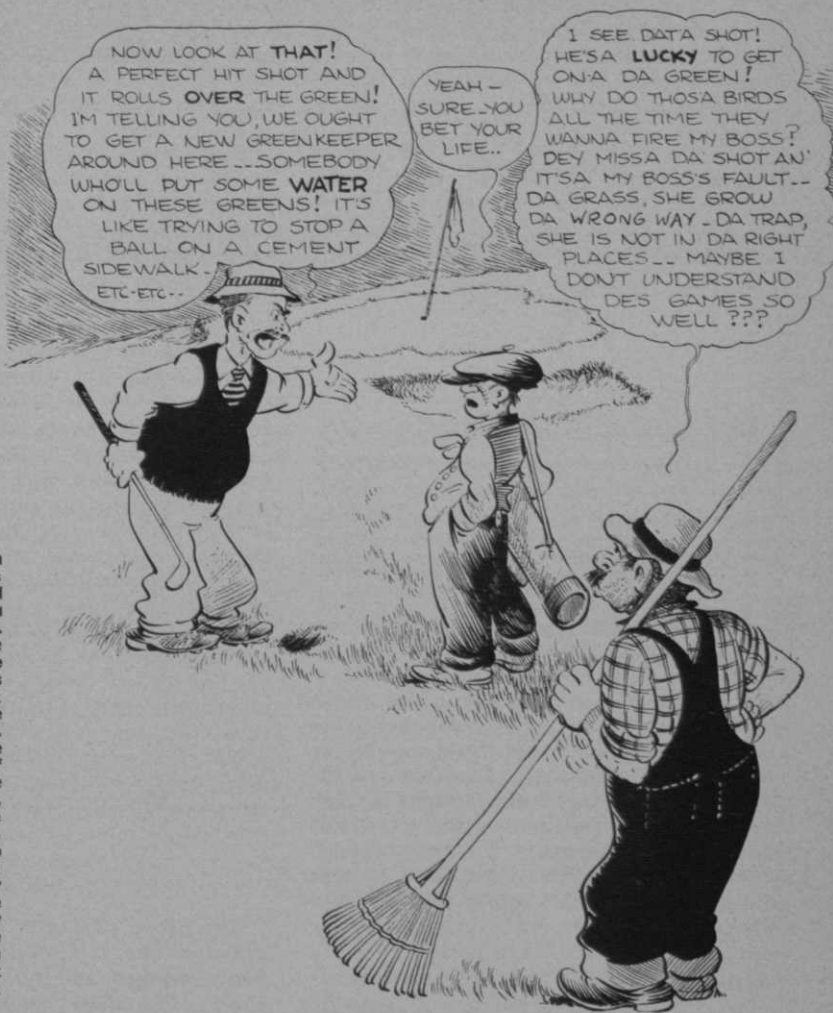
Greens in hollows are most often in broken rolling land where there will nearly always be accompanying natural depressions fit for grass traps with but little work.

I am not wholly esthetic in my dislike of sanded traps. I find from both experience and practice that a well-hit and well-placed trap shot to a sanded green will take peculiar gyrations after hitting the sand that is beyond my ability to explain or analyze.

To get on to the construction of the green. The base should be formed by

THERE ARE SEVERAL IN EVERY CLUB

If they put enough water on the greens for this bird you'd have to wade thru the mud on stilts. As a player, he couldn't hit the ground with his hat; instead of a golf course, he wants a set-up. Perhaps he'd be more content if they made traps he couldn't get into, cut down all the trees, made fairways out of all the rough, and installed runways to every cup. This would be something new which might prove popular, although rather dull. But it certainly wouldn't be golf!



NOW LOOK AT THAT!
A PERFECT HIT SHOT AND
IT ROLLS OVER THE GREEN!
I'M TELLING YOU, WE OUGHT
TO GET A NEW GREENKEEPER
AROUND HERE...SOMEBODY
WHOLL PUT SOME WATER
ON THESE GREENS! IT'S
LIKE TRYING TO STOP A
BALL ON A CEMENT
SIDEWALK--
ETC-ETC--

YEAH -
SURE YOU
BET YOUR
LIFE..

I SEE DATA SHOT!
HE'S A LUCKY TO GET
ON-A DA GREEN!
WHY DO THOSA BIRDS
ALL THE TIME THEY
WANNA FIRE MY BOSS?
DEY MISSA DA SHOT AN'
IT'SA MY BOSS'S FAULT--
DA GRASS, SHE GROW
DA WRONG WAY - DA TRAP,
SHE IS NOT IN DA RIGHT
PLACES-- MAYBE I
DONT UNDERSTAND
DES GAMES SO
WELL ???

the removal of the sod with a sodcutter from two to three inches in depth. This will leave a definite rim about the green's edge, definitely defining the green's boundary. If there is a roll in the green, which will in all cases exist if the sod be cut from the natural contour; and the roll be no more than 1 inch in three to five feet, any sand washed or blown to the edge of the green will not totally escape. In a hard rain, even though the sand washes to the edge of the green, the water can escape over the rim leaving the heavier sand in deposit. To finish this rim, sod may be sloped to the base; if the drop is quick enough the rim remains, yet leaves a definite boundary without allowing a poor shot through the green from hitting the rim and bouncing back.

After the base is formed and smoothed, the sand is applied. A sand green is not beautiful to any great degree, so we may dismiss the color of the sand used.

Many clubs have tried expensive processes of building a base to produce a cushioning effect by a layer of earth, a layer of straw, earth, straw, etc.; but the result does not justify the expense. The cushioned effect must be produced in the sand.

A graded river-washed sand should be used—one free from gravel, pebbles, and foreign substances. The sand should be applied *dry* and leveled to from $\frac{3}{4}$ " to $\frac{7}{8}$ " over the base. This may be done with a minimum of work with a drag made of a 4x4 about five feet long. The handle should be placed through the back center so that both the top and bottom

of the drag may be used. The 4x4 should be completely covered with sheet tin to prevent chipping and splintering through constant use, also to provide a smooth dragging surface. In the bottom should be placed sixteen-penny nails driven to the depth desired for the thickness of the sand—from $\frac{3}{4}$ " to $\frac{7}{8}$ ". They should be set in two rows staggered $1\frac{1}{2}$ " to 2" apart. This provides a rake sufficiently heavy to prevent bending and a

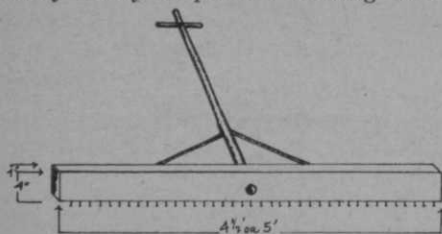


Diagram of drag for effective use on sand greens. Staggered effect of nails, although not shown by diagram, prevents collection of any particles that might cause uneven distribution.

gauge for sand depth. The staggering effect prevents collection of any particles that may cause uneven distribution of the sand. The handle should be placed in the drag at an angle to prevent piling of the sand before the drag and to accentuate distribution. The use of the 4x4 will provide enough weight to prevent the drag riding over the top of the sand. After the green is constructed the drag will serve for a long time to come to keep the greens smoothed in maintenance.

Never Oil Before Application

After the sand has been applied and equally distributed it should be oiled—never before application. Sand mixed with oil before application has an equal consistency throughout and eventually binds the sand to the base from heat and pressure. But if the oil is applied after distribution of the sand, whether the green be raked or smoothed, a pitch shot will force the oiled sand away and tear into the less oily sand above the base; this deadens the shot. A run shot will travel over the oiled portion without being affected by the underlying dry sand.

Many kinds of oils are used in the maintenance of greens. Paraffined oil ordinarily used as a base for furniture oils and floor sweeping compounds is probably the best, in that it is exceptionally clear and clean; but rather ex-

pensive. Crank case drainings may be used and the dirty residue may be removed, to a great extent, by filtration. The oil may be spread with a garden sprinkler and works best if spread on a windy day.

The amount of oil to be used is beyond description or formula. Experience will disclose the need or excess of oil by the feel of the sand to the hands. As the sand dries out it takes on a deadening and lifeless feel; the more it dries out the more it slows and deadens a shot. An excess of oil will cause layers of sand to form and destroy the cushioning effect of the dry bottom sand.

Clubs usually make a practice of oiling twice and sometimes three times a year—excessively each time. It is much better to oil lightly once a month for, as the greens are continuously stirred and leveled with the combined rake and drag, there is a turnover of the sand, which makes it impossible to keep the oil-soaked sand on the top.

The easiest way to keep the sand level on the green is to use the rake part of the drag. Drag it with a square crosshatch effect starting six to eight feet from the cup and dragging through to about the same distance on the other side; then cross and continue this procedure until the edge of the green is reached.

Removable Cup Most Adaptable

The most adaptable cup for the sand green is the removable cup. There are many designs and no particular preference. The most common type has an oversized galvanized sheet-iron sleeve inserted in the hole deeper by six inches or more than the bottom of the cup. The cup is made to fit snugly but not too snugly, as this causes sticking of loose particles of sand between the cup and the retainer. There is no particular advantage to the removable cup over the solid sleeve unless the playing members of the club have the courtesy to empty the accumulated sand each time the green is used; for if the cups are not emptied each time it sooner or later falls the lot of a following golfer to dig the sand out with his hand so that the pin retainer may be grasped to pull the cup out of the sleeve. This is much more difficult and bothersome than the removal of sand from a solid cup with the hands or a club.