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THE BRITISH GOLF



HON. EDITOR: F. W. HAWTREE.



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"Let's face it—enough has already been written about the state of the putting greens at Royal Birkdale. It's easy for a reporter to buttonhole a chap who has just three- and four-putted his way round a golf course in 92 and make headlines of his not unnatural vehemence. It does less than justice, however, to the tremendous efforts of the head greenkeeper and his staff to make the course playable at all after the depredations of the severest freeze-up in living memory." June "Golf Fixtures".

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The Committee of the Royal Lytham St. Anne's Golf Club have very kindly placed a small rest tent at the disposal of greenkeepers at the Open Championship on 8th—12th July. Members will also be admitted to the course without charge on production of their membership card. The Association is very grateful for these thoughtful and courteous arrangements, when so many others, more pressing, must be occupying the thoughts of the club.

President Kennedy did not find time to play round the Wannsee Golf Course when he visited West Berlin at the end of last month. The U.S. forces have 18 holes of the original 27 and the German Club has 9 holes and a separate clubhouse.

Herr Rosshoff, the Secretary, who has been with the club for thirty-five years, is shortly retiring. He well remembers the Alliss family when they were there; Peter Alliss was, in fact, born in a house adjoining the course.

The German course looks to be in better shape than the American one where a couple of lorry loads of defaulters are likely to be turned loose to remove weeds or rake bunkers.

More roads are eating into golf courses. An enquiry at Lowestoft a fortnight ago confirmed the removal of parts of the 8th and 9th holes. Dartford, in Kent, will lose a large slice out of five holes. Evewash Valley will soon be rebuilt with six new holes to make way for the M1 extension after it has carved through the Longcliffe Golf Course at Loughborough. Tankersley Park, Sheffield, is another one which will suffer soon—Mill Hill another.

Members will be sorry to hear that Lou Lowcock, Royal Liverpool, is in Hoylake Cottage Hospital for a few weeks. We saw him the other night, sitting up in bed with one eye on the weather and pencil and paper at the ready to send off a few instructions.

Ernest Folkes, Flackwell Heath, is pegging out four new greens, two of them in new land, which will enable some of the hill-climbs to be cut out. Ernest expects to take on some extra help and an excavator and get half the work done this winter at least.

COURSES IN PLAY I

"It was a staggering example of how a single hole can suddenly snarl round, show its teeth and bite chunks out of the uncertain..."

John Stobbs talks about Turnberry in the first of a new series of six articles describing courses with big events.

John Stobbs

THE Walker Cup match at Turn-berry goes down in the records not just as the biggest and sharpest disappointment we have yet suffered but also as the occasion upon which for the first time since the war the British Isles side did completely find its feet and show itself capable of matching the Americans, player for player, man for man. The failure on the Saturday was one of psychology: the last horrid uprising of the old underdog complex, which had already been factually exorcised by the home side's triumph in the singles on Friday afternoon. They collapsed on the second day at the mere imagined sight of the ghost of their old fallibility. It was absurd; it was outof-character; and it will probably never happen to them again.

Examination

The match will also be remembered, though, for how perfectly the course suited the occasion : and how telling proved its examination of top amateurs' weaknesses and strengths. It lies in sandy links-land by the sea : going out through an area of true dune-land stretching in from a great range of steep beach sandhills, rises to a sandy plateau on top of a rock formation, interspersed with beaches, and then comes home on the gentler more inland half of the dune country. The examination progresses in strength from hole to hole. For the 1st, 2nd and 3rd, the player meets three straightforward holes, two of them long ones; the short 4th by the sea is testing to find, but bowl-shaped once the ball hits the green. Then the test toughens. Five is a long dog leg between the dunes; 6 a huge short hole, a full drive from a high tee to a plateau green perched up by the sea-range; 7 and 8 are two good-length holes rising through valleys between dunes, to the 9th : where from a tee out at sea, you drive over a rocky beach to a high fairway on the crest of the hill, torn at by winds, and with the green guarded by a steep mound on one side. Another big drive with the beach yawning on the left, and a maze of sand before the green; a short hole along the top of the rocks by the sea; then inland to a series of holes which look less spectacular but call for firm, bold second shots to get home. The 15th is a long short hole along the edge of a dune-plateau, across which the wind screams again. The last two are good, straightforward 5, 4, finishing holes. But before them comes the 16th; and it was at the 16th that the Walker Cup match was settled.

Challenge

In its place in the round, it is an almost perfect hole, both in concept and lay-out. It comes after two holes with greens reachable only by long shots, and close-set with nasty bunkers; it is followed by a long slog of a 5 through one of Turnberry's dune-land valleys. So the 16th is a perfectly open, simple, slightly downhill drive to a level fairway, hazarded only by a small pot bunker on the left and a little high mound in the rough on the right. The challenge of the hole is reserved for the second shot. This can be anything from a medium iron to a full brassie, depending on the wind. The fairway continues to some 20 yards from the small green, which perches, up at the back, on a minor plateau, but is slightly bowl shaped to hold a long shot.

The actual stroke to it, in fact, could hardly be more straightforward so far as mechanics and result count. But before it there's a strong hazard to the player's mind and eye : a deep, precipitous, grassy gulley with a little stream at the bottom of it. It cannot in any way whatsoever affect a properly-hit shot to the green, since it all lies well below the level of the green and the front edge of the green is absolutely unguarded and simple—just a line where the grass is mown on the top of the up-slope from the gulley.

It is just the sort of hole to catch a man under nervous pressure in his match. And it did. Down into this gulley on the final day went: in the foursomes: Bonallack (under clubbing), Lunt (under clubbing); and again in the singles: Bonallack (wood hit thin), and Lunt (full wood, short by inches). In the foursomes, too, after a bad drive by Green, Saddler had to play short; and in the singles Saddler, going all out for length from the tee, topped his drive. These six strokes were alone enough to settle the whole match; and they came to men who knew the hole backwards. They did not happen to the Americans, who never once fell for the hole's hazard.

What had happened was that since the Friday the wind veered round; and where the 16th had been comfortably in reach of a mid-iron on the Friday, it lengthened itself to two full woods for the Saturday. It was a staggering example of how a single hole can suddenly snarl round, show its teeth, and bite chunks out of the uncertain before they quite know what's hit them. It is certainly a hole which could well be taken as a model for any club owning a stream in a gulley and considering rejigging parts of the course.

Uncluttered

What makes it great, I think, is the simplicity of its challenge, and the absolutely uncluttered way the drive lies open and passive, slightly downhill, to the long shot needed from the tee; and then the green sits perched in its eyrie, lying open in front and at the right to the rim of the gulley. The only sand bunker on the hole is the little pot at the left of the fairway. Except when the wind is really strong against, all the 16th says to the player is : "Hit your drive anywhere you like down the centre or right of the fairway; then choose your club; then hit your second straight and firm, with enough height to pitch the green".

That's all. But that is one of the purest challenges in golf.

WATER AND TURF DISEASES By Holman M. Griffin

Agronomist, U.S.G.A. Green Section, Southwestern Office.

Reprinted by courtesy of the U.S.G.A. Golf Journal (February, 1963).

PLANT diseases have been a problem to man since the dawn of history, and there has been a constant effort to find methods of alleviating or preventing them. Blight and mildew were known in biblical times, and Aristotle described wheat rust in 350 B.C. During these early times the causes of disease were unknown and accordingly many superstitious explanations were offered. At least one of the explanations was that the diseases were caused by demons or angry gods inflicting punishment on the people. In order to frighten away the demons or appease the gods, complex rituals were performed or prayers were offered. This was somewhat like the witch doctor approach some backward nations still use for curing human disease, and it constitutes the first known attempts at plan disease control.

The following directions for plant disease control date back to 1790 and are a good example of some of the earlier experimentations in this field. Take one bushel of fresh cow dung, onehalf bushel lime rubbish from old buildings, one-half bushel wood ashes, onesixteenth bushel pit or river sand. The last three are to be sifted fine before they are mixed. Then work them together with a spade and afterwards with a wooden beater until the stuff is very smooth like fine plaster used on ceilings of rooms. The mixture was made to the proper consistency with soapsuds or wine; and after its application to the plant, it was dusted over with dry powder of wood ashes mixed with the sixth part of the same quantity of burnt bones.

Experiments with mixtures such as these were the forerunners of the successful experimentation that has resulted in modern controls for plant diseases. Extensive research has now given us chemical as well as cultural methods for combating turf diseases, but these principles and controls must be logically and systematically applied to be of value.

Since our discussion is primarily concerned with water's relationship to plant disease, I would like to define the word "disease" in such a way that it encompasses all detrimental effects of moisture to turf. This is using Webster's definition of disease rather loosely, but in many ways we may think of any condition which impairs health as being a disease.

For years the subject of altering the susceptibility of turfgrass to disease by manipulation of the water and fertility management programmes has interested pathologists and management specialists. Today, there are many opinions along these lines but few facts. There is certainly a great void in our knowledge of the relationship of water to plant disease and in most cases we are left to draw our own conclusions.

Water's Influence

Essentially, there are only three ways in which water can influence disease and affect turf. Our troubles come from either too much water, not enough water, or impurities in water. Again, this is treating our subject rather generally, but I believe we can give some specific examples which fall into each category.

First, we will consider overwatering as a major cause of unhealthy turf. This practice is found rather frequently on golf courses in spite of all that has been said and written about the subject.

Golfers sometimes get the idea that the more water that is applied to a green, the better it will hold a shot. This is neither good golf nor good greenkeeping. What actually occurs with many soils is that they become harder with the addition of excess water. The combination of water and traffic on the greens causes the soil to puddle on the surface, and there is a lack of oxygen in the root zone for the grass. Under these conditions the turf cover is lost, and the soil is further compacted by the lack of a cushion of turf above it; and it becomes increasingly difficult to hold a shot on the green.

Also, a soggy condition of the turf aids disease development. The fungi which cause disease need abundant moisture for their best growth; and when the soil is kept saturated, they develop readily to cause turf injury. Watering is too often a routine rather than an effort to supply the needs of the grass. By watering on schedule rather than according to need we invite trouble from many sources.

Other Sources

Irrigation is not the only source of too much water, however; and rainfall, high humidity, dew and guttational water are closely related to disease incidence.

Rainfall gathers as many as 5 million organisms per square yard on the way to earth, and the figure for snow is even higher. Disease organisms are carried so well by raindrops and run-off water that the activity of disease can actually



be closely correlated with annual rainfall in areas of similar climate. The higher the rainfall, the greater the disease activity.

Rain Often Aids Disease

Often the action of raindrops is the means by which certain spores are liberated. Rain in large drops or driven by wind breaks the disease spores from their stalks or from within an enclosed layer and sets them free.

Relative humidity acts in two ways. During periods of high relative humidity most disease organisms reproduce freely and are able to infect healthy plant tissue. On the other hand, low relative humidity can cause partial wilting of the host tissue in dry air and apparently aids the penetration of certain fungi.

Even though the air around us feels dry, the microclimate surrounding the grass may contain ideal moisture conditions for disease germination. This is sometimes accounted for by dew or the guttation from grass leaves. Many diseases also tend to be autocatalytic in that a certain amount of moisture is produced by the decomposition of the spent disease organisms to provide moisture for new ones.

Early Morning

Watering in the early morning is considered best for dispersing dews and allowing the grass leaves to remain dry as much as possible. Threshing the greens with a limber bamboo pole or dragging a clean water hose across the green surface also helps to disperse dew and moisture otherwise collected on grass leaves.

Another common malady of grass This caused by excess water is scald. condition may or may not be accompanied by disease organisms, and its real cause is somewhat questionable. All too often the term "scald" is used as a "catch all" classification to describe any unidentified turf injury. It is doubtful that grass is ever actually scalded by water that has been overheated by the sun's rays; but we do know that when oxygen is excluded from the soil by overwatering, plants take on a scalded appearance. Low oxygen supply leads to impermeability of the cell walls in roots and they are no longer able to absorb water in proper quantities. This leads to a moisture deficit in the plant and causes the plant to wilt even though it may be in water.

Because most people fail to associate a wet soil with a lack of moisture in the plant, the condition is not recognised as wilt and is called scald.

Weakness

A lack of water may be associated with turf disease in that it weakens the plant, making it all the more susceptible to disease organisms. A good example of this is the Curvularia sp. organisms which usually attack only plants that have first been weakened by adverse environmental conditions.

Fairy ring is a different type of disease which actually denies moisture to the grass. A very dense mass of fungus filaments called the mycelium are produced in a circular pattern in the soil. Because of this dense mycelium, which acts very much like compressed felt in its ability to absorb moisture, the soil cannot be properly wetted by normal watering; and the turf dies or is weakened from lack of moisture.

Mat and thatch also deny moisture to the turfgrass and provide an excellent place for disease to breed. The dead and decaying organic matter in thatch or mat is actually what most fungi pathogenic to turf feed on. Water and air are restricted from the grass roots by an impervious layer of undecomposed organic material, and we have almost ideal conditions for weak grass and strong fungi.

Watch for Warnings

The last and most inexcusable reason for lack of moisture is the failure to apply it when it is needed. The warning signals are always there for those who take time to notice. The grass turns a blue-grey or slate colour and begins to footprint. In many locations during the summer a period of 15 to 20 minutes is the difference between live and dead bentgrass.

By all means we should try to learn and use good watering habits. In this way we will be helping to overcome disease by maintaining vigorous turf. The third way in which water affects turf is through impurities it carries. Water with an extremely high or low pH can have an effect on bacterial action in the soil, and any detrimental effects should be alleviated by correcting the pH of the soil.

Other impurities in water which may cause trouble are certain salts which are injurious to turf. When water containing a high quantity of injurious salts is used, management of both soil and water is essential. Good drainage is necessary to wash the accumulating salts downward and out of the root zone, and it is therefore necessary to have a permeable soil with a high infiltration rate. Quite often, some relief may be obtained by the use of soil conditioners such as gypsum which replaces the undesirable salt in the coil and allows it to be leached out.

Last of all, the amount of water used as a solvent or carrier for fungicide in a spray solution affects turf. When used in the proper amounts with the proper pressure, it is effective. If large quantities are used, the chemical may become too dilute and have little, if any, effect. If too little water is used, the resulting burn may sometimes be worse than the disease.

The future

Now, let us look to the future. It is possible that someday our whole concept of water may be changed, and we will be better able to use it and understand Only in the last three years has it. powdered water been developed by the National Cash Register Company and put to use industrially. Some day this may be the answer to golf course watering problems whereby exact quantities can be applied with little waste. This may seem ridiculous now, but so did a lot of other things which we now accept as commonplace in our present Space Age.

There is a lot to be learned about water and its relationship to our environment. We know the basic composition of water, but we have not yet measured all its properties. It is so essential we cannot live without water, but we can live better with it if we learn more about it.

OCCASIONS JUNE Midland Section, President's Match, Handsworth Golf Club. Southern Section, Annual General Meeting, Talbot Restaurant. Scottish Golf Greenkeepers' Association Annual Golf Outing, Prestonfield Golf Course, Edinburgh. 11th 12th 27th

JULY 16th 16th 25th

SPECIAL

North West Section, Visit to Research Station. Northern Section, Visit to Research Station. South West Section, Annual Tournament, Bristol and Clifton Golf Club.

AUGUST. 12th, 13th and 14th

Annual General Meeting and Annual Tournament, Royal Birkdale Golf Club.

Southern Section, Autumn Tournament, Walton Heath Golf Course.

East Midland Section Autumn Tournament, Rothley Park Golf Club,

Welsh Section, Autumn Tournament, Cardiff Golf Club.

SEPTEMBER 4th 18th 25th

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News



from the Sections



Chairman: G. HERRINGTON (Lindrick) By J. J. Dearlove, Hon. Secretary: 63 Langsett Avenue, Sheffield, 6.

A GOLF COMPETITION ORGANISED by the Sheffield Union of Golf Clubs, for Greenkeepers of this Section, was played on the 5th June over the Hillsborough course, in the form of a four ball Stapleford. The scoring was of a very high standard on a lovely day, with the winners, S. Inman and A. Spencers, returning a score of 45 points. Other prize winners, C. Chappell, A. Goldthorpe and G. Herrington, all on 40 points.

It was good to see so many greenkeepers at the same place at the same time, from the youngest to our oldest member, Fred Keys, an Hon. Life Member, whom we were all pleased to see.

The meal afterwards was of the highest order, as were all facilities extended to us by the Hillsborough Club.

Our thanks go out to the Sheffield Union and especially to Mr. Wilkinson—Union Secretary—and his helpers for their hard work in the organisation.

Some healthy discussion took place over the traditional drinks at the 19th on the havoc the past winter has played on golf greens throughout the district, and it was generally agreed that nothing quite like it has been experienced before.

To sum up, an excellent day was had by all. "Keep up the good attendance, lads!".

MIDLAND

By F. Cashmore

Chairman: G. HART (Gay Hill) Hon. Secretary: 76 Four Oaks Common Road Sutton Coldfield, Warwickshire.

Journal Postage

SHOULD LIKE TO REMIND I members that the postage for the Journal is now 3s. 6d. That makes the subscription for Head Greenkeepers £1 3s. 6d., Assistants 10s. and Associates 12s. The Treasurer, G. Wilson, c/o 294 Middlemarch Road, Radford, Coventry, will be pleased if members will let him have their subscriptions as soon as possible and will any member who has not got a pass card let him know at the same time, so that he can let them have one with their subscription entered on it, then they will always have proof that they have paid. It is very easy to lose a receipt.

Mr. J. L. Davies, who has been head greenkeeper at the Alfreton Golf Club, Oakerthorpe, Derbyshire, for many years, has had to give up greenkeeping and move to Cheshire owing to the ill health of his wife. We wish him well in his new occupation and hope his wife's health improves.

President's Match

As I am writing these notes the President's Match is only four days away and I am still waiting for replies from eight members to a letter sent them a fortnight ago, enquiring if they would be able to play. I am very angry about it, not for myself, but I think it shows discourtesy towards our President. The amount of time and work he gives for our Association, and the Midland Section in particular, warrants a reply of yes or no, so that I can let him know how many greenkeepers will be coming.



Chairman: J. SIMPSON (Ponteland G.C.) By T. Oliver Hon. Secretary: Heathery Cottage, Heathery Lane, Gosforth, Newcastle-on-Tyne 3.

OUR SPRING MEETING WAS PLAYED on the course of Hartlepool Golf Club, by kind permission of the Committee, on Thursday, 16th May. We were favoured by grand weather conditions and the course is in fine trim, particularly the greens. Congratulations to our member, Dick Nicholson.

We were pleased to have with us our President, Mr. Leslie Jones. The President's Putter was won by D. Gray, playing from scratch, with an excellent round of 66. Second was R. Derham (7) 70; third T. Davies (18) 72; T. Nutman (6) 74; T. Green (4) 75; M. Moat (15) 76; T. Kirtley (11) 76; J. Snowdon (10) 81.

Following tea, the Putter was presented by Mr. Jones, who said how pleased he was to see such a good turn-out of members. The