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THE BRITISH GOLF

GREENKEEPER

HON. EDITOR: F. W HAWTREE



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JULY 1966

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One day Bob Hope played a round of golf with Arnold Palmer. At the 19th hole Hope said, "Arnold, what do you think of my game?" Palmer shrugged and replied, "Oh, I suppose it's all right, but I still prefer golf."

—RAYMOND C. OTTO.

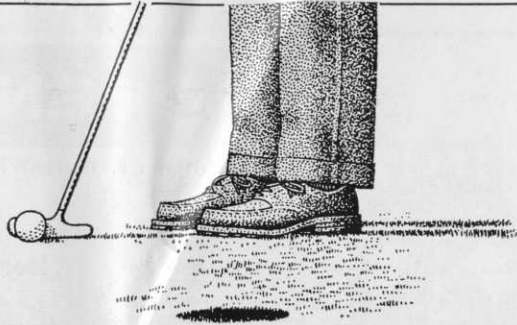
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TEE SHOTS



by the Editor

Michael McDonnell's "Friday Golf Club" column in the *Daily Mail* was discussing the perfect golf course last month.

It came out at 6,732 yards with Par and S.S.S., 72. There were four dog-legs, two par-5s in each half with one at the 1st and one at the 18th, and four par-3s — one odd and one even number to each nine holes. Bunkers were all down the sides of the fairways "to catch hooks or slices — NOTHING ELSE" And there was rough.

It takes a professional journalist to tackle this question in 15 inches of column and still have room for reports of holes in one, hints of play and a news item about Scottish selectors. But we may as well have a stab at it in half a page.

First of all, there should be eight dog-legs, because a straight par-5 is a bore.

The first hole should be a par-4 if traffic is to flow smoothly at the start. At a par-5 there will surely be somebody who thinks he can reach the green with his second shot. Meanwhile, those on the tee continue their practice swings. The ideal length supposes that one match can walk to the green after taking its second shots and putt out while those behind are walking to their drive.

Last hole a par-5? Agreed.

Two odd and two even holes is fine for foursome play, but not a factor important enough to influence the design of the course in the first place. Four short holes in all? Probably, but an odd thing is happening. With 7,000 yards the aim to test the expert, four short holes restrict the length of the par-4s and the number of par-5s. Five short holes make the long holes longer for any given total. The future may even see six short holes, excellently defended, with some of the others almost out of sight.

TEE SHOTS—continued

Bunkers lining the sides of fairways are putting the clock back, but not far enough. Rough, on the other hand, there must be. The problem is — what sort? And if it has to be grass — how long?

What do you think?

Irrigation Systems — Economics

The Automatic System

By CHARLES McCREA, Golf Course Superintendent

PERHAPS at some future date as historians write of the Twentieth Century, they will call it the century of automation. This is especially true of golf courses when you consider irrigation systems.

In the North-east, automatic systems are out of the novelty class. With the continuance of our four-year drought labor problems, increased play, and rising standards of excellence, more clubs are wondering whether to convert to, or install an automatic or at least a more modern irrigation system.

The unanswered question is will the automatic systems stand up to the test of time? Ten years from now we will have the answer

Well designed manual systems with sufficient water capacity can still operate efficiently. Two courses indicated that of the amount spent for labor, less than 5 per cent was used for irrigation. With an automatic system this percentage can be cut further with labor savings of from \$2,500 to \$5,000

Although a manual system with hose and travelers allows greater flexibility it should only be considered as a last

resort. The operational costs become excessive. Also, there is the added expense of hose purchase and repair which would be higher than for any other type system.

Another factor influencing system selection and operational cost is yearly rainfall. The North-east averages 40 inches of rain per year, with the distribution almost even throughout the year. As a result, we don't irrigate as many times per year as other parts of the country, and therefore we have to operate our automatic systems for a greater number of years trouble-free to re-coup the increased outlay for an automatic system. I'm in favor of automatic systems for golf courses in the North-east, but I think there are important reasons other than just economics. Member convenience in that they may never have to play when the system is operating and the fact that the superintendent has complete control over the water program alone are as good reasons as any possible labor savings in deciding to go automatic.

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Two well-used phrases sum up
ATCO Mowers:
TRUE VALUE
LONG trouble-free **LIFE**

No need for us to extol the individual virtues of our mowers: ATCO has been synonymous with quality for over forty years. All this experience and all our advice is yours for the asking. Our wide range of grass-cutting equipment for every purpose is matched only by ATCO's unique nationwide servicing arrangements.

May we suggest a demonstration on your own turf?

The solidly built 18" and 21" Rotaries are fitted with the outstanding ATCO 'Heightomatic' height control permitting instantaneous change over from longest to shortest cut on a wide range of surfaces not demanding a high finish. Prices from £32.



During the next few months, we shall show all our large machines in our advertisements — motor mowers from 20" to 34", Rotaries and Gang Mowers. If you can't wait that long we will gladly supply full details on request.

Cost of Systems Operation

By E. J. HUNTER

Sprinkler Irrigation Association

Hose and Portable Sprinkler System

Manpower and equipment costs for moving hose and sprinklers are the highest of any of the four systems.

The replacement and repair costs are high. Hoses used with the movable sprinkler have a short life expectancy and the movable sprinklers are subject to handling damage as well as normal wear. Consequently, they have high maintenance costs.

Quick Coupler System

The cost of operation is a little lower than the hose and sprinkler system. However, maintenance costs might be slightly higher because of the large number of quick coupler valves that have to be replaced occasionally. Water supply costs and power costs are approximately the same.

In attempting to determine the labor cost in operating a sprinkling system it should be kept in mind that this is a job to be done at night. It has to be done on a "call" basis, depending upon weather conditions. A great deal of supervisory attention must be devoted to an "on call" labor force. They have to be paid a very good wage to be sure that they will be available when called. The cost of maintaining a good night watering crew is considerably higher than one might expect.

Semi-Automatic System

The costs of this type are generally within 90 per cent of the cost of a full

automatic, but this system requires almost as much labor as a conventional quick coupler. The only advantages are that the labor can be performed at a more convenient time and the actual running time of the heads can be set automatically. The cost of operation will be slightly lower than the quick coupler system because of lower labor costs. This will, in part, be offset by higher maintenance costs on a large number of sprinkler heads which are handled twice during each watering.

Full Automatic System

The cost of operation is, by far, the lowest. Labor is completely eliminated. Water supply costs and power costs are somewhat reduced through efficient use of water. Replacement and maintenance costs can be slightly higher because of the larger cost of the equipment involved. However, frequently it is found that replacement and maintenance costs are actually lower.

In an automatic system, even in the most arid climate, each sprinkler head will only be run 100-150 hours per year and will not be subject to handling damage. In a quick coupler system the sprinklers cost less, there are approximately one-tenth as many sprinklers, but each has to run 10 times as long. This, plus handling damage, means increased maintenance costs. Often the maintenance costs are higher than for the full automatic system.

COST OF SYSTEMS OPERATION—continued

It must be assumed that each type system is adequate. A system that can not deliver the required volume of water is inadequate and it will be inadequate whether it is a hose and sprinkler, a quick coupler, semi-automatic, or a full automatic. Conversion is possible only if the initial system has adequate capacity. If it doesn't, additional mains and pumps should be added before converting and calculating costs.

Superintendent's Responsibility

He will have greatly reduced his personnel problems with an automatic system. Recruiting, training, supervising of night watering crew would be eliminated. Maintenance responsibilities increase slightly.

The economic advantages are, of course, greater in an arid climate.

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POP UP SPRINKLERS ARE A MUST, SAYS PETER ALLISS

"We have installed B.O.I.L. Pop Up sprinklers at Parkstone because we insist that our greens are always in championship condition," says Peter Alliss.

What better recommendation could we offer to you? Pop up sprinklers with an automatic controller to carry out a pre-arranged programme at night, and the self-travelling sprinkler watering almost an acre at one setting provide the Parkstone Club with first class playing conditions—they could do the same for your club! Installation does not affect play **STOP PRESS!** latest installations include Brockenhurst, Fairhaven, Studland and Sunningdale.



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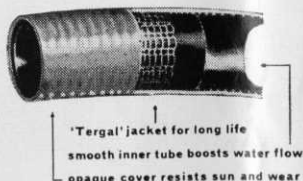
'Supplex' Sprinkler

This triple-bore plastic hose is minutely perforated throughout its length. One end is closed so that when the perforations are opened by water pressure, a *fine* rain-like spray is produced which soaks without flooding—in a rectangular pattern. Supplex is the logical choice for rectangular areas. Lengths are available to cover, in one operation, tennis courts, bowling greens and cricket pitches.

'Tricoflex' Reinforced Plastic Hose

For conveying water, Tricoflex is three ways superior to rubber hose. Tricoflex withstands the kind of rough handling that soon destroys a rubber hose; it weathers better—it is

particularly resistant to long exposure to the sun—and its light weight and suppleness make it easier to coil and carry. Tricoflex hose is constructed of 3 layers—black P.V.C. inner tube, with mirror finish for optimum water flow, knitted jacket of 'Tergal' polyester fibre and an opaque vivid yellow outer cover of polythene. Tricoflex has been proved in rugged tests on building sites will last you years!



TA2078

Moss Control

Berk Moss Control compounds are based on mercury—this is present in an insoluble and harmless form. Mercury not only kills moss but prevents subsequent growth—it can control moss for up to three years. Three compounds are available—the choice depends on the individual requirements and the time of the year.

M.T.S (Mercurised Turf Sand) (M of A 1477)

This is applied at 4 oz. per square yard from early spring to late summer. It kills moss immediately, reduces weed population and, because it contains a quick-acting nitrogen fertilizer, stimulates grass growth.

Moss Killer (M of A 1478)

This is applied at 4 oz. per square yard at any time of the year but especially prior to normal autumn treatments. Moss Killer does not contain a grass stimulant but gives rapid control over moss.

Moss Eradicant (M of A 1479)

A special formulation to control the following crop of moss while killing the immediate crop gradually—so there is no disfigurement from dead moss.

Hints on Moss Control

1. Moss will always invade and colonise neglected turf.
2. Do not rely on raking alone to remove moss. This spreads moss spores and fragments which can re-infest the site. Always use a moss killer in conjunction with raking.
3. Correct turf management should always be practised. After using a moss killer, the factors responsible for the appearance of moss should be removed.
4. Some common causes for the appearance of moss are
 - * Poor drainage and aeration
 - * Bare patches
 - * Over-rolling and compaction
 - * Acid and undernourished soils
 - * Persistent close mowing.

groundsmen & greenkeepers

Wormkiller

Berk 25% Chlordane Wormkiller

Berk Chlordane kills worms *underground*, also controls leather-jackets, ants and chafer grubs. It is cheap and easy to apply—calling for little watering and minimum labour. Best applied in warm, showery weather during autumn or spring when worms are most active and near the surface.

Berk 20% Chlordane Wormkiller (Granular)

Applied at 80 lb. per acre, granular can be particularly useful where grass is kept long or the sward is thick.

Turf Fungicide

This fungicide contains the equivalent of 2½% Mercury and gives excellent control of Fusarium Patch (*F. nivale*) and Dollar Spot (*Sclerotinia homoeocarpa*) in Turf. Apply in late summer or spring for Fusarium control, or when symptoms appear for control of Dollar Spot.

Application. 1 oz. per 40 sq. yards in 2 gallons of water or with 14 lbs. sand for wet and dry methods respectively

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Weedkiller

Turf Weedkiller—Standard

(Ministry Approved)

A selective weedkiller controlling broad-leaved weeds in turf.

Application. 2-4 fl. oz. per 120 sq. yards in not less than half gallon of water (4-8 pints per acre in not less than 20 gallons).

Turf Weedkiller—Super

(Ministry Approved)

A selective weedkiller controlling clover and chickweed in addition to other common broad-leaved weeds in turf.

Application: 3-4 fl. oz. per 120 sq. yards in not less than half gallon of water (6-8 pints per acre).

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BGG 4



HON. SECRETARY'S NOTES

LITTLE ASTON

NOTICE IS HEREBY GIVEN THAT the Forty-ninth Annual General Meeting of the British Golf Greenkeepers' Association will be held at the Little Aston Golf Club, Sutton Coldfield, on Monday, 8th August 1966, at 2.30 p.m.

Notice of resolutions must be sent in writing to the Hon. Secretary **twenty-one days** before the date of the Meeting. Under Rule 29, Proxies may be voted at all General Meetings. A Form of Proxy may be obtained from the Honorary Secretary and returned not later than the first post on Wednesday, 3rd August.

The Annual Tournament

The Forty-ninth Annual Golf Tournament will be held at the Little Aston Golf Club, Sutton Coldfield, on Monday Tuesday and Wednesday, 8th, 9th and 10th August 1966. Entry Forms were enclosed with the June issue of the Journal.

Programme

Monday 8th August

Morning—18 Holes Stableford.

Afternoon—Annual General Meeting,
2.30 p.m.

Tuesday, 9th August

36 Holes Medal.

News of the World Cup (Scratch).

Senior Division (Plus to 11).

Junior Division (12 to 24).

The Artisan Medal.

The Jubilee Cup (Team Prize off Handicap).

The Coming of Age Cup.

Wednesday 10th August

Morning—18 Holes Medal.

Afternoon—Prize Distribution at 3 p.m.

Handicaps

Section Secretaries will be asked to verify the handicaps of all competitors from their records before the Tournament. All handicaps and revisions must be based on the National Golf Union's handicapping system.

A Meeting of the Executive Committee will be held at the Little Aston Golf Club, Sutton Coldfield, on Sunday, 7th August 1966, at approximately 5 p.m.

May I remind holders of trophies from last year's Tournament, who are not taking part this year, to ensure that these are returned to the Little Aston Golf Club before Saturday, 6th August.

Annual Draw

May I remind members that all counterfoils and moneys should be returned to their Section Secretary and NOT to me.

C. H. DIX.

MISCELLANEOUS

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