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THE BRITISH GOLF

GREENKEEPER

HON. EDITOR: F. W. HAWTREE.

No. 216 New Series
MARCH 1963

"I always think of nature as a great spectacle, somewhat resembling the opera."

BERNARD DE FONTENELLE.

CONTENTS

Page 3 TEE SHOTS.

4 QUESTIONS FREQUENTLY ASKED.

7 NEW DISTRIBUTOR.

8 SPECIAL OCCASIONS.

10 NEWS AND NOTES.

12 SECTION NOTES.

14 SITUATIONS VACANT.

16 SCOTTISH GREENKEEPERS NOTES VIEWPOINT.

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"Better than anything on the market at the present time"...

Lancashire Golf Club recommends HI-GROW and SEAGROW to all Golf Clubs.

First-hand testimony to the results achieved with HI-GROW and SEAGROW. The secretary writes:

"We consider that Hi-Grow and Seagrow fertilisers are better than anything on the market at the present time. We would have no hesitation at all in recommending Hi-Grow for use on the fairways throughout the growing season. Seagrow has been used on newly made and old established greens and this has produced marvellous results. Our greens have received praise from everyone because of the marvellous results, and the beautiful colour which has been maintained throughout the winter. We have no hesitation in recommending your fertilisers to all golf clubs".

**HI-GROW**

The top-quality fertiliser with the exceptionally high N.P.K. content—9% N, 9% P, 15% K.

**SEAGROW**

A seaweed based fertiliser which has achieved spectacular success.

Write for full technical details and highly competitive prices to

**PEAKS OF WIGAN**

Peaks—Newtown—Wigan—Telephone 44278
GOLF course watering systems are seldom demonstrated in aeroplanes. Mr. Tim Hilton, Managing Director of British Overhead Irrigation Ltd., contrived, nevertheless, to show us the workings of one of his automatic systems last week in a Viscount on the way to Germany.

The “pop-up” sprinkler came apart in five seconds with the aid of a table knife borrowed from Lufthansa, though a screwdriver and pliers are normally recommended. Dismantling is occasionally necessary to clear the built-in filter surrounding the gears. A small screw adjusts the angle of the sector to be watered from $30^\circ$ to $330^\circ$, the radius of throw being about 40 feet. With three or four pop-ups on a ring main round each green, the whole putting area is covered comfortably—all from black plastic cylinders, four inches long, two inches in diameter, weighing under eight ounces.

Next we saw the remote control valve, which can be operated from the clubhouse through a $\frac{1}{4}$ in hydraulic control tube laid with the mains. The master controller—size again measured in inches—controls nine pairs of greens, watering them in rotation for specified periods at pre-set times, up to a fourteen-day cycle. Thus any quantity of water up to the limit of the supply can be applied daily (or nightly), every other day, weekly and so on up to a fortnight. The cycle then repeats itself. If rain comes, the whole system shuts down.

Draining off in winter can also be arranged automatically in low sections of the mains by valves which open when pressure is shut off.

Incidentally, the additional cost of fully automated green watering when installing a new system can be as low as 20%.
QUESTIONS FREQUENTLY ASKED

Typical questions and typical answers in the United States will interest green-keepers here and may give a new angle on treatment. This selection comes from the South Western office of the U.S.G.A. Green Section, one of the five regional offices covering the North American continent. It is reprinted with grateful acknowledgments to the U.S.G.A. Golf Journal.

When should overseeding be done in bentgrass greens which are highly infested with Poa annua?

The purpose of overseeding with additional bentgrass is to increase the relative population of bentgrass to Poa annua. Normally, seeding would be done either in the fall or spring. Seeding during these two seasons should not be discredited or discontinued. However, it is felt that much can be gained from summer overseeding. The procedure followed has been either to power spike in two or three directions to open the turf and permit more seed to contact the soil or to use a verticut with the reel disengaged to accomplish the same effect.

Should a summer aerification be warranted, such an overseeding could be made concurrently. Inasmuch as a very close observation is essential during the summer and especially if the greens are aerified, the possibility of losing seedlings due to drying is reduced greatly.

The rate to seed should be in the range of two or three pounds of seed per 1,000 square feet. While this programme has helped most of those who have tried it, it does not represent a cure-all for Poa annua. Rather it is possibly another step in management to discourage Poa annua.

Is any benefit derived from winter fertilisation of fairway turf?

Virginia tests have demonstrated that winter applications of fertiliser, even on steep roadside slopes, have had little leaching loss. USDA tests have shown that such feeding has an unexpectedly important influence—there is a great deal of winter root growth even though grass tops are frozen stiff.

An experiment at the Lawn Institute in Marysville, Ohio, with the application of high rates of urea to frozen bluegrass sod in the middle of January resulted in just as attractive a spring turf as did equal amounts of fertiliser applied in March. Also, the effects of this mid-winter feeding continued through the summer in the darker green colour of the experimental area. At least one beneficial effect was that there was no surge of spring growth that aggravates spring mowing.

What kind of topdressing mixture is best for greens?

Once a topsoil mixture is selected and the green constructed, every effort should be made to keep the subsequent applications of topsoil as nearly like the original as possible. The best way to go about this is to exercise great care in selecting the original topsoil mixture so that there will be no need for a change later on.

Much of the guesswork can be taken out of the selection of the proper soil mixture with a physical analysis. Such an analysis measures the porosity, permeability, and moisture retention of a soil mixture. These are important characteristics of any soil mixture; and it follows that it would be much better to test these characteristics before the final selection of a soil mixture is made than to select the mixture, incorporate it in a green, and then have it turn out to be undesirable.

If it should become necessary to change the structure of soil under turf, every effort should be made to avoid any type of layering. At least one method which has been successful is the incorporation of amendments into the soil by placing them in the aerifier holes after a
FOR THE GOLF COURSE – and for Life

PARTICULARLY ATCO
GANG MOWERS
FOR THE FAIRWAYS

There are two models of the new ATCO Gang Mowers available. No. '1' is a general purpose mower and No. '2' designed for extremely heavy duty.

The unique ganging arrangement allows for multiples of one unit upwards making subsequent conversions very economic.

A particularly outstanding feature applied to both models is the totally enclosed all-gear drive. All the gears run in an oil bath which makes for extremely low maintenance in respect of time and cost.

ATCO Gang Mowers are only some of the many machines in the ATCO complete range from the 12" Roller type to the 34" Roller type with a full range of Rotaries, Sidewheels and the Atcoscythe.

and perhaps most important of all IMPECCABLE SERVICE

EVERYWHERE there is an ATCO Engineer attached to an ATCO owned Branch ready to advise on any problem in connection with grass cutting.

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The Triple Gang illustrated costs £270

The 20' Special for 'superfine' mowing of greens

This 'self-contained' motor mower has become recognised as the best machine of all for the maintenance of the perfect finish required for the Greens. The specification is complete and will maintain peak performance—for life.

£90
thorough aerification. If this method does not work, complete renovation may be the only answer.

Why does young grass in many greens show a nitrogen deficiency even when greater rates of N are applied than normally required?

In most instances when this occurs, raw or readily decomposable organic matter was used in the mixture. For the most part, organic matter breakdown is dependent upon soil microbes. While their growth responds to temperature changes, they, like the grass, require nutrients for growth; and when an organic material is available, they seem to prosper. Inasmuch as the bodies of the microbes are rich in proteins (which are about 6.25 per cent nitrogen), much of the nitrogen in the soil is tied up in their bodies as they grow.

The microbes consume the available substrate (the rough organic in this case) until their population becomes too great for it to support. At that point, death of the older and weaker of the microbes begins to occur until an equilibrium in population is established. It is during the period prior to the establishment of the equilibrium that the deficiency develops; during this time supplemental applications of an inorganic and readily available source of nitrogen are warranted.

While much nitrogen can be tied up in proteins and complex nucleo-proteins, later it will become available for turf consumption as those complex compounds are broken down, as described above, and also through chemical decomposition.

The deficiency should not cause alarm but should be expected and its management planned when such sources of organic matter are utilised. It is for this same reason that farmers must fertilize more after a cover crop than when no cover crop was ploughed in prior to planting.

don't fail to grow Sutton's grass seeds

Turf to be proud of Sutton's know about turf. And they operate a special advisory service for groundsmen and those responsible for the condition of grass. But most important, Sutton's provide the right grass seed for any need, and know which seed is right for your soil, your conditions. Buy your grass seeds, fertilizer, weedkiller and dressings from Sutton's.
A NEW DISTRIBUTOR FROM “SISIS”

“SISIS 36”—SUPER COULTAS—
Model SCD/36

Messrs. W. Hargreaves & Co. Ltd., manufacturers of the well-known “SISIS” patent Equipment for Turf Management have introduced a new precision Fertiliser and Seed Spreader known as the “SISIS 36” Super Coultas.

The trend of fertiliser manufacturers is to increase the concentration of materials, thus requiring a Spreader which will distribute accurately and evenly in a full width carpet at the very low rates demanded. The Super Coultas has been designed to meet this need with a unique degree of accuracy and operates on the well-known Coultas principle, while incorporating the best design features of the “SISIS” Truspred.

The material is drawn from the extra large capacity hopper by a slow moving, jointless, ribbed, rubber conveyor belt. Final spread is by means of a full width rotary brush. A hand controlled clutch is fitted to stop and start delivery. A wide range of materials from granular and powder fertiliser, disease and pest controls, grass seed and damp or difficult “clinging” materials can be spread with precision. Spreading rates are controlled by a tilting hopper which varies the aperture between the base of the hopper and the conveyor belt. Rate and adjustment is carried out by finger-tip control dials which are simple and positive.

At the 1962 Exhibition of the National Association of Groundsmen the 36 Super Coultas received the Merit Award as the “Outstanding Production of the Year”.

The Super Coultas is designed for pushing or pulling by hand, or can be operated behind the suspension control unit of the “SISIS” Aeromain or Aeromat.

“SISIS” Model Ref. SCD/36, the Super Coultas sells for £47 10s. 0d. including carriage and packing in crate.
MARCH
13th Southern Section, Quiz, Talbot Restaurant, 6-30 p.m.

APRIL
3rd Welsh Section, Spring Meeting, Clyne Golf Club.
4th Midland Section, Spring Tournament, Sutton Coldfield Golf Club.
9th Northern Section, Spring Tournament, Woodsome Hall, Huddersfield Golf Club.
18th Scottish Golf Greenkeepers’ Association (West Section), Annual Spring Competition, Erskine Golf Club.
23rd North East Section, Visit to Sports Turf Research Institute.

MAY
28th East Midland Section, Spring Tournament, Derby Golf Club.

JUNE
11th Midland Section, President’s Match, Handsworth.

AUGUST
12th, 13th and 14th Annual General Meeting and Annual Tournament, Royal Birkdale Golf Club.

SEPTEMBER
26th Midland Section, Autumn Tournament, Handsworth Golf Club.
At the 1962 Exhibition at Hurlingham organised by the National Association of Groundsmen, Carters comprehensive Exhibit, as illustrated, was again awarded the Highest Honours by the Association for display and lay-out.

For the Production of Fine Turf
Carters Tested Grass Seeds, Special Grass Dressings, Fertilisers, Weedkillers and Wormkillers are used by many of the Leading Golf Clubs and Sports Clubs throughout the country.
We invite you to consult our Sports and Advisory Department on any problem connected with the maintenance of Golf Courses, Lawn Tennis Courts, Cricket Squares, Bowling Greens, Sports Grounds and Recreation Grounds.

The 1963 Edition of our illustrated booklet:—
“Treatment of Golf Courses and Sports Grounds”
free on request

RAYNES PARK, LONDON, S.W.20
NEW WORMKILLER

Fisons Horticulture Ltd. are marketing a new liquid wormkiller, formulated from chlorinated camphere.

Worms die in the ground and casting should have ceased in four weeks after application. Leatherjackets are killed too. The effects of one application may persist several years, though, presumably, it is still too early to know just how many.

The material comes in 1, 2, 5 and 45 gallon packs, price and area treated being as follows:

1 gallon £3 10 0 treats 1,210 sq. yds. (¼ acre).
2 gallons £6 15 0 treat 2,420 sq. yds. (½ acre).
5 gallons £15 12 6 treat 6,050 sq. yds. (1½ acre).
45 gallons £123 15 0 treat 54,450 sq. yds. (11½ acres).

Application may be by high volume sprayer or watering can after appropriate dilution in water.

The name (why did nobody think of it before, or did they?) is WORMI-CIDE.

N.A.G. FIELD DAY, MOTSPUR PARK

This year’s Motspur Park Field Day will be held on Wednesday, 3rd April, and Ransomes Sims & Jefferies Ltd. will be there as usual showing and demonstrating a wide selection of their grass cutting machinery.

The 18 in. Auto-Certes machine with its world-wide reputation for giving a superb finish on Golf Greens and other fine grass areas is to be exhibited.

The versatile Multi-Mower will be shown with its choice of cutting heads. The Reelcutter attachment is excellent for cutting banks and grass verges while the 27 in. Rotacutter will tackle grass up to 2 feet tall.

Completing the range of heavy duty mowers will be a selection of Gang Mowers of which Ransomes were the original manufacturers in this country.

The high-quality 18 in. or 20 in. Marquis will be shown. This is used extensively in the upkeep of ornamental lawns.

Ransomes Rotary Mower, the new 18 in. Typhoon Major with its vacuum-lift cutting blades which swing back on the concave disc if an obstruction is met, should receive special attention. It is powered by a 150 c.c. Villiers 4-stroke engine, fitted with oil pump lubrication in the sump.

Another new model on show will be the new 14 in. Ripper Hand Mower; other hand machines on view will be the 12 in. Conquest, 12 in. Ajax and the 16 in. Certes.

SIGN OF THE TIMES

Golf drives out cricket and lawn tennis at Richmond

The Richmond Athletic Association—who own the Richmond golf driving range—have given the four cricket clubs and lawn tennis clubs notice to quit after this summer to make way for an extension of the driving range.

Mr. D. Wheeler, now secretary of the non-profit-making enterprise, explained: “The cricket clubs hardly pay the expense of maintaining their cricket squares, so we are going downhill financially. With business on the driving range booming, we must do this with reluctance. We plan to increase our 12 tees to 20 and install floodlights so during the summer we can play until midnight. A putting green is also planned. With the increased income we will be able to put up a building for the range with changing facilities”.

“The Guardian.”

WARNING

... It may well be that the spring will bring an exceptional crop of weeds, for frost and snow are great breakers of weed dormancy ...

Amateur Gardening—9.2.63.