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The British Golf Greenkeeper

HON. EDITOR: F. W. HAWTREE

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Front Cover Picture

The Moor Allerton Golf Club, near Leeds, is now using a Toro Sandpro hydraulically-driven ride-on mechanical rake for care of sand traps. There are 128 bunkers on the 27-hole course—some up to 400 square yards in area. Seven men were previously involved in raking on two days a week. One man can now do the lot in a day with the Sandpro giving his colleagues the opportunity to keep up with other aspects of course management.

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TEE SHOTS

The natural beauty of a golf course such as the site of this year's U.S. Open Championship, Winged Foot Golf Club, Mamaroneck, N.Y., is not achieved by nature alone. In recognition of his exceptional efforts and achievements at Winged Foot, golf course superintendent Ted Horton was awarded a "Citation of Performance" award by his professional association, the Golf Course Superintendents Association of America (GCSAA).

President of the international association, Charles G. Baskin, presented Horton with this distinguished award during the traditional ceremonies at the conclusion of the tournament. Also participating in the presentation were Winged Foot President Edward Schneider and United States Golf Association President Horton Semple.

PAN BUSTING

The benefits of pan-busting to improve drainage and therefore the grass growing, has been admirably demonstrated in an A.D.A.S. experiment on a Cornish farm, according to the Farmers Weekly.

Mr. Jack Bolitho of Commonmoor, Cornwall has a 1,000 acre hill farm with an iron oxide pan under much of it, which stopped water flow through the peat soil.

The A.D.A.S. team sub-soiled 20 acres. Now, while most of the 33,500 acres of moorland carry the usual poor-quality, stunted growth, the treated area has grass 12 inches high.

Three sub-soiled plots, compared with three controls, gave the following grass production.

		lbs. of Dry matter	
		Control 1/ fertilised	Fertilised/ Sub-soiled
68	units N.	145	210
91	" "	180	400
150	" "	450	740

Dr. David Hughes, A.D.A.S. soil scientist, also estimated that resistance to poaching (and golfers cause that just as well as cattle) had increased by 40%.

Gordon West, Head Greenkeeper at the Auckland Golf Club, Middlemore, New Zealand had similar ideas when he inserted five sticks of gelignite in one of his fairways. It was just bad luck that he was next to a hospital instead of Bodmin Moor. But he got the results he wanted and the hospital is still there. He only rattled it.

F. W. Hawtree.



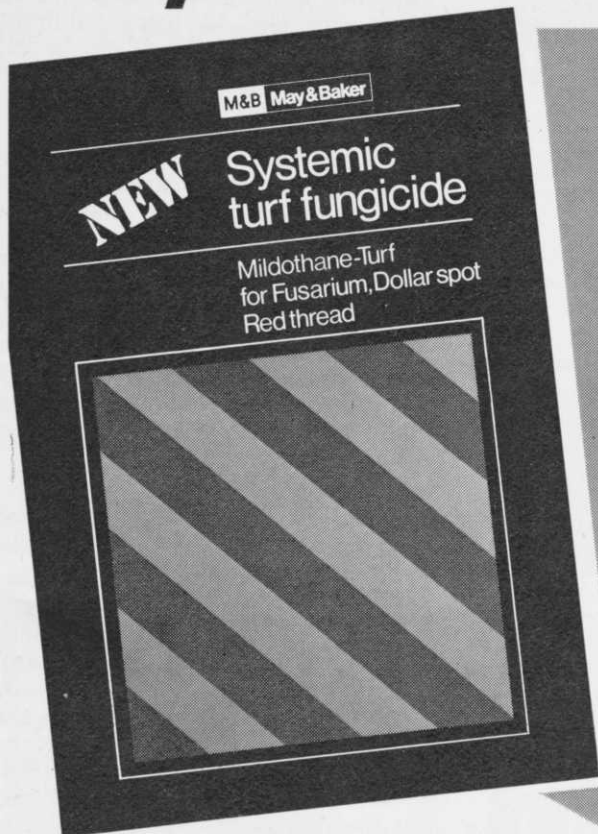
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HON. SECRETARY'S NOTES

**A.G.M. Isle of Purbeck Golf Club,
Studland, Swanage, Dorset.**

NOTICE IS HEREBY GIVEN that the fifty-seventh Annual General Meeting of the British Golf Greenkeepers' Association will be held at the Isle of Purbeck Golf Club, on Monday 30th September 1974 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 Hon. Secretary and returned not later than the first post of Wednesday 25th September.

Annual Tournament

The fifty-seventh Annual Tournament will be held at the Isle of Purbeck Golf Club on Monday, Tuesday and Wednesday, 30th September, 1st and 2nd October 1974. Entry Forms appeared in the July Journal.

Programme

Monday 30th September. Morning—18 Holes Stableford. Afternoon—Annual General Meeting 2.30 p.m.

Tuesday 1st October. 36 Hole Medal; News of the World Cup (Scratch). Senior Division (plus to 11) Junior Division (12 to 24); the Jubilee Cup (Team Prize off Handicap); 'The Coming of Age' Cup.

Wednesday 2nd October. Morning 18 Hole Medal; Afternoon—Prize distribution 3 p.m.

Handicaps

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

Executive Committee

A Meeting of the Executive Committee will be held at the Isle of Purbeck Golf Club, Studland, Swanage, Dorset on Sunday 29th September 1974 at approximately 5.30 p.m.

Trophies

May I remind all holders of trophies from last year's Tournament who are not taking part this year, to ensure that these are returned to the Isle of Purbeck Golf Club, Swanage, Dorset, before Saturday 28th September, 1974.

The Mommersteeg Seed Company would be pleased to give a talk with slides on modern cultivars of grass seed for golf courses. Interested sections should contact Mrs. Bradbury, Sports Turf Advisor at Mommersteeg International, Station Road, Finedon, Wellingborough, Northants.

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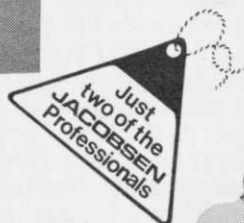
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The Mete-R-Matic from Jacobsen is the only spreader which drives the top dressing down to the base of the turf. It spreads a full 3' wide - at up to 225 feet per minute. And it spreads evenly, whether dry or moist, with fingertip control of application.



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MAINTENANCE MACHINERY AND SURFACE DRAINAGE

TOM MASCARO

Although not introducing anything new I hope to organise your thinking as managers of turfgrass areas how you can alter conditions to grow better grass by the use of maintenance machinery and cultural practices. The five major factors that affect surface drainage are:—Degree of Grade, the Sub-Surface Drainage, Soil Structure, Soil Texture and Thatch.

Degree of Grade & Sub-Surface Drainage

First it should be clear that the degree of grade, or slope, will have a profound effect upon surface drainage. The greater the degree of grade, the more rapid the run-off of excess water. Therefore it is vital for turfgrass areas that both surface drainage and internal drainage be adequate to remove excess water rapidly. The reason, of course, is that grass roots breathe, just as you and I, and all living things on this planet. Excess water, devoid of oxygen, prevents the grass plant from functioning. Severe damage and death of the plant especially at high temperatures will occur.

Degree of Grade is something you cannot alter very much once it is established and by and large you have to live with what has been done from the very beginning. The same applies to the drainage underneath. The tile drains which were installed, the type of sub-surface which exists under the grass you are growing, once it has been established, generally cannot be

altered very much unless you go to a tremendous amount of expense. So as Greenkeepers and Golf Course Superintendents you have a very small area to work in, and this is that upper layer we are all familiar with. Much can be done here and we will discuss this area under three headings, Soil Structure, Soil Texture and Degree of Thatch.

1. Soil Structure

By structure we mean how the soil is put together, how the particles are arranged. The sand, silt and clay of any soil is arranged in such a way so that it has 50% solid, 25% for air space and 25% for water. Modern irrigation systems supply the water. What we like to see under turf is a soil in good tilth, one which is made up of aggregates. We have spaces for air, water, fertiliser to move down and also to exhaust gases that are produced by the roots. We say that roots don't grow in the soil, they grow in the spaces within the soil and this is what we like to see under turf areas; this is what the farmer likes to have when he plants his crops.

Unfortunately, water is a lubricant and this can compact the soil quite easily. If you take a feather and stroke a wet soil you can seal it off very nicely. When we were children and made mud pies, we didn't make them by pounding the soil, we made them by patting the soil. So water

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NEW
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All controls are accessible from the operating position behind the machine and a self-release control lever is fitted for maximum safety. Depth adjustment up to 4 ins. is quick and simple without tools. There is a separate control for disengagement of the drive to the tines and quick transfer to the transport position without tools. Standard SISIS Auto-Turfman tines can be fitted giving the choice of slit tining, solid tining or hollow coring.

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