

ABOUT TURF DISEASE

By J. G. HALCROW, B.Sc., M.I.Biol.

DISEASE has been associated with grass for a great space of measurable time but has become more noticeable during the last 50 years because of the intensive cultivation and maintenance given to fine and coarse turf. New grasses and different variations of grasses may (as they are introduced into sports turf and so become exposed to the intensive measure of turf culture) bring new or different forms of disease. There can be no complacency about disease or its control.

Disease which, rightly so, is thought of so often as being caused by fungi, can be brought about by non-fungal agencies such as mechanical damage due to the smokes and dusts of industry, by severe frost, or scorch by excessive and injudicious use of fertilisers, fungicides and weedkillers, or by plant food deficiencies. All these and many more must be considered when a patch of dead, bleached or discoloured grass has to be examined.

Undesirables

The unsightly discolorations and scars on turf frequently indicate the presence of fungal disease, as also do the fine "cob-web like" strands of fungal hyphae which, in the dew of early morning, can be seen joining grassblade to grassblade. The discolorations and scars left on turf by fungal disease are unsightly and unwanted but it should be remembered also that disease, by weakening and "opening-out" the sward, will permit weed invasion and the entry of undesirable grasses such as annual meadow-grass. A radical change for the worse can be seen in the composition of a sward exposed to repeated attacks of fungal disease.

Diseases that concern us in the British Isles are *Fusarium* patch disease, *Corticium* or Red Thread disease, *Ophiobolus* patch disease, Dollar spot disease, and to a lesser extent *Helminthosporium* infections and those due to the presence of fairy rings. In other

countries these and many more diseases may be present, e.g. Brown Patch (*Rhizoctonia* sp.) and Copper spot (*Gloeocercospora* sp.)

Under British conditions, Dollar spot disease attacks turf of sea-marsh origin. The small bleached "dollar-sized" areas on the fescues join to form larger masses of bleached turf. The appearance of bleached areas on fescues could be mistaken for *Corticium* disease. However in the later stages of *Corticium* the hyphae become fused to form coral-red needles. Dollar spot disease has its own very characteristic horizontal yellow banding on the fescues.

Rings

Ophiobolus patch disease may flare upon areas of bent-grasses growing under conditions of excess surface moisture and alkaline pH. The active fungus shows itself in June as a red-orange ring, vigorously growing outwards and destroying the bent-grasses in its path. Inside the ring will be found the resistant plants such as annual meadow-grass, ryegrasses and pearlwort cushions.

Perhaps the commonest and most disfiguring disease of sports turf is *Fusarium* patch disease—the so-called "Fuzz". The faint brown patches of the disease quickly become orange-brown and wet in appearance. The infected grass dies leaving bare unsightly scars. In warm "muggy" weather this disease becomes active from its banana-shaped "resting spores".

Breeding

The control of disease so as to achieve a healthy sward need not depend always on fungicides, but will usually do so. It may be possible in future years for the plant breeders and geneticists to produce grasses resistant in varying degrees to diseases. However, cultural activities can do much to reduce the incidence of disease, i.e. switching will decrease *Fusarium* patch disease by removing moisture which is

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had been a member of the Association for a great number of years and always had the welfare of his fellow members at heart. Jim, who was at Royal Lytham for approximately 18 years was also at Southport and Airdale.

On behalf of all the members I would like to extend our deepest sympathy to the relations of Mr Marshall in their loss.

Autumn Tournament

Will all members who intend to take part, please let me know as soon as possible so that I can make suitable catering arrangements. This is really important, especially for the people responsible for the catering.

On behalf of all members I would like to wish Mr Ben Ellis the best of everything on his recovery from a recent operation.

Any member not receiving his journal should let either Mr Dix, the National Secretary, or myself know as soon as possible, when the matter can be rectified.

New Members

We extend a most cordial welcome to the following new members and hope they have a long and enjoyable association with the Section. H. Lawler, Bootle Golf Club, Liverpool, D. Macavoy, Royal Birkdale Golf Club, Southport; T W Hamilton, Royal Birkdale Golf Club, Southport.

NORTH-EAST

By D. Earsman

Hon. Secretary:
Arcot Hall Cottage
Dudley

Newcastle on Tyne 3

Annual General Meeting

OUR ANNUAL GENERAL MEETING was held on the 25th June at the Duke of Wellington Hotel, Newcastle, 18 members being present.

Our Chairman, J Simpson, welcomed the members and thanked them for their support during the last year.

Officers elected for the ensuing year: President, L. A. Jones, Vice-Presidents, C. H. Storey, K. B. Hood, J V Todd, F.R.C.S., A. Harrison, T Oliver, I. T Johnstone, K. B. Doyle, J McKenzie, K. J Hilton, D. Lowes, R. Atkinson Chairman, J Simpson, Vice-Chairman, R. H. Nicholson, Committee, T Nutman, L. Lowery, R. Raine, N Fraser, T Kirkley R. Derham, W Harker, H. Somerville, J Taylor D. Gray, T Oliver; Hon. Auditors, Messrs Marton, Hilton, Blakey; Hon. Secretary and Treasurer D. A. Earsman.

Our Chairman, on behalf of the Committee and Members, thanked our Hon. Auditors for their work with the accounts, L. Lowery for his help with the cards at our Golf Competitions and our Vice-Chairman, R. H. Nicholson, for his work with the sweep tickets.

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so essential to the fungus. Providing a free air flow across the sward will also deter the rapid multiplication of a fungal parasite. Obviously the factors associated with Ophiobolus patch disease, i.e. excess moisture and high surface pH, are capable of being changed thus assisting in prevention and control of the disease.

Fungicides fill the gap that may be created by human error, cultural error or plant response to environmental conditions. The judicious use of a good class fungicide, whether mercurial or non-mercurial should be a routine measure. Preventive spraying is better than control spraying although both are costly in money, time and labour. Fungicides have to be used at one time or another, so do "read the label" as the first thing and as the last thing do "wash hands and face", otherwise human disease may set in just as fungicidal scorch can cause disease on grass.

SITUATIONS VACANT

ASSISTANT GREENKEEPER REQUIRED on our new Course. No accommodation. Write stating age and experience, etc., to The Secretary Folkestone and Hythe Golf Club, Sene, Folkestone.

EXPERIENCED HEAD GREENKEEPER required. Good wages with house plus garage. Write, stating age and qualifications, to The Secretary, Betworth Park Golf Club, Reigate Road, Dorking, Surrey

HEAD GREENKEEPER REQUIRED by Frilford Heath Golf Club to take complete charge of recently extended 36-hole course. Fully experienced man—special knowledge of maintaining some 25 various types of machines. New house on course, rent and rates free. Apply with full particulars and salary required to Secretary, Frilford Heath Golf Club, Abingdon, Berkshire.

HEAD GREENKEEPER with outstanding ability required owing to retirement of present Head Greenkeeper after 35 years' service. Excellent salary Accommodation will be either provided or assistance given. Applications, in writing, giving details of past experience, to the Secretary, Wildernesse Golf Club, Seal, Sevenoaks, Kent.