

The Last Word

Send your letters to The Editor, Greenkeeper International, 13 Firle Close, Seaford, East Sussex BN25 2HL

Efficient team

I am most grateful for the help which we received from BIGGA members during the course of the most recent Open Championship. They did, as I am sure you know, provide a most efficient team of bunker rakers and their efforts were very much appreciated. They did, too, tend to stand out from the crowd with their lilac shirts, which I am assuming is now the official BIGGA colour!

I would be most grateful if you would convey our thanks to those of your members who were involved.

G E Watts, Secretary, Royal St George's Golf Club, Sandwich, Kent
(letter sent to John Millen, who forwarded it for publication — editor)

Excellent video

May I congratulate BIGGA on producing an excellent and most professional video — 'SETTING THE STANDARD IN SPRAY APPLICATION'. Not only will this prove to be a great asset in helping with the education of young trainee greenkeepers, but to some of the older generation also — those who came into greenkeeping later in life and who find it difficult to get time off (from some clubs) to attend college and lectures. I hope this video will be the first of many educational training films.

Martin Forrester, Course Manager, Stapleford Abbots GC, Essex

The hole facts

I write in response to Mr S Antolik's letter in last month's Greenkeeper International.

H Patisson & Co came under new management on July 5 1993 and I became the new managing director. Since taking over the company we have embarked on new strategies, better production methods and new quality checks. Obviously it is difficult to achieve this overnight. On Aug 11 1993 a letter was received from Mr Antolik pointing out that he was in possession of one of our hole cups measuring 111mm in diameter, contrary to the R&A rules of golf. We promptly replied to Mr Antolik, thanking him for bringing this to our attention, and took immediate action by making contact with our manufacturer.

After a short investigation we found a small batch of hole cups to have a diameter change from 107mm to 111mm, this a direct result of the compound of nylon utilised and a change in the coolant cycle, not the original tool that has been made that actually manufactures the hole cup. Our original patented drawings for the hole cup clearly show the diameter should be 108mm.

The problem has now been resolved and a new quality control procedure put into place to ensure that all hole cups meet the required 108mm as set down by the R&A. The small batch with the size differential problem have been sourced and returned to the manufacturer. I have also been assured by the Rules Committee that

the hole cups used at The Open, supplied by Patisson, measured 108mm.

I am pleased also to announce that our new quality controls are all part of procedures as the company embarks on BS5750. May I also point out that Mr Antolik is and has been a valued customer of Patisson since the early seventies.

M Hinch, Managing Director, Patisson & Co Ltd, Luton, Bedfordshire

More on mowrah

Re Jon Allbutt's letter (August) asking for information from 'mature' greenkeepers regarding the use of mowrah meal, although a mere 'young upstart' of 23, I believe I have something of interest.

The following was taken from 'GOLF COURSES, DESIGN, CONSTRUCTION, AND UPKEEP' Published in 1933: "Mowrah meal was recommended to be used at the rate of half a pound to one pound per square yard. After the powder has been spread it should be thoroughly watered in, even if rain is falling at the time. It is useless to apply mowrah meal when worms have been driven below either by frost or a prolonged period of dry weather. Nor is it advisable to use it while the grass is in a young and tender stage of growth.

Mowrah meal also possesses some slight fertilising value. This product is the residue from an Indian Bean, known as *Bassia latifolia*, after it has been crushed for the extraction of oil. There are many grades of mowrah meal according to the degree to which the residue is ground. Coarse grades are of small value for killing worms, and although samples of such grades are offered at cheap rates it is uneconomical to purchase them as they may only be 50% effective. Mowrah meal can also be used to eradicate small grubs that feed upon grass roots, the most common of these being Bibio."

It would appear therefore that mowrah meal was only a by-product from the mahua tree after mahua-butter was produced from its seeds. If the butter is no longer produced commercially this may explain why mowrah meal is no longer available. As we are now talking of an organic-based worm deterrent could this also explain why the Pesticides Safety Directorate were unable to help with information. Perhaps some investigation into those industries connected with the mahua tree would be more rewarding.

Jon Cole, Church Lane, Eaton Bray, Bedfordshire

Jon is not alone in researching mowrah, as Roger Tydeman's letter and extract (below) reveals. Further, readers may care to look back at 'How to make the worms turn' (March '93), The illustrations used are identical to those in the Carter's catalogue mentioned — editor.

1930s approach

During recent building work in our clubhouse, several books from the thirties were found, including Carter's 'Practical Greenkeeper' for 1936 and Sutton's Golf Course Catalogue for 1939. The information contained in the latter may be of interest to Jon

(and others) regarding mowrah meal.

As you can imagine, the books are of considerable interest to historians, featuring photographs of many well known courses (of the period) under construction.

Roger Tydeman, Croham Hurst Golf Club, South Croydon, Surrey

● *Extract from Sutton's catalogue:* 'Earthworms are present in almost every class of soil, with the possible exception of some of the dry peaty types. Their food consists mainly of decaying vegetable substances, but they also consume decomposing animal matter. Various kinds of leaves, grass stalks, and even twigs are drawn into their burrows to decay and provide food, but living plants are not attacked. When feeding, and also when burrowing, earthworms consume considerable quantities of soil. During the passage of the soil through the body of the worm the digestible matter is extracted, the indigestible residue being discharged when the creature visits the surface, thus forming the familiar worm casts. Even small stones and other solids are passed through the bodies of worms and brought to the surface.

The activities of earthworms are largely affected by weather conditions, and during dry or very cold spells they will descend to a great depth. Although regarded as terrestrial creatures, they are, to a certain extent, semi-aquatic. Moisture is essential to their existence and they are conspicuously active during wet weather, especially when the temperature is not very low. Being nocturnal in habit, worms are not often seen on the surface by day.

Breeding takes place chiefly during June and July, although some authorities state that it occurs in spring and autumn. The eggs (from one to three) are contained in a capsule or cocoon and are hatched in from two to three weeks.

While it is admitted that the operations of earthworms are in some respects beneficial to the soil, the presence of these creatures in golf and other sports turf can only be considered as a nuisance. Not only do the casts they create make the surface muddy and uneven, to the great annoyance of players, but they also provide a ready medium for the germination of weed seeds. Furthermore, weed seeds are brought to the surface by worms. It is sometimes noticeable that worms are especially troublesome on areas which have been limed, and it is also found that the worm population is greater in turf mown without the use of the grass box than where the cuttings are collected.

On some golf courses it is regarded as part of the regular routine to destroy worms in putting greens, and an increasing number of clubs now treat their fairways also, generally by means of mechanical pumping machines designed for applying the destructive agencies. To keep the fairways clear is sound policy, for players have a preference for such courses, particularly in the winter months. For many years we have been in close touch with various methods of destroying earthworms, e.g., by the use of Mowrah Meal, Lead Arsenate,

Copper Sulphate, Permanganate of Potash, Lime Water etc. There is little doubt that on courses where the water supply is restricted a convenient method of disposing of worms is by the use of Lead Arsenate. It must be borne in mind, however, that this is a scheduled poison and that a Poison Book Entry Form must be signed at the time of ordering. Although we have received reports from some golf clubs that rabbits had been found dead following the use of Lead Arsenate, no case of poisoning of human beings has yet come to our notice.

MOWRAH MEAL is the crushed residue of a species of Indian Bean known as *Bassia*. Not only is the product very efficacious in killing earthworms, which are brought to the surface, BUT IT IS OF AN ORGANIC NATURE AND POSSESSES FERTILISING PROPERTIES. Further, it is non-poisonous and easy to use.

An interesting fact. In the 1936 price list which Roger enclosed, the price of 'Carter's tested worm killer' (i.e. Mowrah meal) was quoted at £12 per ton, less than in the 1924 Carter list I have in my library, where the price quoted was £15 per ton. How many companies, I wonder, are today able to boast substantial price decreases? — editor.

Picture this

I must have been in one of my bolshie moods when I read the July issue, for I took exception to no less than three pictures within! Page 22: Why not a full group picture of the greenkeeping staff, instead of Japanese golfers? Surely the locals deserve better recognition. Page 19: The redesigned bunker at Sandwich is an eyesore, and the most un-natural man-made obstacle I've ever seen on a golf course. It's not the contractors fault, but the club's, and I trust they have considered the implications of 'accidents at work' by greenkeeping staff when trying to maintain it, or possible claims by golfers injured in an attempt to scale this height. Did you see Mike Harwood clambering about in there during The Open? He was lucky, someone was on hand to rake it afterwards, though ordinary golfers will take so long in restoring it that people waiting on the tee will need great powers of patience — I'd like to hear the greenkeepers reaction to this 'improvement'.

Page 19, lower: Presumably neither Rhone-Poulenc nor their advertising agency are familiar with the complexities of cricket score-boards, this one shows the score at 142 for 4, the last wicket having fallen at 122. So, twenty runs have been added since the fall of the last wicket, but one batsman has 23 runs to his credit, and the other one 48! Therefore the minimum score must be 122 + 23 = 145. There's one exception to this scenario. For a year's supply of Supertox I'll be happy to tell Rhone-Poulenc what it is!

Well, that's off my chest; you can't say that Greenkeeper International isn't perused in this household. Keep up the good work. Your July cover picture is delightful with such natural bunkers, looking an acceptable part of the golfing scene.

Peter Bown, Winterbourne Houghton, Blandford Forum, Dorset