

OUT AND ABOUT

cally against bugs and other pests), and in fertilisation techniques. On return to the UK he worked for a while in the landscape industry in East Anglia.

After a period of familiarisation with Brouwer machines and Turfland techniques, Rob will principally cover some of the North West area.

Mechanised core collection from Cushman

Greenkeepers can now collect their hollow tine aeration cores mechanically the new Core Harvester attachment for Cushman Turf Truckster vehicles.

Developed by Cushman and distributed in the UK by Huxleys Grass Machinery, the Core Harvester is suitable for mounting to both 3- and 4-wheel Cushman Turf Trucksters from serial number 8720 onwards, fitted with a short dumpbox or longbox with sides and tailgate.

Attached to the nearside of the Cushman Turf Truckster vehicle, the new Core Harvester comprises three principal sections. At the front, a pair of spring-balanced gathering blades, set at a 60 degree angle, glide across the turf channelling the cores into the mouth of a chain and flight elevator.

This lifts the cores from the ground, depositing them onto a rubber-belted cross conveyor which carries the "harvested" cores sideways to the Turf Truckster's dump box.

When the box is full, the operator shuts off drive to the Core Harvester's elevator and conveyor, raises the machine from the ground and drives to the dump site, where the cores are quickly off-loaded



The new Cushman Core Harvester.

from the Truckster's tipping box.

In tests conducted by its manufacturer, the attachment enabled one man to clear aeration cores from a 70000 sq ft (650 sq m) golf green in just 15 minutes, providing substantial savings in both time and effort over manual gathering and collection.

Drive to the Core Harvester's elevator and cross-conveyor is by individual hydraulic motors supplied by the Turf Truckster's internal hydraulic system. The elevator uses a low speed, high torque motor, while the conveyor has a variable speed motor, allowing the operator to increase or reduce its rate of movement to suit operating conditions and the volume of cores being collected.

In addition to the spring-balanced flota-

tion system on the core-gathering blades, the complete attachment is supported in work and maintained parallel to the turf by an adjustable shock absorber and pneumatic tyre positioned beneath the elevator.

The core-gathering blades can be offset to either the left or right of centre to facilitate a circular driving pattern.

Attached by just six bolts, and the connection of two hydraulic hoses, the new Cushman Core Harvester is priced at £1,850, plus fitting and VAT.

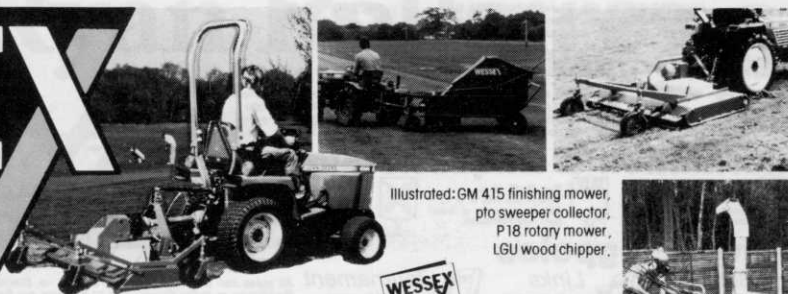
It is available now for demonstration through Huxleys Grass Machinery, The Dean, New Alresford, Hampshire SO24 9BL; Tel: 0962 733222, or by contacting the company's nationwide network of appointed specialist dealers.

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Illustrated: GM 415 finishing mower, pto sweeper collector, P18 rotary mower, LGU wood chipper.



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The Mole truth

Frank Taylor is a man with a 'hush hush' mission. The task is enormous - but the day of the mole is over. Their cover has been blown and the trap is set. No - this isn't a tale about espionage, but about those furry little 'critters' who can turn a snooker table lawn into a battle field overnight.

For sixty-year old Frank Taylor, of Pattingham, Wolverhampton, is a professional mole-catcher. Made redundant in 1986, Frank set himself up as a mole



catcher with the help of the government's Enterprise Scheme.

Frank's new found, and one could say down to earth career, has rescued a dying country art and his services are much in demand. On one 'under cover' job at Willey Park, near Broseley, Shropshire, he caught 561 moles in two months. Lord Forester had 150 acres of solid mole hills before Frank began, but armed with knee pad, trap and a skill that can catch a mole

in 2½ minutes, the numbers soon dwindled.

"I have trapped moles since I was a boy, usually for my family and friends in the countryside. The use of poisons for controlling moles has always repelled me", said Frank. "I think I have proved that trapping is the only effective method of mole control", he added.

Colorcoat tees off for golf market

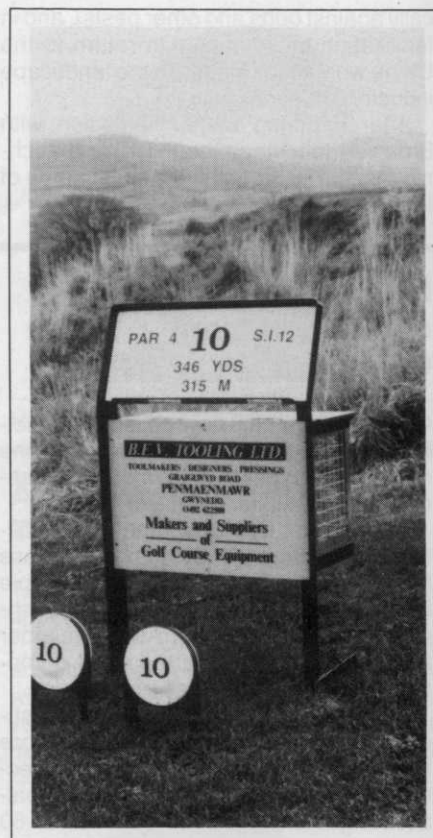
Golf course accessories including fairway signs and tee markers are now being fabricated by BEV Golf Equipment Ltd from Colorcoat HP200 supplied by Color Steels Ltd - major stockists and processors of pre-painted steel.

John Hall, managing director of Color Steels, says that such golf course accessories have traditionally been manufactured from formica or post-painted steel.

"However, it has been found that Colorcoat HP200 has several advantages over these materials. It is very cost competitive, offers exceptionally long life and durability (especially against weather corrosion) and is aesthetically pleasing.

Golf courses depend a great deal on easily recognisable, 'colour coded' signs and markers; Colorcoat HP200 offers total consistency in colour quality and high resistance to fading and weathering".


The new Colorcoat HP200 signs and markers are being offered by BEV Golf Equipment Ltd as complete advertising




Golf markers made Colorcoat HP200.

packages. Advertisers can place their promotional messages on signs and markers, so effectively targeting golf players, while giving clubs and courses the opportunity to upgrade their marking facilities free of charge.


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 The Rider Hole Cup R. & A. Approved Size. The best hole cup on the market today" (Derrick Ganning - The Belfry) **£4.99** each available in cartons of 10.

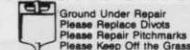
Teeing Ground Area Markers

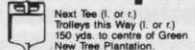
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MANAGEMENT

Using wetting agents for dry patch control

A review on the use of wetting agents by Neil A. Baldwin, plant pathologist, at the Sports Turf Research Institute in Bingley

Many greenkeepers are familiar with dry patch, a water-repellent condition of fine turf prevalent especially on links courses, however, this condition is also found on heathland and parkland courses. The symptoms of dry patch may be alleviated to a certain extent by applying wetting agents regularly through the growing season to aid penetration of water into affected turf. This article describes the wetting agents currently available and how to apply them effectively for dry patch control.

Wetting agents are essentially mild detergents which are designed to increase the infiltration rate of water into hydrophobic (water repellent) turf. Basically, they achieve this in two ways. Firstly, when water droplets come into contact with a hydrophobic turf surface they 'ball' up to form a large contact angle (Figure 1). If a wetting agent is added to the irrigation water then surface tension is reduced, a smaller contact angle is formed and consequently the water spreads over a greater surface area, thereby wetting more of the turf (Figure 2).

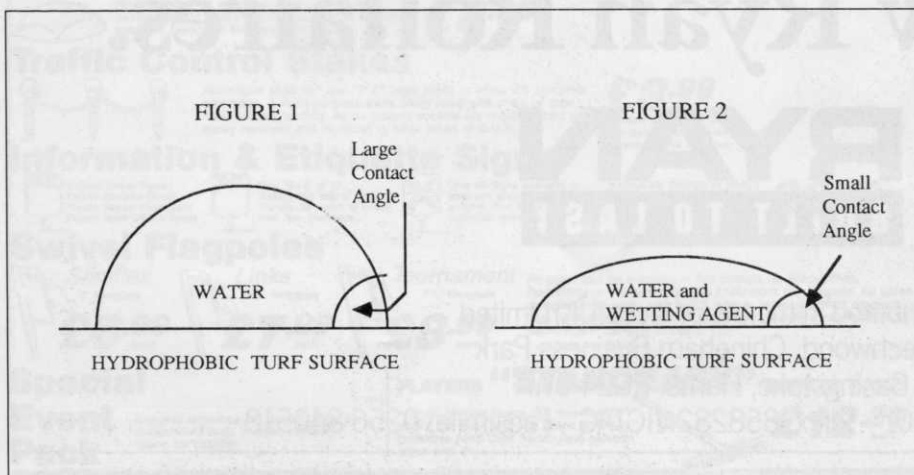
Secondly, the wetting agent, once it has entered the turf profile, can then bind to the organic materials shown to be responsible for creating the hydrophobic nature of dry patch areas. During subsequent irrigation and rainfall, wetting agents in the turf will re-dissolve to produce essentially the water-attractive turf surface originally created. Thus,



Irregular ring of dry patch affected turf (brown area) surrounding healthy turf (central green area).



Irrigation applied 3 hours before photograph was taken. Note water repellency of dry patch affected turf.



regular applications of wetting agents (as recommended by the manufacturers) will lead to an accumulation of chemical thus enabling water to penetrate more freely.

In the 1950's a mild detergent namely Teepol was commonly used on turf to aid water infiltration. Teepol is an **anionic** chemical which means that it has a strong negative electrical charge. Problems occur when anionic materials are applied to turf as they can, with frequent application, have an adverse effect on soil structure especially on soils with high clay contents. **Non ionic**

MANAGEMENT

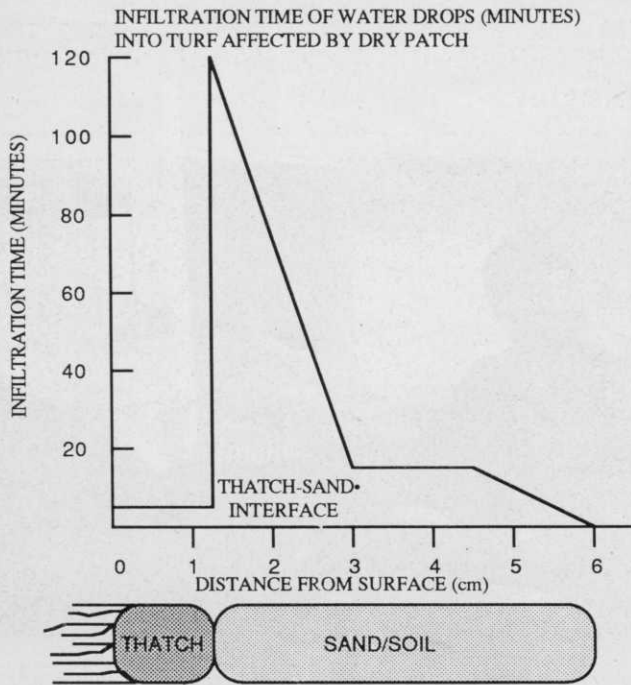


Figure 3. Just below the thatch layer is where the turf is most hydrophobic. Spreadable wetting agent formulations can be placed in this zone after hollow tining or Verti-Draining.

chemicals (which have a very small electrical charge only) do not affect soil structure and consequently may be used safely. For this reason most commercially available wetting agents are non-ionic forms.

Field trials at STRI and feedback from golf greenkeepers has enabled recommendations to be made on the timing of wetting agent applications for the alleviation of dry patch.

Generally, wetting agent applications should begin at the start of the growing season, before dry

patch is observed. If dry patch is a problem, then much can be gained from the routine applications through the April to October period, spraying the chemical at four to six week intervals. This should be combined with aeration using slit or chisel tines to aid turf penetration. In situations where dry patch is a major problem or where preventative applications have not been made, then treatment has to be more intense, and wetting agent applied every two to four weeks and forced into the turf by hand watering. However, it is extremely difficult to

obtain satisfactory results by making curative applications, emphasising the importance of a strategy based on prevention rather than cure.

To date, there has been little research comparing the relative effectiveness of the various wetting agents currently available. Research in the USA has identified Aqua-gro as being readily absorbed on to hydrophobic materials in turf which may produce lasting effects against dry patch. It is probable that Hydro-wet has similar properties. Also, Synperonic has for many years been recommended as a cost-effective wetting agent treatment. Recent research at STRI has developed, in collaboration with industry, a new wetting agent, namely Turfex, which has excellent penetrative properties into water repellent turf.

Spreadable formulations of Aqua-gro and Hydro-wet are also available. Spreadable wetting agents consist of the chemical together with a dry carrier, such as ground corn cobs, which can be easily spread on to large turf areas. These spreadable formulations can also be worked down hollow tine or Verti-Drain holes, placing the wetting agent where the turf is most hydrophobic - often just beneath the thatch layer (Figure 3). Even with extensive watering, this is often extremely difficult to achieve with liquid formulations.

Further information on dry patch and the use of wetting agents may be found in the following publications: Anon (1987) Dry Patch. *Sport Turf Bulletin* 159, 11-12. Baldwin, N.A. (1987) *Turfgrass Diseases*. Sports Turf Research Institute, 40pp, price £2.50.



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ON THE COURSE



Aeration is the secret at Churston

Forty years a greenkeeper, Gordon Child talks to Michael Bird about his work on the golf course and his devotion to the profession.

There's a saying at Churston Golf Club that the only place that is not aerated is the car park.

Well, some of the more wayward golfers had better start improving their game, because course Manager, Gordon Child, is well on his way to treating every part of the course from where a golf ball might be played. And that includes the car park, landing spot of the occasional badly-sliced shot from the 18th fairway.

This may be just another tall-tale

from the 19th hole, but it's thanks to the care and experience brought to the course by Gordon Child over the past nine years, that unplayable greens over winter or after heavy rainfall are now just a memory at Churston Golf Club.

Indeed, Churston is one of the few courses in South Devon able to boast that it rarely, if ever, turns golfers away due to the weather. And that is a fine testimonial to a man who has devoted a lifetime to improving the standing of the green-keeping profession and the educa-

tion and training of its members.

For apart from his daily course maintenance and management duties, Gordon is also the regional administrator for the British and International Golf Greenkeepers Association.

Gordon Child was appointed course manager at the 6,201 yard, par 70. Churston Golf Club in December 1980, following seven years at Moor Park, and before that at St Georges Hill, Weybridge.

The course now in his charge commands a superb position on the

ON THE COURSE



Setting the programme on the Watermation irrigation system.

southern shores of Torbay and, apart from the first and 18th holes, clings tightly to the coastline with the back nine played virtually straight into the prevailing south-westerly winds.

Six of the holes around the turn - from the sixth to the 11th - offer totally different characteristics to the remaining 12 on the course, being located on a thin, shaley sub-soil with very little cover before solid rock is encountered.

The other holes lie on deep, heavy clay, providing a year-round challenge to the greenkeeping staff.

"The terrain at Churston imparts the characteristics of both a heathland and a parkland course," explained Mr Child. "When one half of the course is wet, the other is much drier. And when the heavy soil dries out, the six holes on the shallow land are facing drought."

Fortunately, the experience and knowledge gained by Gordon over 40 years as a greenkeeper supplied a ready

answer: "There is absolutely no substitute for mechanical work on a golf course," he said. "When I arrived, there were parts of the course which had never been touched or where very little aeration was carried out. Now, there is virtually nowhere that we don't spike or slit to help keep the ground open."

Regular aeration is an absolute must to Gordon Child. "Greens, sur-

An acid soil to limit the spread of meadowgrass

rounds, tees and fairways all receive routine treatment," he pointed out. "The operation saves time and it saves money. Quite simply, it has to be looked upon now as a regular job on most courses because of the amount of golf played and the compaction that results.

"If golfers want to play all year round, we have to aerate all year round."

Irrespective of the hole, aeration of Churston's 18 greens is carried out every week, weather permitting, with one of the club's two Cushmans equipped with a variable-depth aerator fitted with 'V'-shaped tines.

Operating depth is set to 3in during the summer and 5in over winter.

Year-round aeration of the greens and their surrounds is accompanied by tractor-towed slit tining of the fairways during the winter months and occasional Verti-draining. The greens are also hollow or solid tined for both aeration purposes and when Gordon feels there is a need to correct pH levels.

"We try to maintain a slightly acid soil on the course to limit the spread of meadowgrass which tends to grow very easily," he explained. "A top dressing of sand and peat, plus iron, after tining helps keep conditions nicely balanced. And it assists in maintaining an open surface.

"Verticutting also helps and in

ON THE COURSE

summer we regularly slit and then verticut before mowing the greens.”

The Child philosophy on top dressing is “little and often”. Other than when correcting pH levels, Gordon Child also applies dressings to maintain speed on the greens, always matting in the mix, the majority of which is produced on the course to his own formula. Fendress makes up the balance.

Automatic watering of the greens is under the control of a Watermation system, updated in 1987 with the replacement of all components apart from the mains and storage tank. The system is said to work extremely well, especially on the greens with little sub-soil which could otherwise quickly show signs of stress in dry weather.

Weeds are not a major problem at Churston, with treatment against daisies on the fairways being the only regular reason for a sprayer being attached to either the Cushman or one of the club's two tractors.

This is carried out twice a year, with spot treatments as and when necessary. The greens are weeded by hand.

Despite the apparent low use of pesticides on the course, Gordon Child said that an immediate priority was the construction of a separate lockable chemical store, with shower. “I believe that this is absolutely crucial and would urge all greenkeepers to place it at the top of their equipment priorities list.” he stressed.

Apart from daily greens mowing during the summer, the fairways are cut twice a week using a ground-driven trailed set of five gangs.

“We're a bit out of date there,” commented Mr Child, “and I shall be looking to replace them with modern equipment soon. There are definite advantages to collecting grass cut on the fairways, and that is the direction in which I am looking.”

No reseeding has ever been carried out on the greens at Churston as the club does not seem to have a problem with either regrowth or re-establishment after winter or dry periods, due to a combination of good drainage and regular watering.

Mr Child admitted that the pre-



Gordon Childs pointing to the 13th green where trees have been removed to improve turf growth and drainage.



Gordon Childs in his office (at home) with a plan of the Churston Golf Course.

dominant meadow grass had been difficult to reduce, but pointed out that he had managed to raise the percentage of bents and fescues through regular aeration, better drainage and a reduction in fertiliser usage which, he said, had been too high in the past: “The course was literally overfed.”

Drainage improvement has been one of the major areas of attention on the course since Gordon Child's appointment.

“Even fairly light rainfall caused the bunkers to fill up with water and overflow onto the greens,” he

explained. “We have drained a number of bunkers and also around the edges of greens to eliminate most of the problem areas.”

Gordon Child and his staff of four, headed by assistant, David Prosser, have also been busy on other parts of the course, with at least one important project being completed each year.

Last winter, with advice from golf course architect, Fred Hawtree, the team removed a rock bank adjoining the 8th green, setting in three new bunkers in its place.

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ON THE COURSE

inches off line could strike the bank and be "kicked off" into undergrowth, never to be found again. Now, it is just another challenging golf shot, with the alteration much appreciated by members.

Projects in other years have involved removing trees that were shading a green, making it unplayable in winter, to let in light and air and improving the green "beyond recognition"; building new tees in positions designed to both enhance and encourage golf shots; and altering the line of a fairway to keep play away from a busy road.

Despite bearing the title course manager, Gordon Child is very much a working greenkeeper. "That is the only way to keep in touch totally with what is going on," he said. "The club management has been tremendous and we have established an excellent relationship. They respect and appreciate what we are doing on the course."

This understanding has been

New tees designed to encourage golf shots

most important to Gordon for his work with BIGGA.

Although he says that he has found it easier to relax at the end of the day since he arrived at Churston, Gordon Child's work does not finish when he locks up the sheds at night.

As administrator for the South West and South Wales region of BIGGA since its inception, he is totally absorbed in the education, training and welfare of greenkeepers within their chosen profession.

"The formation of the Association is the best thing that has happened in our industry for many years," he said.

"Although funded by headquarters at the start, the regions are now looking to stand on their own feet. For that reason, we are hoping that our first Turf Care Trade Exhibition to be held at Long Ashton Golf Club on 24th May will be a success for the region and become an annual event."

Ever generous in his praise, Gordon Child admits that he could not have coped with the ever-growing paperwork and responsibilities of his full and part-time jobs without the invaluable help and support of his wife, Marion.

And yet, with all his interests, Gordon Child still finds time to relax. An ability which he believes is essential to all involved with a job where pressure and pride go hand in hand.

His great passion is for horse riding, so if you can't find Gordon Child on the golf course or in his office, look out for a windswept figure galloping along the cliff top. But there again, he could just be in the car park at Churston Golf Club checking for compaction.

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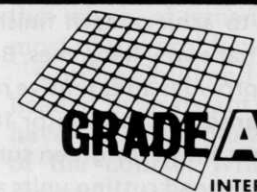
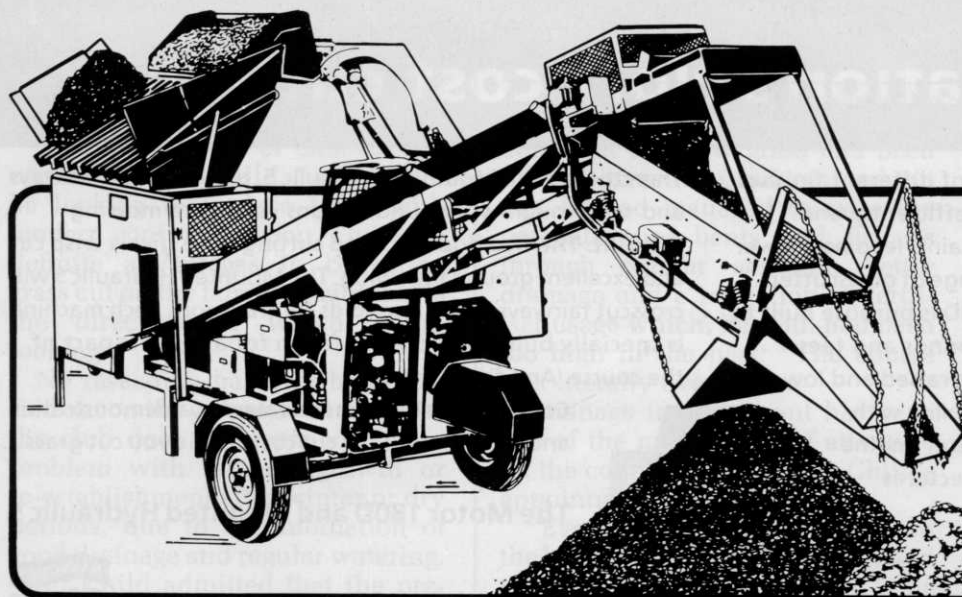
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