What people are saying about the BIGGA Supervisory Management Courses – to find out more contact Ken Richardson on 01347 838581. More information in next month's *Greenkeeper International*

"Very enjoyable and beneficial"

"Brilliant – enjoyed every minute" "Extremely worthwhile"

"An excellent introduction" "200 greenkeepers can't be wrong" "What a confidence booster"

"Fast, punchy, entertaining, fun, informative" "Let's have more"

Best course yet

The purpose of this letter is to pass on my feelings regarding the Supervisory Management Course which I attended last October at Elmwood College in Fife. My immediate response to reading the application notice in Greenkeeper International was that it seemed such good value for money – $\pounds 50$ for a two-day course – which included meals and accommodation ($\pounds 150$ for non-members who find it difficult to justify their membership fee!.

The subjects covered during the course related to the abilities necessary to create enthusiasm, leadership and motivation (read any advertisement in Greenkeeper International and you will find these immortal words). On arriving and meeting the rest of the the class, which mainly consisted of assistants (the gaffers presumably know it all already!) I found everybody to be very pleasant and friendly.

Enter our lecturer, Rod Clark, warm and cheerful, and in no time at all he had set a comfortable pace that was appreciated by the entire class. The learning process had begun and, indeed, it continued over the course of the next two days. From the presentation of the hand-outs, to the plentiful supply of note pads and even the sharpened pencils everything was considered to be very professional and was appreciated by all.

I found the whole experience to be extremely worthwhile and I would like to thank the BIGGA Education Department and the Golden and Silver patrons for what I feel was one of the best courses I have every attended.

Ronald Bunting, Head Greenkeeper, Kilmacolm GC

PS Why is there no Scottish venues arranged for 1996? Editor's Note: The Scottish Region asked for their courses to be held in October '95. Further courses planned in October '96/ Spring '97.

I've been Franked

Two days in February I was given the opportunity to become Franked.

You may well say what is he on about being Franked. Well for you people out there who do not have a clue what I am on about I will let you into a secret.

Frank Newberry runs a training

and consultancy business and one of his contracts is with BIGGA.

Just recently I was on one of his managment courses held in Brighton. It was spread over two very full but highly informative days.

At 9am, after we checked into our rooms at the superb Old Ship Hotel we gathered into our group of 14 pupils and found our seats in the conference room (class room). Frank then introduced himself and we were away.

Over the next 48 hours I found out more about myself as a manager than I have in the last three years. Not only do you learn about management but you also get a small insight into body language and public speaking. The majority of the time is taken up learning new techniques to make you a more confident manager.

Team work features very highly throughout the course as does the art of conversation. As part of the course you finish up by making a presentation which includes putting together a 30 second video which everybody found immense fun to do.

At the end of the two days everyone had got something out of the course so this can only be a good thing. What also makes it a better deal is that it only cost my club around £50. This can only come about with generous support that BIGGA receives from its Golden and Silver Key members.

Frank runs a variety of courses for BIGGA so don't miss out on an opportunity to get yourself Franked.

Jonathan Budd Deputy Head Greenkeeper, Ham Golf Club

Stimulating

Having recently attended the Regional Supervisory Management Course at Brighton I feel I must write and congratulate you on the interesting and stimulating two days.

As well as introducing new management techniques Frank Newberry's infectious enthusiasm ensures that all participants left the sessions with increased confidence in their own management ability.

Running these courses locally and at such low cost (thanks to Golden Key contributers) speaks volumes for the Association's Education Initiative. **Roger Tydeman**

Selsdon, Surrey

Sowing the seeds for

What does it take for new grass seed to reach the stage where it is ready to be launched on to market place? Gerard Van 'tKlooster, pictured right, reports.

The development of a new grass variety takes 15 years and can take the breeder around the world in the search for the perfect species for certain conditions.

In breeding groups of plants of the same species are used in order to achieve as great an amount of variation as possible – variation is the most important element in breeding.

Plants living in natural conditions are affected by a large number of stress factors such as climate and environment. The origin for the genus Lolium has not been precisely pinpointed. It is thought to have come from the Mediterranean but another possibility is that it came to the UK from Wester Asia.



Lolium perenne (Perennial ryegrass) is an especially important species in developing lawn grasses and knowledge about the best possible growing area for individual species and biotypes, as well as the borders within which these grasses occur, provides the breeder with information for targeted breeding.

It is up to the breeder to

achieve the best combination in the new varieties and you can find grass species growing naturally all over the world.

The most important species in breeding cool season grasses like perennial ryegrass (Lilium perenne), smooth stalked meadowgrass (Poa pratensis), fine fescue (Festuca rubra spss) and Bent grass (Agrostis) it is ideal to learn more about, and collect, the good plants with a winter hardiness found in Scandinavia and Eastern Europe.

Likewise those with a good drought tolerance which are found in Italy and France or good wear tolerance which are found on paths etc.

The collection of plants occurs at one spot where between 30 and 50 ecotypes of a species are collected to ensure that all possible combinations and specialities from that site. This is the initial selection. The big difference between this and collecting for a gene bank is that gene bank officials like to collect all the genes from a site while the breeder looks for specific genes.

The entire plant is considered and not just its seed production – the speed of growth, the amount of tillers on a plant and the speed of spread are all important.

Once at the nursery of the breeding station the various types are selected and divided into three plants and a clone is planted out in the greenhouse. This constitutes the second selection. In the early spring we select the fast growers from the greenhouse and plant outside. The plants are harvested in groups of half-sibling families - mother is known, father is not - or as total populations. This decision depends on such factors as the amount of seed and the breeding schedule.

The next year the seed comes up for variety testing and is assessed as half-sibling family. After undergoing one or two years of variety testing in turf tri-

Buying time is a whole new ball game

Force Limagrain introduce Fortiva – a new and unique concept in applied seed technology. Three fungicides and a biostimulant have been locked into a unique polymer coating to give fast, disease free establishment.

More turf, quicker turf Fortiva significantly increases the rate of grass establishment. Fusarium and Pythium control increase plant survival, producing longer-lasting turf.

Extended renovation period Fortiva has a unique blend of ingredients that increases the grass seeds ability to produce plants. This allows earlier and later renovation, and improves success from 'in-season' over-seeding.

Technically proven Extensive independent disease and establishment trials over 4 years have shown significant benefits, even where disease has not occurred.

Versatile Fortiva has been trialled on perennial ryegrass, red fescue, smooth-stalked meadow grass and bent grass.



REF Force Limagrain Ltd, The Old School, High St, Fen Drayton, Cambs CB4 5SJ. Tel: (01954) 232020

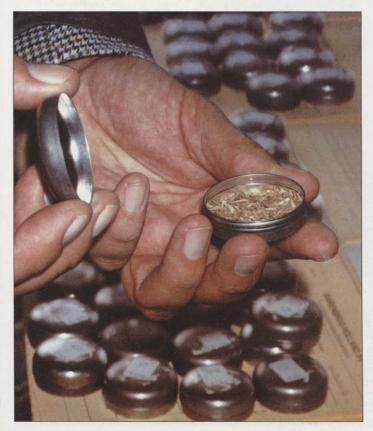


the grass of tomorrow



als, a selection is made and the best plants of one group are place with the best group of another in turf plots around a foot square in size. In every trial there are some control varieties and there are three plots of every sample. The same tests are carried out in the Netherlands, Germany and France whenever possible.

In these turf tests the breeder gets data for shoot density, wear tolerance, winter hardiness, spring performance and the gen-



eral turf impression. By making comparisons from the trials it is possible to decide upon the best sample for different climates or on which samples are best on all trial sites.

After these have been selected we bring the best together in a new isolation. This is to prevent pollin from other samples corrupting these elite samples. We use rye for isolations as during the flowering period of May and June it is two metres tall, much higher than the grass culms and it therefore acts as a barrier for the pollen and prevents it from blowing about.

The best populations are harvested that year and the seed will be used on more trial sites in bigger plots. By now the elite populations have proved that they are better than the control varieties which are existing varieties. For a seed company the new variety must be better than the best variety the company already has.

Seed yield is also very important and this is also tested on the new varieties while disease resistance is another important consideration.

For some diseases – brown patch, Pythium, Dollar Spot – there are laboratory tests or for others – Crownrust – there are greenhouse tests but the best way to find out the disease resistance is from the data of the trials. The only problem then is that the breeder never knows when a disease will strike. Therefore you need more trial sites. There is the same problem testing for winter hardiness but you can solve it by a trial in a mountain area.

For specialised uses we use a machine that "plays football" for sports fields and when golf use is the main goal we use a green mower and cut back to four or five millimetres. This is even possible for some strains of perennial ryegrass and looking into the future we see a place for perennial ryegrass on the golf course.

In the USA and Germany it is already quite normal to use perennial in the mixtures but in the United Kingdom we are afraid to use the words perennial ryegrass. People there think of the S-23 types of perennial ryegrass and forget that there have been real amenity types of this species in existance for 25 years now see the STRI Turf Grass Seed List. Some of the better varieties can exist under close mowing, therefore are suitable for fairways, tees and even the greens. Perennial ryegrass is excellent for overseeding so it can rival annual meadowgrass.

What about a good equal green with perennial against a patchy green with bent and Poa annua? It would be nice to use the best grass but not just because our father and our father's father used it but because under the circumstances the species is the best.

After three years of testing the breeder can make a decision. If a new variety is better than the exisiting variety the first multiplication can start up - a planted multiplicaiton for a small harvest of about 30-70kg or seed. Part of this will be used for the next generation of the variety, a part for applications in the different countries of interest and a part for storage. In a controlled storage room the seed can be stored for 15-25 years. From planting to harvesting of the variety it takes 16 months.

The official application takes two to six years and in that time the multiplication to certified seed takes place.

Gerard Van 'tKlooster is Head of Breeding for Barenbrug in Holland.

New on the market

A new method of anchoring divots to aid rapid root recovery was shown at BTME for the first time.

Turf Tie Divot Anchors were designed primarily for fairways but can also be used on tees to promote recovery of mature turf.

One of the discussion points raised at Harrogate was that golfers could anchor the turf themselves after taking a substantial divot after loading up from a container of Divot Anchors in the locker room.

Their use during the winter/ spring period will help to reduce reseeding.

The results of STRI tests using this technique will be released later.



Damaged caused by moles and rabbits can be reduced thanks to **Rentokil**'s applicator which can apply Phostoxin tablets quicker and more safely.

The applicator is lightweight and made of clear plastic so the tablets can be seen being dispensed with a push button action.

After placing the tablet in the hole the tablet will react with atmospheric moisture to produce the lethal gas that will spread through the runs and burrows.

For further information contact John Dickson, Rentokil Industrial Products, Rentokil Ltd, Fencourt, East Grinstead, West Sussex Tel: 01342 833022.

Tildenet Ltd has produced a portable green which can be assembled in an hour, relocated in half an hour and doesn't need mowing.

The Epic is a six metre by 10 metre structure covered in a green netting simulating a green. With bunkers, contours and a flag it has all the features of a green and is ideal for practice.

It doesn't cause damage to the grass as its net covering allows air and light to penetrate.



Force Limagrain has introduced Fortiva, a new seed coating which it claims will cut the time needed to renovate greens and tees by at least two to three weeks.

In independent tests by the STRI Fortiva improved new grass cover by an average of 30% after six weeks.

In a second, on-going, test it kept turf seedling disease down to a minimum. Fortiva contains three fungicides each having a different way of attacking seedling disease. It also contains a biostimulant to help improve natural early season grass growth.



John Deere celebrated the 10th anniversary of its grounds care equipment business in the UK and Ireland with the launch of a new Roberine mower.

Aimed at the golf course and local authority user the self-propelled 1510 wide-area mower has a 2.85m cutting width and a mowing capacity of around 3ha/hr.

The five rear-discharge rotary cutting discs are split across a front-mounted three disc deck and a twin-disc unit offset to the right of the machine.

This allows the mower to reach difficult sites more easily, for example under bushes, alongside ditches and streams.

The 1510 features at 41hp Peugeot diesel engine, power steering and hydraulic mower drive. Options include a comfort cab and four-wheel drive.

Basic price of a new 1510 mower is £28,151.

Fen Turf Dressings Ltd has introduced a new soil-less top dressing – Fendress Greentop on to the market. It is a new top dressing for fine turf which offers greenkeepers the benefits of "state of the art" green technology. The humus content is neither peat nor soil but a specially selected composted greenwaste thoroughly cleaned and screened by a screening system for which a patent is pending. This is then blended with a selected Leighton Buzzard sand and lignite.

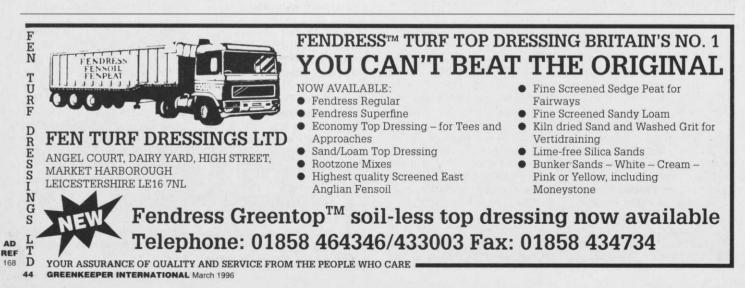
Anyone seeking further information should contact Fen Turf Dressings Ltd, Market Harborough Tel: 01858 464346.



Rigby Taylor has launched a new generation herbicide developed specifically for the Amenity and Sports Turf market.

Greenor joins Bastion T, the first of the new generation of turfgrass herbicides developed by DowElanco. Both are based on micro-emulsion technology which increases chemical activity, simplifies application and improves spray performance.

Sold exclusively by Rigby Taylor as part of its Advanced Technology Products range the sister products both give first rate control of a wide range of broad leaved weeds by inhibiting plant growth. The herbicides are translocated deep into the wet root system giving excellent kill without creating burnt, discoloured patches in the turf.



Both offer high levels of control of a wide range of problem weeds including clover but Bastion T shows particular strength on Slender Speedwell and Plantains while Greenor is outstanding on Daisy and Buttercup.

"Product trials show that both herbicides are highly selective and have excellent grass safety," said Clive Williams of Rigby Taylor. "With recommendations for use on new grass as early as two months after sowing, either product can be used over the entire area of turf even on worn patches that have recently been renovated."

Rigby Taylor has also launched Mascot Breaker, an advanced wetting agent for use on sports and amenity turfgrass situations.

It has been formulated using the latest generation of surfactant technology and has been designed to provide a rapid and long lasting effect on Dry Patch, drought stressed turf and water repellent soils. Independent trials have proved significant increases in both the speed and depth of infiltration of water through thatch and compacted soils giving excellent re-wetting of the treated turf.

It is available in liquid, granular and tablet forms.



Catalytic converts have been introduced on **Jonsered**'s GR36, GR32D and GR32L professional brushcutters.

The emission of environmentally hazardous fumes is significantly reduced: hydrocarbons by up to 60%, carbon monoxide by up to 40% and nitric oxide by 60-70%. Exhaust smells are also eliminated and unnecessary health risks are avoided.

Literature on these products are available from Partner Jonsered Power Products UK, Oldends Lane, Industríal Estate, Stonedale Road, Stonehouse, Glous, GL10 3SY. Tel: 01453 820305.



Echo has introduced The Arc for the '96 season. A 51 inch shaft gives extra reach and together with the 90 degree articulated gearbox reduces the need for standing on ladders.

The 20 inch double reciprocating blades can be set through 15 different angles from 0-90 degrees to allow the tops of hedges to be cut from ground level.

It is powered by a 23.6cc dual piston ring Echo engine with a commercial air filtration system, electronic ignition and diaphragm carburettor.

Cost is £595 plus VAT.



Amenity Technology Products Ltd has launched a special offer in relation to its Drencher Gun which will run for all of 1996.

Every Drencher Gun purchased will be accompanied by a case of six Drencher pellets – either NEW 123 Turf Nutrient Formulation and Wetting Agent or the Standard WA, Wetting Agent – for only £1, a saving of up to £60.50.

For further information see this month's reader reply card or contact Amenity Technology Tel: 01734 510033.

A grass seed catalogue for the amenity and sports sectors has been launched by Mommersteeg containing full details of all **Mommersteeg** varieties and mixtures and with colour coded sections to aid selection.

Mommersteeg has extended its product range for '96 and the catalogue includes details of four new varieties – Amadeus, Gerona, Dancer and Mocassin as well as a new general landscaping and low maintenance mixture MM21 and five re-formulated mixtures.

Copies of the catalogue are available free from Mommersteeg International , The Anderson Centre, Spitfire Close, Ermine Business Park, Huntingdon, Cambridgeshire PE18 6XY Tel: 01480 459500.



Gannon has introduced the AE-40 Aera-Vator as an addition to the Aera-Vator range for the smaller compact tractor of 13-20hp.

The principal of operation is as

the rotors roll the pto powers the tines to vibrate rapidly in a burrowing motion to penetrate and fracture harder soils with less weight.

It costs £2,550 plus optional rear roller £256 plus VAT.

The **Huxley** Grainskeeper brush is now available for use with suitable compact tractors and turf vehicles as well as a wide range of ride-on greensmowers.

Designed for quick and efficient integration of top-dressings on greens and for effective brushing and grooming of most sports turf areas the Grainskeeper is also an excellent tool for maintaining artificial playing surfaces in top condition.

The Grainskeeper is hydraulically driven and can be mounted on the front on Huxley, Toro, Jacobsen and John Deere greensmowers as well as on the rear or suitable compact tractors, Cushman Trucksters, Toro Workman trucks and Huxtruk Turf Vehicles.

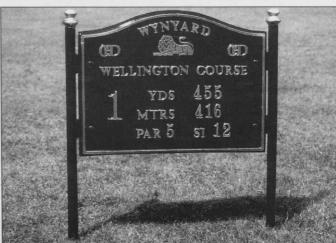


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The Scotts company is a leading researcher, manufacturer and marketer of products for consumer, do-it-yourself lawn care and gardening, professional turfcare and commercial horticulture



Above, the 13th at The Duke's Course and below, the 18th Pictures by Brian Morgan

Aussie rules The Duke's Course

Australian Owen Browne is the Course Manager at St Andrews latest course the inland Dukes Course.

There are two things unusual about the latest St Andrews golf course to join the most illustrious stable in golf. The first is that, whisper it, The Duke's Course is not a links. It's not even particularly close to the sea being at least four or five miles from the famous piece of land shared by the Old, the New, the Jubilee, the Eden and the Strathtyrum courses and the second is that the Course Manager, Owen Browne, is not Scottish. He's not even British, but an Australian who until a couple of years ago was an assistant greenkeeper in his native Melbourne.

It may appear to be the greenkeeping equivalent of Coals to Newcastle but Owen has earned his chance having worked his way up from picking up stones when construction was in its early stages through the growing in period and was Head Greenkeeper by the time the Duke of York performed the opening ceremony just before The Open Championship at its more famous near neighbour – why do we always end up mentioning Neighbours in anything to do with Australia?

"It is something I could just dream about. It has exceeded my expectations I mean two years ago I was still an assistant greenkeeper



and now I've leapt up to one of the top jobs and it's very exciting," says 29 year-old Owen.

"I came over originally for a cousin's wedding in Ireland not intending to get a job on a golf course but I'd heard about the work of Thomson Woolveridge at St Andrews, came over and asked about a job."

The course is the first in the United King-

dom to be designed by five times Open Champion Peter Thomson, whose Australian link was carried on by Owen. Built on parkland a few miles inland of St Andrews at Craigtown The Duke's proffers many views of the famous old town from its high vantage points and is a course which gives the most accomplished of player an exacting test as well as an

'I'm a big fan of the greenkeeper education system in Australia. It is all done in great depth'

alternative to traditionalist Andrews links golf. "I came to work as a labourer and picked up

stones for the first three or four weeks," said Owen.

"I was later put in charge or growing in and worked closely with the construction supervisor who directed me in how to work in the Thomson Woolveridge style of construction," he explained.

In the next phase Owen worked with the landscaping team using knowledge acquired as a gardener in Melbourne to carry out work.

"I became Head Greenkeeper in November '94 but they didn't just hand me the job. It was advertised in Greenkeeper International and I believe a good set of candidates applied. When the course was handed over to the Old Course Hotel my title was changed to Course Manager."

A look at Owen's career takes us to the other side of the world and Melbourne where he first got an apprenticeship as a gardener with a local authority.

"I was awarded a scholarship to go over to New Zealand and spent a year working for another authority gong everything from tree surgery to nursery and forestry work and turf management.

"When I got back I was more interested in getting involved in turf management and got a job as Employee in Charge (Head Greenkeeper) at City of Northcote nine hole municipal course. After four and a half years I realised I didn't really know enough to go anywhere or have the experience to manage a course so I decided to take a step back and go to Kingston Heath which is ranked highly in Australia as an assistant.

"I spent two years there and studied under Graeme Rand, recognised as one of the leading Course Superintendents in Australia and did a two year course in Course Management..

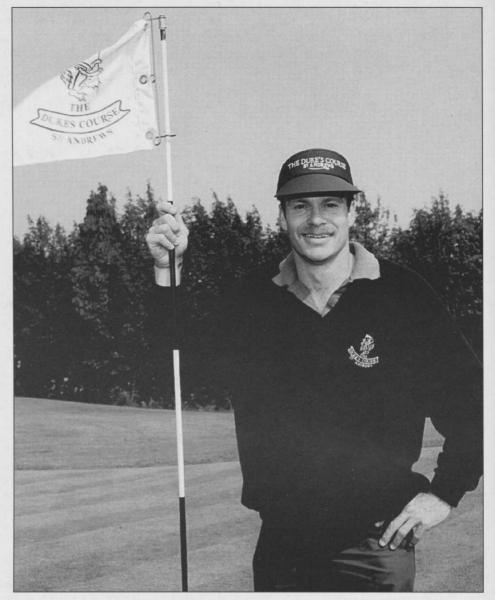
"I'm a big fan of the greenkeeper education system in Australia. It is all done in great depth. You'll concentrate on nutrition and only nutrition and are not distracted by anything else at the same time," he explains.

The new Duke's Course is typical of the Thomson Woolveridge style of design.

"Their courses are noted for their fairway mounding and the mounding off to the sides of the fairways. It is links style in a parkland setting and we have the pot style bunkering set into the mounds. The bunkers don't stand out but just sit in the mounds like you would find on a links."

Owen has a staff of seven including a mechanic and they will be heavily involved in putting in the drainage system as the course settles down.

"The principle is based on the run-off system of drainage. The water sheds off from the



fairway and is then collected or spread out into the rough. We do have a lot more drainage to put into the course over the next few years. You can't do it on a clay course effectively and properly without mixing in clay with the drainage material. It just clogs the system after a while.

"You need to have the course there and then put your drains into the worst spots when you know where they are otherwise you might be putting in drains you don't need," said Owen.

Surprisingly the drought which might have conspired to help make the course miss it's official opening, on the Sunday prior to the Open, didn't slow the final stages of the course's construction.

"The drought didn't cause particular problems but a headache was caused by the fact we couldn't transfer enough water from our bottom dam to our top dam quickly enough. We were worried we might run out because for every days water we used we needed two and a half days to pump it to that dam. We do have our own bores and a wall to wall Watermation irrigation system."

Owen's work at The Duke's has brought him into contact with one of Australia's sporting icons.

"Peter Thomson was a legend a hero to me and the first time I met him he knew me – he'd obviously asked someone who I was. He came into the room and said is anyone here I haven't met yet and there was a dozen guys from the construction crew and I stuck my hand up a bit sheepishly. He said 'ah yes you're Owen aren't you?' That's the sort of style he's got. He makes you feel very comfortable.

"On a work front, he tells you what he wants and if it doesn't fit into the maintenance practices or is not possible to implement he will agree to change it. He's a great listener."

He even helps prevent Owen for becoming too homesick.

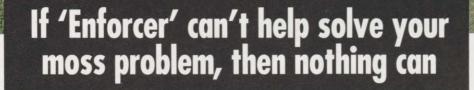
"When he comes over from Australia he always brings an Aussie Rules football magazine for me and sometimes a video as well."

One of the highlights of Owen's career so far was the opening of the course by HRH Duke of York just prior to The Open last year.

"I was very nervous that morning and I don't normally get nervous. There was nothing which could have gone wrong but I was really tense. It went so well though and I was standing on a grassy mound clutching my girlfriend's hand and I was almost squeezing the life out of it." Owen has integrated into the local community so well his girlfriend, Sandra, is the sister of Mark Brunton, Course Manager of the New Course at St Andrews.

He also does his bit for the education of young British greenkeepers.

"Ian Bishop from Elmwood brings a bus load of students to look over the course and it's great for me because it means I can improve my public speaking a bit."



- ALL SELONG

'Enforcer' liquid moss killer is a special chelated formulation of dichlorophen to enhance its performance. This enables the product to stay in solution, particularly in hard water areas, so ensuring a high level of efficacy.

'Enforcer' controls moss on golf greens, bowling greens and other amenity turf areas without blackening the turf.



It can be used at any time of the year, providing conditions are moist, and will kill moss and fungi on hard areas like pavements and car parks without damaging the surface.

And remember, empty 'Enforcer' containers can be collected and disposed of free of charge on the UK mainland using the Miracle Professional Collection Scheme on 0345 125398.

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