FULCRUM BLADE™ is a totally new generation of supplement for your turf. Developed and marketed by Cargill plc, one of the world’s largest fertiliser companies, Blade™ is based on the new technology of carbohydrate nutrition.

It works by supplying the naturally occurring mycorrhiza in the soil with a readily available source of energy.

The results seen by a whole range of users from golf courses to turf growers are a healthier and stronger plant with far greater tolerance to drought, due to the increase in root mass, leading to more efficient use of the other inputs applied.

Recently launched in the UK, this new technology is one of the most cost effective, natural ways of optimising the performance of your turf.

Please consult one of our distributors for details or contact Cargill on freephone 0800 919187.
The Fund provides the key to the future for greenkeeper, golf club and course management. Individuals and companies can join the Golden and Silver Key Circles. For details contact BIGGA on 01347 838581.

Golden Key Circle Company Members
Amazone Ground Care, Barrowby, Lincoln, NK14 5QG
CHF Equipment Ltd, Barrowby, Lincoln, NK14 5QG
Culcheth Turf Machinery Ltd, Huyton, Liverpool, L36 3HQ
Fenway Turf, East Rainton, Houghton, Durham, DH4 7LP
Green Amenity, Gedling, Nottingham, NG16 6JL
Levington Horticulture Ltd, Headland Road, Lostock Hall, Preston, PR5 6DQ
Pattison Amenity, Kirkcudbright, Dumfries, DG6 5JE
Poulenc Amenity, Rigby Taylor Ltd, Ritefeed, Stourbridge, DY8 1YD
Ransomes, Yarmouth, Norfolk, NR30 1NU
Rhône-Poulenc Amenity, Rygby Taylor Ltd, Rookiehead, Salford, M6 3JW
Silver Key Circle Company Members
Avoncrop Amenity Products, Lambeth Road, Teddington, Middlesex, TW11 8ET
Fenncur UK Group Ltd, H Pattison & Co Ltd, Holsway, Stourbridge, DY8 1YD

The official monthly magazine of the British & International Golf Greenkeepers Association
Editor: Scott MacCallum
Advertising: Sales & Marketing Manager: James McEvoy Senior Sales & Marketing Assistant: Jenny Panton Tel: 01347 838581 Fax: 01347 838864 E-mail: bigga@biginternet.com
Design: Design & Production Editor: David Emery Printing: Hi-Tec Print, Units 9-10, Houghton Road, North Anston Trading Estate, North Anston, Sheffield S25 4JJ Tel: 01909 568853 Fax: 01909 568206
Origination: R C Bailey & Sons, Half, White Cross Road, Haxby Road, York YO3 7JR Tel: 01904 650480

You can contact The British and International Golf Greenkeepers Association in any number of ways.
Post: BIGGA, Aldwark Manor, Aldwark, Ains, York, YO61 1UF Tel: 01347 838581 Fax: 01347 838864 E-mail: bigga@biginternet.com
Internet: www.bigga.org.uk

Your next issue of Greenkeeper International will be with you by June 4

Regulars

News
Pages 7, 8, 9, 10, 11, 12

13 Education
As the deadlines for the annual competitions approach Ken Richardson is waiting for the last remaining entries to pop through the letter box

14 Money Matters
All you need to know about TESSAs

15 Health & Safety
The benefit of attending safety courses

36-43 Around the Green

64-65 Sandy McDivot
Sandy makes his bi-monthly appearance and discusses the role of the agronomist

66 Features Listing
Helping you track down features from old issues

66 As I see it...
BIGGA Chairman, Gordon Child, discusses a range of topics concerning his time in the army, the National Tournament, education courses to progress on the new building
The green, green grass of home?

Avid followers of this particular column may recall that last year I gave you just a little insight into the work that was going on in preparation for the move my wife, Elaine, and I were making to live in the York area. Well, with just a few hiccups, we made it and we moved into our new home at the end of July.

It was while the pair of us were still unpacking that a young man came along and laid our lawn. We thought it was great. It made it look like a home...on the outside anyway.

We were given our instructions - make sure it gets plenty water - and, as it was in the middle of a drought, rushed out to buy a hose. While it was bedding in, you wouldn’t have found a more caring couple when it came to looking after that small area of grass and it seemed to be establishing itself well.

Then it started to go wrong. Mushrooms began to appear and then bare patches. Through the winter it got worse, until it looked more like a well used football goalmouth at the end of a long season.

But I haven’t worked for the Greenkeepers’ Association for three years without picking up a few ideas on how to look after grass.

I aerated, then scarified and overseeded using a couple of these boxes which involve you doing an al fresco version of the “shake ‘n’ vac.” I then topdressed using a product a painful trawl of the garden centre had assured me was ideal for the job. This task I completed by carefully brushing in the sand. After that I waited for my labours to bear fruit.

Just this morning I looked out of our bedroom window, down upon the scene of all this industry to see...a well used football goalmouth at the end of a long season. Worse, the sand gave it more of a look of a desert.

The lesson it has taught me is that it is not what happens above ground that matters, it is what going on underneath and if the area hasn’t been prepared properly there are always going to be problems. While we were delighted to see a lush, green lawn so soon after our arrival we would have been far better putting a hold on it until we’d broken up the hard pan of soil upon which the turf was laid and generally prepared the ground.

As for us, unless there is a drastic improvement I reckon it’ll be back to square one.

Features

17 Would you scythe your green?
Roland Taylor looks back at how greens used to be cut and to the present day and what to look for when buying a sophisticated greens mower

21 Kept in suspense
Dr Stephen Baker takes the mystery out of suspended water table green construction

23 Home on the Grange
Letham Grange is preparing to welcome members to the National Tournament, in association with Scotts/Miracle in August. As Scott MacCallum found out, those who decide to compete are in for a real treat

29 Taking the strain
Gerard van ‘t Klooster describes what it takes to produce a new grass and what we can expect in future

33 All donations welcome
BIGGA President, Viscount Whitelaw, is retiring from the position but his last task was to invite golf clubs to contribute to the Association’s Building Fund. The first club to make a donation was Ham Manor in Sussex

36 A Machinery Charter
Charterhouse are the latest Golden Key Supporter and, as Scott MacCallum discovered, the company has always been keen to promote greenkeeper education

46 Digging deeper
A look at natural occurring soil bacteria

48 Daylight robbery
Hugh Tilley gives some advice to help reduce the chances of some on wanted visits by some uninvited guests

51 The Learning Experience
Taking the rough with the smooth. Should we be so obsessed with green speed? Surely we are looking for smooth putting surfaces
World class
turf care.

We have the edge.

Over 200 years experience in developing and manufacturing grass cutting equipment is undoubtedly a key factor in Ransomes’ worldwide success.

Ransomes has continued to identify customers ongoing needs and respond with continuous improvement, vision and innovation to stay ahead of the competition. Which is why the current range offers unbeatable features, toughness and value for money.

But delivering the equipment is only the first part of our service. We have also worked extremely hard in developing a Ransomes worldwide dealer network which offers support right through to after sales.

There is one more thing that experience has taught us at Ransomes. Our passion and commitment to serve our customers at all times and at all levels is what differentiates us from the competition.

For a free demonstration or the name of your nearest dealer call freephone 0500 026208 for details.
Any which way you choose

THE VERSATILE sisis TECHNICORE

PTO OPERATED VERTICAL AERATOR

choice of eight interchangeable tines

choice of hole patterns

choice of depth to a true 5ins (127mm)

SISIS EQUIPMENT (Macclesfield) LTD, Hurdsfield, Macclesfield, Cheshire, SK10 2LZ
Tel: 01625 503030 Fax: 427426
Industry heavyweight retires

Mark Horner takes over as Commercial and Amenity Sales Manager at Vitax this month, following the retirement of Trevor Holmes after 14 years with the company.

Formerly with Sinclair Horticulture & Leisure, Trevor, who joined the company as National Field Sales Manager in 1984 and rose to Director two years later, following a company buy-out, has seen the successful merge of Vitax with Synchemicals in 1988, and Amenity sales figures triple since he joined the company.

During his time with Vitax, Trevor has introduced many new products including the wetting agent "Ultraflo", the entire range of slow release fertilisers and, most recently, the seaweed products "Seaturf Soluble" and "Seaweed Foliar Feed".

While building his early career in the horticultural and amenity sectors, Trevor had also been building his body. A self confessed seven stone wheeler in his 20s, he joined a body building club in Grantham, of which he is now Honorary Secretary, and put on six stones in two years, helping him to take second place in the British Power Lifting Championships in 1963 and become Champion of Champions of Great Britain in the same year.

Three British records still stand to Trevor for the "Pull-over and press on back", a lift which is his speciality - they are for the middle-weight, light heavyweight and mid-heavyweight classes, the middle-weight record since 1965.

The future holds a rigorous training programme, as Trevor will continue to lift, although not compete, and is looking forward to playing more golf.

Mark Horner, who has been with Vitax for three years, and working alongside Trevor as Commercial and Amenity Sales Manager Designate since September, was born into horticulture as his father grew over 30 acres of field vegetables at Scarisbrick, Lancashire, on the Fylde Coast.

With an HND in horticultural sciences and previous experience with Henry Alty Ltd, Mark, 30, was a Technical Sales Advisor covering the 15 South Eastern counties for Vitax, before training for his new post.

Trevor Holmes with the weight of the world on his shoulders

A very fine vintage at Reaseheath

This unique tournament is approaching its fourth season. The brainchild of Bruce Whitehead and Paul Mayman, it has been nothing but a constant success.

Due to its one of a kind invitation, over 70's structure, it has gained great recognition as the only one of its type. In fact a real niche in the market has been uncovered.

This year's tournament has again started to make a name for itself. Staged in a small Cheshire hamlet envied for its natural characteristics, Reaseheath Golf Club provides the ideal venue.

Reaseheath College is a premier centre for training in the land based industries. Most noticeable is the HND Golf Course Management sector, whose students take charge of the event.

This year's tournament is to be held on May 13. Purely invitational, the experienced over 70's field are already working hard on their games ready to peak in time.

Sponsorship and contacts gained by the students in their industrial placements has given the tournament a professional life. This year's sponsor has been finalised as Jacobsen.

The need to control irrigation systems as an integral part of golf course management, and the need to optimise water usage is becoming one of the key tasks facing Course Managers. Over the last few years the UK and Ireland has seen the installation of some extensive irrigation systems to greens, tees and fairways. The number of sprinklers, and the necessary complexity of the irrigation programmes, makes PC based control an essential feature for a successful operation. Toro has been at the cutting edge of PC based technology and its latest system is named SitePro.

SitePro uses full graphic depiction of the actual course on which it is installed these graphics show the position of the pipework, cables and sprinklers. Operation of individual sprinklers is activated by simply clicking on the sprinkler marked on the screen. This is only the beginning; full utilisation of the system features, flow management, weather station communication to calculate site evapo-transpiration rates and a range of course management reporting functions. SitePro represents the pinnacle of irrigation system control technology and all that is required to run the irrigation is a knowledge of Windows 95, and a knowledge of a turf irrigation practices.

For further information on Toro Irrigation Products call Francis on 01425 476261 or contact Hydroscope, Water House, 10 Carvers Industrial Estate, Southampton Road, Ringwood, Hampshire UK BH24 1JS Fax: 01425 472380
Scotts Company has big move all planned out

The Scotts Company has announced the formation of a new structure following the company's purchase of Miracle Professional in 96 and Levington Horticulture Ltd last year. The new company will be called the Scotts UK Professional Business Group and will be based at the Levington Horticulture offices at Bramford, Ipswich.

The new structure is a key step in the integration of the professional operations of the two businesses. In the Turf and Amenity sector, products include Sierrahen, Greenmaster and Longlife fertilisers plus treatments such as Daconil, Casoron, Tritox and Turfclear are involved.

Under General Manager, Louis de Kort, the Scotts Professional Business Group will have a dedicated Professional Marketing Department headed by Martin Morgan and a Sales and Customer Service Department similarly focussed exclusively on professional grover and amenity customers. To maximise the quality of service offered to customers, three new UK Sales Support Teams have been established with the the Turf and Amenity team being headed by UK Sales Manager, Chris Briggs.

'General Manager Louis de Kort said: "The creation of a dedicated UK Headquarters for the new business is a tremendous step forward, enabling us to establish skilled and experienced teams to focus specifically on the needs of our UK customers. That we are able to base ourselves at the Levington Horticulture site is especially important, as it will facilitate close and vital liaison with the Scotts Research and Development operation, located at the same site."'

The new contact details for the company are: Scotts UK Professional Business Group, Paper Mill Lane, Bramford, Ipswich, Suffolk IP8 4BZ. Tel: 01473 830492. Fax: 01473 830386.

Moss control advice given

Weed control specialist Nomix-Chipman has issued a new technical advice sheet on moss control for hard surfaces and turf. This includes details on its non-residual moss killer which now has MAFF approval for use on internal and external hard surfaces.

Based on dichlorophen, Nomix' liquid Mosskiller delivers effective control of moss and fungi on paths, hard surfaces such as car parks and ornamental paved areas as well as lawns and tennis courts and amenity turf. Mosskiller also offers an unrestricted number of applications through the season.

Mosskiller is applied by knapsack sprayer during active growth at rates of 17 litres/ha (170ml in 10 litres of water for 100m²) when treating hard surfaces. For turf areas, the application rate is 50 litres/ha (500 ml in 10 litres of water to treat 100m²).

For further information Tel: 01179 754754.

Sweet smell of success!

A new competition involving four man teams from golf clubs in South Wales is to be held at Celtic Manor Hotel and Country Club in August. Teams comprising the Course Manager or Head Greenkeeper, the Secretary or Club Manager, Chairman of Green or a member of the Green Committee and the Club Captain or Vice Captain will play for the Golf Management Trophy sponsored by Scotts Turf and Amenity, on August 27, for the considerable prize of one tonne of fertiliser.

The format for the competition is four ball better ball with two score to count on each hole and the cost to enter plus coffee on arrival and a two course meal is £60 per team. For further information contact Paula Humphries, BIGGA South West and South Wales Regional Administrator Tel: 01962 739222.
Scotch mist fails to help Peter

The annual match between BIGGA Scottish Region and the Association of Golf Club Secretaries, at Glasgow Gailes GC, ended in defeat for BIGGA and their Captain, Regional Administrator, Peter Boyd.

While still a rookie, Captain Boyd, did manage to amass an impressive array of excuses for the 7-3 defeat in the 20 man side contest - the team had been fooled by the lack of rain; the team had been fooled by the lack of wind and finally that the secretaries had made full use of their handicaps.

I don't think Seve himself would have been able to come up with a better set had the Ryder Cup result gone a different way. "Despite the result everyone had a most enjoyable day with the weather being kind and the hospitality from the golf club first class. Our thanks to the Captain and Council of Glasgow Golf Club for affording us the facilities for the day," said Peter. The BIGGA winners were Willie McMeakan, Turnberry Hotel, and John Scott, Kirkhill GC, who won by the handsome margin of 7&6. Elliott Small, Tulliallan GC, and Martin Lothian, Turnberry Hotel, and Stuart Crawford, North Berwick GC, and Steve Sullivan, Craigie Hill GC halved their matches while Peter Boyd himself also managed a win.

"We look forward to next year's fixture and hopefully we can improve and regain the Trophy," said Peter.

Aerators get to the point

Amazone Ground Care has launched new range of slitter/aerators. The new four-model range incorporates a unique blade configuration that ensures high point pressure across the full width of the implement at high operating speeds, while exerting 91kg point pressure for entry into the thickest thatch.

Designated the Amazone, SLC and SLS series, they replace the current SL range. All the new models are three-point linkage mounted. The SL has a 1.2 metre working width, the SLC 1.2 metres and 2.4 metres; that of the SLS, which features a new contour following system, is 1.2 metres.

The SL forms the base of the new range and is intended for working on flat ground. Its fully enclosed 1.2 metre-wide ground-driven rotor is fitted with 40 blades, each of which, uniquely, is mounted with a 10 degree offset.

With that pattern, all the points in contact with the surface penetrate the ground to an equal depth when the slitter is driven forward, so eliminating the 'walking' effect associated with some blade layouts.

Both the 1.2 metre-wide SLC and the 2.4 metre-wide version feature contour following through a floating chain and bar support at the rear of the implement. Penetration depth on these models is by means of weights around the rotor axle. At the top of the new slitter range is the 1.2 metre-wide SLS. This model features a new contour following mechanism, comprising a front-mounted hydraulic depth ram connected through an arm to a pre-loaded spring anchored to the frame at the rear of them implement. When crossing an undulation the operating depth is maintained through ram pressure, while the spring releases to enable the tractor's rear wheels to remain on the ground, so maintaining traction.

Royal Inverdivot GC...

"Scuse me, you just hit one of a fairway bunker and didn't replace it... made a divot..."

...on the fairway and didn't replace it and then didn't repair your pitchmarks.

Surely that's what we pay you to do!

The facts - not the hype

"I have used Primer 604 since it came on the market - with great results. It will be included in my programme for 1999."

 tracey Maddison is BIGGA's new Membership Services Officer having taken up the post at the beginning of April. A native of York, Tracey joins the Association having recently completed a three year Leisure Studies degree course at Leeds Metropolitan University where she became interested in training and development and memberships/sales.

"Since leaving university I have gained experience in the design of training and development material as a desk top publisher within a management consulting company" explained Tracey.

"I returned to education after eight years or so working in a variety of administration/secretarial roles and perhaps more excitingly travelling around the world for a year, visiting Indonesia, Australia, New Zealand, Thailand, Malaysia and Europe, where I saw some of the most amazing golf courses, from the most beautiful to the most obscure!" she added.

"I have many hobbies, most of which are sport orientated, including golf which I played in my past and will possibly take it up again now that I am situated in such a lovely locality as Aldwark Manor. I also enjoy squash and aerobics."
Ipswich becomes new Textron HQ

With Textron's acquisition of Ransomes now complete, a new Textron Turf and Specialist Vehicles Group has been created and the rationalisation process to pull together Ransomes and Jacobsen in the UK is well underway.

This process has involved a careful assessment of the requirements of each of the businesses in the Group and a full audit of all the physical and human assets that the company possesses.

The decision has now been taken to headquarter the new Group at Ipswich, the established base of Ransomes, and to combine the activities of Ransomes Textron and Jacobsen Textron on this site.

A number of key staff will be relocated and the principle objective is to ensure a continuity of the high-quality levels of service for customers of both Jacobson and Ransomes.

'Textron Turf & Specialist Vehicle Group now includes brands such as Jacobsen, Ransomes, Cushman, E-Z-GO and Ryan. It is the company's stated intention to support fully each of these brands.'

David goes West

Etesia has appointed of David Shepherd as Area Manager for the western side of the UK. David will look after a territory covering Wales, the West Country and the north-west, where he will be responsible for maintaining the company's existing dealer network and seeking opportunities to increase Etesia's market share.

"In the nine years since Etesia entered the UK market, the company has continued to affirm its commitment to selling quality machines through specialist dealers who can offer customers the kind of service and back-up they expect. The close support our Sales Team provides is a key link in ensuring complete satisfaction at every junction of the sales process," said UK Sales Manager, Robin Taylor.

No bugs with this Millennium winner

The Sisis Ecospray, drift-free sprayer, has been selected for the first tranche of Millennium Products.

In September last year, Tony Blair, launched Millennium Products and began the search for the country's most innovative products and services. The challenge went out to submit for consideration ground-breaking products that will change the way we live in the 21st century. The aim is to have 2000 examples of British business ingenuity by the new millennium.

The selected products are allowed to carry the Millennium Products marque, will go on display in national and international exhibitions and will be a major feature in the Millennium Products. Each unit on the Ecospray, therefore, is enclosed by a shroud to reduce "drift" to an absolute minimum. Solid covers can alter the spray pattern; the Ecospray has especially designed and patented, perforated, shields developed in conjunction with an experienced spraying contractor and Cranfield University, who implemented computer modelling and wind tunnel tests to achieve the optimum design. Bubble jet nozzles were fitted to give a more uniform droplet size, which also reduces drift and improves leaf contact. Sisis subsequently developed the original idea into a viable, commercial product.

The Sisis Ecospray is available in two models, 5-unit towed gang and 3-unit fully mounted. Other models will be available shortly. The first production models are now in use with spraying contractors Complete Weed Control Ltd.

Brushcutter with designs on success

The Stihl FS 85 brushcutter has been chosen to join the permanent collection at London's Design Museum, of objects representative of late 20th century industrial design.

The Conran Foundation, was set up by Sir Terence Conran in 1993 to assemble a collection of industrially designed mass-produced objects. Each year a British resident with an 'educated' awareness of design is given £27,000 to construct a collection of their own choice. Selectors can choose anything from domestic items are packaging to vehicles. The only criteria are that they must choose "things they would like to live with" and that are in current production.

In time, a fascinating collection of mass-produced design will be formed, representing changes in design technology, as well as individual tastes. Such a collecting policy is unique among museums worldwide and will result in a truly fascinating collection that will provide a major design resource for the late 20th century and beyond.

The collection currently on display has been specially chosen by Dan Pearson the well known TV gardening presenter and Sunday Times' gardening columnist.

In selecting the Stihl FS 85 Dan Pearson said, "Lots of strimmers are very flimsy, but this professional quality model is designed to last. The frame is lightweight but strong and the nylon blade can be replaced."