

GREENKEEPER

International

Our
first
decade



LOOKING BACK ON
THE WAY WE WERE



A facelift for

THE WORLD'S OLDEST COURSE



220A



RZi 700



TURF GATOR



1500 AERATOR



3235A



2653A

OUR QUALITY IS ON COURSE

No one can accuse John Deere of standing still. Since 1995, we've added 8 quality machines to our line. Another strong statement about our commitment to your business. New this year are the Turf Gator and 220A Walk-Behind Greens Mower.

The Turf Gator's unique combination of toughness and quietness make it perfect for the golf course. Toughness comes from uni-body construction and one-piece forged axles. Quietness comes from a large volume silencer, internal sound absorbing material, and golf-car-style transmission.

The 220A is the latest addition to John Deere's quality line of walk-behind greens mowers. 220A improvements include an isolation-mounted engine for reduced vibration, improved operator-presence safety system, and an easier-filling grass box design.

Add superior parts support and our existing line of quality mowers, tractors, aerators, root zone injectors and utility vehicles and you see why John Deere is the fastest growing golf and turf equipment name in the world. Talk with us soon for a first-hand look.



NOTHING RUNS LIKE A DEERE

John Deere Ltd., Harby Road, Langar, Nottingham NG 13 9HT, Telephone 01949 863299 (answerphone)



BY APPOINTMENT TO HER
MAJESTY THE QUEEN
SUPPLIERS OF ALL
KINDS OF EQUIPMENT
JOHN DEERE LIMITED
NOTTINGHAM



President
The Rt. Hon.
Viscount Whitelaw
K.T., C.H., M.C.,
D.L.

BIGGA BOARD OF MANAGEMENT

Chairman: Patrick Murphy
Vice Chairman: Gordon Child
Past Chairman: Dean Cleaver

BOARD MEMBERS

Richard Barker
George Barr
Robin Greaves
Jim Paton
David Milbourne

EXECUTIVE DIRECTOR

Neil Thomas B.A.

ADMINISTRATION MANAGER

John Pemberton

EDUCATION OFFICER

Ken Richardson

SALES AND MARKETING MANAGER

James McEvoy

MEMBERSHIP SERVICES OFFICER

Janet Adamson

Where to contact BIGGA

Aldwark Manor, Aldwark, Airedale,
York, North Yorkshire YO6 2NF

Tel: 01347 838581

Fax: 01347 838864

■ The next edition of
Greenkeeper International
should be with you by April 9

GREENKEEPER

International

MARCH 1997

Contents

Facelift for Musselburgh

Mary Queen of Scots played there in 1567 – and while there have doubtless been other changes since then, current improvements are being hailed as a big success. Scott MacCallum visited the course recognised as the oldest in the world.....**Pages 26-28**



Making machinery last the distance

Picture the scene: the day of a major club tournament and a vital piece of machinery fails. Take steps to lessen the chances of such a nightmare with the Learning Experience..**Pages 10-11**

A decade of progress

BIGGA is celebrating its tenth anniversary this year and *Greenkeeper International* together with the Association's first Chairman Walter Woods, step back in time.....**Pages 13-15**

Inside the STRI

The Sports Turf Research Institute commands the utmost respect from our industry. But what really goes on, on a day to day basis? We look behind the scenes..... **Pages 30-32**

Regular features

Scott MacCallum The *Greenkeeper International* editor reflects on BIGGA's first decade with a sideways glance at other events happening in 1987... days when Major and Blair meant Farrah Fawcett and Lionel**Page 4**

News Turf grower's plans for the new millennium... a greenkeeper's revenge... new faces... worthy winners... details of the new Hayter Challenge plus a way of controlling the rabbit population on golf courses**Pages 5, 7, 9**

Education Ken Richardson with a run down of the awards and competitions which could transform your career in 1997**Page 36**

Cover

Musselburgh, acknowledged to be the world's oldest golf course – and now enjoying a facelift Picture by Brian Morgan

WIN £50 CASH IN OUR
BUYER'S GUIDE
COMPETITION:
TURN TO PAGE 54

FREE READER REPLY SERVICE

Use the post-paid Reader Reply Card facing Page 2 for further information on the products and services advertised in this issue. Just state the companies' Ad Ref numbers, post the card to us and we'll arrange for further information to be sent to you direct.



ADVERTISERS' INDEX a quick reference guide

	Ad Ref	Page
Baileys	339	32
Banks	168	42
Barenbrug	172	34,38
Bathgate Silica Sands	543	36
C&P Soilcare	46	8
Charterhouse	130	40-41
Force Limagrain	507	45
Glen Heat	280	24
Hardi	25	64
Hayter	90	6
Hoofmark	539	12
IC Irrigation	541	24
J Gibbs & Co	542	12
John Deere	103	2
Johnsons Seeds	540	10-11
Kawasaki	544	51
Kubota	86	49
Lely	61	18-19
	21,	46-47
Levington	102	21
Links Leisure	493	12
Logic Irrigation	545	24
Marlwood	501	8
Miracle	54	28, 37
New Holland	165	52
North Staffs Irrigation	217	24
Ocmis	360	23
Pattissons	35	8
Ransomes	9	29
Rhône Poulenc	59	16
Risboro Turf	386	36
SGL	491	22
Service Chemicals	304	30,35
Sisis	176	50
Sovereign Turf	435	38
Standard Golf	421	34
Weed Free	504	31
Wessex Machinery	210	34
Westurf		8
Buyer's Guide		54-58
Classified		59
Job Shop		59
Recruitment		60-61

ADVERTISING WORKS IN GREENKEEPER INTERNATIONAL:

“Hepworth Minerals and Chemicals Ltd has found *Greenkeeper International* an invaluable asset in the promotional campaign for HMC Pro-Sport rootzone products”

– TREVOR
LEADBEATER,
Hepworth Minerals and
Chemicals Ltd

FOR MORE DETAILS CALL:
James McEvoy, Amanda
Freeman or Jenny Pantan at
BIGGA HQ on 01347 838581.

GREENKEEPER

International

is the official monthly magazine
of the British & International
Golf Greenkeepers Association

EDITORIAL

Editor: Scott MacCallum

ADVERTISING

Sales and Marketing Manager:
James McEvoy
Sales and Marketing Assistants:
Amanda Freeman
Jenny Pantan
Telephone: 01347 838581
E-mail: general@bigga.co.uk

PRODUCTION

Design and Production Editor:
Tim Moat, telephone 01904 610611
E-mail: timmoat@headline-comm.co.uk

PRINTING

Hi-Tec Print, Unit 7, Universal Crescent,
North Anston Trading Estate,
North Anston, Sheffield S31 7NZ
Tel: 01909 568533, fax: 01909 568206

**Greenkeeper International: winner
of Certificate of Merit in Magazine
of the Year category, Editing for
Industry Awards 1994 and 1995**

Contents may not be reprinted or otherwise
reproduced without written permission. Return
postage must accompany all materials submitted
if return is requested. No responsibility can be
assumed for unsolicited materials. The right is
reserved to edit submissions before publication.

Although every care will be taken, no
responsibility is accepted for loss of manuscripts,
photographs or artwork. Opinions expressed are
not necessarily those of the Association and no
responsibility is accepted by the Association for
such content, advertising or product information
that may appear.

Circulation is by subscription. Subscription
rate: UK £34 per year, Europe and Eire £44. The
magazine is also distributed to BIGGA members,
golf clubs, local authorities, the turf industry,
libraries and central government.

ISSN 0961-6977
© 1997 British & International
Golf Greenkeepers Association

Greenkeeper Education and Development Fund

The Fund provides the key to the future for greenkeeper, golf club
and game. Individuals and companies can join the Golden Key Circle
and Silver Key Circle. For details, contact BIGGA on 01347 838581.

GOLDEN KEY CIRCLE COMPANY MEMBERS:

• Amazone Ground Care • Bailey's of Norfolk • Hardi Ltd • Hayter Ltd
• Jacobsen E-Z-Go Texttron • John Deere Ltd • Kubota UK Ltd
• Levington Horticulture Ltd • Miracle Professional • Mommersteeg
International • Ocmis Irrigation UK Ltd • PGA European Tour • Ransomes
• Rhône Poulenc Amenity • Rigby Taylor Ltd • Supaturf Products Ltd
• The Toro Company

SILVER KEY CIRCLE COMPANY MEMBERS:

• Avoncrop Amenity Products • Fenchurch Insurance Brokers Ltd • Hepworth
Minerals & Chemicals Ltd • H Pattisson & Co Ltd • Rolawn Ltd • Sisis Equipment Ltd



**GOLDEN KEY
and SILVER KEY
CIRCLES**



You can book your exhibition space NOW for BTME 98 – for details call Amanda Freeman on 01347 838581

Ten years? Seems like yesterday

At the risk of sounding a little like that Edmonds bloke, in Noel's Telly Years, what were you doing a decade ago and what can you remember about 1987?

The reason I ask is that, as you no doubt know, this year is BIGGA's 10th anniversary and it's interesting to look back 10 years and recall what life was like when BIGGA was born.

In the interests of this column, I've undertaken some extensive research of a time when the names Major and Blair conjured up images of Farrah Fawcett and Lionel, the Berlin Wall was still in place, Nelson Mandela was still inside and Melinda Messenger was only 12... or should that be 16?

Well, back in 1987 Europe won the Ryder Cup at Muirfield Village, the first time ever in the United States. Nick Faldo hadn't even won a Major at the beginning of the year but by the end of July was being acclaimed for his 18 straight pars and victory in The Open at the other Muirfield.

What else happened in golf? Larry Mize produced the chip of a lifetime to deny Greg Norman in the play-off for the Masters, while Wales got the better of Scotland in the World Cup of Golf (Neil Thomas made me put this in).

The year also saw the deaths of two legends of the game, Sir Henry Cotton and Bobby Locke, while high profile courses like East Sussex National, The Wisley, Loch Lomond, The Oxfordshire and Collingtree Park were mere twinkles in an architect's eye.

Elsewhere in sport Coventry won the FA Cup; Rangers hadn't started the run which now threatens Celtic's nine in a row record; Martina Navratilova claimed her sixth consecutive Wimbledon single's title; Ben Johnson won the World Championship

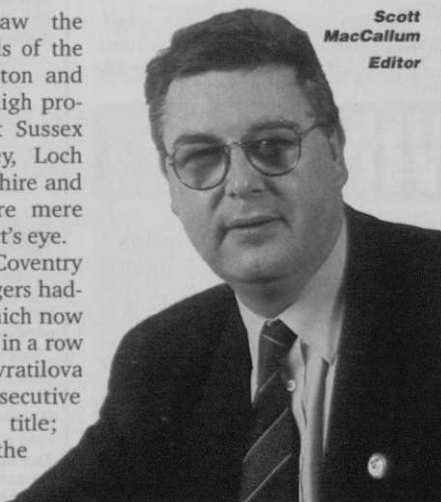
100 metres in a world record time; Mike Tyson became the youngest winner of the World Heavyweight title; Lester Piggott was sent to prison for tax evasion and Mike Gattling went nose to nose with Pakistani umpire Shakoor Rana.

Looking at these events it is perhaps surprising how some, at least, seem like only yesterday, and it does help to reinforce the fact that, when recalling the formation of BIGGA, we're not uncovering ancient history.

The Association has made huge strides in a relatively short space of time. From virtually a standing start the Association now boasts almost 6,500 members; a progressive and wide ranging education programme the envy of many other industries; a trade show which has grown to be the largest indoor of its type in Europe and a successful magazine (I hope!).

Add to this the fact that the next two years should see BIGGA move to new custom-built offices and you have an Association which will continue to move forward and look after members' needs for many more decades to come.

Those who helped to create this success have every reason to feel extremely proud.



Scott
MacCallum
Editor

As I see it...

BY PAT MURPHY
BIGGA CHAIRMAN

Since becoming Chairman my feet haven't touched the ground. No sooner had I finished BTME 97 then I was off to Las Vegas for the GCSAA Conference and Show.

BIGGA had a stand at the show and it was an outstanding success with a great many membership enquiries. Interestingly, our Master Greenkeeper Award scheme appeared particularly popular with quite a number of superintendents.

It was a busy week with functions every day and I made presentations to Joe Baidy, President in '95 and Paul McGuinness, the incoming President.

I also had the privilege to sit beside Jaime Ortiz-Patino, the President of Valderrama Golf Club during the Gala Dinner and he chatted to me about preparations for the Ryder Cup in September. I also met both Robert Trent Jones Senior and Junior.

A speaker at the opening session was the astronaut Jim Lovell, whom Tom Hanks played in Apollo 13. He gave one of the best talks I've ever heard.

Another highlight of the Conference was the International Symposium. Neil Thomas and Per-Olof Ljung both spoke excellently about FEGGA and generated quite a bit of interest among the other nations represented.

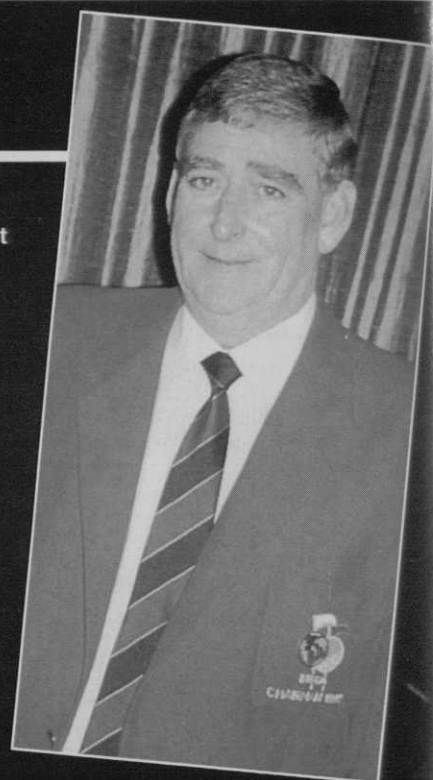
It was good to meet up with Toro Student of the Year Fintan Brennan, who was at college in the States as part of his prize while Miracle Professional Premier Greenkeeper of the Year Cedric Gough was part of our group and appeared to enjoy himself. We also met George Brown, from Turnberry, and our five American Master Greenkeepers who were at the Show.

The Show itself was enormous and, while not being knocked sideways by any one new product, it was interesting to see hand tools and some of the extensions which are unavailable in this country.

I also brought back some of the soft spikes for my Chairman of Green to try out. I do think they will be huge in this country soon. Not only do they protect the course but also the car park, walkways and the clubhouse.

Las Vegas is some place. The light shows in Freemont Street have to be seen to be believed while Caesar's Palace Hotel has an amazing show every hour. We visited the Valley of Fire where the Star Wars film was made and also went to the Hoover Dam.

I also went to the infamous World Heavyweight fight with Lennox Lewis and Oliver McCall but we were seated so far back my wife saw more than I did watching it on television. It was the first world title fight I've been to and will probably be the last. I did have a drink with Jim Watt and Reg Gutteridge though.



Pat Murphy

Bill voted personality of the year by BTLIA

At the recent AGM of the British Turf and Landscape Irrigation Association the incoming Chairman, Gerry Wilkins, presented Bill Hawthorn with the Association's "Personality of the Year" award for 1996. The annual award was established in 1995 and is made on the basis of members' nominations.

In congratulating him on being only the second recipient, the Chairman said that the honour

recognised Bill Hawthorn's outstanding contribution to the turf irrigation industry over a period of more than 30 years and his work in developing the BTLIA since its formation in 1978.

Bill was part of the founding committee of the Association and served as its first Secretary/Treasurer during the early years. He is also a past Chairman and is currently a member of the committee. He was a major contributor to the

Association's highly regarded "Guide", now in its fourth edition, which defines a code of ethics and minimum standards of system design and contract implementation to which members bind themselves. He also helped to establish the Diploma Course in Turf and Landscape Irrigation run jointly by Myerscough College and the Association.

Bill is Chairman of Watermation Sprinkler and Controls Ltd.

A BIGGA welcome to Jenny



Visitors to BTME may have already met BIGGA's latest recruit, Jenny Panton, as she

spent a couple of days at the show prior to joining the staff on a full time basis, replacing Louise Lunn.

Jenny joins the Sales and Marketing Department as Sales and Marketing Assistant.

Before joining BIGGA 27 year-old Jenny worked for the York and County Press alongside Amanda Freeman whom she joins up with again at Aldwark Manor.

Coincidentally, Tony Cocker, BIGGA's part time Accounts Assistant, also worked for the same company.

As well as working in the advertisement department Jenny spent time in the promotions department organising wedding fayres and other similar events.

Prior to that she spent five years working for Thomas Cook in the Harrogate and York offices where she worked in the flight centre and was also ski coordinator.

Jenny lists photography among her hobbies.



Tony Mears has been appointed Service Manager for Allen Power Equipment. A Chartered

Mechanical Engineer, Tony, 59, will be responsible for all technical aspects of both the Allen and Echo range of products.



Alex Wright has been appointed Amenity Technology's new Office Sales Manager. Alex, who

graduated from Reading University in '94, will be overseeing and developing office sales and customer support.



Wiedenmann UK has appointed David Bate as Sales Manager for England and Wales.

Scottish Region's worthy winners



The recipients of the Scottish Region 1996 Patron's Awards were presented with their awards at a recent luncheon.

Pictured are, from left, Stephen Sullivan, Craigie Hill; Alan Russell, Torphin Hill; Sam Morrison, Scottish Regional Chairman; Martin

Kohler, Swanston; Bryan Cocker, Alyth; Scott Ballantyne, Cowglen; Drew McKechnie, Douglas Park and in front, Andy O'Hare, Leven Links.

Three others, Jimmy Johnstone, Turnberry; Lee Blackburn, Southerness, and Gordon McRae, Ratho Park, were unavailable.

Greenkeeper turns taps on sneaky golfer

Hero of the month is Mike Osley, Course Superintendent at a munipule course in Tallahassee, Florida, who took action when the town Mayor consistently sneaked onto the course for a few practice shots before the official opening time despite being warned.

As reported in Michael McDonnell's Golf Diary in the *Daily Mail*,

Mike switched on all the sprinklers and soaked Mayor, Ron Weaver. Mike was suspended for a week without pay but the locals were so incensed with the way he was treated that they raised money to make up for his lost wages.

The point got through to the Mayor who said, "I'm embarrassed that I broke the rules. I won't ever do it again."

Turf grower has plans for the new millennium

Inturf has announced plans to produce Millennium Turf which will go on sale from 1 January 2000.

Millennium Turf will be mature cultivated turfgrass grown using ten different grasses and the main feature of this new turf is that it can be used in a multitude of situations.

While some of the species present in Millennium Turf will flourish, some may diminish in vigour, so all the time adapting to conditions in which the turf is placed.

Inturf plans to market Millennium Turf in the first instance for landscape and lawn applications but there will also be uses for sport and special projects.

The first batches of Millennium Turf will be sown during the autumn of 1997 to allow good time for all grasses to establish and to be ready for sale early in 2000. No artificial reinforcement will be used (ie free from plastic netting) and it will be available in conventional square yard, square metre rolls, Big Rolls for TIM machine laying and Lay 'n' Play Turf Tiles.

Millennium Turf will conform to the new TGA (Turfgrass Producers Association) Standards for turf and the company is registered for ISO 9002.

Every club should have a professional like this!



The Hayter FM514 is a purpose-built 5-gang mower that's equal to the challenge of any course. Since no two golf courses are the same, the FM is designed to adapt. Unique 26" floating heads follow the ground contours closely for a superb finish.

Ground holding is gentle but firm. Wide front axle, broad tyres and variable weight transfer system give traction with minimum turf or soil damage.

And behind it all is the sheer power of a Kubota 35hp engine. With 'on-demand' 4-wheel drive transmission and differential locking you have total mastery.



HAYTER

Hayter Limited

Spellbrook Bishop's Stortford Herts CM23 4BU England
Tel: 01279 723444 Fax: 01279 600338

Call now to arrange a demonstration

Every club should have a professional like this!

John Deere achieves certification to ISO standards

John Deere Ltd, the UK arm of the world's largest manufacturer of agricultural and amenity equipment, has achieved certification to ISO 9002:1994, the quality management system assessed by Lloyd's Register Quality Assurance.

Both the company's headquar-

ters at Langar, Nottingham and the John Deere Training Centre at Bingham have received separate LROA certificates of approval.

Certification to ISO 9002 demonstrates that both sites operate formal procedures which lead to improved quality, not only of

the products sold, but also in John Deere's relations with its customers, dealers and suppliers.

"While ISO 9002 certification is an important criterion in customers' purchasing decisions, especially in bids for governmental and institutional sales, our

main purpose in wanting to achieve certification is that it forms part of our overall plan to continuously improve our services to meet or exceed our customers changing needs," said Alec McKee, Managing Director of John Deere in the UK and Ireland.

Dealers are recognised with bubbly at BTME

At BTME Jacobsen acknowledged the sales and service achievements of a number of their dealers.

The following dealers were awarded with plaques and bottles of champagne by Peter Bell, General Manager, Jacobsen E-Z-GO UK.

Steve George, BS Mowers, received their award for Outstanding Parts Performance in 1996. Steve Williment, Scats, received their award for Outstanding After Sales Service Care in 1996. Steve Pullman, Sharrocks received their award for Outstanding Sales in 1996. Ian Bridges, Jacobsen Business Manager, accepted the award on behalf of GreenCare who were given an award for top dealer in 1996. Mick Shaw, Abbey Mowers, received their award for Outstanding Sales Performance in 1996.

At the presentation ceremony, Peter Bell commented, "I am pleased to present a number of dealers with these awards and I feel it not only shows the high calibre of our dealers but also their commitment to providing their customers with not only a range of excellent machinery but also with first class after sales service and support. Customer Care is of paramount importance to us."



Peter Bell, seated, and winners



Ready for some night-time action: MG Wildlife

Night working keeps rabbits under control

A Home Counties-based company is making a name for itself in the field of conservation and the control of wildlife.

MG Wildlife, 15 years old and based in Hayes, Middlesex, specialises in work on golf courses, council parks and open land.

As these areas tend to be populated during daylight hours the company works at night using its own silenced all-terrain vehicle adapted for night work and silenced rifles to control animals such as rabbits and foxes.

"We expect to be able to cover a radius of 50 miles in a single three to four hours session during which they can go round the golf course three times and a by-product of our work is an ability to

survey the ground and monitor nocturnal wildlife including badgers, which are protected by law, and deer," said company Director, Max Gizzi.

"Grey squirrels are also a problem and we use feeder hoppers to poison the boisterous males who tend to be the ones which cause most of the problems by gnawing bark."

Special emphasis is placed on the conservation aspect of MG Wildlife's work as it wishes to maintain a natural balance of wildlife which means it is necessary to thin a particular species.

The company is fully licensed and insured to undertake conservation and control duties both day and night. For further information Tel: 01895 824395.

Jim Paton, Head Greenkeeper at West Kilbride GC, has uncovered a new talent at his club in the shape of 93 year-old Peter McNab, who drew this cartoon.

Peter, who was the Club Captain during West Kilbride's 50th anniversary and was also around for the club's centenary three years ago, is a retired banker but could easily have enjoyed a successful career with pencil and sketch pad.



HAYTER CHALLENGE

You could be playing in America

With the golfing season now virtually upon us the annual Hayter Challenge gets under way in earnest. This year there is a huge incentive to spend a few extra hours pounding balls on the practice range or honing your skills on the putting green as there are places on offer to represent the Rest of the World team to play against the Americas in the Hayter International Cup to be played in the USA next year.

The player with a handicap of 12 or better, who represents and resides in each of the home countries and who performs best in this year's Hayter Challenge Final, will be selected for the Rest of the World team in the second Hayter International match, to be held at the Cherokee Town and Country Club, Atlanta, Georgia, in October 1998.

A rare opportunity indeed, particularly as the team will have the chance to avenge the narrow defeat inflicted on the Rest of the World by the Americas at West Lancashire Golf Club last year.

As ever some excellent golf clubs are hosting Sectional Qualifiers while the venues for the Regional Qualifiers form a group of clubs which it would be hard to better.

- South West and South Wales – Burnham and Berrow GC, June 11.
- Midland – Warwickshire GC, June 26.
- South East – Ham Manor GC, June 27.
- Northern – Matfen Hall GC, July 9.
- Scottish – Loch Green GC, Troon, May 27.



COMPACTION? POOR DRAINAGE? POOR GROWTH?

Are you experiencing any of these problems with your
SPORTS FIELDS, GREENS, CRICKET SQUARES,
LANDSCAPING AREAS OR TREES?

The Terralift was specifically designed to aerate around tree roots, reaching
1m depth as standard. The Terralift also incorporates soil conditioners in
turf and also root feeds trees

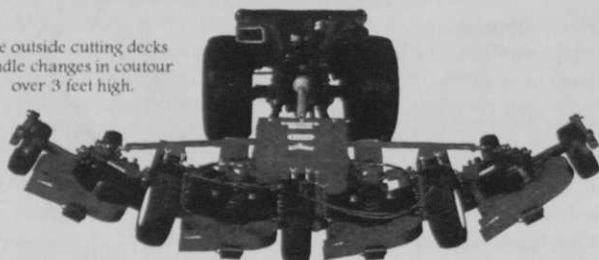
Unit 3, Bush Farm, Nedging, Ipswich, Suffolk IP7 7BL
Tel: (01449) 741012 Fax: (01449) 741012

AD
REF
46



INCREDIBLE FOR WHAT THEY DO

The outside cutting decks
handle changes in contour
over 3 feet high.



Articulators from LasTec offering the highest
quality finish cut of any rotary mower at any price

- Precise length •
- Better grass distribution •
- Better wet grass cutting •
- Better lift • Less Compaction •
- And of course, No Scalping

**STRONGER • LIGHTER • TOUGHER • BETTER
EVEN BETTER FOR WHAT THEY ARE**

Marlwood Limited

Court Lodge Farm, Forge Lane, East Farleigh
Maidstone, Kent, ME15 0HQ, England.

Tel: (01622) 728718 • Fax (01622) 728720

AD
REF
501

WESTURF TRADE EXHIBITION

A-Z of TURF CARE

Amenity Land Services • Amenity Technology • Avoncrop Amenity
Products • Barenbrug • Better Methods Europe • Bourne Amenity •
Bowcom Ltd • British Seed Houses • Cannington College •
Complete Weed Control • Course Care • DGM Turf Equipment •
Encore Leisure Ltd • Farmura Ltd • Gem Professional •
H Pattisssons & Co • Hartpury College • Headland Amenity
Products • Huxleys Grass Machinery • Institute of Groundsmanship
• Levington Horticulture • Lindum Seeded Turf • Logic Irrigation •
Lubrication Engineers • Maxicrop International • Medland Sanders
& Twose • Miracle Garden Care • Ocmis Irrigation • PJ Flegg •
Pencoed College • Pipewise UK Ltd • Pro-Seed Equipment •
RS Bird • Ransomes • Rhône Poulenc • Rigby Taylor Ltd • Rocol
Site Safety Systems • Roffey Ltd • Ruffords Top-Dress Supplies •
Scotts UK Ltd • Shelton Trenching Systems • Sisis Equipment •
Sovereign Turf • Sparsholt College • Supaturf Products Ltd • Swan
Plant Services • Tildenet Ltd • TH White • Tonick Watering •
Turf Irrigation Services • Vitax Ltd



LONG ASHTON GOLF CLUB

BRISTOL

30 April 1997

Tel/Fax: 01803 844056

Free entry and parking

FREE

LINEMARKING PAINT

WHEN YOU BUY 6 CANS OF
PREMIERLINE LINEMARKING PAINT
WE WILL GIVE YOU 2 CANS

FREE

NB: This offer applies between
3rd March and 30th April 1997.

Please mention this ad
when ordering.



Established 1896

H. Pattisson & Co. Ltd

suppliers of quality Golf Course Furnishings since 1896

Sales Desk

01582-597262

342, Selbourne Road, Luton, Bedfordshire, LU4 8NU Fax 01582-505241

AD
REF
35

Outstanding performance applauded in dealer award

Four dealers have picked up special awards from Toro in the firm's annual dealer awards scheme. Top award for "Best Dealer Overall" went to AT Oliver & Sons Limited of Kings Langley in Hertfordshire. The award is made in recognition of outstanding performance in all aspects of customer sales and after sales.

Three other dealers in the national network also receiving awards were A M Russell Limited of Edinburgh, and County Mowers Limited, Leeds, for 'Outstand-



ing After sales', and Ian Kerry (Machinery) Limited of Godalming in Surrey, whose John Colebrook won the 'Best Dealer Salesman of the Year' award.

The picture shows Toro Turf

Products general manager Peter Mansfield (right) presenting the 'Best Dealer' award to AT Oliver & Sons' sales manager John Cockburn (seated) and salesman Tony Martin.

Diploma course is a first for architecture

The British Institute of Golf Course Architects broke new ground at the beginning of January when 12 students commenced their professional Diploma in Golf Course Architecture at Merrist Wood, Surrey.

The nine week course at the

College, supplemented by project and practical work will see the 12 work throughout the year towards graduation in December.

It is the first time in the world, it is believed that a specialist course in golf course architecture has been organised and the

BIGCA Diploma will be the first formal accreditation in the profession.

Martin Hawtree, President, BIGCA, said, "I am delighted that, after five years of our own student programme, we have, with Merrist Wood, put on the Diploma course. In this way the Institute is able to ensure professional education for those wishing to join the field and continue to ensure that proper and correct standards are met".



Elmwood graduation

Elmwood College, in Cupar, held a graduation ceremony for students who achieved awards of the Higher National Certificate or Higher National Diploma of the Scottish Vocational Education Council.

Photo taken at the recent College Awards Ceremony shows, from left:

Carol Borthwick, Head of Greenkeeping Section, Elmwood College; Fintan Brennan, Student of the Year and winner

of the Barenbrug & Toro/PGA Greenkeeping Awards; Graeme Taylor with the Gleneagles Trophy for Golf Course Management; Graeme Simmers OBE, Chairman of the Scottish Sports Council and Principal Guest; Robert Kane, BIGGA Award for 1st Year Golf Greenkeepers; John Myles, BIGGA Award for 2nd Year Golf Greenkeeper and Steven Ewing, winner of the St. Andrews Links Trust Award.

FLYING DIVOTS

■ Banks Horticultural Products Ltd (founded 1961) and its Associate Company Fen Turf Dressings Ltd (founded 1980) have been supplying construction and top dressing materials to the golf course industry during that time. The two companies have now merged to form a new company, Banks Amenity Products Ltd and will trade under this name.



■ Barenbrug has appointed Ben Petitjean as new Area Manager to cover East Anglia,

Midlands and West Midlands.

■ Blackley GC has appointed Hugh Gavin Jones as Course Manager. He was previously Head Greenkeeper at Disley GC, Stockport.

■ Pleasington GC, Blackburn, has appointed First Assistant Gary Thomlinson as Head Greenkeeper.

■ North Manchester GC has appointed Martin Finney as Head Greenkeeper. He was previously Head Greenkeeper at Crompton and Royton GC.

■ Upton by Chester has gone overseas to appoint its new Head Greenkeeper in the shape of Robert Gee, previously of Faith Legg GC.

(mis)adventures of Gordon the Greenkeeper



WORRIED BY CONFLICT AT WORK?

The **STRESS HELPLINE** can advise you

Greenkeeper Members call the STRESS HELPLINE for FREE advice: 0990 234999

Yet another benefit of BIGGA membership



Making machinery last

Anyone underestimating the importance of having sound, reliable machinery need only ask themselves how they would manage if a vital piece of equipment failed or performed below expectations on the day of a major club tournament. No matter how quickly your workshop or local dealer is able to sort out the problem, any delay is likely to affect the whole maintenance programme on the course, with difficult questions to be answered at the end of the day.

In an ideal world, every machine would start first time, operate at the required setting and maintain peak performance throughout its working life. In the real world, any machine can only deliver the goods if it is properly used, regularly maintained and treated with care and respect.

Apart from the tangible benefits that will result from having equipment perform as near as possible to its initial design specification, one can also look forward to extracting a longer



working life and a higher value for the investment when the time eventually comes for change.

The first step for anyone wanting their machinery to remain in peak condition for as long as possible is to ensure that those responsible for using and looking after the machine receive proper training and instruction. This should normally be carried out by the supplying dealer and can take place at the course or as part of an organised session at the dealer's premises. In some cases, the manufacturer will also be involved.

A thorough understanding of the machine is essential if one is to extract maximum benefit from it. User and bystander safety is also vital, so do not allow anyone involved with the equipment's operation or care to skip a training session. And if you feel unhappy or are unsure about any part of the instruction, ask the person responsible to go over the points again.

The dealer should also be willing to provide training at a later date for new members of staff or to refamiliarise operators with a machine which is used infrequently. This latter point is also particularly important when specialist equipment is hired-in for short periods.

Any concerns over the level or standard of instruction received should be reported initially to the supplier's sales representative. If that course of action is not possible, then contact the dealer's sales manager or managing director. As a last resort, speak directly to the manufacturer or distributor of the

machine. It is in their interest to ensure that the product is performing to its maximum potential and they will want to hear about any shortfall in user training or instruction.

Regular, planned servicing and maintenance in accordance with the manufacturer's schedule is something which should happen as a matter of course. Full information will normally be provided within the machine's instruction book and this can be supplemented with guidance from the dealer. Ensure that the people responsible for using and looking after the machine have access to the appropriate manuals. They are of little use locked away in a cupboard or drawer.

Many end-users are surprised at the amount by which machinery maintenance standards can be raised simply by ensuring that storage and servicing areas are kept tidy and the machine is regularly washed down. Not only will a clean machine be easier to look after but it will maintain its value



takes the rough with

Whatever their sport, players deserve a surface that can absorb all they dish out and bounce back for the next fixture. From rugby pitches to golf courses, Johnsons' grass playing surfaces can cope with the best of British sport – and the worst of British weather.

Our range of seeds gives you all the benefits of one and a half centuries of breeding. So when you want to bring new life, strength and disease resistance back to your playing surface, Johnsons will deliver the goods, season after season. We supply Wembley's "hallowed turf" and are one of Britain's



Clean machinery lasts longer and is easier and more pleasant to service and adjust



Check settings and make adjustments before returning the machine to the shed

better and for longer.

Secure storage is something which most clubs take very seriously. Anyone entrusted with a key must ensure that the area is secured after a machine or piece of equipment has been collected or returned.

Apart from the obvious safety and security benefits, allowing free access to tools and machines does not promote a high level of care and attention. Having to check items in and out will help instil greater pride in the equipment and allow operational or service problems to be noted and acted upon promptly.

In addition to full service histo-

ries of each machine, many clubs keep a log of any problems and the actions taken. It can also be helpful to note down points such as cutting height settings so that an unfamiliar operator can use the machine without wasting time making unnecessary checks or altering settings.

Always try to carry out adjustments and maintenance when returning a machine after use to the storage building. This is far preferable to waiting until the following day when important items can be overlooked or forgotten.

Experienced operators do it without a second thought, but the novice greenkeeper will almost

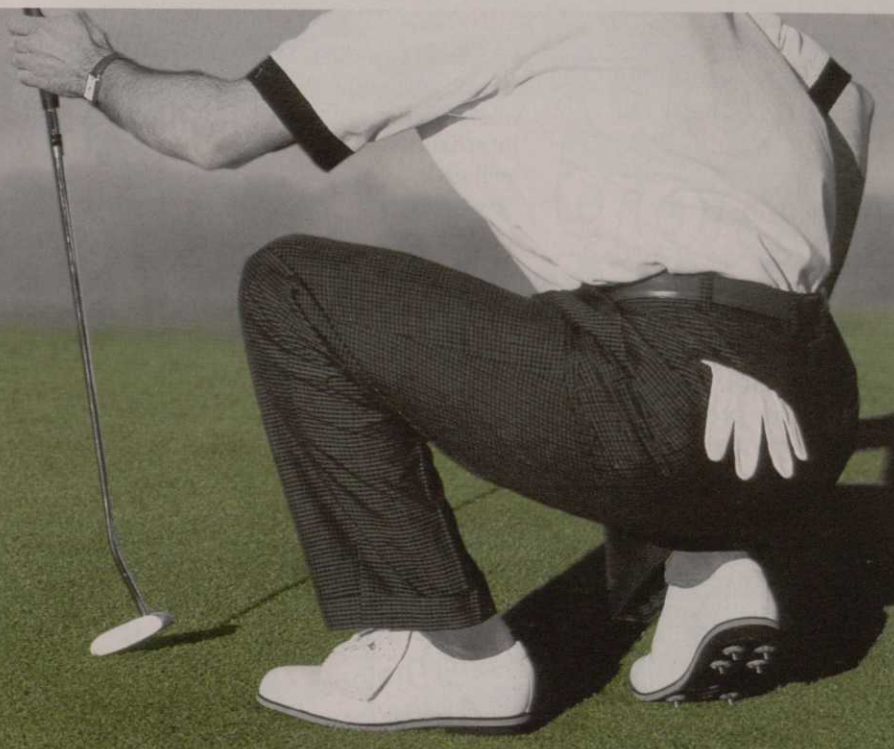
certainly need guidance in using machinery within its design capabilities. Two common reminders for the inexperienced are that mowers rarely benefit from being driven at high speed across bumpy terrain and tractors have a higher centre of gravity than turf vehicles, so be extra careful on sloping ground.

In the longer term, all clubs should seriously consider setting up a planned replacement schedule for the principal machines on the course. Knowing when a machine is going to be replaced will allow budgets to be set and ensure that one is always in a position to take advantage of

technological progress.

If you employ a dedicated mechanic at the club or have someone with a serious interest in machinery maintenance, it can be worthwhile taking advantage of the service courses offered by many manufacturers on individual machines. Although you may need to provide a separate working area and special tools, the pay back can be considerable, especially if it ensures that your course machinery is always maintained to the optimum standard, leading to higher levels of performance and operation and able to find a ready buyer when the time come for change.

the smooth



leading professional turfgrass providers. Proof positive that good breeding breeds success. And to ensure that our quality remains second to none, we have our own breeding centre and MAFF-certified testing facility: a unique combination that is your guarantee of our performance.



Johnsons Seeds

Johnsons Seeds put success at your feet.

AD
REF
540

Robust & Durable PRO-TEE GOLF DRIVING BAYS

- Robust & durable construction
- Single or multiple bay system
- Rust resistant frame
- Easily erected
- Long-life baffle nets
- Little or no maintenance
- Available with all-weather golf mats



For full information contact:
Links Leisure Limited,
Unit 22, Civic Industrial Park,
Whitchurch, Shropshire SY13 1TT
Tel: 01948 663002 Fax: 01948 666381

LINKS LEISURE

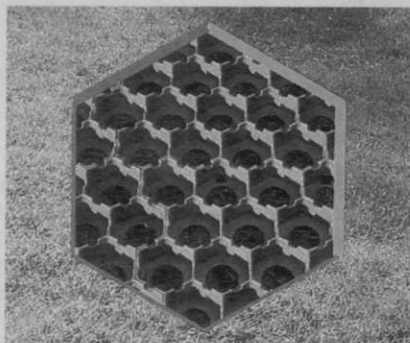
Hoofmark (UK) Ltd

Importers and distributors of the

GOLPLA®

GRASS PAVING SYSTEM

giving over 90% grass coverage to car parks,
access roads, footpaths etc.



The patented INTERLOCKING systems offers lateral restraint in addition to control of line and level, whilst ground pins are available to permit use on gradients and for slope stabilisation.

High load bearing capacity – 100% recycled HDPE.

Telephone: 0191 3888 494

Fax: 0191 3882 167

E-mail: hoofmark_ukltd@compuserve.com

AD
REF
539

Job Shop

Job Shop is a new service provided by Greenkeeper International which will give greenkeepers:

- ★ the opportunity to let potential employers know about them for only £19.95

★ looking for new opportunities, a change of location, promotion, or perhaps a move back into greenkeeping

Don't forget to include details of qualifications, experience and perhaps award wins. You can fit approximately 50 words into your advertisement.

Just send your details with a cheque for £19.95 made payable to BIGGA, to Job Shop, BIGGA, Aldwark Manor, Aldwark, Aline, York YO6 2NF

For only £19.95 you get a space this size in the Job Shop section to tell clubs about yourself. The cost includes the use of a confidential box number.

Get on to

GIBBS

LEADING SPECIALISTS IN
TURF MAINTENANCE MACHINERY

MAIN DEALERS FOR



RANSOMES CUSHMAN RYAN

Total Turf Care.

J. GIBBS LTD
BEDFONT, MIDDLESEX
TELEPHONE: 0181 890 5071
FAX: 0181 751 0108



AD
REF
542



It's hard to believe that 1997 sees BIGGA's 10th birthday and from the modest beginnings of a one room office within the STRI

building the Association has grown to become a respected body in the world of golf with almost 6500 members and a reputation for excellence.

Just look at the success of BTME and the Learning Experience in association with Ransomes and the Golden and Silver Key sponsorship programme which has assisted the educational development of members and funded books and videos including the latest Golf Course Ecology video which has been acclaimed by everyone who has seen it.

With the Association becoming ever stronger who knows where it will be when, in 2008 BIGGA comes of age – using current progress as a gauge – BIGGA will have even more successes under its belt.

To mark the occasion of BIGGA's 10th birthday, Walter Woods looks back at greenkeeping before the formation of the Association and charts the progress made since then – and we've uncovered some old photographs of some familiar faces looking slightly less wrinkled!



Neil Thomas at the first AGM at York Racecourse in March 1988

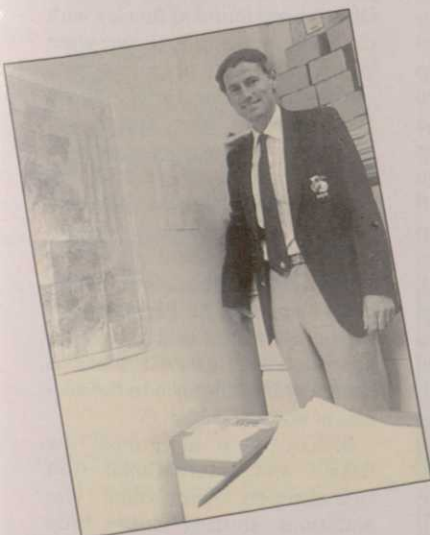


Fine weather at the first Westurf Show in May 1989



The first 10 Chairmen met for a dinner during BTME 97

Decade of progress



THE EARLY DAYS Where it all began. Neil Thomas in BIGGA's first office – in the STRI's building at Bingley. ■ Above, the first Board. Pictured from left, standing, Kevin Munt, George Malcolm and Bill Lawson. Seated: Jimmy Nielson, Walter Woods, Dennis Ayling, Paddy McCarron and Jimmy Kidd. Those missing from the picture are Jack McMillan, Cecil George, Ivor Scoones and Eric James. ■ Right, the first Education Conference at Queen's College, Cambridge in April 1989. Pictured from left, Jack McMillan, Paddy McCarron, David Palmer, Richard Fry, Neil Thomas, David Purdie, the speaker who also spoke at this year's Education Conference dinner, Dr Coaker, Fellow of Queen's College and Dennis Mottram.



Walter Woods, BIGGA's first Chairman, reflects...

Throughout the British Isles greenkeeping has been an integral part of golf organisation. Scotland in particular, where golf originated, always had hardworking proud men who pioneered their skills to all parts of the world where golf courses could be found.

Turf science, greenkeeping methods and golf course maintenance are all part and parcel of providing a well maintained golf course where golfers can play and enjoy the playing surfaces provided by the greenstaff using skills which have been learned from our greenkeeping predecessors. Many years ago people realised that before progress could be made some method of knowledge exchange would be necessary so, to encourage this, golf outings with seminars were organised mainly to formulate discussion.

Before and after World War II many golf courses employed the combined job of Head Greenkeeper and Professional Golfer, a very well respected job mainly to be found at the bigger golf clubs. As golf progressed and became more popular Professional Golfers formed their own association leaving the greenkeepers to form or improve their existing one. These were located through England, Ireland and Scotland all of them working well with their own identity. People worked voluntarily with dedication to promote their trade and most importantly create an image which would be respected.

The Open Championship, organised by the Royal and Ancient Golf Club, attracted Arnold Palmer, Jack Nicklaus, Gary Player and these three golfers had a great influence in golf. This was followed by the organisation of the European Tour who featured Seve Ballesteros, Sandy Lyle and Nick Faldo. Television showed well organised golf tournaments combined with many golf courses exposed to the eye of the camera.

Golf boomed in popularity with many golf courses being constructed throughout Britain and Europe. More people than ever were playing with golfing seasons being stretched. No longer did the



Prince Andrew opens the '93 BTME from the stage of the Royal Hall, Harrogate



Neil Thomas greets Viscount Whitelaw during the President's visit to the BIGGA tent during the 1990 Open at St Andrews with Elliott Small, John Millen and Harry Diamond in the background

club open in March and close in October. Every month, every day indeed was valuable to assist the golf club in its efforts to provide facilities and the promotion of golf. Golf course maintenance along with greenkeepers came under pressure, more play meant more compaction. More television, particularly of Augusta meant more fertiliser and water, the combination of all of these meant problems would occur... and they did.

Golf clubs and greenkeepers needed help. Associations which had worked well in the past were treading water, barely preventing themselves from drowning. Following a meeting with the R&A officials, who were very supportive of all issues, it was decided to test the water with the view of having one total British green-

keepers association which would allow expansion, more organisation, a better professional image and, most importantly, a stronger output in education. How to achieve this was the problem. Each of the splintered Associations had their suspicions of each other and all of this had to be broken down. Fortunately there were enthusiastic people who could see the benefits. After many productive meetings it was decided to go ahead. The R&A provided finance to hire a reputable consultancy company to form plans on how the Association should develop starting off from a solid formation.

The whole of Britain and Ireland were analysed according to their location and membership size. These were dissected into Regions and Sections all with a flow of communication. Members could flow from section to region and then represent their region if ambitious enough. Throughout this difficult period two Trustees from the R&A sat on the board, these were Peter Wilson and Roger Robinson, both of whom were extremely well educated and without them I doubt if our decisions would have been so effective. A constitution was developed taking many months and much effort and my goodness was this tough. All regions wanted their

piece of the action and every detail had to be scrutinised and analysed like you were walking through a minefield. Finally it was decided and accepted.

During 1987 most of the early groundwork had been cultivated ready for seed. Neil Thomas was hired not for his greenkeeping knowledge but more for his business skills.

All of the meetings were held in the Station Hotel in York and I doubt if a more beautiful or historic place as York could have been selected. The first year was difficult, we were marching hard just to consolidate our position. Offices were found at Bingley with the STRI but although we were grateful they were not satisfactory.

Aldwark Manor Hotel outside York offered office space and because of its convenience for ease of travel this was accepted. During '87 Lord Whitelaw was contacted by letter and much to our delight agreed to be President of our new British Association. This acceptance along with his Parliamentary career, his ability as a golfer and appreciation of greenkeepers has been a great influence in the success of our Association.

BIGGA, as it is termed, the British and International Golf Greenkeepers Association, was ambitious, starting with a little

come...

over a thousand members. The magazine to start us off in our communications was reasonable but unreliable and I doubt if we would have rested until it came under our own authority. The machinery exhibition was at that time talked about but we were not clear on what revenues to take as at all times there were people ready to exploit. Great care had to be taken. Greenkeepers image and dress code, with blazer and newly designed badge, was our first priority. At first this was laughed at but it soon became accepted and the more

proud members became. Barriers between Sections and Regions were broken down mainly because of greenkeeping problems and all of our worries and concerns knew no barriers.

The first Board of Management and subsequent Committee realised that if all ambitions were to be fulfilled a solid financial base would have to be made. Members subscriptions were our main source of revenue but increases were difficult simply because we had nothing to offer. The R&A still provided encouragement and financial support which allowed us to improve communications with a better, more educational, magazine. Neil Thomas made massive improvements with a business-like approach but often must have been frustrated by negative comments.

The Association improved slowly with a professional image being our objective. Many officials of authority in the golf industry considered us as a threat with the view that if we educated Greenkeepers their demands would become unacceptable. However every year some progress was, and is, made.

The magazine came under our own control providing us with additional welcome revenue. The exhibition was born at Harrogate with only a few loyal tradesmen giving support and has now grown beyond our own expectations.

Our educational system under Ken Richardson covers all aspects of Education from the lowly bunker raker right up to Course Manager status. Membership has also risen dramatically rising from 1000 members up to over 6000 and eventually more will be attracted. The demand for education is on the increase and young ambitious greenkeepers realise



Who's that with the BIGGA Greenkeeping Support Teams?



Disaster struck the Scottish team's journey to the first Iseki Competition at St Pierre when the bus broke down leaving the team stranded. Chris Kennedy, Dave Robertson, Stewart Harvey, Andy Wilson, John Geddes, Billy Whitefield, Mike McInness, Charlie White, Vince Reid, Elliott Small, Jim Gray and Arthur Williamson. Apparently the lights also failed on the journey home!



Almost a complete set of Regional Administrators from BTME '93. Roger Willars, Midland Region; Elliott Small, Scottish Region; the late Norman Exley, South East Region and Gordon Child, South West and South Wales Region. Bob Lupton, Northern Region, was unavailable for the photocall.

WHAT PEOPLE SAY

Pat Murphy, current Chairman:

"We didn't have a clue what BIGGA might become 10 years ago but it is beyond our wildest expectations. The progress we have made even in the last five years is unbelievable."

Jack McMillan, 1988 Chairman:

"What has been achieved over the last ten years is remarkable and a credit to the Board of Management and staff. Greenkeeping is a lonely business and BTME is our chance to get together."

Cecil George, First Board Member:

"BIGGA is going from strength to strength and I can only see it continuing along those lines. The next thing should be to build a championship golf course of our own."

Ivor Scoones, 1990 Chairman:

"At the beginning, what we've achieved now would have seemed completely out of our grasp. It just shows that with dedication you can reach for the sky successfully."

Eric James, First Board Member:

"BIGGA has advanced so rapidly and we are more professional now than we have ever been. I'm particularly pleased that our links with the GCSAA are strong as I was one of the first UK greenkeepers to visit their show."

that without the assistance of a well respected Association this cannot be achieved.

The Open Championship provides a platform for traditional British Greenkeeping to be shown all over the world. To assist the Course Manager to cover any circumstances which he might require a support team from the Association is provided, giving us the chance to show how profes-

sional we have become.

Ten years on I now see unbelievable improvements, far beyond any recognition, young men smart in their attitude, proud in their ambition, all representing their golf clubs but still all wanting to learn. This year I visited the Turf Management Exhibition at Harrogate which attracted 5,500 and must be the biggest Indoor Exhibition of its kind in Europe. In addition to this there were delegations from 17 different countries.

During the week there were also seminars, workshops and discussions organised mainly to stimulate more growth in education. On one day of that week I was lucky enough to be invited to the Association Chairman's Lunch and who was there but our own Lord Whitelaw who was still telling us to go forward and progress with confidence.



The Rest of the World and Americas teams which contested the first Hayter International Cup at West Lancashire Golf Club last September. For the record the Americas just pipped the Rest of the World in a tightly fought contest.

Perfect turf. No weeds. Get the point?

Spearhead

Even the most Stubborn turf weeds won't see new SPEARHEAD coming.

Containing new chemistry, SPEARHEAD is a selective herbicide with the power to strike from out of the blue in any sports or amenity turf situation.


SPEARHEAD sets new levels of excellence, and controls not only the more common

weeds of turf, but also the problem weeds such as Slender Speedwell and the Clovers.

With its approval for use on grasses as young as two months, low rates of use and clearance for knapsack application, now is the time to select SPEARHEAD - the ultimate all round weapon in the war against turf weeds.



For details of your Rhône-Poulenc distributor telephone 0277 301115.

 **RHÔNE-POULENC**

Rhône-Poulenc Environmental Products, Fyfield Road, Ongar, Essex CM5 0HW Telephone 0277 301115 Fax 0277 301119
SPEARHEAD CONTAINS DIFLUFENICAN, MCPA AND CLOPYRALID. READ THE LABEL BEFORE YOU BUY: USE PESTICIDES SAFELY. MAFF 07342

Spearhead. The ultimate all rounder on turf.

As Greenkeepers what do you have a right to expect?

by **Tony Rees** MIOSH, Health & Safety Consultant & Senior Instructor with ATB-Landbase Training Services

The Health and Safety at Work Act 1974 places duties on the Employer (Golf Club) not only covering the safety of employees but also on the general duty to ensure the safety of all other persons who may use the services or facilities.

The duties under the Act are broken down to show in a series of monthly articles:

- Employers Duty to Staff
- Employers Duty to Others
- Duties of Designers, Suppliers, Manufacturers of both Articles and Substances, Employees Duties.

This Act is supported by a series of Regulations which are also Statutory, that clarify specific responsibilities. In addition there are specific requirements both Statutory and Guidance covering the use of pesticides, chainsaws, abrasive wheels etc. These will be covered in future articles.

Employers Duty to Staff

The effect of Section 2 of the Health and Safety at Work Act is to make criminally enforceable the common law duty to take reasonable care for the safety of all employees.

Section 2(1) 'It shall be the duty of every employer to ensure so far as is reasonably practicable the Health, Safety and Welfare of all his Employees'

Section 2(2) In particular this duty extends to providing and maintaining:

- safe plant and systems of work
- safe use, storage, handling and transport of articles and substances
- provision of information, instruction, training and supervision
- safe means of access and egress, with a safe place of work
- safe working environment

As can be seen from the above section the five points shown actually cover all aspects of the employers business, from the provision of safe equipment/machinery to use, the provision of safe operating procedures for their use to, the provision of information, instruction and

supervision to ensure that the equipment/task is carried out safely.

It requires the employer to ensure so far as is reasonably practicable that all the equipment to be used eg tractor, mower, strimmer, chainsaw and any other equipment, is safe for the operator to use. It must be adequately guarded, maintained and in good a good condition to achieve this. There must also be available safe systems of work which will give the operators information and instruction on how to use the equipment safely covering the variations of use for example working on slopes or working alone.

We need to ensure that all articles and substances are handled, stored and transported safely at all times, and ensure that all employees receive



adequate information, instruction, training and supervision covering the work they will be doing. This relates to information regarding any specific hazard that may be encountered, and any specific equipment that may be used. Any specific training that is given should be to the required standard to enhance the competency of the individuals being trained. You may be required to produce evidence of this.

The use of the words "so far as is reasonable practicable" sets the standard for the employers duties. They are qualified rather than absolute duties. In practice it is for each employer to determine what are reasonably practicable precautions for the risks their employees may be exposed to at work by carrying out a risk assessment, and in most cases documenting this training in risk assessment fundamental to the implementation of safe practice.

A definition of "reasonably practicable" given by Case Law

shows that "reasonably practicable" is balancing the risks against the costs (in time, effort and money) in overcoming those risks. The greater the risks the more will be expected to be done by the courts.

Further guidance on what would be deemed as reasonably practicable precautions in the place of work can be found in Health and Safety Executive (HSE) Guidance Notes and Codes of Practice from industry groups, and through training. In most instances Common Good Practice will be taken to be reasonably practicable.

Section 2(3) Safety Policy

An employer with FIVE or more employers must produce a written statement of their general health and safety policy which should include:

A General Statement of their intentions with regard to Health and Safety. This statement should show what the organisation is going to do with regard to Health and Safety and must be signed and dated by the most senior person in the organisation.

The Organisation which will state the specific duties placed on staff to ensure that the statement is implemented.

The Arrangements for carrying out the policy. Procedures to allow the organisations intentions to be achieved. This would cover specifics - what will be done to ensure that employees and others are kept as safe as is reasonably practicable. The arrangements would give specific guidelines to cover things like Machinery Safety, Manual Handling, Electricity, Noise, COSHH (Control of Substances Hazardous to Health), Accident Reporting/Recording, First Aid, Fire and all other topics that could effect Health and Safety.

■ Next month we will look at the Employer's duty to others eg club members and the public together with the duty of Designers, Manufacturers and suppliers of articles and substances.

■ Further information on training courses and consultancy ATB-Landbase Training Services (Jean John on 01282 617466 or Tony Rees on 01686 622799).

ASSISTANT GREENKEEPER

Profile

Usually the spotlight falls on the Course Manager or Head Greenkeeper at a Club. Now it is the turn of those whose work often goes unheralded to star...



Name: **Scott Corrigan**
Age: **23**
Club: **Greenburn GC, West Lothian**
Position: **First Assistant**

1. How long have you been a greenkeeper?

Seven years

2. What education are you currently undertaking?

HNC in Golf Course Management

3. Which one task do you most enjoy doing?

Redesigning features of the golf course - bunkers, mounds etc

4. Which one task do you most dislike doing?

Hollow coring

5. What job other than greenkeeping might you have ended up doing?

Electrician or a joiner

6. Who has been the biggest influence on your career?

My mum, Ann, and my dad, John.

7. What would you do to improve the life of a greenkeeper?

Double the standard rate of a First Assistant's wages and educate the golfer about the work involved with maintaining a golf course.

8. What are your hobbies?

Golf, football and cycling

9. What do you get out of BIGGA?

Information on education, good articles that are relevant, security through the insurance provided and a chance to play golf at other courses.

10. What do you hope to be doing in 10 years time?

I hope to become a Head Greenkeeper or maybe a Course Manager.

Your computer as yo

Ken Richardson continues his series with a look at how to operate a PC and at some of the software packages available for golf course management



When you first get access to a digital computer and you have connected all of the hardware together, you need to connect the computer (and if necessary the Monitor) to the mains. Before applying power, however, check that you do not have any floppy disks installed in disk drives.

Switch on the monitor and then switch on the computer. You should hear a series of bleeps and groaning sounds, the floppy and hard disk lights should flash and messages should start to appear on the screen. If you

have forgotten to remove floppy disks then this message will be an error message

telling you that the computer has found a non system disk. These checking and loading operations are performed by a 'built in operating system' which comes ready loaded, in ROM, by the manufacturer. This software also tells the computer to search for The Operating System.

Operating Systems

Operating systems are software packages that tell the computer what to do and when to do it. There is a range of operating systems but for most PC users, DOS and Windows are the norm. Apple Macintosh computers use a system called Mac OS. New PCs normally come with Windows 95 ready loaded but older computers will probably have a version of DOS eg 6.1 and a version of Windows eg 3.11. Some very old computers may only have DOS.

DOS

DOS is an acronym for Disk Operating System. To communicate with DOS needs a shorthand lan-

INTRODUCING THE NEW GREENSMaster 3200-D



ur business partner

guage, which can fill a large book however a few examples are given below:

■ **DOS Prompt.** If your computer has DOS loaded and is set up so that you must access Windows through DOS then the DOS prompt will appear on the screen when the built in operating system has completed its job. The DOS prompt will be shown as C:\>. This means that the computer is operating from the C drive ie hard drive and is in the base directory (I will look at directories in more detail later). To load Windows then all you normally have to do is type Windows, after the DOS prompt ie C:\>Wind, and DOS will start to load Windows.

■ **Drives.** As was stated in last month's article, each disk drive is identified by a letter eg the hard disk is given the letter C, floppy drives A and B and CD ROM is given the letter D. To change drives in DOS you type the appropriate letter followed by a colon eg to change from the C drive to the

A drive type A: after the DOS prompt and press Enter and to change from the A drive to the C drive type C: at the DOS prompt ie A:\>C: followed by pressing the Enter key.

■ **Directories.** Directories are used to store collections of information. This can be data in files, software, or other directories. DOS allows you to access directories simply by typing Dir after the DOS prompt followed by Enter. However, the whole directory will be displayed on the screen and could cover several pages. Therefore, it is better to type Dir/p followed by Enter, which outputs one page (more pages may be output by pressing any key until all pages have been accessed) or by typing Dir/w followed by Enter, which prints in wide format. To change directories, type cd (followed by a space) and then the name of the directory and Enter. Eg to change from Windows to MSWorks: C:\Windows>cd MSWorks (Enter), C:\MSWorks>

Running programmes in DOS

At the DOS prompt type the programme name. C:\MSWorks>Works

The programme (application) should now run.

■ **Stopping a programme in DOS.** A programme can be stopped in a number of ways but is normally done by pressing Esc.

Windows

The Windows operating environment differs from DOS in many ways. It is more 'user friendly', there are less words to remember and it can allow more than one concurrent task to be run ie multi tasking. Many books have been written to help users understand Windows and I can only give a brief summary here. As I said above, Windows can be selected automatically by your computer (using Autoexec.bat) or you may have to select it through DOS. Nevertheless, when Windows is selected, the screen will show the Windows logo and information about the version being used. Once Windows is fully loaded,

your screen will show the programme manager window (rectangular shape) or a number of windows on top of the programme manager window. Each window may contain a number of icons ie pictures which indicate an application eg the MS Works window may show an icon which represents MSWorks. It is normal to run applications in windows by using the mouse eg:

■ Point the mouse pointer at the icon.

■ Double click the mouse button. The application should now run. The application can be stopped in two main ways.

■ Point the mouse at the small rectangle in the top left corner of the open window and double click the mouse button.

■ Point the mouse pointer at File on the menu line. Then point at Quit and double click.

The final action with any computer system is shutting down the system before switching off. This action is important as turning off the computer without performing

SO QUIET, YOU CAN HEAR A PIN DROP.



Early morning mowing is no problem for this greenkeeper. He knows there'll be no complaints about noise because he's operating a Greensmaster 3200.

With an exceptionally quiet engine it maintains its power for a full day's work.

An operator's dream, this new model is the latest in Toro's top-selling Greensmaster 3000 series. Its unique new cutting system gives a superb quality of cut.



The new cutting system

If you want to hear a pin drop, give us a call and we'll walk your course with you and recommend the best machine for your needs.

You can trust Toro expertise and quality.

Simply telephone 01480 476971 and we'll arrange for a local dealer to contact you.



TORO

Bringing perfection to play.

'There are many software packages of use to Golf Course Managers'

shutdown can cause irrecoverable damage to disks. If the computer is running an application then shut down the application. Then shut down Windows by pointing at the rectangle in the top left corner of the programme manager window and double click or pull down the file menu, as above, point to Quit and double click. Windows will ask if you really want to quit and you agree by pressing Enter. The computer will then show the DOS prompt and you can switch off the power to the computer, monitor and any peripheral devices (printers etc) and turn off the mains supply.

Windows 95

Windows 95 is meant to be easier to use than previous versions of Windows and it has the added advantage that it does not need DOS to run, although it will run DOS programmes. It also comes with 'free' applications software ie a word processor, an address book, a calendar and a drawing package. There is less pointing and clicking in Windows 95 and there are more icons (meaningful pictures) that you can use. It allows you to use longer filenames of up to 255 characters as against 8 in previous Windows versions. Many processes are automated and operate 'in the background' and it automatically looks after the computer hardware. All of this does come for nothing, however, and if you want to update to windows 95 then you may have to update your hardware. Windows 95 needs at least 8 Mb RAM, at least 120 Mb Hard Disk space and a 486DX or Pentium processor.

Once you have installed Windows 95 and switched on the power the computer will make similar noises as with DOS and Windows. Once everything has stopped and Windows 95 is running, the screen will show the Welcome to Windows 95 window with a My Computer icon and a Recycle bin icon on the desktop. The most important icon is the Start icon. Pressing Start gives you access to a series of pop up menus so that you can run applications. You can shut down Windows 95 by clicking the Shut down button. This opens a window which asks if you are sure you want to shut down and has Yes No and Help buttons. Clicking on Yes will shut down Windows 95. Windows normally comes

installed on new computers, however if you decide to update an existing Windows package it costs approximately £60 +VAT.

Applications Software

Applications software allows you to use the computer to do a task or tasks. These can be single applications such as word processors, databases, spreadsheets, games, multi applications such as MSWorks, MSOffice and WordPerfect Office, all of which have word processor, database and spreadsheet in the one application and specific application programmes such as TRIMS and Greenware and Office 2000. Each application comes with its own tutorial and Help features but I will try to describe the main features of several packages.

■ **MSWorks** MSWorks is a straightforward office package which includes a word processor, database and spreadsheet. It comes in both DOS and Windows versions and costs approximately £80 +VAT. MSWorks needs a 386SX computer with at least 4 Mb of memory and 14 Mb of Hard Disk space available. DOS 3.1 or later and Windows 3.1 or later. Also available for Windows 95

■ **Word processor** Most word processors are very similar. When the word processor is selected, you are faced with a blank piece of paper on which you can type your information. However certain features are set by the computer. These features are known as default settings and include margins, the type of print character (font), the size of print and page orientation. These settings may be altered so that you can customise your documents. Once you have typed your let-

ter, you can use the spell check facility, make corrections and finally print the document. Before printing, however, you should ensure that the document is oriented correctly ie portrait or landscape and that the printer settings match the document settings. Remember, that your document must be stored, usually on a floppy disk, before switching off the computer, otherwise it will be lost.

■ **Databases** Most data bases are similar and have similar features. They are used to hold data that has the same features eg machinery servicing records, address lists and trade contacts. Before any data base is used, you must decide what data it is going to hold and sketch out a plan.

When you are ready, you can then input the layout into the data base. Each 'box' is known as a field and each set of fields is known as a record. Once the record has been inputted, you can then put data into records. Data bases allow you to search for records, search for data in records, match records sort records and print information from records. In MSWorks and most other office packages, you can link data bases with the word processor to produce mail merged documents, land labels.

■ **Spreadsheets** Spreadsheets are used to hold data in columns and rows. There are many uses of spreadsheets but the most common use is for the storage and manipulation of financial records. Spreadsheets allow you input data, carry out calculations, print data, and display information in graphs and charts.

MSWorks also contains Works Wizards. These are commonly used features that have been set up by the programmer which may save you time.

■ **TRIMS** TRIMS is a Grounds Management software package that was developed in the USA. TRIMS was designed specifically for Golf Course Managers and, although available in DOS and Windows versions it is normally supplied in Windows format. Main features include:

- Schedule of Events Calendar, Safety Data Sheets
- Calculator, Emergency Telephone Directory
- Water Management, Weather Database
- Personnel Records, Inventory and Purchase Orders
- Fuel Inventory, Budget Monitoring
- Chemical Records, Soil Nutrient Charts

■ Maintenance Records

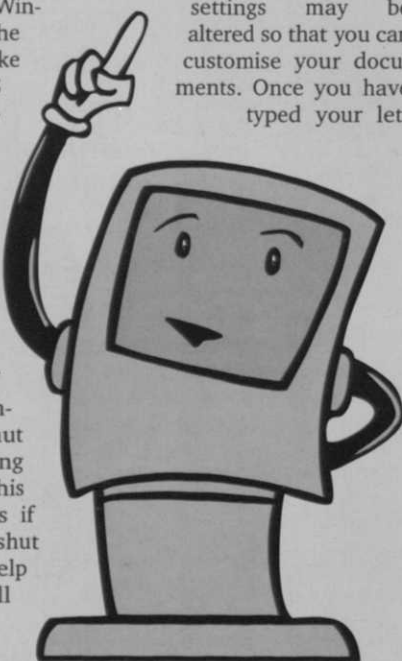
Further details on TRIMS and a demonstration disk may be obtained from BIGGA HQ. Trims costs £1250 (for Windows version), which includes delivery charges. Installation, basic training and one year's support can be arranged through BIGGA. Hardware requirements are 386, 486 or Pentium processor, 4 Mb RAM (8 MB recommended), 25 Mb available on Hard Disk, Windows 3.1 or Windows 95, VGA display, Mouse and Windows compatible printer.

There are other grounds management programmes available. Greenware, which is available from Veenstra Adviesburo Golfterreinen, Walingsdijk, 1633 Avenhorn, Netherlands, is similar to TRIMS however, we currently do not have any feedback on its operation.

■ **Club 2000** Club 2000 is a golf club administration package. Used mainly by golf club secretaries, this software incorporates membership control, subscriptions, payroll, integrated accounting and project planning. Club 2000 costs £1250 + VAT for the full system with annual software support costs of £245 + VAT. Full details may be obtained from Club Systems International 34/36 Fairacres Road, High Lane, Stockport, SK6 8JQ, telephone 01663 762499.

There are many software packages that may be of use to Golf Course Managers. More are being developed as more course managers become computer literate and are having hardware installed. It is difficult to gauge the advantages (and disadvantages) of using a computer to assist in day to day management of the golf course when you are unfamiliar with the hardware and the software supplied or inherited. However, as more greenkeepers become familiar with computing, hardware and software, the range of software management tools designed specifically for greenkeepers will increase.

In this second article, I have looked at how you can make the computer work for you by looking, briefly, at operating system software and applications software. The only way to become completely familiar with software is by attending a training course, such as the BIGGA Supervisory Management Courses at Aldwark Manor and around the BIGGA regions and then to practise using the hardware and software.



All you need to carry all



Take the stress out of transportation by letting Carryall take the strain. It's a course winner every time.

Whether carrying people, turf maintenance equipment or any



number of other things that need shifting – this exceptionally quiet, lightweight, yet hardworking machine lets you perform around the golf

course, free of stress to you and your turf.

And, as one of the most dependable utility vehicles available, with a durable aluminium/Armorflex body shell, it won't leave you stranded in the rough.

Economic to run, it's available with a wide choice of options, such as our Driving Range Protective Enclosure and Machinery Loading Ramp. Whether you're working the fairways, tees or greens, Carryall is ALL you need to carry. For further information and a no-obligation demonstration of the Carryall, telephone **01480 476971**.



CARRYALL

Club Car

DRIVE IT TO WORK

LELY (UK) LIMITED, STATION ROAD, ST NEOTS, HUNTINGDON, CAMBRIDGESHIRE PE19 1QH
TELEPHONE 01480 476971 FACSIMILE 01480 216167

AD
REF
61

Weed out your worries



Be selective - choose **Tritox**® for effective control of the broadest range of weeds in sports and amenity turf.

- Kills a wide range of broad-leaved turf weeds - including clover - in one application.
- Only one day's freedom from mowing needed before and after application to fine turf.
- Rain-fast and irrigation-proof in just six hours.
- Will not vaporise or scorch in hot conditions.
- May be conveniently tank mixed with **Greenmaster**® Liquid (15-0-0), **Seafeed**® seaweed extract and **Aquamaster**® wetting and penetrating agent.

Tritox contains 178g/l MCPA,
54g/l mecoprop-P and 15g/l dicamba.

ALTOGETHER AN UNBEATABLE COMBINATION



If you would like to know more please call our Technical Services Manager on 01473 203143 or contact your Local Area Sales Manager:

South - Chris Briggs

Tel: 0378 603103 (mobile) or 01273 675966

Midlands and Wales - Roger Moore

Tel: 0378 603052 (mobile) or 01832 710076

N. England, Scotland & N.I. - Richard Walton

Tel: 0378 603091 (mobile) or 01977 662187

Read the label before you buy: use pesticides safely.
TRITOX, GREENMASTER, SEAFED, AQUAMASTER and THE LEVINGTON DIFFERENCE are registered Trade Marks of Levington Horticulture Ltd. © Levington Horticulture Ltd 1997

AD
REF
102

The **BEAR**® is here!

At last – an inexpensive alternative to upgrade
TORO® and **RAINBIRD**® sprinklers and
with a 5 year exchange warranty.

One kit fits all – RG7800 replaces
28 **TORO**® 1½" conversion assemblies

– no more bull when it comes to irrigation
components

- why pay through the nose?

For the best in sprinkler parts –
go with the **BEAR**®

– for quality and value – it's way out in front

AVAILABLE FROM ALL **Hunter**® DEALERS.

All original equipment manufacturers names and numbers are used for identification purposes only and not to
imply that these are original parts. **TORO** and **RAINBIRD** are registered trade marks.

Sports Ground Irrigation Co.

6, Stuart Road, Market Harborough, Leicestershire, LE16 9PQ
Telephone: **01858 463153** Fax: **01858 410085**

What to look for when buying an irrigation system

Firstly some good advice from John Ruskin, the philosopher, written some 100 years ago; *"It is unwise to pay too much, but it's worse to pay too little. When you pay too much, you lose a little money - that's all. When you pay too little sometimes you lose everything, because the thing you bought is incapable of doing the thing it was bought to do. The common law of business balance prohibits paying a little and getting a lot - It can't be done. If you deal with the lowest bidder, it is well to add something for the risk you run, And if you do that, you'll have enough to buy something better."*

Getting value for money is a delicate balance; the purchasing of an irrigation system is no exception.

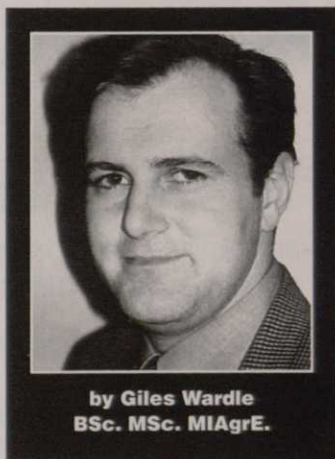
The awarding of an irrigation installation contract requires the assessment of a multitude of factors.

So what are the things to look out for in an irrigation salesman's presentation?

Specialist golf irrigation materials (sprinklers, control systems, solenoid valves etc.)

This is where the irrigation salesman has a field day. It provides the basis of his armoury to persuade the customer to buy his products. These components are the most visible parts of the irrigation system and the ones that bear the name of the manufacturer whom he represents or for whom he is the distributor/agent.

No two sprinklers or controllers



are the same and therefore there are numerous differences in terms of the features of the products on offer that the salesman can use to show his products in a better light. As every greenkeeper knows, the benefits of these features according to the salesman are that his sprinklers are more energy efficient, require less maintenance and apply water more uniformly. His control system is more "flexible", easier to use, more reliable and, the most common claim of all, saves you water.

Because of the wide range of equipment available, very often people and specially committees can get bogged down and spend too much time deciding on which manufacturer or model of sprinkler, valve or controller is the best. Often insufficient consideration is given to the other major facets of an irrigation system (design, installation, service).

PUMPS SPRINKLERS CONTROLLERS

We service your needs completely.

Ocmis Irrigation

Head Office	01460 241939
Midlands	01789 414604
Northern	01924 453102
Scotland	0131 2202102

AD
REF
360

IRRIGATION CONTROL

THE ONLY OFFICIALLY APPOINTED MASTER
DEALERS IN NORTHERN ENGLAND FOR



Hunter®

SPRINKLERS

WITH OFFICES IN CHESHIRE AND YORKSHIRE
WE OFFER A FULL RANGE OF SERVICES
INCLUDING DESIGN,
SUPPLY, INSTALLATION AND SERVICE

FREEPHONE

0800 174 175

AD
REF
541

THE WINNING CHOICE IN SPORTS FIELD IRRIGATION

RAIN BIRD®

PREFERRED BY PROFESSIONALS WORLDWIDE

There is no specific system that meets the demand for every sports field. That's why Rain Bird offer a choice of systems to meet the individual requirements of your sport, local conditions, budget, water and manpower.

Ghi

As professional distributors and installers of irrigation equipment for over 25 years we will put our experience behind you

So make our reputation your choice.

GLEN HEAT & IRRIGATION LTD,

PINCHBECK, SPALDING,
LINCS. PE11 3UE

Telephone:
(01775) 722327

Facsimile:
(01775) 725444

We would be
pleased to carry
out a
SITE SURVEY
at your course
and forward
recommendations
**FREE OF
CHARGE**

Irrigation at its best

AD
REF
280

Logic Irrigation

Manufacturers and distributors of quality irrigation equipment

Exclusive European distributors for

- **Eicon Radio Remote Control**, which is now available for TW2-1 and the TW2-4 controllers. Call for your nearest Logic approved supplier.
- **Aquarius 2** – The PC-based control system that runs in Windows 95 – as a stand alone controller or with a TW2 as a back up. This advanced controller can be fitted to any existing two or three wire network.
- **Logic TW2 Decoders** – A breakthrough in price and performance – three year warranty – Built-in lightning protection – Multiway output: up to four valves can be operated from one decoder – Prices from **£18.00** per valve.
- **New Logic Impact Drive Pop Up Sprinklers** manufactured in the UK exclusively for Logic Irrigation – Call for details on the full range.
- **New low cost Weather Station** with a desk top display that calculates ET at the press of a button.
- **Aquamaster fountains, Mini Klik, King, products, West Ag sprinklers** – Trade enquiries welcome.

Logic Irrigation Ltd, 24 Hazel Grove, Wallingford,
Oxon OX10 OTA. Tel: 01491 837 455

AD
REF
217

NORTH STAFFS IRRIGATION

IVY MILL, LONGTON ROAD,
STONE, STAFFORDSHIRE

Value for money at the sign of
the water mill.



We are big enough to cope with all your Irrigation requirements and small enough to care about every aspect of our dealings with you. A family run business of qualified Engineers who really enjoy thier work. Our Principal plays golf when he's not working and fully appreciates the needs of the course managers. We can offer your Golf Club the technology of today at prices well below some of the the bigger companies.

**At the end of the day the system has to work
OURS DO – BEAUTIFULLY**

Recent contracts:

Royal Lytham & St Annes (1996 Open), Chatsworth
(For the Duke of Devonshire), Wilmslow, Northampton
Town F.C., Donnington Wood Bowling Green.

We are also pleased to undertake work at Tennis Clubs,
Bowling Greens and Football Grounds.

Telephone us now on 01785 812706

Fax 01785 811747

Member of the BTLIA

AD
REF
545

What to look for when buying an irrigation system

'It is wise to ask for references from the tenderers...'

True, the specialist irrigation products are crucial to the success of an irrigation system, however it is important to remember the old adage that the "system is greater than the sum of its parts". While the individual components are of paramount importance; their incorporation into a system design is of greater significance.

By and large all manufacturers of golf irrigation equipment produce quality materials, since golf is at the vanguard of irrigation technology. The important aspect in choosing the specialist irrigation equipment is to choose the right type of sprinkler and controller rather than the make. There are numerous products available but only a handful of manufacturers; the name on the sprinkler lid is of less importance than the type, model and performance of the sprinkler.

Since irrigation manufacturers and distributors are in the business of selling the specialist irrigation components, they will spend more time selling the benefits of their latest all-singing-and-dancing products than the other facets of the system that are equally as important and collectively more important. These are....

Irrigation System Design

Golf course irrigation system design involves more than just hydraulics calculations and is as much an art as a science. As such, like all engineering disciplines, there are no such things as wrong designs and right designs, rather good designs and bad designs.

Consequently if you give the course plans to three engineers you will get three completely different designs. These designs will be very difficult to compare equitably when choosing which one to buy. If the golf club or developer chooses to invite tenders on the basis of "design and build", then he would be wise to give tenderers at least a performance specification to adhere to when designing their system. Otherwise the task of choosing which tender will be reduced to choosing which design; two completely separate matters. While you may decide which is the best design, you will have no way of knowing if it is the most competitive.

A performance specification obviously will vary according to the layout of the course, the type of course, the climate, the soil, the topography, the grass species

utilised etc. However a performance specification should detail the following;

- The design water application (ie. the peak water requirement in mm/day)
- The design irrigation cycle (the time in which the above must be applied to avoid disrupting daytime play, commonly 9-10 hours)
- The areas of playing surface to be watered
- The pumping plant location
- The type of system (e.g block system or valve-in-head)
- The materials to be used (e.g type of sprinkler, controller, MDPE or uPVC pipe etc)
- The method of installation (e.g. trenching/mole-ploughing)
- The pumping plant (minimum No. of pumps, fixed-speed/variable-speed etc).

It is a testament to the fact that creative input is required in irrigation system design that even with a performance specification the designs submitted are likely to differ. The alternative option is to invite tenders from prospective contractors for a single specific design, undertaken by an independent engineer. This will ensure competitive tendering.

Non-specialist materials (pumping plant, pipework, cable, ancillary items)

The pump and pipes are the heart and arteries of an irrigation system. The hydraulic design of an irrigation system is, therefore, fundamental to its long term performance and reliability, not only in terms of the amount of water the system is capable of applying

but also the running costs and maintenance requirement.

However this is often the least discussed topic between salesman and customer, partly because this is the facet that the layman is most poorly equipped to discuss. The modern day golf architect, golf director or greenkeeper is technically very aware and well informed. However hydraulic design does not, nor should, form part of his technical competence.

It is rare to find an irrigation system that has been over-designed in terms of pipework and pumping plant but not uncommon to find one over-specified in terms of specialist irrigation equipment. Not surprisingly, since the pipework and pumping plant return smaller profit margins to the irrigation manufacturer, distributor or contractor than the specialist equipment that bears their name.

It is not uncommon for a golf course to employ a permanent member of the greenkeeping staff whose sole duties are to tend to the maintenance requirement of the irrigation system. Probably the greenkeepers biggest headache during the irrigation season is to repair pipe bursts. This is the one failure of a bad irrigation system which has the most serious consequences since pipe bursts can result in damage to the course, disruption of play, loss of water, temporary shut down of the irrigation system, which in turn disrupts irrigation scheduling and may cause drought-stress to the turf if the damage is not repaired quickly.

Often a customer, fearing this

scenario, will ask for a longer guarantee on the system, five years instead of one or two. However this should not really offer peace of mind, because an irrigation system should last a lot longer than five years. Good hydraulic design is worth much more than a guarantee. The customer should therefore ensure that the system has been designed by a competent and qualified engineer with experience of golf irrigation design. Installation and After-sales Service

A chain is only as strong as its weakest link. Often the weak link in an irrigation system is poor installation. There is nothing more annoying than paying for poor, defective or incomplete work particularly when you've paid for quality materials and good design.

Often the tenderers are well-known and respected irrigation contractors with good reputations. However this may not always be the case. It is wise to ask for references from the tenderers and in most cases they will provide several references in their sales literature.

The references, not surprisingly, will comprise the most recent and prestigious installations they have undertaken. However it is important to note that the majority of problems arising from a poor standard of installation occur either during construction, whence they are ironed out before handover, or many years later. Checking up on a recent reference therefore is unlikely to yield a negative response in terms of the contractor's standard of workmanship (unless of course they are really bad). It could be more informative to check up on old references.

The British Turf & Landscape Irrigation Association has a code of practice for irrigation design and installation; ensure the contractor adheres to it.

When assessing tenders it would be prudent to ascertain the contractors ability to provide after-sales service. Do they have a maintenance department or is maintenance undertaken by the installations staff? Do they offer a service & maintenance contract? How fast can they respond to a call-out? Are spares and replacements charged at list prices or are they discounted? Do they stock spares or are they only stocked by the manufacturer or distributor?

No golf course in the world has more right to call itself "Old" than Musselburgh Old Links which is the oldest existing golf course in the world. As Scott MacCallum found out, like many humans of a certain age, it is having a facelift.

There are many old golf courses in the world. A great many at clubs which have enjoyed successful centenary years where stops are pulled out, pro-ams held and commemorative pullovers produced. A very rare few have had 200th anniversary celebrations but Musselburgh Links can top them all as it has the distinction of being the oldest existing golf course in the world.

To the casual observer there would be nothing to differentiate Musselburgh from many other of Scotland's links courses, except for the fact that it is ringed by a racecourse, but closer examination reveals a piece of golfing land with a history to trump anywhere else in the world and a group of people whose devotion to the well being and advancement of Musselburgh links is unstinting.

Among them are Alistair Patterson, Head Greenkeeper, and Jim Frame, a long standing member of Old Musselburgh and a man who has done much to make the local authority aware of the need to invest in the restoration and preservation of the course.

As befits a part of the country which has such a relationship with the history of the game you shouldn't be surprised by anyone or anything you meet and the first person I bumped into during my visit was Archie Baird, who informed me that he was married to the great grand daughter of Willie Park, the first Open Champion and himself a Musselburgh man. Archie, who is curator of the Golf Museum in Gullane, also showed me the gold watch chain, finished by a gold miniature golf ball, which was passed down to Archie from the great man and which proudly adorns his jacket.

He was visiting the course as he knew construction work was being carried out and was hoping that some old gutties might be dug up.

Yes, you did read correctly, there is construction work being carried out on the oldest golf course in the world... but don't worry.

Making alterations to such a rare piece of history would, you would think, be akin to adding Dormer windows to the Great Pyramid of Giza, rewriting the ending to Hamlet to make it a little less tragic or replacing the

clock tower of Big Ben with a digital face. At Musselburgh, though, the work has become necessary due to work on the racecourse and it is an ideal opportunity to make some changes and improvements to the course. And a very good job Alistair Patterson and the local council are making of them.

Speaking in the Musselburgh Old Golf Club, which was the original home of the Royal Burgess Golf Club now based in Edinburgh and regarded as arguably the oldest golf club in the world, Alistair and Jim talk with pride about the course.

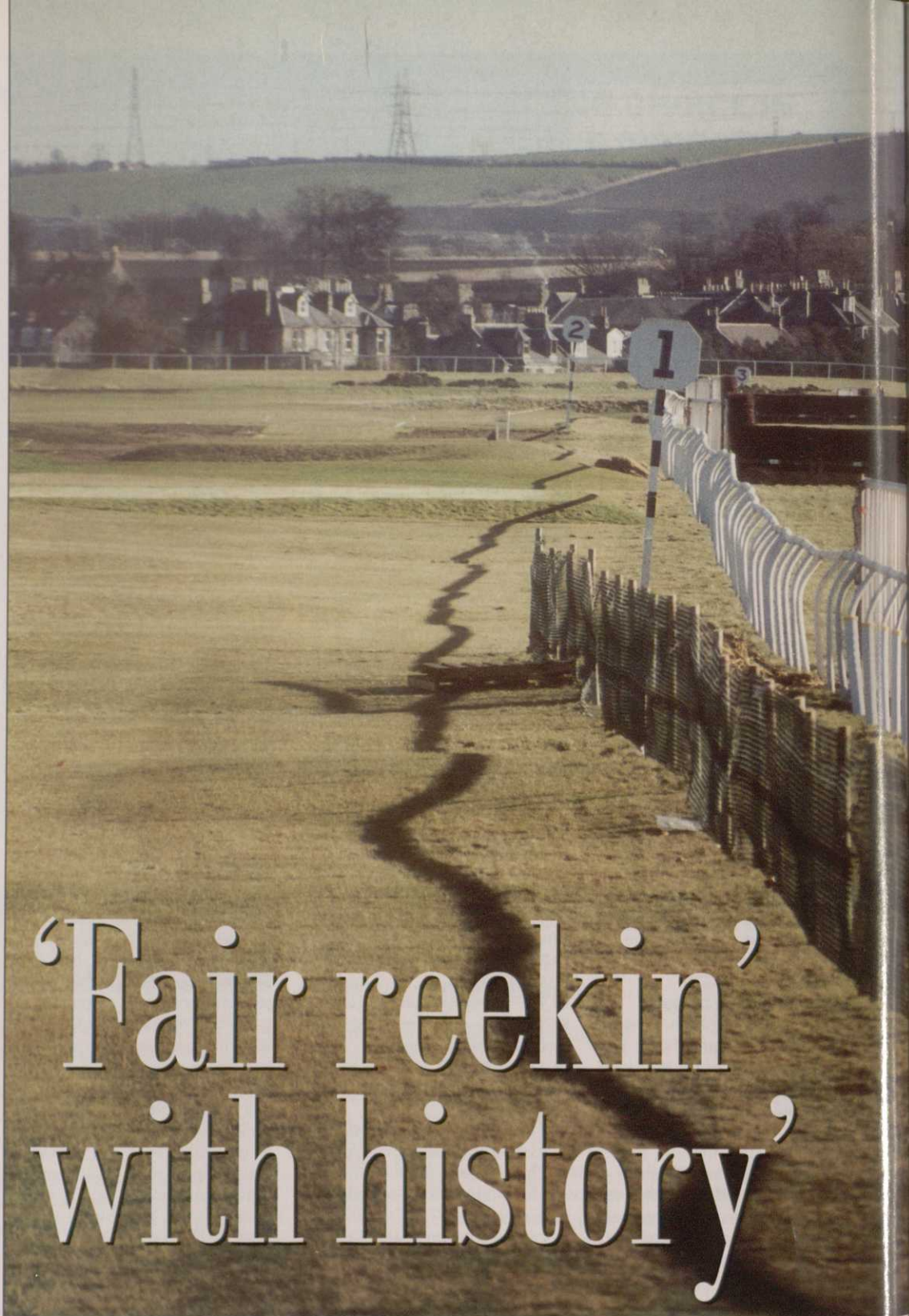
"It is recorded in the minutes of Royal Musselburgh Golf Club that it was the first course to have holes properly cut out and one of the original hole cutters can be seen at the Royal Musselburgh Clubhouse," explained Alistair, who has worked on the course with his apprentice for the last 18 months.

Another first was the universal adoption of the rule "playing the ball as it lies" after it had been first in use at Musselburgh, while the first ever women's golf competition was held at Musselburgh on New Year's Day, 1811 when a creel and skull was competed for

by the fish wives of the community. The first caddies were based in Musselburgh.

"If this was in America it would be hallowed ground, an institution where your grandfather would have to put your name down to join. The Americans treasure golf history and when they come here they absolutely drool. We take far too much for granted," said Jim.

Like many things where the past is clouded over by the mists of time it is difficult to pin an exact date on when golf was first played on Musselburgh Links but the earliest record of golf being



'Fair reekin' with history'

played on the links was 1567 when Mary Queen of Scots was accused of playing golf a few days before her surrender. Now you can be pretty sure she wasn't the first person to play there so you can certainly knock a few years off that figure.

Perhaps Musselburgh's heydays were when it was home to the Honourable Company of Edinburgh Golfers – which now resides at Muirfield – and the Royal Burgess when the gentry, including Lords and judges would arrive in Musselburgh by train from the city and then race to get to the tee first. Failure to build up a sufficient head of steam could result in a three hour wait to tee off.

"It was quite a fair old canter from where the old railway station was to the course and apparently there were some unbelievable sights," said Jim.

But that was then. What is Musselburgh like now?

Well, as I said at the beginning the links is shared with Musselburgh race course, which was established in 1816 and for much of the time since then it has been the race course which has held sway when any difficult decisions have been taken.

Some of the rails are taken down to assist the golf when there isn't a race meeting – there are around 20 a year – but if you concentrate on the individual holes and forget about the race course you will see some wonderfully pure golfing land.

The greens are small and the tees are low – the height of a greenkeepers boot – as the traditional way was for the golfer to see all the undulations from ground level. It also kept costs down.

It is Musselburgh's undulations and subtle slopes and borrows, however, which make any golfer not spoon fed on target golf and dart board greens drool.

Until recently the layout of the 9 hole course hadn't changed drastically from the time that James Braid had put his mark on Mother Nature's original course but the development of the jump and hurdles track on the race-course saw the demise of what was regarded as Musselburgh's best hole – a humdinger of 510 yards down the right hand side of the course.



Long standing member Jim Frame, left and Alistair Patterson, Head Greenkeeper

It would be fair to say that the golf course had been neglected over a period of years before Alistair's arrival.

"The maintenance was done by gardeners and they cut out a hole and mowed an area around it once a week," explained Jim.

"The race course influence predominated within the council at that time but now the golfing interests have blossomed and people have become aware of just what they have here. It is something which is unique and deserves loving care, kindness and all the work that can be done on it. That took a bit of work and hard persuasion but eventually we convinced them of the treasure they had," said Jim who, during the walk of the course, uttered the immortal phrase that the place was "fair reekin' with history".

The money which became available totalled around £100,000 and came from the European Sports Development Fund, Lothian and Edinburgh Enterprise and the sports budget of the local council.

The new work which includes a completely new closing hole, new tees, alterations to the shape of greens and numerous new bunkers, has been carried out with aim of preserving the "feel" of the place.

"Nothing that has been done or will be done on the course will in

any way affect the ambience of the place and the charm of this old fashioned links golf course," said Alistair.

"Even the new bunkering which has been put in is pot bunkering and we are going back to the old fescues, which are using around them and this will be left to grow wild and be as natural as possible."

Alistair and his apprentice are employed by Groundcare, the company which won the contract under Compulsory Competitive Tendering, and it is fellow Groundcare employees who can be called upon, usually in evenings, to assist with some of the construction and maintenance work.



Mrs Forman's famous watering hole

"When I first came here last April I was turfing bunkers and tees and the Groundcare team was coming in after the men had finished their work in the parks and gardens on overtime to help raking soil and pegging out tees. Some of these are 420 square yards and we needed help to get them done," recalled Alistair.

"The construction work began in May and during the dry summer as soon as the turf went down it had to be hand watered. I prefer the old system because I reckon with hand watering you can put the water where you want it. During the summer we had to keep the sprinkler on late and pop out at 10 o'clock to see if it was still there!"

The new dog leg 9th hole which replaces the drivable – for the bigger hitters – par 4 was conceived following a site visit by a local professional who confirmed the thinking of many of the locals who had visualised the same hole for themselves but been too modest to voice it publicly.

The new hole is into the prevailing wind and boasts seven or eight new bunkers, a cluster of which are around the landing area.

"We felt that the current 9th was a soft finishing hole and we felt there should be a good test to finish off the round," explained Jim.

"We have tried to preserve all the subtle little contours on the fairways and we are delighted that the council has asked for the views of the club at every stage and a great many of our ideas have been taken on board.

One of the most famous parts of the golf course is the 4th hole known as "Mrs Forman's". At the far end of the course, Mrs Forman's is a pub at the back of the 4th green which boasted, until for some inexplicable reason it was stopped, a special "golfers' window" which made Mrs Forman's the most famous watering hole in golf.

The construction work is due to be completed in April and it will be a couple of seasons before the big differences are noticed.

"The fairways were ver-tidraind and top dressed for the first time ever last year. In the next few seasons we're going to get the golden rough back and the bluebells are coming though

'Firm but fair is how we want the greens'

and we'll start seeing the skylarks again," said Alistair with almost poetic zeal.

He is adamant about the type of playing conditions he wants to create.

"Firm but fair is how we want the greens and the same with the fairways.

"I'm trying to make all the greens uniform. If I were to shave them I'd have a lot of trouble in the winter so I'll keep a little cover on them but I reckon you can get fast green greens."

Alistair, whose father was Head Greenkeeper at among others Luffness, is revelling in his chance to create something special at Musselburgh.

"I just live across the road from the golf course and I know the history of the course. I feel I can play a part in that history and if I do it well it's going to benefit the golfers as well as myself and we're going to get a lovely links course back. It's more of a hobby than a job for me.



Jim Frame knew he would embarrass his Head Greenkeeper when he said, "he's a gem and we're very fortunate to have him. He's got a real feel for the place and he's put in a tremendous

amount of work."

It is perhaps a little optimistic to think that the latest renovation work will stand for another 420 years but it has certainly improved the course.

Alistair Patterson with one of the features of the old course: the greens are small and the tees are the height of a greenkeeper's boot - as the traditional way was for the golfer to see all undulations from ground level.



**MIRACLE
PROFESSIONAL**

Salisbury House, Weyside Park, Catteshall Lane,
Godalming, Surrey GU7 1XE. Tel: (0990) 301010.
Part of Miracle Garden Care Ltd.

A zero phosphate feed and turf conditioner

- ❖ A mini-granular true compound fertilizer with a 4:0:8 analysis
- ❖ Contains 4% Iron, 2% Magnesium and Seaweed Extract
- ❖ Contains 7.5% Sulphur which can help in controlling the soil pH
- ❖ Low application rate (35 g/sq. m) for use on fine turf and other amenity areas
- ❖ For all year round use - early spring programme, cosmetic use in season, late autumn application

**Longlife
INVIGORATOR**

'Longlife' and 'Invigorator' are trade marks of Miracle Garden Care Ltd.



Clear Leaders on the Fairway.

Ransomes®

Fairway Mowers.



Today's fairways demand a level of quality that was formally reserved for golf greens. To meet these higher standards of presentation course managers have a superb choice in Ransomes "right weight" fairway mowers. There's the 5-unit Fairway 250 and 305 and now the 7-unit Fairway 405 which offers genuine extra productivity with a big 4 metre cut. If you need even more power the Ransomes Commander 3500 high output 5-unit machine offers the ultimate choice in fairway mowing. Ask for a no-obligation demonstration and see the difference Ransomes can make to your fairways in quality of cut, manoeuvrability and productivity.

Call 0500 026208 for details.



RANSOMES is an Official Supplier to the PGA European Tour.



RANSOMES
CUSHMAN
RYAN
For The Best Results

Ransomes, Ransomes Way, Ipswich, England IP3 9QG. Tel: 01473 270000. Fax: 01473 276300.
© Ransomes 1996. All rights reserved.

Inside the STRI



At the hub: Anne Wilson, External Affairs Manager with the central filing system

The Sports Turf Research Institute is an institution in the truest sense of the word but what really goes on on a day to day basis? Scott MacCallum paid it a visit.

Everyone knows of the STRI. Most people actually know that it stands for the Sports Turf Research Institute. A fair proportion know that it is based in Bingley and that it produces the rankings of grass seed every year in "Turf Grass Seed". But how many people actually know what

else the Institute does, how many people it employs and how it all began?

It may surprise you to know that the STRI has a staff of 60 split into several departments. There are turfgrass agronomists, including eight regionally based throughout the UK and Ireland, a chemistry laboratory, a pathology laboratory, a soil physics and a cultivar team, a construction team, a golf course architect, an ecologist, a team of groundsmen and administrative staff.

"We are fundamentally a

research centre and service and information provider," explained External Affairs Manager, Anne Wilson. "First and foremost we are a provider of information and secondly we supply a service through the information we provide."

The Institute has widened its remit since it was originally established, on its present site at Bingley, by the R&A and the Home Golf Unions in 1929 as The Board of Greenkeeping Research.

Then it was purely for golf and it was not until 1951, when it became the Sports Turf Research

Institute, that it was expanded to include other sports as it was seen that what was appropriate for golf turf was also appropriate for other sportsturf.

"We are the national centre within the UK for sports and amenity turf and are internationally recognised for the research that the Institute does. Mike Canaway and Steve Baker work closely with the United States Golf Association Greens Section and Steve was on the Advisory Committee for the recent revision of the USGA Greens Construction Guidelines.

*** MISSION FOR THE 1990'S - ROOT OUT ALL COLONIES OF DRY PATCH - SEARCH AND DESTROY ***

alleviate

tenside hydrophobe technology

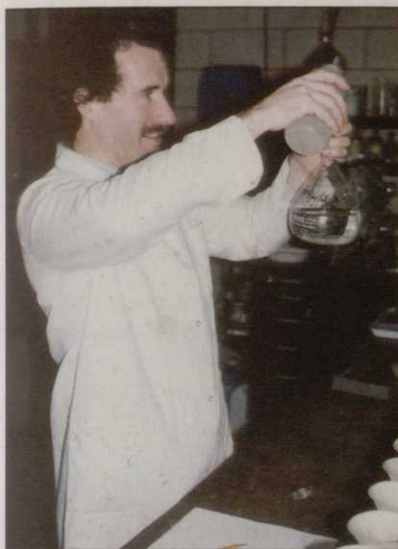
whilst wetting agents
treat the symptoms, **alleviate** uses
innovative tenside hydrophobe technology
to attack and treat the cause
of DRY PATCH

alleviate breaks down the hydrophobic
barrier coating the surface of soil
particles, allowing water to penetrate
the rootzone

unsurpassed
technology

**SERVICE
CHEMICALS**

Developed and manufactured by:
Service Chemicals plc, 17 Lanchester Way, Royal Oak
Industrial Estate, Daventry, Northants, NN11 5PH.
Tel: 01327 704444; Fax: 01327 871154
email: servicechm@aol.com
web pages: <http://members.aol.com/servchemuk>



The right mix: Dr David Lawson, Chemist



Sunny outlook: STRI trials grounds and weather station



Lab work: Dr Catherine York, Pathologist

"We are self financing in the main but also receive other funding from sports governing bodies. For example the R&A for golf and the TCCB for research into cricket pitches," explained Anne.

The Institute is backed by the Sports Council for the good of sport in the UK and the Council has an observer on our members' body, the committee which allows us to maintain our links with the sporting organisations.

"We are also involved with the Sports Council on the distribution of lottery money and we assist with the undertaking of feasibility studies – including the one which resulted in Hampshire County Cricket Club's successful bid for a new ground.

Other money comes from commercial research.

One of the principal duties of the Institute every year is the publishing of Turf Grass Seed, the bible for anyone choosing new grass seed.

"The Seed trade funds most of the trials on new grass seed – there are over 6,000 plots of grass in the trials programme – and these results are published annually.

"They are released at Saltex and the industry gets quite anxious about the publication of the results as the companies want to see their names at the top of the lists."

The results are objective and do not say which is the top company. What they do say is that in certain circumstances varieties performed in a certain way.

Since Mike Canaway took charge and Anne Wilson became External Affairs Manager there has been a significant change in the Institute's image and structure.

"It would be fair to say that the Institute had become insular and we waited for people to come to us rather than us going to them," said Anne.

As Mike Canaway says in the latest issue of the Bulletin:

"Structural change was necessary to both clarify corporate objectives and to assist with the development of new initiatives. For many years STRI had, on the one hand acted as a centre for research, receiving donations from governing bodies of sports for this work. On the other hand it aimed to provide a commercial, advisory and consultancy service. Sometimes these objects were in conflict, for example, if a governing body donated money for research the accusation could be levelled that this was "propping up" the advisory and consultancy side.

"There was also a 'Catch 22' with the financial management. If, as a Company Limited by Guarantee we broke even, this made the commercial aspects seem less than efficient. If, on the other hand, we recorded a surplus there was a potential deterrent for donors to research," explained Mike in his Editorial.

For that reason, as of the beginning of this year, the STRI advisory and consultancy services were transferred to a limited company, STRI Ltd, while the research work remains in the original Scientific Research Organisation.

The changes follow a revamp of the Institute's image which took place in 1995.

With that in mind last year a new image was unveiled complete with a new logo.

"The new logo came about when, not long after I had joined, it became clear that what we were all about in the Institute was first and foremost turfgrass. We are about how turfgrass is applied to sport but we are not strictly a sporting body.

The original logo was extremely clever and incorporated lots of sports – every ball you could possibly use in sport – but it was not what we were about.

"We are about turfgrass and everything which goes to make it grow including root zones, sand, chemical analysis, diseases and the advisory side. Hence the reason our new logo displays grass," explained Anne.

"We've gone back to our grass roots, as it were," she added with a smile.

Anne has also worked hard to give the Institute's various departments a more corporate look.

"Initially everything that was produced by us was individual and didn't possess a common

look. Each department had their own way of doing things, there was a lack of continuity and no-one in a marketing role to create a corporate image," said Anne, who stepped into the marketing role in '95.

One of her main tasks has been to revamp the Institute's publications including the Turfgrass Bulletin, which had been introduced in 1951 and had remained as a small black and white publication for many years.

"In '95, the decision was taken that we needed something more



DAISY
(Bellis perennis)

GONE WITH THE WIND

AT A GOLF COURSE NEAR YOU.

A WEEDFREE PRODUCTION

Inside the STRI

commercial, in addition to the Journal which had become more scientific and only circulated to those people who requested it."

The launch of the Turfgrass Bulletin in April 1996 coincided with the organisational changes within STRI and the launch of the STRI's new logo and corporate image.

The new International Sports Turf Bulletin is full colour A4 size and contains advertising previ-

ously reserved for the Journal.

"It has a circulation of 5,500 and goes to all subscribers including golf clubs, sports clubs, local authorities, education, Sports Associations and Governing Bodies, trade contractors, greenkeepers, groundsmen and colleges.

The Journal continues to be produced annually as a scientific research publication.

With education becoming ever more important the STRI also offers training courses including the Open Learning Training Modules, launched at BTME this year. Operated in conjunction with the GTC the written modules provide greenkeepers with theoretical knowledge for work place assessment at NVQ/SVQ Level 2. To support these written modules there is a series of three one-week long residential training courses.

With the new structure, image and other initiatives it seems that the Sports Turf Research Institute is well prepared to tackle the demands of the future in an increasingly competitive industry.



Dr Mike Canaway, Chief Executive, left and Dr Stephen Baker, Senior Research Officer and Head of Laboratory Services



STRI trial grounds - a plot showing a wide variety of grass species



To celebrate **21 years** in the industry

Bailey's of Norfolk

announce the introduction of the

"Greenkeeper's Charter"

The "Charter" is a commitment to supply Turfdressings, Root Zones, Divot and Tee Dressings that are of the highest quality. Our own "in-house" Soil Analysis Laboratory, allows us to ensure that:

- ❖ Every load you receive is accompanied by an **up-to-date laboratory analysis**
- ❖ The **pH** value is clearly stated
- ❖ The dressings particle size fall within the parameters recommended by the **USGA**
- ❖ The **quality and consistency** of dressings supplied is continually monitored
- ❖ The raw materials used are continually analysed for suitability
- ❖ Provision of a **FREE** on-site sampling and analysis of your greens
- ❖ We can provide a **FREE** analysis of your current dressings
- ❖ You receive technical and informational back-up
- ❖ **21 years** of experience in the top soil business, is used to support Greenkeepers.

Bailey's of Norfolk

**Turf Dressings that meet the highest specification
and a commitment to support Greenkeepers.**

Brick Kiln Road, Hevingham, Norwich, Norfolk NR10 5NL

Tel: 01603-754607





AMENITY
TECHNOLOGY

PROFESSIONAL SPREADERS & FERTILIZERS

Professional Solutions for the Green Environment

AMTEC™ SPREADERS

AMTEC 10

- 15 kgs. hopper capacity
- 5 minute assembly
- Solid wheels
- Basic design at an economical cost
- Lockable applicator gate control



AMTEC 15

- 20 kgs. hopper capacity
- Lockable applicator gate control
- Pneumatic tyres
- Economical pricing
- Ideal for small turf areas



AMTEC 50

- 25 kgs. hopper capacity
- Ideal for tees and greens
- 13" pneumatic tyres
- Enclosed impeller drive gears
- 3 way height adjustment
- Manually adjustable swath control

**Optional extras - Hopper cover
Side deflector**



AMTEC AND THE ANDERSONS WORKING TOGETHER FOR SUPERIOR RESULTS

AMTEC 100

- Top of the range
- 50 kgs. hopper capacity
- 3 - 3.5 m. spread pattern
- Sealed gear unit
- Ideal for larger areas of turf
- Handle operated swath control

Optional extras - Hopper cover
Side deflector



AMTEC DROPSREADER

- 50 kgs. capacity
Dropsreader
- 0.91 m. wide spread
- Steel hopper with epoxy coated paint finish
- Ideal for landscaping and turf
- For application of powders, granules or grass seed.



Spread pattern
without
trim control



Spread pattern
with
trim control



Uniform Flow



Severe Funnel Flow



Ratholing



Premium Fine Turf Spring Fertilizers

PRODUCT ANALYSIS	SIZE GUIDE No.	RATES			kg/NUTR/hect*			NUTRIENT SOURCES		SPREADER SETTINGS		
		gms/m ²	kg/hect	bag/hect	N	P	K	NITROGEN	MICROS	LESCO	SCOTTS R8A	AMTEC 50
13-2-13 w/100% Ammonium Sulphate	100	20	200	9	26	4	26	13.00% Ammoniacal N	18.3% S, 2% Fe, 0.1% Cu, 0.1% Mn, 0.1% Zn	D 1/2	I 1/2	3 3/4
19-5-19 Spring Starter w/25% Nutralene®	100	20	200	9	38	10	38	1.95% Ammoniacal N 12.88% Urea Nitrogen 2.44% SAWSN* 1.73% WIN**	6.5% S, 2% Fe, 0.1% Cu, 0.1% Mn, 0.1% Zn	D 1/2	I 1/2	3 3/4
25-5-15 w/50% Nutralene®	125	20	200	9	50	10	30	1.96% Ammoniacal N 12.14 Urea Nitrogen 6.40% SAWSN* 4.50% WIN**	5.1% S, 1% Fe, 0.1% Cu, 0.1% Mn, 0.1% Zn	F	L	4 1/4
14-28-10 Seed Starter w/50% Nutralene®	100	20	200	9	28	56	20	5.60% Ammoniacal N 2.27% Urea Nitrogen 3.59% SAWSN* 2.54% WIN**	3.4% S	E	J	3 3/4
18-6-15 w/65% Nutralene®	100	20	200	9	36	12	30	2.35% Ammoniacal N 5.41 Urea Nitrogen 6.00% SAWSN* 4.24% WIN**	5.1% S, 2% Fe, 0.1% Cu, 0.1% Mn, 0.1% Zn	E	J	3/34

Premium Fine Turf Summer Fertilizers

22-0-22 w/65% Nutralene®	100	20	200	9	44	0	44	9.3% Urea Nitrogen 7.5% SAWSN* 5.2% WIN**	7.5% S, 1% Fe, 0.1% Cu, 1% Mn, 0.1% Zn	E	J	3 3/4
18-6-15 w/65% Nutralene®	100	20	200	9	36	12	30	2.35% Ammoniacal N 5.41% Urea Nitrogen 6.00% SAWSN* 4.24% WIN**	5.1% S, 2% Fe, 0.1% Cu, 0.1% Mn, 0.1% Zn	E	J	3 3/4
21-3-16 w/97% Nutralene®	100	25	250	11	52.4	7.5	40	1.18% Ammoniacal N 1.97% Urea Nitrogen 10.45 SAWSN* 7.40% WIN**	5.4% S, 1% Fe, 0.1% Cu, 0.1% Mn, 0.1% Zn	E1/2	J 1/2	4
15-0-30 w/100% Nutralene®	100	20	200	9	30	0	60	1.87% Urea Nitrogen 7.69% SAWSN* 5.44% WIN**	10.04% S, 1% Fe, 0.1% Cu, 0.1% Mn, 0.1% Zn	E	J	3 3/4

Premium Fine Turf Autumn and Winter Fertilizers

10-5-25 w/50% Nutralene®	125	20	200	9	20	10	50	1.95% Ammoniacal N 3.67% Urea Nitrogen 2.57% SAWSN* 1.81% WIN**	8.5% S	E 1/2	K 1/2	4 1/4
14-0-24 w/65% Nutralene®	125	20	200	9	28	0	48	6.05% Urea Nitrogen 4.66% SAWSN* 3.29% WIN**	8.16% S, 2% Fe, 5% Mn	E 1/2	K 1/2	4 1/4

General Purpose Fairway and Sports Grounds Fertilizers

28-3-10 w/96% SCU	215	20	200	9	56	6	20	1.12% Ammoniacal N 26.88% Urea Nitrogen 26.88% CSRUN***	14.29% S	F 1/4	M 1/2	4 1/2
37-0-0 w/100% SCU	215	15	150	7	55.6	0	0	37.00% CSRUN***	15% S	H	L 1/2	4 1/2

* Slowly Available Water Soluble Nitrogen ** Water Insoluble Nitrogen

• Bag Weight = 22.68 Kilos

***Coated Slow Release Urea Nitrogen

NOTE: Tee Time spreader settings were established using the standard equipment available from the spreader manufacturer at swath widths and speeds typically used with the industry. It is recommended that all spreader equipment be calibrated at the time of application to achieve the desired application rate.



Balbirnie awakes

Balbirnie Park Golf Club lies to the north east of Glenrothes and is encompassed in 416 acres of attractive parkland and woodland gardens. Within its precincts are some of the most important historic features in Fife. These range from our beautiful golf course to archaeological sites dating from the late Neolithic period of around 2900 BC including a ritual site of some significance and a stone circle and burial site. A classical mansion of the 18th century stands guard over the first tee and its magnificence is enjoyed by many overseas visitors.

The course itself is a treasure chest of environmental delights, and its flora include many special and magnificent trees, these include majestic Oak and Beech through to the introduced species such as the mighty Wellingtonia, Atlas Cedar and Black Pine. But what really makes Balbirnie special lies in its outstanding collection of Rhododendrons brought to our shores from India by the Balfour family in the early 18th century.

To add to these delights the course's wildlife is next to none and even in winter months the rich vegetation of Balbirnie give shelter to an interesting variety of birdlife including mixed flocks of blue tits, coal tits and great tits, and yes readers this is Balbirnie and not Baywatch!

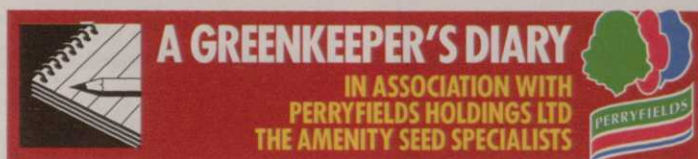
The down side to this heaven on earth is that extra care and management have to be practised while looking after our golf course, here we must sustain and create ongoing environmental habitats for the things we share the park with.

March

Well hopefully spring is here, but when you work on a golf course two degrees nearer the Arctic circle than Moscow anything is possible. The demise of this winter ends the 33rd one as a Greenkeeper, they don't get any harder, just shorter.

It's been a busy winter for us with many projects being successfully completed, and it is now time to tune the course in readiness for commencement of summer competition play towards the end of the month.

The first half of the month continues opportune slitting, this operation ceases before our famous easterlies decide to dry



and open up the slits adding more frustration to our early, heavy competition play. Top dressings are initiated to iron our surface winter desiccation, this allows me to maintain a realistic cutting height while creating smooth surfaces.

These operations are incorporated to include tees and aprons. If a window of good weather is evident then I will apply a lawn

and these decisions on the trees' merit or indeed its downfalls, is it aesthetically appealing to the parks well-being or does it hold significant value as a habitat for the park's wildlife? Decisions of this nature are never easy and are not taken lightly. Thankfully a lot of this work has been based on necessity. At Balbirnie in the early 80s many poplars were planted in order to achieve instant plantations and protect the indigenous species planted at the same time. Thankfully I can now remove them in order to afford light, air and nutrients to the courses natural species.

Hopefully by mid-March all plantation work will be negotiated and wild life corridors left for our friends, bat boxes added or repaired, pipistrelle bats are many and can be seen towards the end of a long summer evening.

Other work tackled in March will include the reinstatement of our many paths. Both surfaces and edgings have to be taken into consideration, all bunkers replenished and edged, out of bounds clearly defined and posts painted etc. All walkways and other badly wintered areas will be vertidrain, overseeded and top-dressed.

Balbirnie awakes, towards the end of the month this sleeping giant comes out of hibernation, grasses are in abundance and therefore a full cutting programme is implemented, heights in accordance to weather. Previous to this awakening my staff and myself have walked the course on many occasions discussing new cutting techniques, traffic routes etc. The input from my staff on those walks always broaden my horizons and arrest any misconceptions that it is me who makes Balbirnie the delight it certainly is.

Management

By March all the staff should be fully cognizant with all new machinery purchased. This would include adjustments, operational skills, service intervals and methods. At Balbirnie each piece of

machinery has its own log which allows a history to be recorded of its performance and reliability. This record can be useful in future purchase or if needed in warranty claims.

By this time of the year at Balbirnie tenders have been received and orders placed for most of my requirements for the coming season. The daily checking of invoices to sanction payment is very much in force, other chemical duties would include the daily log book, recording work schedules, attendance, chemical usage and weather conditions, and if unlucky the reporting of accidents under RIDDOR, touch wood the later is seldom needed at my course.

March will also keep me busy with the involvement of a feasibility study incorporating specifications for a new golf facility that we fully intend to implement in the near future. This project will be built within the confines of the estate on land we had the good fortune to purchase. The land in question forms a beautiful pasture gently rolling with a light sandy loam soil and framed with an abundance of more magnificent trees.

Being the custodian at Balbirnie is of great importance to me, as is my part-time job as lecturer in greenkeeping at what I would consider to be the best college in Europe, Elmwood, especially with the completion of our own 18 hole golf course. March gives me plenty of scope to bring my students down to Balbirnie for practical work based assessment and when they have reached the desired level of competence and are fully aware of the underpinning knowledge it allows me to stamp the GTC manual. This gives the student a feel good factor and contributes to a record of their practical skills for prospective employers. All in all March at Balbirnie can be both a very rewarding and busy month of the year and I love every single day spent within its policies.

Well enough from me, I've got some bunkers to rake - have a good season!



MARCH

BY IAN MACMILLAN
COURSE MANAGER
BALBIRNIE PARK

sand to both greens and tees, this I usually mix myself as I have for over thirty years using a recipe handed down to me as a boy using double salts giving the mixture a greater killing power to the occasional weed that may have crept in over the winter.

March also sees the start-up of the irrigation system and wait for it, we actually start to irrigate our greens. Horror you cry but believe you me I know my greens, as I do my Malts, and a conscious, calculated decision has to be adopted in order to prevent the abysmal clays from drying out (if allowed to dry out a hydrophobic situation is sustained throughout the spring unless excessive rain occurs). This early irrigation programme is backed up by incorporating a wetting agent at the maximum dosage.

A lot of effort this winter has been directed towards tree and scrub clearing in our many woods and plantations. Here careful consideration is vital, do I remove a healthy tree in order that its neighbour may grow as nature intended. One must evaluate

A GREENKEEPER'S DIARY IS
BROUGHT TO YOU IN
ASSOCIATION WITH
PERRYFIELDS HOLDINGS LTD
TEL: 01386 793135
FAX: 01386 792715



HTC18 PROFESSIONAL SCARIFIER/COLLECTOR

- Unique floating head mechanism allows ground contours to be followed accurately.
- 1.8m working width.
- 1.8m discharge height.
- Large capacity hopper.
- Easily converted into a sweeper collector.
- Can be fitted with fine finish grass cutting flails.

WESSEX

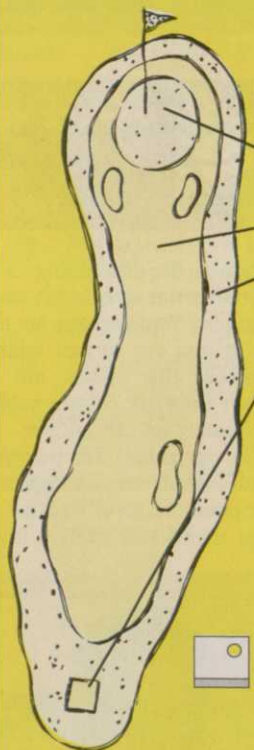
TRADING ESTATE
OAKHANGER ROAD
BORDON HANTS GU35 9HH
TEL 01420 478111



WESSEX
The right choice

"FOUR!"

Tees, greens, fairways and roughs, now you can "whole in one" with Barenbrug mixtures especially formulated for specific purposes.



- 1 Greens - Bar 2 mixture
- 2 Fairways - Bar 3 mixture
- 3 Roughs - Bar 4 mixture
- 4 Tees - Bar 5 mixture

Containing varieties like Bargreen, Barcrown, Bardot and Heriot, Barenbrug mixtures will give superb colour, hard wear, low maintenance and rapid growth.

As with all Barenbrug mixtures, they contain varieties consistently rated in the top banding of the STRI Turfgrass Seed booklets.



BARENBRUG

Great in Grass

Tel: (01359) 270766 Fax: (01359) 271021



For Quality

S T A N D A R D G O L F

For Quality

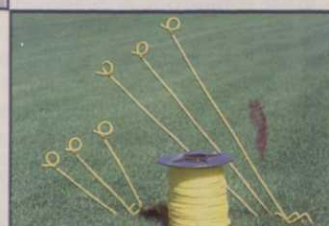


- Ball Washes
- Consoles
- Signs
- Tee Data Signs
- Tee Markers



- Rakes
- Maintenance Tools
- Distance/Fairway Markers

- Rope
- Chain
- Posts/Stakes
- Hazard Markers



- Litter Caddie
- Switches
- Hole Cutters



- Flags & Flagpins
- Hole Cups, Hooks, Setters
- Targets

STANDARD GOLF (UK) LTD
20B BUCKINGHAM AVENUE, SLOUGH,
BERKSHIRE SL1 4QA
TELEPHONE: 01753 537410
FACSIMILE: 01753 534661

PRICES DOWN ON MOST ITEMS FOR 1997
FOR SPRING OFFERS VISIT OUR STAND No. B36

NEW PRODUCTS

■ The features and benefits of Turfmech's tractor-powered blowers and trailed vacuum collector are highlighted in a new video available on free loan from the company.

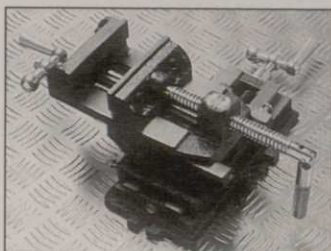
The video shows the largest in the four model range of Turfmech Tornado blowers at work. Featured clearing leaves and litter from turf and hard surfaces, this machine produces a blast of air in excess of 200km/hr (125mph).

Also featured is the tractor-trailed TurfVac TM11 vacuum collector, launched in 1996. Operating like a large vacuum cleaner, this high capacity unit is ideal for fast, effective collection of leaves, litter, grass clippings and most other loose debris from turf and hard surfaces.

A copy of the video (code number VIW1) can be obtained by contacting Turfmech Machinery Ltd, New Road Industrial Estate, Nixon, Staffs ST18 0PJ. Tel: 01889 271503.

■ Spaldings latest edition to its professional range of workshop equipment is a heavy duty fully adjustable 4" cross vice.

The vice has up to a 4" capacity and is adjustable both laterally and longitudinally. This is said to facilitate



the quick and easy drilling of multiple holes in the workplace without the need to continually remove and adjust the position of the work.

This leads to increased drilling accuracy and minimises drill bit breakages.

The vice can be ordered under Product Number 4408 and is priced at £46.75.

For further information telephone 01522 500600.

■ Vermeer, originator of the first stump cutter, has introduced wireless remote control technology to its stump cutter line. With an operating range of over 30m, the state-of-the-art, radio remote control option provides operators with more flexibility and freedom of movement and reduces their exposure to dust, dirt and machine noise.

Currently available on the SC 1102 and SC 502 gearbox driven stump cutters with Vermeer's unique Auto Sweep feature, the remote controls the direction of the stump cutter's tongue, moving the cutter wheel in and out of stumps; the swing of the cutter wheel in its sweep pattern; and runs the up/down wheel positioning mode. For increased safety it is equipped with an emergency engine-stop control. Operated with industrial sealed joysticks, it is powered by a standard 9-volt battery and, weighing only 1.3 kg, can be hand-held or worn with a neck strap.

For more information telephone 01933 274400.

■ Sussex-based Eurogreen, best known for its shredders and chippers has been appointed the UK distributors for the Solo Range of Professional Brush Cutters/Strimmers and Mowers. Solo was formed in a garage in Stuttgart Germany in 1948 by brothers Hans and Heinz Emmerich. It began by developing the world's smallest and lightest gasoline engine; from this small beginning has come nearly 50 years of innovative engineering of the highest quality. In the early '50s Solo pioneered the Rotating

Blade Mower with sturdy die cast aluminium body and wheels. 1950 saw the company producing Brush Cutters/Strimmers which they have steadily improved, refined with much research both in the lab and most importantly in the field with the professional user. 1958 saw Solo lead the way with a Direct Drive Chainsaw the Solorox.

In the UK Solo is known for its range of Back Pack Sprayers and Mist Blowers. It was this reputation that persuaded Eurogreen to 'go Solo'.

Mark McIntyre of Eurogreen, Solo Specialist said "After initial trials with some of our customers in 1996 we soon realised just how good Solo Professional Strimmers and Mowers are, we are already getting repeat orders after just a few months going Solo."

Eurogreen will offer Strimmers and Brushcutters from the little electric unit of 1000w /2300 SOHZ up to a 40cc two stroke version, most will be available in Back Pack form.

Mowers will be from 2-5 1/2 hp powered by Honda or Briggs and Stratton engines.

For further information telephone 01903 700678.

dive dive dive permeate

turfgrass wetting
agent

penetrates deeper
unique dynamic
infiltration technology

permeate penetrates through thatch and water repellent soil layers to infiltrate the root zone optimising water penetration to critical depths.

permeate can be used as a single lasting application for long lasting results or as a managed programme throughout the year.

permeate is fully compatible with Alleviate tenside hydrophobe technology for the treatment of dry patch and water repellent soils.

Developed and manufactured by:

Service Chemicals plc, 17 Lanchester Way, Royal Oak Industrial Estate, Daventry, Northants, NN11 5PH.

Tel: 01327 704444; Fax: 01327 871154

email: servicechm@aol.com

web pages: <http://members.aol.com/servchemuk>

unsurpassed
technology

**SERVICE
CHEMICALS**

Award Winner Best New Sportsturf Product SALTEX Show 1996



LITTLE JOHN PEDESTRIAN SCARIFIER

The ultimate turf care machine designed specifically for
turf maintenance

- Unique hydraulic drive floating head for consistent results
- Hydrostatic ground drive for infinitely adjustable speed
- All seasons use. Sorrel roller, brush, verticut, dragmat, 6 and 8 bladed mower attachments
- Environmentally friendly rapeseed bio oil
- 8.5hp Honda overhead valve engine standard
- Two years interest free finance available.

Want to know more? Ring us for details or to arrange a demonstration on
01844 274127 or contact us on our web page: <http://www.risboroturf.co.uk/rt5>

RISBORO'  TURF

GROUND CARE SERVICES & SUPPLIES TO THE PROFESSIONALS SINCE 1980

Be a winner

Although spring is with us and greenkeepers turn their thoughts to a new season of growth, my thoughts are turning to the autumn, when our major competitions reach their final stages, we start the next series of Supervisory Management Courses and to next January when the Learning Experience 1998 takes place.

Two new competitions have been announced for 1997. These are the BIGGA Golf Course Environment Competition and the Toro Award for Excellence in Greenkeeping.

The BIGGA Golf Course Environment Competition

Following two very successful years of competition run solely by Amazone Ground Care, this year has seen BIGGA and Rhône Poulenc Amenity join Amazone to run the BIGGA Golf Course Environment Competition. This competition is designed to reward those clubs that integrate ecological management with normal golf course management practices to ensure that golf and the environment are compatible. Full details have been sent to all golf clubs and leaflets are included in this magazine. Entries must be returned to BIGGA by 30 April 1997. Why not enter and your club could win a prize of £5000.

The Toro Award for Excellence in Greenkeeping

Joining the very successful Toro Student Greenkeeper of the Year Award is the Toro Award for Excellence in Greenkeeping. With prizes like a Toro Greensmaster triplex ride-on mower and a two week trip to the USA, prizes for the winner's greenkeeping team and for the runners up, this competition is sure to be popular with both greenkeepers and their golf clubs. Nomination forms have been sent out to golf clubs and they are also inserted in this magazine. Get your nominations off as soon as possible and we will send out entry forms to all nominees. All entries must be returned to BIGGA HQ by 30 May 1997. The National Final will take place, in Harrogate, on 26 and 27 October.

The Toro Student Greenkeeper of the Year Award

Now in its eighth year, the search to find the Toro Student of the Year has begun. Competition details and entry forms have been sent to col-



Education Update

BY KEN
RICHARDSON

leges and all entries should reach BIGGA HQ by 30 May 1997. The main points of the competition are:

■ The winner receives the Toro scholarship to the USA and visits to the TORO factories and to the GCSAA conference and show in Anaheim, California.

■ The winner's greenkeeping lecturer wins a visit to the GCSAA conference and show in Anaheim.

■ The two runners-up win a visit to the GCSAA conference and show in Anaheim.

■ Regional finals will be held in five locations during late July and up to eight students will be selected for the National Final which will take place on 26 and 27 October 1997.

National Education Conference and Seminar Programmes

Videos, written transcriptions and audio tapes for Learning Experiences 1996 and 1997 are still available. Contact Sami at BIGGA HQ for more details or to ask for an order form.

BIGGA Supervisory Management Courses

Detailed information on this year's Supervisory Management Courses will appear in the next issue of *Greenkeeper International*. Make sure that you book early to ensure your place on the Aldwark Manor Courses or on the two day courses around the Regions.

WANTED!

This time of year is when planning commences for the Learning Experience, at Harrogate. After a very successful year in 1997 it will be more difficult than ever to find speakers and subjects for the National Education Conference and Seminar programme for 1998. Therefore, if you wish to listen to a particular speaker or hear a particular topic or even volunteer to speak, then please let me or Sami know.

Cheshire Sand & Top Dressings

Does your current supplier of Top Dressings, Root Zones and Sands:

- Own a quarry containing the highest quality Cheshire Silica Sand?
- Produce all products to BS EN ISO 9002?
- Carry out hourly tests of all of the grades of sand which they produce, to ensure the highest quality?
- Test every batch of Top dressing and Root Zone to assure you the consistency which you require?
- Have the productive capacity to produce 600 tons of Top Dressing per day, so that you will not be let down at the busiest times of the year?
- Use top quality hauliers to ensure that deliveries are in the right place, at the right time and without a mess?

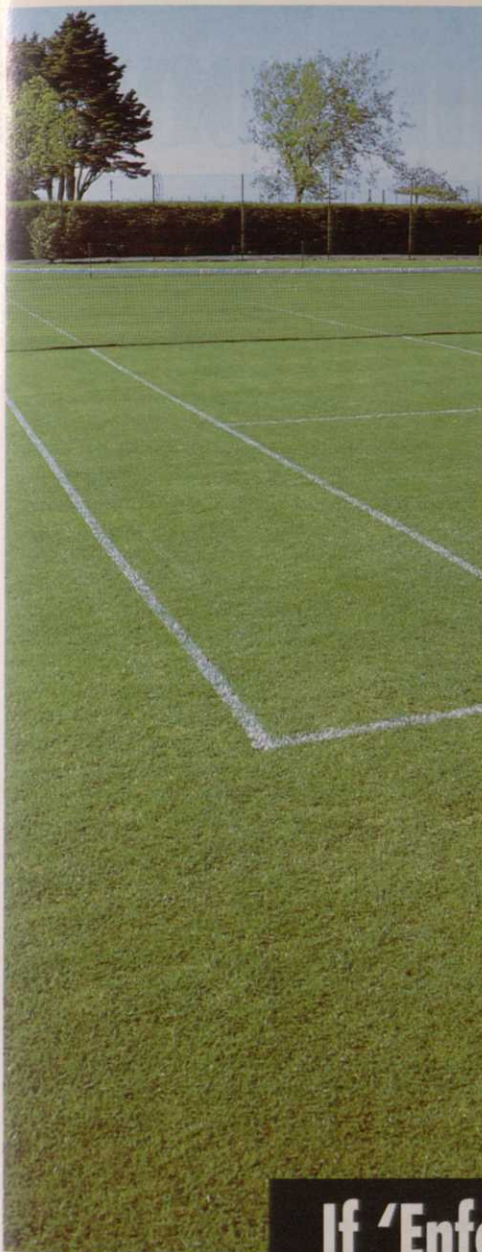
If you current supplier cannot offer you all of these, we would be delighted to.

Please call 01270 765996 for prompt service and delivery.

Arclid Quarry
Congleton Road
Sandbach
Cheshire
CW11 4SN



The gathering of previous Toro winners during BTME 97



If 'Enforcer' can't help solve your moss problem, then nothing can

'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.

Formerly



**Professional
Products**

ENFORCER

FOR AMENITY TURF AND HARD SURFACES

**Miracle
Professional**

Salisbury House, Weyside Park,
Catteshall Lane, Godalming,
Surrey GU7 1XE. Tel: (01483) 410210
Part of Miracle Garden Care Ltd.

AD
REF
54

BARCROWN King of the Greens

We may be biased but we believe that our Bar 2 mixture is rightly regarded as the very best for golf and bowls greens.

The major reason is that it contains Barcrown, the outstanding slender creeping red fescue coupled with the brown top bents Heriot and Bardot. Barcrown is tolerant to close mowing, has good shoot density and disease resistance - there's nothing else like it.

As with all Barenbrug mixtures, it contains varieties consistently rated in the top banding of the STRI Turfgrass Seed booklets.



BARENBRUG

Great in Grass

Tel: (01359) 270766 Fax: (01359) 271021



Playing perfor

Dr Steve Baker, Senior Research Officer, reports on the fascinating research he is currently undertaking at the STRI.

Within the golf clubhouse a fairly regular topic of discussion concerns the playing quality of the greens. Snippets of conversation may include - "the greens were far too slow today", or "...the greens were much harder than those on the course we played last week" or hopefully "...the putting surface was excellent". Unfortunately human nature being what it is, it is more likely that the complaints will be voiced more loudly than the compliments!

Unless we can measure the various components of playing quality it is very difficult to assess whether the complaints can be justified or was it a case of a poor round and a "bad workman blaming his tools"? One of the objectives of our recent research project for the R&A covering a National Survey of Golf Greens (*Greenkeeper International*, January 1996) was to develop test procedures for measuring the playing performance of golf greens and to assess the range of values that are likely to occur on golf courses.

This had two main objectives - firstly knowledge of playing performance can set clear objectives for the management of greens. Secondly in research work it is important that we can assess how for example a particular construction technique or maintenance operation will affect the playing quality of greens, so that the measurements we make have direct relevance to the golfer.

THE SURVEY

The work took place over an 18 month period and included visits to 74 golf courses from south-west England to north-east Scotland, although with a concentration in sites in northern and central England. Several types of course were visited, e.g. parkland, links, heathland etc. and on each course we tested two greens one of which the Head Greenkeeper considered to be one of his best greens, the second being one of his weaker greens. As well as measurements of soil and grass properties (for example drainage rates, air-filled pore

space or grass species composition) we measured the playing quality of the greens.

PLAYING QUALITY MEASUREMENTS

The three main aspects of playing performance of interest to the golfer are the speed of the green, the evenness of the putting surface and hardness, in particular how this will influence the distance taken for a ball to stop when pitched onto the green.

Measurements of green speed are well established through the use of a Stimpmeter. To measure the evenness of the putting surface we used a profile gauge consisting of ten graduated rods at 50 mm intervals which were free to move vertically if they were displaced by undulations. Measurements of displacement could be combined into an index of evenness.

For the last ten years we have made regular measurements of the hardness of sports surfaces using a Clegg Impact Soil Tester. This consists of a 0.5 kg, 50 mm diameter cylinder which can be released from a variety of heights. An accelerometer attached to the cylinder and the appropriate electronics measures how quickly the cylinder stops when it lands on the turf. If the surface is hard the test mass stops quickly and a high reading is obtained. On the other hand the cylinder will stop much more slowly on a wet, thatchy surface and a low hardness reading will be recorded. In the current study we evaluated the effectiveness of two different drop heights, i.e. 0.3 m and 0.55 m.

Ball impact properties can be assessed by firing a ball at the surface with defined conditions of velocity, approach angle and back spin so that we can simulate different shots. This was achieved using ball firing apparatus in which the ball was fired between two independently rotating wheels to simulate what can loosely be described as 5-iron and 9-iron impacts. In recording the impact we recorded the distance of the first bounce, the patterns of subsequent movement, in other words whether it continued to travel forwards or whether back-spin brought it back. Most importantly from the golfer's point of view we recorded that the total distance travelled from the pitch mark of the initial impact to the final resting position.

Putting down roots has never been more important



The wear and tear your tees suffer all year round puts a premium on turf with outstanding powers of recovery. That's why you should use Medallion turf from Rolawn.

It's ferocious rooting power ensures maximum penetration - ready to play weeks, even months, earlier. And Medallion turf is ideal for repair and renewal: order as much or as little as you need.

TRY BEFORE YOU BUY: contact your local Rolawn depot for a **FREE** sample and see the difference for yourself in days.

We have depots nationwide - to find your nearest, call 01904-608661 and ask for Customer Services.



Rolawn®

BRITAIN'S FINEST TURF

HEAD OFFICE: ELVINGTON, YORK, YO4 5AR

Performance and how it's defined

PLAYER ASSESSMENT

It is no use making thousands of measurements if we have no means of interpreting them. Just what does a hardness value of 1.5 gravities mean compared with a value of 105 gravities and do these differences relate in any way to how a golfer perceives the hardness of a green? One solution was to ask golfers using the greens what they thought about the turf's playing performance, so a questionnaire was prepared covering everything from the golfer's handicap to his perceptions of green speed, hardness, etc. Players are notoriously variable in their attributes to the quality of a green so it was important that a large number of responses were collected. In total we collected questionnaire forms from 787 golfers enabling us to look at general patterns of response.

GREEN SPEED

In an article of this length it is not possible to cover more than a fraction of the results but some of the more interesting findings are discussed here. For example results for green speed are given in Table 1 and are related to the USGA classification for regular membership play. The overall range of values was 1.20 m to 2.97 m but the vast majority of values occurred in the range 1.52 m to 2.44 m which accord to the USGA classifications of medium-slow to medium-fast.

Table 1: Green speed in relation to USGA classification for regular membership play

Category	Distance rolled (m)	Number of cases	
		April/ Sept	October/ March
Fast	>2.44	6	6
Medium fast	2.15-2.44	31	15
Medium	1.83-2.14	37	28
Medium slow	1.52-1.82	14	5
Slow	<1.52	2	1

Most of the players were happy with the speed of the greens. Only 6% of replies suggested speeds were too slow and only 1% of players thought the greens were too fast. There was some inconsistency in response to green speed but 38% of respondents considered green speeds less than 1.8 m to be slow or too slow but for values greater than 2.40 m 84% of respondents suggested that green speed was good or fast.

HARDNESS AND STOPPING DISTANCE

Hardness measured using a 0.3 m



Ball firing apparatus: part of the research

drop height ranged from 50-130 gravities with the majority of readings being between 60 and 110 gravities. Hardness values tended to be highest on greens with high bulk density (a measure of soil compaction) and a low organic matter content and inevitably firmness decreased as soil moisture content increased. Newer greens also tended to give a harder surface, in part probably reflecting greater sand contents in modern rootzones but probably also because of less thatch build up on these newer greens, thus giving a firmer playing surface.

There was a significant relationship between player response and measured values of hardness. For example 40% of players considered greens with values less than 70 gravities to be soft or too soft while the number of responses that the green was hard increased for greens where measured values exceeded 90 gravities.

Similar results were obtained when stopping distance was considered. Stopping distance was influenced by such factors as soil density and moisture content. For the five iron simulation the average distance between the pitch mark and the landing point of the first bounce was 1.21 m and in general the ball continued to move away from the point of initial impact giving an overall stopping distance ranging from 0.5 m behind the pitch mark to 9.04 m beyond the pitch mark. However for the nine iron simulation, although the initial bounce was similar, roughly half of the balls spun backwards to the point of initial impact because of the greater backspin and the overall stopping distance ranged from –

1.36 m (i.e. the ball lay behind the initial point of impact) to 3.56 m.

Again there was a significant association with player response. For example, greens where the ball spun back behind the initial pitch mark following the nine iron simulation (i.e. had negative values of stopping distance) were generally considered to be soft while the proportion of golfers considering the surface to be hard increased as stopping distance became higher. In addition the proportion of golfers complaining that their ball travelled on excessively increased considerably on those greens with high measured values of stopping distance.

SUGGESTED PERFORMANCE REQUIREMENTS

The proposed limits for interpreting the playing quality of golf greens under British conditions are given in Table 2. They have been established as relatively broad bands because one of the joys and challenges of golf is playing a wide variety of courses under a range of weather conditions and it would be criminal to

define an excessively uniform set of playing conditions. In dry summer conditions it would be expected that for example hardness and stopping distance would be towards the upper part of the range while in wet winter weather the values would fall. However it is believed that the values that have been proposed eliminate the extreme conditions that may be unacceptable to the golfer such as slow, thatchy surfaces that will hold almost any chip however badly struck or badly constructed greens that have set like concrete in dry weather.

The limits have not been determined only by the information on player response as it is important that greens present a challenge to the golfer and reward the skill of the better players. In this respect firm, fast greens should be regarded as ideal, even though questionnaire responses from some players indicated that the greens were too fast and that the ball travelled on excessively after pitching.

Finally it is essential that the limits were set so that they could be achieved using good greenkeeping skills without causing unnecessary stress to the turf as this may have long term effect on the quality of greens. In the United States for example, there have been problems with Stimpmeter readings putting pressure on greenkeeping staff to reduce cutting heights to achieve faster and faster green speeds. By setting both upper and lower limits for each component of playing quality it is hoped that these values can act as a tool to help research work and management decisions without giving unrealistic expectations for the golfers who play the course.

Table 2: Proposed limits for interpreting playing quality of golf greens under British conditions

Parameter range	Test method	Normal range	Acceptable
Green speed (ie. distance rolled, m)	Stimpmeter	1.6 to 2.8	1.5 to 3.0
Hardness gravities	Clegg Impact Soil Tester 0.5kg mass dropped from 0.3m	70 to 100	55 to 120
Stopping distance (m)	"Five iron" simulation (Angle 53°, velocity 22.7m s ⁻¹ , backspin 750 rad s ⁻¹)	0.5 to 5.0	-0.5 to 8.0
Stopping distance (m)	"Nine iron" simulation (Angle 53°, velocity 18.8m s ⁻¹ , backspin 880 rad s ⁻¹)	0.0 to 2.0	-1.0 to 3.5
Surface evenness (mm)*	Profile gauge	≤1.0	≤1.25

*This index is based on the calculation of standard deviation, which is a statistical measure of the variation of readings.

Around the Green

Keeping in touch with news and comment from the regions

SCOTTISH REGION

Elliott Small
Tel: 01259 731445
North



It is good to start the report with news of some new members to the Section. Rejoining us are three of the Ballater staff, Derek Cowan, Andrew Brown and Richard Cooper. Andrew Wood, from Bon Accord, has joined and Helen Bates, of Fife Silica Sands, has joined as a Company Member. I hope this year we can hold on to all 1996 members and add to our total instead of, as in recent years, when we have lost as many as we have gained. Anyone out there thinking of not renewing please call me and we can talk about it and I will try to show you all the benefits of membership which should outweigh the minus points. The stronger we are, the better for greenkeepers and green-keeping all round.

Royal Aberdeen's Sam Morrison, the current Scottish Chairman, is happy to announce that he has finally "off loaded" his son, Wilson, Head Greenkeeper at Alford, when he married his fiancée, Suzi, in Jamaica on February 18. Congratulations to both and good luck to Suzi. Being married to a greenkeeper takes a special kind of person, or so my wife says!

BTME was bigger and better than ever. I have never seen the Exhibition so busy and the workshops and Conference were packed out. A big vote of thanks must go to the staff at Head Office for all the hard work that went on to make this week so successful. It is comforting to know that the Association is in such good hands. The entertainment at the banquet was first class although I don't think they were responsible for the sky diving display from the snooker room window on the Sunday! Once again there was a good turnout from the North and I can thoroughly recommend others to go next year. Another pleasing aspect was meeting up with so many ex-North members now working in other regions and hearing how they are doing. Congratulations to Gordon Moir on an excellent talk which was well received by all present, despite his broad Fraserburgh accent.

This month we have the Scottish Conference at the Isle of Skye Hotel, Perth, and I hope to see many Section members pre-

sent for what I am sure will be a very good day with some excellent speakers on show.

The Spring outing has been confirmed as Duff House Royal on Thursday, May 15. We look forward to visiting Duff House as the Head Greenkeeper and ex-Section Chairman, Willie Forsyth, will be retiring this year after 34 years at the club. On Sunday, July 13, the club is staging a testimonial open golf tournament to mark Willie's retirement and in recognition of his loyal service. So members in the area could enter that competition as well and swell the testimonial fund for Willie.

West of Scotland

Welcome to spring, or so they say when the end of the month comes, but no doubt the grass will have ground to a halt. Let's hope this spring is better than last with good temperatures inducing fresh growth for a nice early start to the season... wishful thinking, we've got as much chance of winning the lottery!

Well what's been happening and what is going to happen in the future? By now the fixture cards will have been issued so most of you can roughly see the agenda for the year.

Although I was not personally at the BTME the reports were all first rate. The annual excursion to the BTME of lowlanders and highlanders appear to have enjoyed the social events with some over-indulgence from certain quarters who will remain unnamed. The whole event sounds as if next year should be a must for those who have yet to experience the delights of Harrogate. Can I say on behalf of West Section members who attended thanks to Elliott Small for the arrangements - good organisation to put Scott and Drew together. I don't think anybody could have kept up to their pace! Congratulations to the Association for the professional running of the whole event.

As mentioned previously, a trial was arranged for gathering an eleven-a-side team together though only one enquiry was received by telephone. On the day some 19 people turned up and from them a team will play the Central Section. A report about the game will be in the next issue but its nice to report a few different faces have been selected. Thanks to all who participated,

later in the year another trial will be lettered to everybody.

Recently a conservation day was organised at the Gosta Offices in Fineston. Jonathan Smith gave a very interesting talk, not at all as one would have perceived. The industry is changing and hopefully the golfer as well with greater awareness of matters pertaining to the environment. Public opinion has now changed the whole way in which people view the countryside and the golfer and the greenkeeper can show through careful management how sport can work hand in hand with nature to the mutual benefit of both. We look forward to the site visits to Kirkhill and East Renfrewshire to see what can be achieved. Thanks to all involved with the organisation of the day.

A warm welcome to some new members - William Hunter, Hilton Park GC; David Ballantyne, Cardross GC; Kenneth Murphy, Cathcart Castle GC; Gordon Logan, Machrie GC, and finally Desmond McCulloch, Renfrewshire Mowers. The Section wishes you a good season and looks forward to seeing you at future events.

Finally, two events to mark in the diary - firstly a day trip to Loch Lomond, early entries will be a must as this is sure to be an interesting day. Secondly the greenkeepers/convenors match at Kirkhill, again a popular event and an enjoyable day. Both events should have been lettered so get in there quickly or you will be kicking yourself.

One last thing - please telephone me if you have an interesting piece of news on 0141 942 5554. Remember this is your section and your news column. So let's hear about what is going on!

Stuart Taylor

Central

Sadly I must begin this month's report with the news that one of our retired members, Jim Harrison, formally Head Greenkeeper at Muthill GC, died recently. Jim was a long standing member of the section and along with his pal and fellow member, Haig Gordon, attended most of our events, even after retiring. He will be sadly missed and our sincere condolences go to his family at this very trying time.

At the time of writing this report the date and venue for the Spring Tournament have yet to be confirmed but the probable date will be late April. I will send out details and

entry forms as soon as possible.

Congratulations from everyone in the Section go to Ian MacMillan, of Balbirnie Park GC. Ian is the first home-based Scot to achieve the Master Greenkeeper Certificate and was presented with his certificate and MGC blazer at the National Education Conference at Harrogate in January.

Another Section member in the news is Walter Woods. Walter was appointed a Guardian of the Association in January at the AGM. It is nice to see that despite all his years of hard work in the formation of BIGGA and his numerous other achievements he is still taking an active interest in our future. Thanks Walter!

While writing about the AGM and BTME it was pleasing to see a good number of Central Section members there and those that were there for the first time enjoyed themselves so much they are intending to mark it in their diaries for next year.

We extend a warm welcome to new members David Leishman and Gregor Pirret, both from Dullatur GC; David Gilon, from Tulliallan GC; Kevin McArthur, from Balbirnie Park GC, and Dirk Thelen, from Elmwood College. We now have eight new members so far this year so if we keep going at this rate we will achieve and maybe even pass our target of 250 without too much effort. Just imagine what we could achieve if we really put our minds to it! We are looking for all the sportsmen in the Section as we are planning to organise fishing on Loch Leven, kart racing at Kirkcaldy, ten pin bowling in Glenrothes/Falkirk and football in Stirling/Glasgow (we can pick all the exotic locations!) plus our golf tournaments at some of the finest courses in the country. So let's have a lot more support than we have been getting in the past. Details of all events should be reaching you shortly so if you give me a quick response we can start getting them organised. If there are events which you think we should be organising just let me know and we will try to oblige.

The Inter Club Tournament will be held again this year with a different format. Leagues will be formed with games played on a home and away basis and the tournament will be completed prior to the Spring Tournament in 1998.

Former Section Chairman, Sandy Brown, is leaving Crieff GC after many years as Head Greenkeeper there and emigrating to



THE UNIQUE VERTI-DRAIN:

Redexim

- Unique patent adjustable parallelogram forced heave
- Simple tine design
- Leaves playing surface in superb condition



THE CHOICE OF CHAMPIONSHIP CO

Australia. Sandy has family in Australia and I am sure it will not be too long before he and his wife have settled into their new life. At the moment I don't think Sandy is intending to continue in greenkeeping but I am sure he will make a success of whatever he decides to do - maybe he has won the lottery and won't be doing anything! Best wishes for the future go to Sandy and his wife from all their friends in Scotland.

In December of last year I asked all trophy holders to make arrangements to return them to me as they were required for engraving and valuation but I am still waiting to hear from some of you. Please make arrangements as soon as possible.

John Crawford

East

Welcome to this month's news. I hope as I am writing this that spring is not all that far away because we do not want a repeat of last year so everybody get those fingers and anything else crossed for a good start to this season. I hope everyone from the East Section enjoyed their trip to the BTME which was even better than last year which takes some beating! Congratulations go to everyone at HQ who organised it and anyone else who assisted in the show, it just keeps getting better. If you haven't been before try and make it in 1998 as it shouldn't be missed. The karaoke on the Wednesday night at the Majestic Hotel was absolutely fabulous. This was something that everyone that attended really enjoyed, or so I have been told. The Scottish lads were in good voice so roll on next year! Tom Brannan, of Souters of Stirling, said the word of the week at BTME 97 especially on Thursday should be "vintage"! I don't know why!

There is only one member on the move that I know of. Paul Hares is moving from Newbattle GC to Melville GC and Driving Range to be Assistant to the Head Greenkeeper Steven Halladay. Good luck Paul on your new appointment.

Events to be held in the Region during 1997 are as follows:- February 27 - West Section Games Night, Claremont Bowling Club; March 4 - Scottish Region Conference, Isle of Skye Hotel, Perth; April 12 - West Section Course Visit - Loch Lomond GC; April 1 - Region v Secretaries Match, Lundin Links; April 23 - West Section Spring Meeting, Eastwood GC; April 29 - East Section Spring Meeting - Winterfield GC; May 15 - North Section Spring Meeting, Duff House GC; July 17-20 - The Open, Royal Troon; August 4-6 - BIGGA National Tournament, Cooden Beach; September 4 - East Section W Woods Comp, Kingsknowe GC; September 17-18 - Hayter Challenge Tournament, Ganton GC; September 25 - North Section Autumn Meeting, Wordlyth GC; October 7 - West Section Autumn Meeting, Hilton Park; October 13-17 - BIGGA Management Courses, Scotland.

In February a Swanston GC select (without yours truly) played against Ratho Park GC at 5-a-side football. By the reports I have had it was a good game with Ratho running out victors on the night by 2 goals. A re-match will take place very soon. We (Swanston) have a game arranged against Heart of Midlothian FC groundstaff who are so far unbeaten so we shall have to play to top form to get a result against them. I wonder if Laudrup, Gascoigne or Rozenal are available that night! If any other team would like a game give me a call, we are waiting. By the time you read this you will have received a letter about a five-a-side tournament we are hoping to organise, so all clubs get a team together and enter into the Section 5-a-side competition. It will be played at the new Pitz Centre at Sighthill so come on, support your Section and have a good time into the bargain. I would like to thank Elliott and Edna Small on behalf of the Section for organising the Scottish BTME trip again this year. Once again everything was great, just one or two problems but these were sorted out so thanks once again to you both for doing such a great job for the region.

Finally, if you are attending a Section event this year take your camera with you as I am needing a few pictures from our members, not just of presentations but of people enjoying themselves along with anything of interest on your own course that we could put in the magazine.

Chris Yeaman

NORTHERN REGION

Bob Lupton

Tel: 01782 750539

Sheffield

On behalf of the Sheffield Section I would like to thank everyone at BIGGA for the excellent job which was done in the organisation and presentation of the BTME 1997 which I know was thoroughly enjoyed by a good number of our section members.

Ron Graham has recently been given retired membership of the Association. Enjoy your retirement Ron.

Our last winter lecture will be held on April 3 at Rotherham GC and will be given by Mr D. Godfrey and Mr M. Franklin from Boughton Loam Ltd at 2.30pm.

New members this month include:- Ben Paling - Sherwood Forest GC, Andrew Fisher - Rother Valley GC, David Cakley - Brough GC, Stewart Barlow - Austerfield GC, Jonathan Haywood - Waterton Park GC, Carl Wilson - Ashby Decoy GC and Steven Rydiard - Hallows GC. Ron Ullathorne

Cleveland

Firstly, I would like to welcome our new members, Cliff Addison and six members of his staff at Drainage and Construction Contractors of Yarm-on-Tees, Cleveland. They

recently constructed a golf course for farmer Fred Sturrock, of High Throston Grange, Hartlepool, a new 18 hole course of which 9 holes are now in play. All the course drainage, greens, tees and bunker construction was carried out by Addisons, under the course architect, Jonathan Gaunt. Addisons have a large investment in equipment and machinery and can cope with any golf course project. They now have a new adaptation for tracked JCB 360, a power tilt which is ideal for shaping tees, bunkers or mounds from a static position thus reducing the risk of soil compaction.

News from clubs in the area, at last Bedale GC are to get a new shed for their machinery. Head Greenkeeper, Ian Pemberton, informed me that they are also building a new bunker at the 12th and a new winter tee on the 1st. Middlesbrough Golf Club have made a culvert at the 7th hole and have landscaped and turfed 1500 square yards. They have also built a new 9th tee and removed sand from all the bunkers to reshape and refill them with new sand.

Chris Fiddell is improving following his motorcycle accident 12 months ago and he hopes to be returning to work at Billingham GC soon. We wish him well.

The Christmas Competition was held at Wynyard Hall GC near Billingham, Cleveland and was won by Tony Cheesborough, of Wearside Sunderland GC.

Our annual meeting was held on January 16, at Darlington GC. Bob Lawton stepped down as Golf Organiser and he was replaced by Paul Kellett. The annual reports were read and thanks go in particular to Gary Munro and Ian Holloran who work very hard for the Section and the North Region. Also George Malcolm was elected back onto the Committee and is to be our Northern Area Representative.

The Spring Tournament will be held at Bedale GC on Thursday, May 8, at 9.30am. It is also the Hayter Qualifier. If any local courses would like to be used for demonstrations eg chainsaw, tractor driving, brush cutting, sprayer training etc please contact Gary Munro. Please keep up-to-date with COSHH and also job risk assessments.

I am sorry to report that our old friend Bill Burt, retired from SISIS, is in poor health and is in hospital. Our sincere best wishes Bill for a speedy recovery.

Finally many thanks to all those who have helped our Section during the course of the last year.

Bruce Burnell

North East

Two new courses have been chosen for the Spring and Autumn Competitions. We shall be at South Shields on April 17 and then at Boldon in September.

The Section has purchased two videos - Golf Green Reconstruction and Golf Course Ecology. Should anyone like to borrow one please contact me, the only charge will be for postage.

By now all members will have received a questionnaire from the Section. Could you please fill it in and return it to me at 19 Southside, Maften, Newcastle-upon-Tyne, NE20 0RL.

Finally I would like to welcome David Simpson, Course Manager at Tyneside GC, to the Section.

Jimmy Richardson

Northern

Spring is nearly with us and I am sure everybody hopes that it won't be a poor one like last year. A bad spring and a dry summer don't really go together for good green-keeping conditions!

The BTME at Harrogate was again a splendid exhibition and one that BIGGA should be proud of organising. May I thank Ian Thompson, of Wetherby GC, and Telford Jarvis, of Scarcroft GC, for helping me on the Northern Region stand.

Not many people have booked for the golfing events this year. I hope everyone is aware that if they have not submitted their deposit at least one week before the event they will not be allowed to play, so be warned all you hangers on!

Here are this year's golfing events:- Hayter Qualifier - Wakefield GC, Wednesday April 23 at 10.30am; Presidents Day - South Leeds GC, Wednesday June 25 at 1pm; Roses Match - Halifax GC, Wednesday August 13 at 1pm; Invitation Day - Skipton GC, Wednesday September 3 at 1.00 pm; Autumn Tour - Bridlington Links GC, Wednesday October 8 at 10.30am; Winter Golf - Scarcroft GC, Wednesday December 10 at 10.30am. Numbers at most of the above venues are to be limited.

Any member with any news or information to put into the magazine please contact me on 01484 519829. Bits and pieces are always useful for the column.

Simon Heppenstall

North Wales

So far I have had only a relatively small response for the "Little and Large" show due to be held at the Welsh Horticultural College, on Thursday, March 27. I know it is early days yet but if you wish to know what Boughton Loam has to say on grasses, top dressings and rootzones please contact me on 0151 336 6675 in the evening to reserve your place.

I am pleased to be able to report that after a great deal of detective work, and an early morning raid on a home in the Abergele District, the Richard Campey Trophy has been found in perfect condition.

May I remind you that our Spring Competition will be on Wednesday, April 30, at Frodsham GC. We will be playing for the Hi-Speed Rose Bowl and the Richard Campey Trophy. Entry forms for Frodsham should be with you by the beginning of April. To ensure the viability of the Section we have had to make a small increase to the entry

ITS EFFECT IS SHATTERING

Charterhouse



Deep aeration on an intensively used golf course is vital if the grasses which we require are to survive.

We purchased our first Verti-Drain back in 1983 and very quickly bought a second. Both these machines have been working on a continuous basis providing excellent results and utilising only a minimum of spare parts.

Comment From Walter Woods

St. Andrews Links Golf Course supervisor

For your free guide to compaction relief send this coupon to Charterhouse Turf Machinery Ltd., FREEPOST, (GL2283), Haslemere, Surrey GU27 1DW.
Tel: 01428 661222 Fax: 01428 661218

Name: _____ Position: _____ Address: _____ Postcode: _____

COURSES THROUGHOUT THE WORLD

GL3.97

fees for subsequent competitions. The members' fee will be £13 and guests will be £18 which I am sure you will agree is still extremely good value when you consider the whole package of golf, excellent food and prizes.

Brian Anderson, our Past Chairman, has written the following message:- "To all members of the North Wales Section - I would like to take this opportunity to thank you all for your loyal and very much appreciated support over the last four years. I have enjoyed being Chairman and have had the opportunity to make many new friends. I would like to wish you all the very best for 1997 and thank you again for your support and to welcome and congratulate Pat Valentine as your new Section Chairman.

"Thank you to all the committee members past and present and to all the trade who have given us their whole hearted support without question, along with the golf clubs. It is because of this tremendous support that our Section is so financially viable and may you continue with your support for 1997 as we lose the membership money.

"So once again thanks to the following traders for all they have done for us:- Phil Davies, Mommersteeg International; Terry Adamson, GEM; Dave Morgan and Mike Whitehouse, Rigby Taylor; Paul Walker, Walker Engineering (Ransomes); John Osman, Osman Machinery (John Deere); Andy Jones, Major Owen (Toro); Andrew Cornes, Acorn Equipment; Julie Hargreave, Ki Chem; Paul Shaw, Course Care; Tony Cundell and Richard Campey, Campey Machinery; David Robinson, Strike (Top Hat); Nick Grey, Martin Bros.

"Also thank you to all the following golf clubs for their support:- Abergele & Pensarn GC, Bull Bay GC, Chirk GC, Chester GC, Nefyn GC, Pwllheli GC, Porthmadog GC, Llangollen GC and Prestatyn GC."

Finally a welcome to three new members, Stephen Jenkins, of Eaton GC; Robert Green, of Aberdovey GC, and Nick Bower who has transferred from the North West Section.

Trevor Johnston

North West

Once again another BTME is over. They seem to come around so quickly but at least this year we escaped the snow ploughs (remember BTME 1995!). As usual it was an excellent show and a great opportunity to meet old friends and new. Let's hope the show continues at Harrogate for many years to come.

I'm sure you will all join me in congratulating Jim McDonald, Head Greenkeeper at Royal Lytham GC, for being awarded the MBE for his services. Jim will be retiring in 1999 after many years in the profession and after being involved in preparing courses for the Open on no fewer than five occasions. I feel his award is a very fitting award for a lifetime of dedication to greenkeeping.

Around the Green



Well done Jim.

The "Mere Seminar" will be on March 18, at Mere G & CC, and by now you will all have received your fixture lists with events for the year plus application forms for the seminar. The seminar is based on problems we have all had during the last two years with drought conditions. The first speaker is Graeme Francis, from Toro Irrigation, who will be advising you on how to get the best from your irrigation system plus advise on the legalities of procuring your own bore hole. Derek Green will cover the construction of bunkers. Derek has already starred in the BIGGA video on bunker construction which appears to be an everlasting job and one which needs to be done properly as Derek will show you.

The afternoon will be covered by Guy Longshaw and Paul Hartley, from Symbio. They will introduce you to the biological approach to fine turf management and how to work with nature. This management claims to reduce thatch and resistance to disease. Please try to come along and bring your Chairman of Green and Secretary - we never stop learning!

On Wednesday April 16 the North West play North Wales, at Hill Valley GC, for the GEM Trophy and I require a team of 16. If you are available and feel you want to be part of the winning team contact me on 0151 724 5412.

Bert Cross

MIDLAND REGION

Peter Larter

Tel: 01480 437507

East Midlands

I hope you all enjoyed this year's BTME at Harrogate, the show really does get bigger every year. Again we were all treated to a first class show, seminar programme and social evening and it was great to see more and more section members there. On the Sunday evening we provided our own entertainment by taking part in a football match which was unfortunately lost by the narrowest of margins 6-5. The team included Richard Barker, Dave Leatherland, Adie Porter, Gavin Robson, Dave Sankey and myself with the star player being Dave Leatherland the scorer of two of the team's goals. Unfortunately all of us woke the following morning feeling very stiff with Dave Leatherland nursing a swollen ankle. Hopefully we can perform better at next year's match.



The Section has purchased a scoreboard for all golf events so we will all have to try to get some respectable scores as they will be all on show from now on! Thanks go to Pete Forshaw and Brian Jenkinson, Centre Manager at Ramsdale Park, for their work in putting the board together.

Brooksby College has arranged two lecture evenings and all members are welcome to attend these lectures. They include a talk from David Bibble on "Dealing with Stress" on Thursday April 17 and on Thursday April 24 the weather is the subject of Dave Mutton's talk. Both talks begin at 7pm. For further details contact Paul Greene at the College.

Finally, I would like to wish a speedy recovery for Martin Smith, James Robson and Gary Thurman after recent operations and a get well soon to Chris James. We all hope it won't affect your golf for the next season.

Anthony Bindley

BB & O

Warren Farm College launched its winter lecture programme back in January. This was an evening with Jack MacMillan. The evening proved to be a great success with over 70 people in attendance. The various subjects which Jack touched upon were relevant to every one of us and it was nice to know that we all share the same problems. The next lecture is planned for March 19 and this will be a talk by Martin Jones, of The Oxfordshire, on the presentation of a championship course. Thanks to Warren Farm for putting on these evenings, I'm sure they are going to be a great success.

As a new golfing season approaches my thoughts go back to last Spring. The weather was very unkind for those of us in the Midland Region with frosty conditions into May! I hope this Spring/Summer is kinder so that our courses can fully recover. As yet there are no firm dates for any of the golfing events since venues have to be secured. At present we are putting together the fixture card for the forthcoming season, these will be posted along with the entry forms for the Spring Tournament.

Last season finished on a high note with two very well attended golf days so I am optimistic about the coming season. If everybody sets out to play in at least one event they will be contributing greatly to the success of the Section.

Before I sign off I would like to thank Mark Chesman for his contribution at committee level over the past few seasons.

Lindsay Anderson

Midland

For the members who attended the BTME I hope you had a good time and like me were suitably impressed with the whole exhibition. It is now the main highlight of the greenkeeping calendar and expands every year which is of great credit to BIGGA and

the support they receive from the various companies. The obvious attraction on the Miracle stand seemed to be a great success and the signed photographs will hang on many greenkeepers messroom walls for a long time.

As I mentioned in the last report I will now give you the dates for the forthcoming tournaments:- Thursday April 24 - Harbourn GC; Monday July 7 - Worcestershire G & CC; Thursday October 2 - North Worcestershire GC. The Christmas Tournament will be played at Druids Heath GC on Monday December 8 when the AGM will also be held.

The Spring Tournament will also be the qualifying round for the Hayter Challenge. It was discussed at our last committee meeting what we could do for the non-golfers as regards education so there will be a short letter which you should have received prior to this report telling you about the trips we have arranged to championship courses. I would be grateful if you would fill in the slip or give me a ring. It is very important to us as a committee that we can offer events to both non-golfers and golfers alike. If you personally have any ideas on this subject please give me a call.

On a very serious note I would like to offer the Section's condolences to the family and friends of Steven Pike who passed away early in January. Steven was Head Greenkeeper at Trentham Park GC.

At a time when most of us are gearing ourselves for the on-coming season there is one notable person who is looking forward to his retirement. Peter Richmond has given vast amounts of time to greenkeeping and to this Section, he has served as Treasurer for many years and has performed splendidly. He has been one of the most respected golf greenkeeping mechanics in the business. He will be a great loss to Walmley GC and to the greenkeeping industry. On behalf of the Midlands Section I would like to wish you all the best in your future retirement.

Finally I would like to welcome the following new members:- Steven Blakeman, Paul Tildesley, Joseph Wood, Wayne Oseman, Richard Cosby, Nigel Paskin, Paul Chillington, Michael Gresswell, Ian Ravenhall, J Mason, Robin Wilcox, Shane Wilton, Keith Hawith, Michael Wyatt, Barry Wood, John Ganley, Jon Reid, Tim Hendy and Steven Golder.

Jon Wood

SOUTH WEST AND SOUTH WALES REGION

Gordon Child

Tel: 01803 844056

South West

As is tradition during the month of January many of the South West greenkeepers joined the coach to Harrogate for the BTME



BANKS AMENITY PRODUCTS

ANGEL COURT, DAIRY YARD, HIGH STREET,
MARKET HARBOROUGH
LEICESTERSHIRE LE16 7NL



Fendress Greentop™ soil-less top dressing now available
Telephone: 01858 464346/433003 Fax: 01858 434734

YOUR ASSURANCE OF QUALITY AND SERVICE FROM THE PEOPLE WHO CARE

FENDRESS™ TURF TOP DRESSING BRITAIN'S NO. 1 YOU CAN'T BEAT THE ORIGINAL

NOW AVAILABLE:

- Fendress Regular
- Fendress Superfine
- Economy Top Dressing - for Tees and Approaches
- Sand/Loam Top Dressing
- Rootzone Mixes
- Highest quality Screened East Anglian Fensol

- Fine Screened Sedge Peat for Fairways
- Fine Screened Sandy Loam
- Kiln dried Sand and Washed Grit for Vertidrainage
- Lime-free Silica Sands
- Bunker Sands - White - Cream - Pink or Yellow, including Moneystone

and a very enjoyable time was had by all. Thanks are due to Gordon and Marion Child for their usual excellent organisation of this three day excursion which must be the bargain of the year. Being one of the more itinerant greenkeepers I especially enjoy the opportunity of meeting old friends and catching up on what has been happening in our own very close knit community while some of the more athletic greenkeepers took the chance of enjoying the Harrogate night life! This included among other things the karaoke in which I am glad to say the South West area didn't let the side down and gave an uplifting rendition of "Puff the Magic Dragon" but the less said about that the better! The show itself and the speakers just keep on improving year in and year out and the whole event was topped by the banquet which all agreed was brilliant. The food, the precision like service of the Majestic Hotel staff and then the hilarious Bobby Davro made it a night to remember. I am sure that once again we will have a full coach for next year. Before finishing may I on behalf of the South West Region give our congratulations to Gordon Child on being elected Vice Chairman of the Association for this year.

Marc Haring

Devon and Cornwall

It is with great regret that I have to inform members of the death of Steve Pike. Steve was at Tiverton GC before moving on to Trentham Park GC, Stoke-on-Trent. Our thoughts are with Stephen's family at this time of need.

The Section's first meeting of the year was sponsored by Barenbrug Seeds and held at Fingle Glen GC, on Wednesday, January 15. The day started with golfing members playing a Stableford competition over 9 holes. Our non-golfing members were treated to an excellent workshop on irrigation maintenance and equipment which was presented by Ocmis Irrigation with some of the golfing members joining in the last part of the workshop before lunch.

After lunch members were invited to enter the Barenbrug grass identification competition. The lucky winner drawn from the hat by John Bradley, of Barenbrug, was Tony Gooch who walked away with Barenbrug's goodies.

John Bradley then presented the golfing prizes to the winners of the 9 hole Barenbrug golf competition:- 1. Tony Gooch, 20 pts; 2. Brian Ridgeway, 20 pts.

To conclude a superb day Ocmis Irrigation presented an afternoon seminar on irrigation design and installation. This provided members with some good healthy debating points.

The Section would like to thank Roger Davey and Keith Ford, of Ocmis, for their excellent educational presentation. Our thanks must go to the day's sponsor Barenbrug for without it this meeting would not have taken place and our thanks also go to Bill Pile and his crew who kept the rain off (this must be a first) and for having the course in excellent condition. Finally, thank you to Fingle Glen and all their staff who made our day run so smoothly.

January was also the month when members from all over the Section join the Region's annual trip to the BTME in Harrogate. This year was no exception as the Region's trip was fully booked, a fitting tribute to Gordon and Marion Child on their last BTME trip as organisers. On behalf of all the Sections within the Region I would like to thank you both for all your efforts.

The long journey home gave me the chance to remember the first BTME and seminar programme which was held many years ago. That year the seminar programme was held in the Royal Baths across from the Exhibition Centre and the BTME covered just one and a half halls of the Exhibition Centre. Now we have four halls

fully booked. Congratulations must go to the Board of Management and all the staff at Aldwark for the continued success and growth of BTME week.

Our last meeting of the winter programme will be held at Honiton GC, on Thursday, March 20. The day will start as always with golfing members competing for the Supaturf Trophy (Head Greenkeepers) and the Rhone Poulenc Trophy (Assistants). This will also be the Section's qualifier for the Hayter Regional Final and as always golfing members will have a guided tour of the course and sheds.

Westurf is now just around the corner and hopefully the weather will improve before then with this being Gordon and Marion's last Westurf in charge. What better way to thank them for all their efforts over the last ten years than all of you turning up to make the day unforgettable.

Remember the date – April 30 at Long Ashton GC, Bristol.
Richard Whyman

South Coast

On January 15 we had an afternoon trip to Roffeys at Bournemouth. David Roffey showed us around the complex and we were shown all the various materials which go to make up our top dressings, root zone mixes and horticultural composts. We then moved on to the sterilising plant and were shown how the various materials are mixed and finally the bagging of the various dressings. The afternoon finished with tea and biscuits and a general chat about the various products. I would like to thank Roffeys for allowing us to look over their premises and in particular David for giving us the guided tour. It was a shame that only 10 people turned up.

Our Spring Tournament this year will be held at Broadstone GC, on Monday, April 28. This will consist of a full days golf and it will also be the qualifier for the 1997 Hayter Tournament. The Regional Final will be held at Burnham and Berrow GC, on June 11. All those wishing to play should forward their names, address and their current handicap and a cheque for £16 to:- Mark Webb, 12 Lime Road, Arelsford, Hants, SO24 9LD. The closing date for entries is April 18. Would all the winners of last years tournament please ensure they are returned on or before the day of the tournament.

Another reminder for Westurf 97 to be held at Long Ashton GC, on April 30. We would like to see as many of you there as possible. This will be Gordon and Marion's last Westurf, all the more reason for a large attendance. Let's give them our support and thanks for what they have done for Westurf over the years. I am told there are some new stands and a free prize draw, if it's quite a substantial prize then who knows, you could be jetting off to the Bahamas, Bermuda or even sunny Blackpool!

Once again the BTME was a resounding success. All records were broken yet again and I found that on quite a lot of the stands I could not get to talk to the representatives as they were so busy which has got to be good news. The seminars were of a very high calibre and the sound was very good. The only criticism was that it was difficult to see the screen. However I am sure that the organisers have this in hand for next year. Congratulations must go to all those who had a hand in the organisation of the BTME. I say this every year – "It was the best yet!" At the AGM Gordon Child was made a Life Member of the Association and I am sure Gordon will make an excellent Chairman in 1998. There can be no-one more deserving of this honour.

It was nice to see that there was a good representation from the South Coast at the BTME. Thirteen members travelled on the Regional "Bargain of the Year" coach! The journey went quite smoothly with no major hiccups! The driver of the coach from

Southampton to Bristol did get a little confused around Bristol. I must admit I did get a bit worried when I found we were going back out of Bristol the way we came in! Still we made the connection at Gordanio which was the main thing. Several members also made their own way to the BTME and during the course of the four days I did bump in to most of them.

Lastly I would like to say thank you to Gordon and Marion for organising the trip and also for all the hard work they have done over the years. Gordon and Marion are going to be a hard act to follow.
Ken Lodge

South Wales

Our latest evening lecture was presented by Mark De Ath, the National Amenity Manager for Headland Agrochemicals. Entitled "Chemicals for the Management of Turf" Mark's presentation covered many topics but was primarily based on the management of soil and the effects on its pH (percentage hydrogen). Fifteen hardy soles braved the typical winter conditions to attend an excellent lecture packed with valuable information. Our thanks to both Headland Agrochemicals and Mark for what was a thoroughly worthwhile evening.

I won't dwell for too long on the subject of the BTME for I'm sure that it will be covered in much greater detail within the pages of this magazine but I must say that another successful BIGGA Turf Management Exhibition has passed us by, bigger, better, more exhibitors and more visitors than ever before – what can one say!

The show goes from strength to strength as does the regional trip. Well done again to Marion and Gordon Child for their excellent organisation of the trip and many thanks!

If any member would like to borrow a book from the BIGGA library, forms can be obtained from myself or BIGGA Headquarters.

Ian Walker has recently been appointed the new Head Greenkeeper at Carmarthen GC. Ian, a Scot with a handicap of 9, joined from the Stonehaven GC in Aberdeen. We wish him well and look forward to seeing him at forthcoming Section events.
Peter Lacey

SOUTH EAST REGION

Derek Farrington

Tel: 01903 260956

Surrey

A proposal was put forward at the December AGM that the golf meetings should have an educational element attached to them. Not all golf venues are suitable for educational purposes but the spring meeting at Dukes Dean GC, on May 12, would appear to be ideal. The spring meeting was chosen because it is also the Hayter qualifier and we usually have a good turn out.

Following 27 holes of golf Jack MacMillan has kindly agreed to attend for the evening meal and talk to us on his chosen subject so please come along and support this event.

On another subject entirely I hear that the Drift GC has been taken over by the largest golf company in the world, Club Corporation of America. The Drift is now a member along with 240 clubs throughout the world with associations in the Philippines, China, Indonesia, Mexico, Canada, Germany, Ireland, India and now England which the Drift are very excited about since they are the first English club to be acquired by CCA. Good luck to the Club and the staff, especially to Paul and his team who I understand are very happy with the new management.
Mike Kirkham

Essex

The new Essex Section got underway with a meeting at the White Horse Pub, Chelms-

ford when 45 greenkeepers and trade members aired their views and formed a committee as follows:- President – David Wells; Chairman – Carl Crocher; Secretary – Andy Sheehan; Treasurer – Richard Pride; Handicap Secretary – Mick Fance; Scribe – David Wells; Education – Martin Forrester; Committee Member – Reg Hooker.

Golf days have been arranged on April 22 at Chigwell GC (Hayter Qualifier), June 16 at Five Lakes G & CC, August 9, at The Warren GC and October 2 at Stock Brook Manor GC. The AGM will be held at Orsett GC in December.

Evening lectures will be held at Writtle College in the main building, room L60 at 7.30 pm. Please make a note of the following dates in your diary – March 18, May 14 and September 25. Details of each meeting will be announced later. Liquid refreshments will be available in the students bar after 8pm.

A meeting was held at Writtle College, on February 3, when members were invited to sit on an advisory panel to the College to discuss educational and training provision. These meetings will be held on a regular basis.

Urgent – more assessors (D32/33) are required for our area for the success of future greenkeeping. Contact Martin on 01245 603131 if you are interested. You should have received your questionnaire by now. It is important from all our points of view you spend a few minutes to fill it in so the committee know what members want. As a bonus your form will be entered into a free draw which will be drawn at our meeting on March 18. If you haven't received your questionnaire yet please contact Martin on the above number.

We wish Alan Sharpe and Doug Smith good luck in their new jobs and congratulate Andy Turbine and Adrian Kersey on their promotions at Ernest Doe. Finally our best wishes for the future are sent to Richard Pride who was recently married.

If you have any news for the Essex section phone me on 01702 522202.

David Wells

Sussex

Harrogate is over for another year. It may only last five days but the memories will last a lot longer. The Conference, Seminars and Exhibition were terrific and so well organised. To gather so many greenkeepers from Europe and beyond just shows it's getting BIGGA and better every year!

Congratulations to Dave Ansell on his presentation on Downland Conservation. It not only took a lot of hard work to prepare but also a lot of guts to get up and present it so well. But that's not all – the highlight of his week came on Wednesday night when a stunned audience watched Dave giving his all at karaoke night singing "Give me all your lovin'" Great stuff Dave, but don't give up the day job!

Now news of a forthcoming event. An inter-county golf challenge is to be held at Princes Golf Club, Sandwich, on 27 March. This event is the idea of Chris Allen. He approached Bill Howie, at Princes, for permission to play there and has also arranged sponsorship from John Deere and Sisis. Teams will be made up of eleven players from each county with the best 10 Stableford cards to count from each team. Derek Farrington, our Regional Representative, is coordinating between the counties involved in this event.

The Sussex team for this year will be selected by George Barr but it is the intention of the committee to make either the summer or autumn competition into a qualifier for next year's challenge.

To finish can I remind members that articles have to be in one month before the magazine is printed so I need any items you want included in plenty of time so that I can mention them in my write up.

Colin Cathie



SEE THE
INSERT IN THIS
EDITION OF GREENKEEPER
INTERNATIONAL



THE PRIZES

THE WINNER of the Toro Award for Excellence in Greenkeeping will receive the following:



FOR THE CLUB

The golf club of the winning Course Manager or Head Greenkeeper will win a world renowned Toro Greensmaster 3000 triple greens mower (pictured above), the winner's trophy to display for a year and a plaque to display in the club house.

FOR THE WINNING COURSE MANAGER/ HEAD GREENKEEPER

The individual winner will win a two week trip to the United States, visiting the Golf Course Superintendents Association of America Conference and Show, as well as a trip to visit the Toro Company's Headquarters in Minneapolis and its factory in Riverside, California.

FOR THE TEAM

Each member of the winning Course Manager or Head Greenkeeper's team will receive a set of BIGGA waterproofs.

FOR THE REGIONAL WINNERS

Each regional winning Course Manager or Head Greenkeeper will receive £100 for themselves and a plaque to display in their club house.



Budding author needs help in 'exposing' tyrannical golfers

I am currently Head Greenkeeper at Whitby GC and am compiling a book called *Golfers Through a Greenkeeper's Eyes*. It is a satirical look at our golfing fraternity and the people we have to deal with on a daily basis.

Having sent the finished article to a couple of agents the reply was more or less the same – it isn't long enough to be a book and is more of a booklet. As I explained to these people I'm a greenkeeper not a writer and, although there was much encouragement, it was strongly recommended that I "fill out" the aforementioned literature with some humorous drawings. Seeing as how my ability to draw cartoons is even less favourable than my ability to write I was wondering if there are any, like minded, greenkeepers out there who would like to partake in a joint venture.

I must, however, forewarn any budding Schultzs that this book/booklet is a scathing and bitter attack on our beloved golfing associates, albeit very "tongue in cheek" and should we not make a million in the first publication we may end up huddled carrying on some building site or other remembering the days when we used to cut grass for a living!

I'm convinced that this request will be greeted with open arms as a chance to put our side of the story in a light hearted and jovial manner and should anyone want to take up this metaphorical gauntlet I would only be too willing to send a few descriptive paragraphs so a visual likeness could be sketched.

I thank you.

Ian Lavelle
Head Greenkeeper
Whitby GC

Thanks for support

I write to thank the BIGGA members, staff and my many friends in the industry for the letters, cards and messages I received during my recent bereavement.

The support given has been a great comfort to me during a very sad time.

I would also like to send my best wishes for the future to my successor as Association Guardian, Walter Woods, and to Neil Thomas and all at BIGGA during this 10th anniversary year.

Bill Lawson

Green card system could be made to work in the UK

I would like the chance to reply to David Roy's article "Employers and Intruders", February issue.

I too have endured two inclement years with very dry summers, the worst winter of snow for 15 years in 1995/96 (eg first snowfall November 5, '95 disappearing on April 12, '96), frost down to 15cm and windchill factors below -30° 1996/97. I consequently can fully follow your articles and sympathise.

You are totally correct when you refer to the green card system. This applies to Denmark, Sweden and, I believe, Germany and Norway. Our requirements work on a points system covering etiquette, rules and how to play.

All the new members have to pass tests on: bunker shots, chip shots, fairway shots, etc which are conducted with an existing low handicap player or the club professional. These new members start with a handicap of, wait for it, 55! for both men and women. They must play nine holes to this handicap on the nine hole par 3 course before they are allowed to move on to the main 18 hole par 72 course. This is a popular system with our new golfers and improves the etiquette on the course ie pitch marks, divots etc.

However this only accounts for

the new members and I still have the "old brigade" who neither like change or improvements especially when it interferes with their daily routine.

I quote: "What's wrong with the greens? They're worse now you've made all these holes in them!" These greens have 635 mg per litre of phosphates – I could actually legally sell it for fertiliser!

Or: "I've been playing here for 25 years and never seen it closed when the frost comes out." We have had 10cm of frost moving up coupled with 6mm of rain. This led to a cocktail when walked upon almost like roundup on your feet... "of course we can see that but the grass is 25 years old so it must be able to cope." This is actually 25 years of over fertilisation, over watering and a lack of root system. Enough said.

The worst day has to be the men's day with the hard core of 20 members who incidentally do not have green cards, who leave the course with pepper pot greens and bunker size divots. Of course there's nothing you can teach them.

On numerous occasions we have tried to hold information evenings to educate the membership on greenkeeping techniques and forthcoming disruptive operations.

Strangely enough the aforementioned seem to develop a rare strength of Indian 'flu on that day but are fit to tee off at 8am the next morning.

My quarterly article in the club magazine is appreciated by the majority and it is to those the information is aimed. I do believe the green card system will work, although it will take a long time to see the results.

Maybe the British would benefit from this system, improving course quality and lower our greenkeeper's stress levels.

Thanks for another brilliant Harrogate Show.

Chris Haspell
Course Manager
Falster GC
Denmark

Fortiva
APPLIED SEED TECHNOLOGY



Great Hadham's Green Recovery

When David Dollimore took over at Great Hadham GC on the Herts/Essex border, greens were worn and weeds were starting to get a foothold.

His problems increased when a late April herbicide was followed by unusually severe frosts. Attempts to returf and then re-seed were also thwarted, this time by drought.

It was then that he spotted a Fortiva advert and, after consulting Kings Horticulture, decided to give it a go.

"We added the Fortiva treated pure bent mixture to a top dressing, chitting the seed over a weekend. Just 12 days later, it was up and running," he recalls.

"Normally I'd expect grass to take 21 days to establish, but within a fortnight it had bedded in. This was an incredible recovery, the best I've seen in 15 years.

"Fortiva treated seed is certainly worth it," he says. "Now I'll rarely consider anything else on the greens."

for further information and details of your nearest distributor, contact

Force Limagrain
01954 / 232020

Fortiva
APPLIED SEED TECHNOLOGY

Removing guesswork from spraying system selection

Matching the correct equipment to the needs of their course is of vital importance. This month we look at spray tanks.

If you don't know where you're going, any road will take you there.

The above is a common business adage often used to make managers aware of the need to seek out all the available information before deciding on a course of action.

It is therefore vitally important, when considering the purchase of a replacement or additional spraying system, to be aware of the many options available so that whatever choice is made, the decision will have been reached on knowledge rather than 'experience' or guesswork.

To help you decide which combination of application equipment best matches your particular needs this guide reviews the different tank options. At the same time as deciding the choice of equipment, don't forget the skill levels of your staff who will ultimately use the



equipment; much of the new equipment available will require extra training on its use.

The first consideration will be tank size in relation to the size and nature of the course.

What is the intended function of the sprayer and the likely intensity of use? There is little point in selecting a 1500 litre trailer sprayer if the course is small with narrow fairways and steep sided greens and tees. Conversely, a tractor mounted 300 litre sprayer would be a waste of money if it is the only machine available for spraying a large course with "motorway" fairways.

The second consideration is the materials from which the tank is constructed (see table). Common tank-construction materials

include moulded plastics, fibreglass, heavy-gauge steel and stainless steel. Whatever the material, the overriding consideration must be that it should resist corrosion from the materials applied.

New tanks introduced into the

Amenity market have been designed to minimise leftover spray mix, tanks such as these reduce chemical waste and disposal problems. Some manufacturers have also introduced a built-in sump that also helps with disposal. The tank must also have a drain plug at its lowest point, preferably operated by a valve located on the top of the tank.

Finally, the tanks should be clearly marked with graduated level indicator or have a sight gauge (visible from the operator's position) to provide the operator with a constant visual of the tank levels.

Fig. 1 Amenity sprayers: Tank materials and their characteristics

Consideration	Polypropylene	Fibreglass	Stainless Steel
Corrosion-proof	Yes	Yes	Yes
Repairable	Kits for some	Kit with resin	Welding
Weight	Light	Medium	Heavy
Sizes	100-1,500 ltrs	100-1,500 ltrs	300-1,500 ltrs
Level visibility	Good	Poor	None: Sight gauge required
Cost	Low	Medium	High
Comments	Not easy to repair Select UV resistant materials Easy to mount May stain after time	Can break or crack under impact Mounting is difficult Inside may flake due to effect of corrosive materials	Strong and durable Very heavy Most expensive Difficult to repair

PRESENTING THE POWERFUL NEW REELMASTER SERIES.



Compact and bijou

Hugh Tilley looks at the range of compact tractor which now faces the prospective customer and speaks with the people who use them.

With an excellent power to weight ratio and both hydraulics and power take-off, compact tractors are ideal for many essential operations. Equipped with turf or low pressure tyres, most have four wheel drive making them very sure footed and able to be used for both tractive and hydraulic lift and pto work.

Recent changes have altered the marketing of several makes of compact tractor, notably Shibaura and Iseki.

Marketing agreements have been made for Iseki with Jacobsen – in place of Massey Ferguson and for Shibaura with Ransomes. The recent Ransomes announcement simply states that that company will be bringing in a range of seven tractors – from 18 to 45hp in corporate style and colours.

For trailer work compact tractors offer greater capacity and load hauling ability than turf maintenance vehicles (TMV) such as the Cushman, while the virtual standardisation of their hydraulic lift (category I) and pto means that they offer exceptional flexibility to use with other makes or models. Actually several speeds may be offered for the pto – so it will pay to check what speed your machinery

requires, remembering that forward speed and engine speed will co-relate.

Furthermore front end loaders are available so that most can be used for lifting and loading in a way that no TMV can. Some models are better for loader work than others, in particular for the output of the hydraulic pump

and the strengths of their construction.

Experience suggests that on many courses the compact tractor is also used as a run-around. Cabs, once scoffed at as "soft", are becoming more popular and widespread although there are still those who say that their tractors are mainly used in fine weather



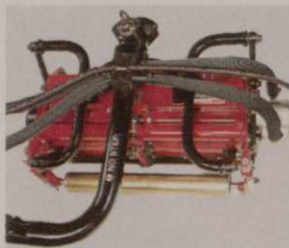
SO DEDICATED, THEY EARN THEIR STRIPES EVERYTIME.



Whatever the season, whatever the weather, this greenkeeper cuts a fine swathe through thick, uneven turf to produce the perfect fairway.

For the new Reelmaster fairway mowers boast many new, innovative features resulting in a cut like never before.

Rugged, powerful and durable, they have the lightest of touches. Their new L-I-N-K-S™ system of floating linkage and individual lift arm dampers hug the turf to get into dips and hollows for a close, all-over cut with no "bobbing", even at speeds in excess of 7mph.



The new L-I-N-K-S™ system



The Reelmaster 6500D, with its 5-gang mower, and the 6700D, a 7-gang mower, both offer impressive cutting technology with all-interchangeable variable speed, automatically controlled reels to handle fast-growing, tough seasonal grasses.

Quiet in operation thanks to Toro's advanced noise reduction, the powerful 38hp and 42hp diesel engines will help these machines reach inclines other mowers can't.

To win your stripes, give us a call and we'll walk your course with you and recommend the best machine for your needs.

You too can trust Toro expertise and quality. Simply telephone 01480 476971 and we'll arrange for a local dealer to contact you.



Bringing perfection to play.

REAL WORLD TEST COMPACT TRACTORS GREENKEEPER INTERNATIONAL

(ie for mowing rough or fairway) so a cab is superfluous. ROPS, or Roll Over Protection, or frames are a minimum legal requirement.

Few smaller tractors have air conditioning, but most with cabs do have heating.

Most manufacturers offer a range of transmissions, and usually these include a hydrostatic drive which may be more ideal for loader work. There are many variations in transmission ratios and many models will offer a 'shuttle' gear which gives fast and easy direction changes. Deep aeration – such as with a Verti-drain is a frequent requirement, and places several specific requirements on the tractor, typically, sufficient low ratio or creeper gears, and enough front weight, but the latest developments in deep aerators with higher gearing mean that specific "creeper" ratios may not be needed. Where there is limited turning space such as at the edges of greens or tees a good turning circle or easy to operate gear shift may be another essential requirement – however beware of the dangers of scuffing.

Because hydrostatics is such an integral part of most compact tractors the majority also use it for power steering – from the manufacturing point of view hydrostatic steering is more flexible as there is no need for mechanical connection from steering wheel to drag link. From the operators point of view there is less effort needed and little kick back – but some maintenance may be needed. Hydrostatic steering can be abused.

John Deere Tractors at Puckrup Hall Golf Club, at Tewkesbury

This 18 hole course is about five years old, mainly flat but with considerable tree planting and the Head Greenkeeper is Trevor Williams. He used past experience to suggest the club buy John Deere tractors from Frank Sutton at Raglan, and now with five years use he is totally satisfied with the choice. Trevor's past experience has included Ford, Kubota and others.

The club has three John Deere tractors, a 38hp JD 1070 now with 1727 hours on its clock and two 33hp JD 955s – clocking 905 and 1986 hours respectively. JD 1070s are no longer available. The higher hour 955 is equipped with a front end loader and a mid-mounted mower thus it has a considerable work load. The 1070 is mostly used for verti-draining and for operating a five gang mechanical mower set on fairways, as well as for trailer work.

One of the first comments that First Assistant Peter Rack, made was that all three tractors always start – first time, every time, without heaters. Another of his likes was the roominess of the operator platform (particularly on the 1070) with all the controls to hand. Access was particularly good he commented. None of the tractors have a specific driver – any of the five greenkeeping staff are expected to be able to operate any machine. Oil changes and similar routine servicing is carried out by in-house, as is some larger scale work, however none of the JDs have needed anything other than routine work – the only non-usual item on the service sheet has been with one of the 955s which needed a new hydraulic pipe as the old chafed through – this was covered by warranty. The club is meticulous over its servicing and oil changes, preferring to undertake them early rather than leaving them past their due date.

Trevor said his policy was to get the right sized tractor for its use, he commented that expecting a smaller tractor, for instance, to operate the verti-drain was asking for problems, with steering and control as well as by



Keith Weston, Course Manager, Kenilworth GC and their Iseki 537

demanding too much from the hydraulics and power output. All three tractors have 4WD but this is seldom needed on the Puckrup Hall course. Hydraulic lift has proved to be more than adequate in terms of lift capacity.

The lower hour JD 955 has a three gang wrap-around fairway mower fitted and this has made it effectively a one use machine – Trevor said that he would expect this to last for at least ten years, whereas he is looking to replace the other two machines within the next two years. The criteria for replacement is "before the value drops" – or more exactly while the tractor is in good order, clean and with a good resale potential.

Mounting and demounting the loader is exceptionally easy and quick and it was demonstrated to Greenkeeper International, and although this demo was on concrete it demonstrated the 70A loader to be one of the best systems ever, and one which looked particularly stable without needing extra stands or the removal of pins or stands. Peter commented that not only was the loader quick to fit but it was also a very fast loader to use, with quick acting hydraulics and the hydrostatic transmission which made for rapid forward/reverse operation. Fitting the 60 in. mid-mounted deck was little more difficult, Trevor estimated it as a four minute job. In this form the tractor is used to cut between the 15,000 trees planted on the course – a considerable task, and one which demands some dexterity.

Certainly Trevor was confident that the John Deeres had been his best choice and he foresaw replacement as being from the same supplier.

Iseki Tractors at Kenilworth Golf Club

Kenilworth Golf Club is an old established club which has used a wide variety of makes of tractor in the past, nor has it tied itself to any particular dealer. The two Iseki tractors currently on the course – an 18 hole private park-



Puckrup Hall Head Greenkeeper Trevor Williams, left and First Assistant Peter Rack with their John Deere 1070

**The Kubota SuperB series is here today.
Another leader from the leader.**



Yesterday, we recognised that tomorrow's compact tractor would need to be more powerful, more innovative, more reliable, more environmentally responsible.

At Kubota we're always thinking of tomorrow.

CALL THE KUBOTA HOTLINE ON: 01844 218289

Kubota

Designed to lead.

Kubota (UK) Limited, Dormer Road, Thame, Oxfordshire OX9 3UN. Tel: 01844 214500 Fax: 01844 216685

SERIES 20 FORD TRACTORS



More compact, more versatile

- 17 to 41 hp range
- Wide range of groundspeeds
- Robust, easy to operate transmission



NEW HOLLAND prefers **Ambra** lubricants



NEW HOLLAND

MACHINERY FOR
ADVANCING GROUND CARE

REAL WORLD TEST COMPACT TRACTORS GREENKEEPER INTERNATIONAL

land course – were supplied by Western Farm Machinery at Stratford-on-Avon, who happen to be Massey Ferguson dealers.

Course Manager Keith Weston said that in the past little dealer support had been needed. Later he explained that the club sent all its main machinery out for a winter service to ensure maximum reliability during the season. There were absolutely no complaints over the service provided by Western Farm.

As of writing the expectation is that local Jacobsen dealer, Abbey Mower Supplies Ltd, will become an approved Iseki dealer, and The Kenilworth Club is a committed Jacobsen user and Keith commented that if Mick's service on the Iseki is as good as has proved with other Jacobsen equipment he will be happy to go to them.

The main tractor at Kenilworth is a 37hp Iseki 537 with 4WD, cab, and mechanical transmission. It has proved to be totally reliable no breakdowns were admitted, except when it was run without coolant and this caused two oil seals to warp. The fact that this appears to be the total extent of the damage has been taken as proof of the quality of the engineering. An ex-assistant greenkeeper also managed to do some damage to the tinwork but this has not prevented the machine from functioning – again a tribute to the machine.

Bought in 1991 the 537 now shows 2565 hours on its clock as a measure of the considerable amount of work it has undertaken mostly with verti-drain, fairway gang mower and trailer. The hydraulic gang frame also takes a set of verti-cutters thus significantly adding to the tractor's duties. The creep ratios on the tractor are an essential for deep tine aeration as is the cab. Keith commented, "It gets very cold when operating for considerable lengths of time at low speeds and the operator is justified in expecting some comfort." The tractor is used with a 1.46m Verti-drain and covers all the greens and most of the fairways on the course each year.

The operator platform is particularly user friendly and devoid of clutter with all controls ready to hand. Four wheel drive is used most of the time – in particular it is seen as giving a better and surer travel with the Verti-drain.

The club also has an Iseki 4270 from the same source – and with equally as good a service record.

Lamborghini 660S at Chiselhurst Golf Club

Prime reason for selecting the Lamborghini 660S was for its excellent power to weight ratio. In fact it is not a compact tractor within the strictest terms as it is actually from the Same/Lamborghini "fruit and narrow" tractor range. This gives it an overall width which is less than many compacts while having little greater weight but considerably more power (60hp). The "fruit" specification also provides a high level of specification including a full 'Q' cab without any need to fit options. To Gary Tait, Course Manager at Chiselhurst, the narrow width was a welcome bonus.

The most applicable extra on the tractor is the loader which Gary rated as excellent, especially when it came to putting it on and off. One of the most important tasks undertaken with the tractor has been to reform several banks on the course, using bucket and grader blade, for this the tractor has been brilliant, in particular because it has a 12/12 shuttle gear box – ie 12 ratios with a single lever forward/reverse shift. Also notable is the visibility from the cab, while external operation of the hydraulic lift make fitting implements to the linkage considerably easier.

Deep aeration is a future requirement thus



**Powerful.
Economical.
Versatile.**

Kawasaki Mules are lightweight taskmasters built to tackle the toughest utility duties.

Helping you do your job with the greatest speed, ease and comfort.

To experience the power behind the work, call freephone 0800 500245.

Or call into your nearest Kawasaki dealer.

THE COMPLETE UTILITY TASK FORCE



3-2-1 - GO!

**NEW
FROM
SISIS**

The new SISIS 321 tractor has been designed specifically for the maintenance of turf and artificial playing surfaces and is ideal for golf clubs, local authorities and sports complexes



4-wheel drive
Permanent drive to all 4 wheels
Built-in hydraulic differential

32 h.p. engine



Excellent manoeuvrability
Power assisted steering
Pivot-steer chassis

Deluxe safety cab



Versatility
Operates range of more than
30 pto and towed attachments

Patented weight-transfer system



sisis

SISIS EQUIPMENT (Macclesfield) LTD., Hurdfield, Macclesfield, Cheshire, SK10 2LZ Tel: 01625 503030 Fax: 427426 Spares Hotline: 01625 503020
SISIS CENTRE IN SCOTLAND The Roundel, Middlefield Ind. Estate, Falkirk, FK2 9HG Tel: 01324 629635 Fax: 632894
SISIS CENTRE IN USA, SISIS Inc., Florida

REAL WORLD TEST COMPACT TRACTORS GREENKEEPER INTERNATIONAL

sufficient low gear ratios were considered essential, and these are part of the standard specification of the tractor.

Service support is provided by Ian Kerry Machinery – who supplied the tractor for the 1996 season. They also supply an enhanced level of service which includes a monthly visit with major services at six monthly intervals. Gary also commented that the tractor has the benefit of a three year warranty. To date no problems have been experienced.

The main occupation for the tractor, other than bucket and loader work is with a trailer and with a rotary mower on roughs in summer. Because the course is exceptionally compact and also has some quite steep banks the manoeuvrability and surefootedness of the Lamborghini 660 are ideal. Turning circle can be enhanced by steering brakes, and the tractor has both four wheel drive and four wheel braking. Turf tyres are fitted.

Gary said that when Ian Kerry Machinery knew he was in the market for a new tractor they asked to bring the 660S out on demonstration and he liked it immediately, considering it ideal for the course.

He also added that the club had been able to get an excellent deal. There was no hesitation in recommending the tractor to any greenkeeper, and Gary expects it to be good for at least a ten year life on the course.

Kubota L4200 at North Wiltshire Golf Club

The Kubota at North Wilts is one of the new 'Grandel' models and was bought from Handy's at Swindon in a deal which traded in two tractors including an aged MF 135 with loader. Course Manager, John Boorman, said that the old tractors had become unreliable and that the new tractor would be expected to undertake more work.

John said that he had been given a set sum with which to purchase the tractor and the deal had to be made within this constricton. He added that the dealer would have liked to sell him a smaller model, however the club has an Amazone high lift Groundkeeper and expects to buy a deep tine aerator and thus needed the extra weight, power, and a low gear. Also on the wish list was a back hoe, and for this the L4200 would also be ideal, however, John is not holding his breath until he gets one.

Although the tractor was taxed for the road, it will not be used on the road, partly because insurance (for roadwork) would not be cost effective. Fortunately off-road tracks allow the tractor with trailer to be used to collect compost from a local farm.

The machine will also be used for cutting the rough. With the course built on the edge of a hill effective four wheel drive is essential.

Another important consideration with the Kubota was the fact that it is small and light enough to use on greens when necessary.

It is now one year old and it has worked for 250 hours. Of course these are engine

hours – derived, like all tractor hours, from engine revolutions rather than from time. There were some criticisms of the tractor, one of the assistant greenkeepers is a large lad, he finds the cab a little small and has some problems finding some of the controls which are below seat level. There have also been some cab door catch problems and a hydraulic pipe which was perished had to be

replaced – under warranty, but overall John said he is more than happy with the tractor and he rated Handy Garden Machinery "as one of the better dealers". The club also has another Kubota. John said that the club now has a five year plan in place and this should allow for a better and more regular turnover of machinery.

He expected the Kubota to stay on the course for ten years.

Below: Gary Tait, Course Manager at Chiselhurst with their Lamborghini.

Bottom: North Wiltshire's Kubota L4200



Buyers' Guide

The most cost-effective way of reaching readers of *Greenkeeper International*. Simply ring Amanda Freeman, Jenny Panton or James McEvoy on 01347 838581 and ask about an alphabetical category listing: the cost starts from as little as £28 per month.

Agronomy

B Jamieson Golf Advisors Ltd

Bruce Jamieson formerly Director of Agronomy with the PGA European Tour has now formed the above company offering expert advice on:

- ♦ Golf course maintenance
- ♦ Tournament preparation and presentation
- ♦ Machinery selection
- ♦ Budgeting
- ♦ Staff recruitment
- ♦ Soil and turf analysis

Contact: **Bruce Jamieson**
10 Ashlea, Hook, Hampshire RG27 9RQ
Telephone 01256 760870

Gordon Jaaback

consulting agronomist

offers a practical and scientific approach to problem solving and an all-round service towards cost-effective golf course construction and maintenance

Introductory visits without obligation

25 Cheviot Close Tel/Fax
Tonbridge TN9 1NH 01732 350351

PSD AGRONOMY LTD

A COMPLETE AGRONOMIC CONSULTANCY SERVICE FOR THE GOLF CLUB and GREENKEEPER

- Contract Management of Extensions and New Courses
- Site Management and Problem Diagnosis on Existing Courses
- Technical Advice and Support all year round
- Soil and Turf Analysis



For further information contact:
David Stansfield or John Hacker
42 Garstang Road, Preston PR1 1NA
Tel: (01772) 884450 Fax: 884445

GREENKEEPER International

Greenkeeping's premier publication

Animal Repellents

SCUTTLE

For Humane Rabbit Control



MAFF No. 04559



FOR FURTHER INFORMATION
CONTACT US ON
0118 951 0033

FAIRWAYS

DISCREET CONTROL
CONSULTANCY
ENVIRONMENTAL SERVICE & TRAINING

*Rabbits & Moles...
Our problem!*

SPRINGER HOUSE • WINDMILL LANE
KEMBLE • CIRENCESTER GLOS • GL7 6AN

TEL: 01285 770919
FAX: 01285 770910

YOU'RE ONTO A WINNER WITH GREENKEEPER INTERNATIONAL

Find three tiny £50 notes – win a real one, for free!

HERE WE GO with another chance to WIN £50 with Greenkeeper International!

All you have to do is take a look at this £50 note symbol. Now look through the ads in the Buyers' Guide section and spot THREE of them – they've been reduced in size, but they're there, somewhere!

Write down the names of the three ads where the £50 notes are located and send your entries on a postcard to: **Note the Notes Competition, BIGGA, Aldwark Manor, Aldwark, Alne, York, North Yorkshire YO6 2NF**, to be received by first post Friday March 21, 1997. The first correct entry drawn after that date will win £50. *It could be YOU! Enter today – and Note the Notes!*

Judges' decision is final. Not open to BIGGA staff.

£50

★ **Mr S Reid of South Shields Golf Club, was the lucky winner of last month's competition.**
A crisp £50 is on its way. Don't despair – YOU could be the next winner! Get searching straight away!

Amenity Spraying

WEED FREE BRACKNELL

PROFESSIONAL PESTICIDE APPLICATION AND ASSOCIATED TURF SERVICES
FOR ALL YOUR SPRAYING REQUIREMENTS

Tel: 07000 481011
Fax: 07000 481022
Mobile: 0850 300104

Unit 12 Lindenhill Road, Bracknell, Berkshire RG42 1UT.

Architects

BRITISH INSTITUTE OF GOLF COURSE ARCHITECTS

Representing the leading European Practices in golf course design, working worldwide and offering professional services from initial site appraisals and feasibility, conceptual designs, to detailed architecture, specifications and project management and construction design.

Merrist Wood House, Worplesdon, Guildford, Surrey GU3 3PE
Tel: 01483 236035 Fax: 01483 236037



JONATHAN GAUNT

B.A. (Hons.) Dip L.A.
GOLF COURSE ARCHITECT

From feasibility studies to complete design projects including contract supervision

44 Stanmore Road
London E11 3BU

TEL: 0181 532 9181 FAX: 0181 532 9553
Associate of the British Institute of Golf Course Architects

David Hemstock Associates

Consultants on:

- Golf Course upgrading
- New Course development
- Specialists in irrigation, drainage and contour surveys

Suite 4d, East Mill, Bridgefoot, Belper, Derbyshire DE56 1XU
Tel/Fax: 01159 499080
Mobile: 0850 744957

Artificial Grass



Gabbotts Farm Barn, Bury Lane, Withnell, Chorley, Lancashire PR6 8SW

Tel: 01254 831666
Fax: 01254 831066

- VERDE TEE FRAME
Steel platform, woven grass top.
- VERDE WINTER TEE
Generous size, self-install kit.
- VERDE DRIVING MATS
Top quality - Long Life - Best Prices.
- ARTIFICIAL GRASSES
- DRIVING BAYS AND NETS
For club and home use.

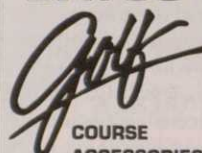
TWENTY YEARS EXPERIENCE SUPPLYING THE BEST SURFACES AT COMPETITIVE PRICES.

Please call for samples & information

HAVE YOU FOUND THE TINY £50 NOTES YET?
Track them down and win a REAL £50 note!
Get searching!

Ball Washers

BAYCO



COURSE ACCESSORIES GC700

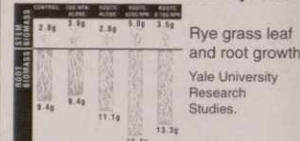


FOR FURTHER INFORMATION
CONTACT US ON
0118 951 0033

Bio Stimulants

ROOTS

For increased root development



FOR FURTHER INFORMATION
CONTACT US ON
0118 951 0033

Bridges

TOTAL TIMBER ENGINEERING

H.L.D. LTD

BRIDGES
Pedestrian and Vehicular
REVETMENTS
SHEET PILING
SHELTERS

HICKSON LEISURE DEVELOPMENTS
THE SHIPYARD, GAINSBOROUGH,
LINCOLNSHIRE DN21 1NG
telephone (01427) 611800 fax (01427) 612867

Buildings



THE GREENKEEPER'S CHOICE



- Secure sectional steel buildings in various sizes
- Machinery & equipment storage
- Fertilizer, weedkiller & seed storage
- Workshops • Tool sheds
- Trolley stores
- Temporary fencing & secure enclosures

For FREE design service, quotation, brochures and technical advice **PHONE NOW**

0121 553 5723 (24hrs)

Elwell Buildings Ltd, 204 Oldbury Road, West Bromwich, West Midlands B70 9DE. Fax: 0121 580 1172.

Greenkeepers' Stores Driving Ranges Club Houses

- ♦ Machinery Storage
 - ♦ Maintenance Workshops
 - ♦ Fertiliser and Weedkiller Storage
 - ♦ Offices and Staff Mess Rooms
- FREE initial designs and costings



Ivan J Cooper Ltd
Steel Framed Buildings
Moorside Works, Cauldon Lowe,
Stoke-on-Trent ST10 3ET
Tel: 01538 702282 Fax: 01538 702662

Bunker Rakes

MEMBERS BUNKER RAKES FROM ONLY £2.54 EACH

Strong construction complete with replaceable threaded handle
12 for £2.99 each
50 for £2.69 each
100 for £2.54 each

HEAD GREENKEEPER/CHAIRMAN OF GREEN? Send for a FREE SAMPLE

Prices are for complete rakes delivered free.
Rake support pegs 70p each.
Made in UK by MW Dyason Ltd, 6/10 Hitchmead Road, Biggleswade, SG18 0NH.
Tel: 01767 317011 Fax: 01767 317186

Chemical Disposal

CHEMICAL & EMPTY CONTAINER DISPOSAL A PROBLEM?

ENVIROGREEN offer a Specialist Pesticide Disposal Service for both full and empty Container disposal.

ENVIROGREEN LIMITED
49 Ringwood Road
Alderholt, near Fordingbridge,
Hampshire SP6 3DF
Tel: 0345 125398
Fax: 01425 656260

GRUNDON

Grundon can provide safe disposal for pesticides and herbicides and all chemical wastes. For more information on how Grundon can help with your "Duty of Care" telephone 01491 834311

Construction



CONTACT THE PROFESSIONALS

Jonathan Franks, Secretary,
BAGCC, 37 Five Mile Drive,
Wolvercote, Oxford OX2 8HT
Tel/Fax: (01865) 516927

John Greasley
Specialist Contractors
for the
Construction
of New
Golf Courses

J D GREASLEY LIMITED

"Ashfield House" 1152 Melton Road,
Syston, Leicester LE7 2HB
Telephone 0116 269 6766
Fax 0116 269 6866

A New Company...For Your Golf Course

Renovations

Offering design and build remodels
- Experienced Designers
- Quality Construction
- Fixed Price

Philip House, Stamford Road, Bowden,
Altrincham, Cheshire, WA14 2JU
Tel: 0161 929 8600
Fax: 0161 929 5060



28 PUMP LANE
HORNDEAN
WATERLOOVILLE
HAMPSHIRE
PO8 9TS ENGLAND
T/F: (01705) 592390

Update Your Existing Course By:
TEE EXTENSIONS
GREEN RE-MODELLING
BUNKER ALTERATIONS
DRAINAGE
also NEW COURSE
CONSTRUCTION



G.O.L.F.
LANDSCAPES
LIMITED

ASHWELLS ROAD, BENTLEY
BRENTWOOD, ESSEX CM15 9SR

TEL: (01277) 373720
FAX: (01277) 374834



C.J. Collins Construction

Golf Course Contractors



Burgess Hill, West Sussex

Tel: 01444 242993
Fax: 01444 247318



CONTOUR GOLF LIMITED

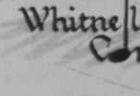
Construction of new golf development
and upgrading of existing courses

Tel: 01327 879464
Mobile: 0385 272935

Head Office: 105 The Severn, Daventry,
Northants NN11 4QS
Irish office: 026 471 183

Whitnell Contracts Ltd

Golf Course Constructors
Woodlands, Ellis Road
Boxted, Colchester
Essex CO4 5RN
Tel: (01206) 272834
Fax: (01206) 272104
Mobile: 0860 421074



RD JONES & SONS

GOLF COURSE CONSTRUCTION LTD
Design, Construction and
Refurbishment Specialists
Cae Coch Farm, Whitford, Clywd,
North Wales CH8 9EP
Tel: 01745 561761 Fax: 01745 561988
MEMBERS OF BIGGA

Cockleshells

WASHED COCKLESHELLS

Delivered Nationwide
Britain's No. 1 Supplier



PHOENIX
PATHWAYS

Tel: 01229 468001
Fax: 01229 468002

BAILEY'S OF NORFOLK

Washed Cockleshells

Delivered Nationwide, Competitive Prices
Brick Kiln Road, Hevingham, Norwich,
Norfolk NR10 5NL Tel: 01603 754607
Mobile: 0850 353603

Course Equipment

BAYCO



COURSE
ACCESSORIES



FOR FURTHER INFORMATION
CONTACT US ON
0118 951 0033

BOYD GOLF COURSE ACCESSORIES

IRELAND'S LEADING GOLF
COURSE EQUIPMENT &
ACCESSORY MANUFACTURER

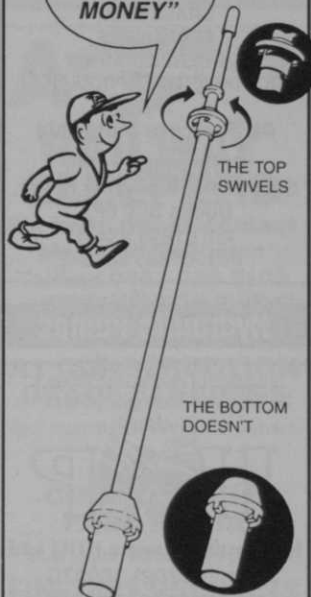
FOR MORE INFORMATION

TEL: (01247) 271163
FAX: (01247) 471136

TACIT

The best for less!

Tommy Tacit
says: "SAVE
MONEY"



THE TOP
SWIVELS

THE BOTTOM
DOESN'T

Lock on to Tacit's new Flagstick
with Anti-wear Ferrule.

When used in conjunction with
Tacit's quality Holecups, it will
prolong the life of the Flagsticks
and so keep them upright
longer.

For further details contact:

TACIT

Golf Course Equipment Manufacturers

Tel: 01788 568818
Fax: 01788 537485

MADE-TO-MEASURE PRO-TEE COURSE MARKERS

- High quality cast construction
- Range of colours
- Durable & maintenance-free
- Standard or tailor-made designs
- Installed on metal posts or free standing

These elegant GPC markers are tailor-made to include not only club name and model, plus any other details.

LINKS LEISURE

Links Leisure Limited,
Unit 22, Cicle Industrial Park,
Whitchurch, Shropshire SY13 1TT
Tel: 01948 663002 Fax: 01948 666381



Drainage

BARRY F COOPER & ASSOCIATES

GOLF COURSE DRAINAGE
CONSULTANTS

COMPLETE SCHEME
DESIGN AND SUPERVISION

61 Station Road, Great Bowden,
Market Harborough,
Leics LE16 7HL

Tel: 01858 467684
Fax: 01858 433942



Specialists in land drainage,
golf course construction and
maintenance

M J ABBOTT LIMITED

Bratch Lane, Dinton, Salisbury, Wiltshire SP3 5EB
Tel: 01722 716361 • Fax: 01722 716828



DRAINAGE
AND
CONSTRUCTION
OXFORD

Tel: 01865 736272 Fax: 01865 326176



- * Vertidrain
- * Land Drainage
- * Top-dressing
- * Overseeding
- * All types of construction

(01734) 795454

Winnersh, Reading, Berkshire

AGRIPOWER LTD.

Construction
Drainage
Stone Picking
Verti-Draining

Tel: (01494) 866776

SLEATH & SON SPORTSTURF DRAINAGE

Full range of modern equipment providing
UK and European service
Contact Geoff Sleath
Tel: (01709) 862109 Fax: (01709) 862075

Driving Range Equipment

RANGE SERVANT

UK Ltd

GOLF RANGE EQUIPMENT

Ball Dispensers, Collectors
and Washers. Play Off Mats
and Winter Tee Mats

AUTOMATIC TEE-UP UNIT

Tel/Fax: 01923 263777
at Abbott's Toolhire, Hempstead Road,
Hunton Bridge, Watford, Herts WD1 3NJ

Environmental Monitoring

THE FULL RANGE OF INSTRUMENTATION

Do you need to measure

- Soil/Water pH • Rain Fall
- Wind Speed
- Soil/Water Temperature
- Air Temperature/Pressure
- Relative Humidity



FOR FURTHER INFORMATION
CONTACT US ON
0118 951 0033

Environmental Products

*For natural and
environmental
solutions to get
you growing,
contact:*

farmura

Stone Hill, Egerton, Ashford,
Kent TN27 9DU
Tel: 01233 756241 Fax: 01233 756419

Fertilisers



The Andersons.
Uniformly the best
in the business



The Highest Quality Nitrogen
source in the industry with the most
uniform particle size available



FOR FURTHER INFORMATION
CONTACT US ON
0118 951 0033

Fertiliser Spreaders

The complete range of
Professional Rotary and
Drop Spreaders



AMTEC 50

AMTEC Drop Spreader



FOR FURTHER INFORMATION
CONTACT US ON
0118 951 0033

Fountains

Fountains

For all your floating fountain and
aerator requirements, contact
S.G.I. Sales. Ask for details of our
large range for functional and
decorative displays.

S.G.I. Sales

6 Stuart Road,
Market Harborough,
Leics LE16 9PQ
Tel: 01858 463153
Fax: 01858 410085

Grass Cutting Equipment

**SAVE
MONEY!**



EX DEMONSTRATION
AND TOP QUALITY REMANUFACTURED
GOLF COURSE MACHINERY AVAILABLE
FROM STOCK

RANSOMES TORO JACOBSEN
RYAN HAYTER BEAVER
sisis CUSHMAN ROYER
VERTI-DRAIN ISEKI KUBOTA

UK & EXPORT DELIVERY ARRANGED
Phone for a full catalogue NOW
GREENSWARD ENG. CO. Manor Farm,
Otley Rd, Adel, Leeds LS16 7AL. Tel: 0113 267 6000

Grass Seed

Turf Management Systems

for
PRE-GERMINATED GRASS SEED
"LIQUID SOD" SPRAY ON GRASS
TOP DRESSINGS
GRASS SEED
FERTILISERS
HERBICIDES
HORTICULTURAL PRODUCTS
and
All Turfcare Materials

Dromenagh Farm,
Sevenhills Road, Iver Heath,
Bucks SL0 0PA
Tel: 01895 834411
Fax: 01895 834892

Hydraulic Pumps

All types of Hydraulic Pumps &
Motors Reconditioned and
Supplied



Hydraulic Pumps (UK) Ltd

Tel: (01709) 360370

Fax: (01709) 372913

Collect, Strip, Assess & Quote
free of charge

Irrigation

AutoFlow Systems

Auto House, Ashtree Works, Mill Road,
Barnham Broom, Norfolk NR9 4DE
Tel: 01603 759701 Fax: 01603 758200

Call now for all your water requirements on
commercial landscaping, golf courses, sports
grounds, bowling greens, private gardens.
Your complete independent irrigation specialists

Logic Irrigation

Manufacturers & Distributors of
quality irrigation equipment

- EICON radio remote control for
TW2-1 and TW2-4
- AQUARIUS 2 PC based control
system, runs in Windows 95
- LOGIC decoders, compatible
with TW1 or TW2, 3 year warranty,
lightning protection included.
Multiway outputs, up to 4 valves.
from £18.00 per station

Tel: 01491 837 455

DECIDE AFTER TALKING TO US...

As Europe's most experienced
independent consultants we are always
ready to help you with advice on all
aspects of irrigation related matters.



PO BOX 1192
Fordingbridge
Hants SP6 1YD
England
Tel: (01425) 652087 Fax: (01425) 652476

BRITISH OVERHEAD IRRIGATION LIMITED

Tel: (01932) 788301
Fax: (01932) 780437

INDEPENDENT CONTRACTORS
FOR GOLF COURSE IRRIGATION
SYSTEMS, UPDATES AND
COMPLETE PROJECTS
BEST BUY B.O.I.L.

EXPERIENCE - EXPERTISE
CARE - SERVICE
since 1923
Founder Member BTLIA

HIGH RELIABILITY DECODERS

Equivalent to Watermaton, CIC, Wright
Rain, PrimeTime, and Robydom

- ◆ No switches, more reliable
 - ◆ 3 year warranty
 - ◆ Multi-outputs available
 - ◆ Low cost address programmer
 - ◆ Competitively priced
- TORO EQUIVALENTS NOW AVAILABLE

TONICK WATERING

Tel: 01903 262393 Fax: 01903 694500
Associate Member of BTLIA



TORO

Installation
Sales
& Service

N.E. England, Yorkshire,
N. Lincs, N. Derbys, N. & S. Humberside
Contact: EB & L Simms
Tel: (01765) 602175 Fax: (01765) 603488
Par 4, Unit 18, Camphill Close,
Dallamires Lane, Ripon,
N Yorks HG4 1TT

A Nationwide Irrigation Service

A well designed and installed irrigation system
is a vital component to a successful project.

OCMIS specialise in irrigation systems for
sportsground, recreational, amenity and
landscape areas.

We offer comprehensive expert consultations,
designs, quotations, manufacture, supply,
installation and service.

OCMIS are stockists of an extensive range of
quality irrigation equipment for every
requirement.

Regional offices throughout the UK
For further information contact
Head Office on 01460 241939



(Buckner Hunter RAIN & BIRD)

Design and service you can trust

TORO

HEMEL HEMPSTEAD

Tel: 01582 842800 Fax: 01582 842900

LITTLEHAMPTON

Tel: 01903 859933 Fax: 01903 859958

RINGWOOD

Tel: 01425 479232 Fax: 01425 472380

SANDBACH

Tel: 01477 500255 Fax: 01477 500633

SHREWSBURY

Tel: 01939 210877 Fax: 01939 210890

SCOTLAND LIMITED - BROXBURN

Tel: 01506 857666 Fax: 01506 857722

TURF irrigation

TURF IRRIGATION SERVICES LTD

I.L.S. Irrigation Systems & Equipment

For all your irrigation
requirements, whether a new
installation or system
refurbishment - contact us now for
a free survey, design and
quotation.

I.L.S. Irrigation Systems &
Equipment, Oundle Road,
Lutton, Peterborough PE8 5ND
Tel/Fax: 01832 272450

Hunter

The Irrigation Innovators

Phone or Fax for your list of
Hunter Dealers
throughout the UK and Ireland

Sportsground Irrigation Co.

Tel: 01858 463153

Fax: 01858 810085

Automatic Watering Systems for Sports and Leisure Grounds

• Designed • Supplied • Installed

GLEN HEAT & IRRIGATION

Pinchbeck, Spalding, Lincs.

Tel: (01775) 722327

Fax: (01775) 725444

IC IRRIGATION CONTROL

DESIGN, SUPPLY, INSTALL, SERVICE

INSTALLING THE WORLD'S
FINEST IRRIGATION PRODUCTS

Area dealers for:

Hunter and **Weathermatic**

WINSFORD CHESHIRE

Tel: 01606 558 927

Fax: 01606 862 882

T. & G. TURF IRRIGATION SERVICES

38 Halfpenny Lane, Knaresborough,
North Yorkshire HG5 0NS

Tel & Fax: (01423) 864963

Full member of B.T.L.I.A.

LIST
IRRIGATION
SYSTEM
CONTROLS LTD
 (Inc. MACPENNY-CAMERON IRRIGATION)
IRRIGATION
 Suppliers of Irrigation Equipment to Golf Courses,
 Bowling Greens, Landscapes, Horticulture.
 * Manufacturers of Irrigation Equipment
 * Existing Systems renovated and upgraded
DESIGN - INSTALLATION - SERVICE
 Call now for all your Irrigation needs.
 MISC LTD, Unit 18, Hightown Industrial Estate,
 Ringwood, Hants BH24 1ND
 Tel: (01425) 474614 Fax: (01425) 471296

WARDLE ASSOCIATES
INDEPENDENT
IRRIGATION
CONSULTANTS
 Objective, practical
 and non-partisan advice
 Feasibility Studies, Performance Specs,
 Design and Project Management
 Giles Wardle BSc. MSc. MIAgrE.
 Unit 6, Lichfield Auction Centre
 Fradley Park, Lichfield WS13 8NF
 Tel & Fax: 01543 411 771

M J ABBOTT LIMITED
 Design, supply and installation of
RAIN-BIRD
 Irrigation Systems
 Tel: 01722 716361

MIDLAND IRRIGATION
 AN INDEPENDENT IRRIGATION COMPANY
 2 Fairedene Way, Great Barr,
 Birmingham B43 5JS
 Tel: 0121 358 1246
 Fax: 0121 357 6789
DESIGN • SUPPLY
INSTALLATION • SERVICE
 Full member of BTLIA

NORTH STAFFS IRRIGATION
DESIGN AND INSTALLATION
BY AN INDEPENDENT,
FAMILY COMPANY
 Tel: 01785 812706 or
 Tel/Fax: 01782 395734

Watermation
 Manufacturers, designers
 and installers of
GOLF COURSE
IRRIGATION
FOR 27 YEARS
 Tongham Road, Aldershot,
 Hants GU12 4AA
 Tel: 01252 336838
 Fax: 01252 336808

Irrigation Pumps

GRUNDFOS
 • Borehole pumps for water supply
 • Pressure boosting pumps for Irrigation
 • Heating & Hot Water Service pumps for clubhouses
 For details of distributors and installers throughout the UK freephone Grundfos on 0500 002621

Lake Construction/Liners

-FIRST-IN-LINE-
Lining specialists
 Ponds • Reservoirs • Lakes
 Golf Water Features
 Tel: 01794 390708
 Fax: 01794 390183

GT GROUP
LEAST COST
WATERPROOFING OF
LAKES AND RESERVOIRS
 - using lining membranes and associated geosynthetic materials.
 ♦ Comprehensive service available to owners/architects/consultants and contractors.
 GT GROUP, Nags Corner, Wiston Road, Nayland, COLCHESTER CO6 4LT
For technical and sales enquiries
 Tel: (01206) 262676
 Fax: (01206) 262998

Lake Management

CRYSTAL CLEAR WSP
 100% Biological Control of
 Algae with additional benefits of
 increased water clarity.

LAKE COLORANT WSP
 Create a natural blue colour to
 your lakes, water hazards, ponds
 with the ease of WSP packets.

FOR FURTHER INFORMATION
CONTACT US ON
0118 951 0033

Liquid Fertilisers

Spoon feed your turf
this summer for less
than £50 per
hectare.

• Bent Grass Special
 28-8-18
 • Zero Phosphate Special
 25-0-25

FOR FURTHER INFORMATION
CONTACT US ON
0118 951 0033

NUGRO
OUTSTANDING RANGE OF
AMENITY PRODUCTS
 LIQUID BLOOD AND BONE
 Plant growth supplement
 CRN Range - unique controlled release
 Nitrogen products.
 ★ PHERTILIZER - pH Control ★ STANDARD
 LIQUID FERT RANGE ★ IRON PRODUCTS
 RANGE ★ SULPHUR PRODUCTS RANGE
 ★ ORGANIC PRODUCT RANGE
 ★ TURF WETTERS
 R&D Formulations, Kettlethorpe, Lincoln
 Tel: 01522 704848 Fax: 01522 704748

Mower Spares

MOWER ACCESSORIES LTD

Manufacturers of high
 quality lawnmower
 blades and cylinders.
 Suppliers of spares and
 accessories.
 65 Forncett Street
 Sheffield S4
 Tel: 0114 276 5825
 Fax: 0114 276 5855

Peat

Superscreened Sphagnum Peat for Golf Course Construction and Maintenance

- * Conforms to BS4156
- * Weed and Pathogen Free
- * Provides quick and even establishment
- * Excellent water retention during dry periods
- * Reduced risk of dry patch
- * Consistent quality for easy handling and mixing
- * Quick and reliable deliveries nationwide

Finnfibre Horticulture Ltd
 Gerrard Business Centre, Worthing Road,
 East Preston, West Sussex BN16 1AW
 Tel: 01903 859555 Fax: 01903 859666

pH Control

STRANCO
Water Quality Control
 pH and chlorine control and dosing systems for
 your irrigation water, for improved turf quality.
 Nationwide installation and commissioning
 service and advice. Contact Brian Sykes
STRANCO LTD.
 17 Apex Park, Hailsham, East Sussex.
 Tel 01323 441744 Fax 01323 441611

Greenturf Systems

for pH Control using
"PHAIRWAY" solution
Contact:
S.G.I. Sales
 6 Stuart Road,
 Market Harborough,
 Leics LE16 9PQ
 Tel: 01858 463153
 Fax: 01858 410085

FREE SOIL AND WATER TESTING

Railway Sleepers

A FAIRWAY 1
RAILWAY
SLEEPERS
For keen prices contact
Mr David Robinson
Tel/Fax 0161 456 7109
at 'STRIKE TOP TURF'

A1 CONSTRUCTION GRADE SLEEPERS

Any quantity, delivered anywhere
 also

COCKLESHELL
PATH MEDIA
 Bulk loads, discounted prices
FINETURF PRODUCTS
 01375 361606

RAILWAY SLEEPERS
 8'6" x 10" x 5"
CROSSING TIMBERS
 12" x 6" up to 16' long
 Price quoted for number required
 Tel (01233) 625121 or 620277

Faggs Fleet
 Whitfield Road,
 Ashford, Kent

Root Zone

PHOENIX SPORTSTURF
SERVICES
QUALITY ROOTZONES
 USGA Spec available
 Tel: 01229 468001 Fax: 01229 468002

FEN TURF DRESSINGS LTD

Specialist Manufacturer and Supplier
 (for over 20 years) of Rootzones and Top
 Dressings - to all specifications including
 USGA. Supplied nationwide.
 Please phone for quotation.
 Tel: (01858) 464346/433003
 Fax: (01858) 434734

Sand/Silica Sand

ARC **BUCKLAND**
Southern **INDUSTRIAL**
MINERALS

Sand and Silica Company COMPLETE RANGE OF HORTICULTURAL SANDS

Contact Lynda Jordan
 Buckland Sand & Silica Co.
 Reigate Heath, Reigate,
 Surrey RH2 9RG
 Tel: (01737) 240151

HAVE YOU FOUND THE
TINY £50 NOTES YET?
 Track them down and
 win a REAL £50 note!
Get searching!

Pro-Sport **Sands**
Root Zones
Top Dressing

Lime Free Dried and Washed Sands.
 USGA, Golf, Sports Pitch Root Zones
 Top grade Top Dressings
 Nationwide availability from local sites
 Hepworth Minerals and Chemicals Ltd
 Brookside Hall
 Sandbach
 Cheshire, CW11 0TR
 Sales orders:
 Tel 01270 752 700 Fax 01270 752 701
 General Enquiries:
 Tel 01270 752 752 Fax 01270 752 753

Drinkwater Sabay Ltd

(EBENEZER MEARS)

KINGSLEY FINE WASHED SAND
 for Tees • Greens • Bunkers
 and drainage sands and shingles
 Wintersells Road, Byfleet, KT14 7AZ

01932 345616

GRUNDON

NOW SPREADING IN YOUR AREA

Top Dressing
 Bunker Sand
 Root Zone
 Tees Dressing
 All Aggregates
 Path Gravels
 Cockleshell

NEW HOTLINE NUMBER:
Contact Gordon
on 01367 244078



- Suppliers of the Dunlop Winter Tee & Practice Mat
- Golf Course Furniture
- Driving Range & Practice Ground Equipment
- Flooring & Pathways

Tel: 01704 571271
Fax: 01704 571272

Seats

Gloster
FINE TEAK FURNITURE

Seats, tables, chairs, benches, planters and litterbins made from plantation grown teak. Listed in the Good Wood Guide. Send for brochure

D-Scan (UK) Ltd Concorde Road, Patchway, Bristol BS12 5TB
Tel: 0117 931 5335 Fax: 0117 931 5334

Sports Netting

SPORTS NETTING



- PERIMETER NETTING
- TARGET NETS
- ANTI BALL PLUGGING
- GRASS GERMINATION
- ANTI DAZZLE NETTING
- PADDED/NET BAY DIVIDERS
- CHIPPING NET
- PRACTICE NETS
- 'EPIC' TARGET GREEN
- BALLSTOP FENCING

TEL: 01179 669684

Tee Mats

TUFTURF

ARTIFICIAL GRASS
TEE MATS, CARRYMATs
AND PUTTING
SURFACES FROM
CARPETITION LTD

14 Kaffir Road, Edgerton,
Huddersfield HD2 2AN

Tel: (01484) 428777 Fax: (01484) 423251

Top Dressings

STERILISED TOP DRESSINGS from £18 per ton



**PHOENIX
SPORTSTURF**

Tel: 01229 468001 Fax: 01229 468002

HADLEY

- ROOTZONES
- DIVOT MIXES
- TOP-DRESSINGS
- SCREENED SOILS
- DRAINAGE & SUB-BASE MATERIALS

Alan Hadley Limited, Fenton House,
102 Grazeley Road, Three Mile Cross,
Reading, Berkshire RG7 1BJ

Tel: 0118 988 3266
Fax: 0118 988 4538

Martins

of course

OUR SUCCESS IS GROWING

For ★ Oakmoor Bunker Sand

★ Par-Link Red Pathway Gravel

★ Top Dressing – loose and bagged

★ Fendress Top Dressing and HMC



Products

Rootzones

★ USGA

★ Golf

★ Sportspitch

also ★ Sharpes Designer Range Grass Seeds

Martin Brothers UK

Tel: 01625 614121

Fax: 01625 618282

All Seasons Dressings

for CONSTRUCTION
OF TEES, GREENS &
BUNKERS

References available

119 London Road,
Kingston, Surrey KT2 6NH
Tel: 0181 546 3960

Tree Planting

EAMONN WALL & CO

WOODLAND DESIGN & MANAGEMENT

- For everything to do with trees on golf courses, from planning to felling, expert advice.
- Large planting grants available.

OFFICES AT DOLLAR, DURHAM AND READING
Tel: 01259 743212



**Eastcote
Nurseries
(Solihull) Ltd**

- ★ Tree Spade hire
- ★ Tree moving
- ★ Semi mature trees

Nationwide service

Hampton Road, Barston, Solihull,
West Midlands B92 0JL

Tel: 01675 442033
Fax: 01675 442324

Turf

Tip Top Turf.

Seed grown turf available in one sq yd or large 25 sq yd rolls with laying machines or service available.

Tel: 01908 270701 • Fax: 01908 374889



Jubilee Seeds & Turf

QUALITY CULTIVATED TURF
FOR ALL GOLF COURSE and
OTHER APPLICATIONS:

Greens, Tees, Surrounds, Bunkers, etc

TEL/FAX 01797 320536

Jubilee Villa, 3 Ness Road,
Lydd, Kent TN29 9DP

Q Lawns

Growers of Quality Turf

- ★ Uniquely cultivated on fine dark soils
- ★ Next day deliveries
- ★ Quality assured company ISO 9002

British Field Products Limited
Corkway Drive, Hockwold,
Thetford, Norfolk IP26 4JR
Office: 01842 828266 Fax: 01842 827911

INTURF

GROWERS AND SUPPLIERS OF HIGH
QUALITY CULTIVATED TURF FOR ALL
APPLICATIONS AND APPOINTED
OFFICIAL TURF PRODUCERS
TO WEMBLEY STADIUM

Please contact Head Office for more information:

THE INTURF GROUP

Regent Street • Pocklington • York YO4 2QN
Telephone 01759 304101 • Fax 01759 305229



For a finer class of grass...

The independent supplier with a wide product range of turf for all applications.

Grasslands Turf Farm
Ashford Road, New Romney,
Kent TN28 8TH. Tel: (01797)
367130 • Fax: (01797) 367929



Growers of consistent quality turf in
either big or small rolls for landscapers,
amenity users and golf courses

Tel: 01728 688 984

Fax: 01728 688 949

Fir Tree Farm, Blaxhall, Woodbridge,
Suffolk IP12 2DX

Turf Dressings

BL BOUGHTON LOAM LTD.

For
TURF DRESSINGS
ROOT ZONE MIXES
SCREENED TOP SOILS
BUNKER SANDS
HORTICULTURAL
COMPOSTS

Telford Way, Kettering,
Northants

Tel: 01536 510515



**BAILEY'S
OF
NORFOLK**

supply

PROFESSIONAL TURF DRESSINGS
FOR THE PROFESSION

- ★ GOLF TURF DRESSINGS
- ★ SAND ★ SCREENED TOP SOIL

Deliveries nationwide

BAILEY'S OF NORFOLK

Brick Kiln Road, Hevingham, Norwich,
Norfolk NR10 5NL Tel: 01603 754607
Mobile: 0850 353603

FEN TURF DRESSINGS LTD

for Fendress Top Dressing

- Fendress Superfine
- Economy Dressing
- Rootzone Mixes
- Screened Fen Soil • Screened Peat
- Screened Loam • Kiln Dried Sand
- Bunker Sands



Tel: (01858) 464346/433003
Fax: (01858) 434734

Rufford

TOP-DRESS SUPPLIES

Britain's No. 1 for
QUALITY • SERVICE •
SHEER VALUE FOR MONEY

Fairway House, South Stage, Broadway,
Salford Quays, Manchester M5 2UQ

Tel: 0161 877 8550 Fax: 0161 877 8554

Tyres

FLOTATION TURF TYRES

- ★ Wide Flat Treads
- ★ Custom Made Wheels
- ★ New and Used available

ROSCO TYRE AND WHEEL LTD

Graveyard Lane, Ormskirk, Lancs
Tel: 01695 421100 Fax: 01695 424265

Vertidrain Hire

SEWARD TURF MAINTENANCE

Vertidrain 2.5 and 1.5 metre
Gravel Banding over seeding
Hollow Tining Fairway Grooming
and Top Dressing

Phone York: 01904 765949

Freephone: 0500 432120

Richard Campey

VERTIDRAIN 1.5mtr and 2.5mtr Hire
Coremaster & Core Harvester.
Shattermaster. Charterhouse Vreeda &
Vertiseed Overseeders, Scarifiers and
Topdressers. Large selection of Tractors,
Mowers and Sports Turf Maintenance
Machinery for sale.

For further details contact:

RJ & J Campey
Marton, Macclesfield
Tel: 01250 224568
Fax: 01260 224791

PETER MANNINGTON



Specialist Verti-Drain Contractor for the South
For greens, tees, fairways and sportsgrounds
Experienced operator. competitive prices and reliable service

Phone Peter on 01580 200205
or Mobile 0850 612061

Sheepwash Farm, Church Street, Ticehurst,
Wadhurst, East Sussex TN5 7DL

ROSS OLIVER

SPORTS GROUND CONSTRUCTION
AND MAINTENANCE

- VERTI-DRAIN for Greens and Sportsgrounds
 - STONE PICKING • RYAN HOLLOW TYNER
 - SAND SPREADERS • DIRECT DRILLS
- Greystones, Trebuddan, Cornwall TR8 4LP
Tel: (01841) 540222 Fax: (01637) 881057

PARKER HART

CONTRACTING SPECIALISTS

VERTI-DRAINING • HOLLOW CORING
TOP DRESSING • SEEDING
SAND SLITTING • SAND BANDING
DRAINAGE

Qualified and experienced staff
Plus all your sports turf, amenity and
horticultural supplies

Contact Anne Wicks (Contracts
Manager) Tel: 0181 337 7791
Fax: 0181 330 7392

WORTH DRAINING

VERTIDRAINING and
HOLLOW CORING HIRE
with the RYAN G.A. 30

Contact Peter Bloodworth
WORTH DRAINING
Cornbecks Farm, Irnham, Grantham,
Lincolnshire. Tel/Fax: 01476 550266

Weed Control



complete weed control

GETTING TO THE ROOT OF THE PROBLEM!

The UK's leading specialist spray contractor
with local service centres nationwide.

01608 644044

Wetting Agents

DRENCHER LIQUID

Do you want to...

- enhance water penetration?
- aid the fight against dry patch?
- stimulate soil microbes?

by using...

- a 100% organic product
- a non-scorching formula



FOR FURTHER INFORMATION

CONTACT US ON

0118 951 0033

Wood Chips



Landscape Supplies

For top quality
mulch and
screened
woodchip please
ring 01604 847416
or 0468 662473
and ask for
Roger Hart

If you haven't found the ads with the
3 symbols in yet,

TRY AGAIN:

IT COULD BE WORTH

£50 TO YOU!

Classified

Machinery For Sale

sisis DIRECT

Various SISIS S/H aerators, scarifiers, top-dressers,
sweepers, seeders, etc. fully refurbished by the manufacturer.
Stock constantly changing - phone for details and prices.

Also available extensive range of hire equipment including
stone removers, trenchers

Phone 01625 503030

DC BULL GRASS MACHINERY

Kubota 2850 Turf	£5,500
MF 550 2WD, Cab, Turf	£3,000
6ft Dowdswell Roller Mower	£900
Huxley Greens Triple D	£3,000
Huxley Verticut Units	£1,000
Ransomes 214	£2,500
Huxley Greens Slitter	£850
Cushman 3 Wheel Diesel	£4,500

Tel: 01708 851310

G E Adamson Grass Machinery

Ryan Greensaire 24 hollow corer. . .	£3250
Ransomes Super 51 Certes	£1150
Ransomes 180D diesel triple-fixed or floating heads.	£2950
Ransomes TM80 slitter - new 7" blades or spoons	£875
Sisis A04/S slitter c/w rear rollers . . .	£950
Sisis FTA/4 fine aerator - hollow tines .	£875
Cushman topdresser (choice)	£975

Tel/Fax: 01995 640180

Balmer's Garden Machinery Centre

New and Used

Compact Tractors and Turf

Care Machinery For Sale

Balmer's, Burnley, Lancs

01282 453900/454848 After 6pm: 616846

Fax: 01282 459767

*Tell the industry of your
products and services,
through an advertisement in
greenkeeping's top magazine
GREENKEEPER INTERNATIONAL*

A.R.C. AGRICULTURAL ENGINEERS

Tel: 01844 278950

Fax: 01844 279158

Huxley 358 Ride-On Greens Mower, as new	£5,950
Vertidrain 2m, very tidy machine	£6,250
Ransomes 213D & 350D full range	POA
Ransomes 180, Diesel & Petrol	POA
Ransomes Hydraulic 3 & 5s	from £1,250
Ransomes T26 4WD 80" R/D 400hrs	£6,500
Ransomes 5/7 Gangs with/without Tractors	POA
Jacobsen Tri-King diesel 3WD, 600hrs	£6,250
Jacobsen Turfcat T422D, choice of 4	POA
Jacobsen Gang Mowers, 3s, 5s and 7s	POA
John Deere 1200 Bunkerake	£2,250
John Deere F935, Choice	POA
Kubota L2850, 1500hrs, cab & Loda	POA

Large selection of Sisis equipment POA
Large selection of tractors
and other good secondhand machinery
always available

Soil Conditioners

STEWARTS KELPIE Range

NATURAL ORGANIC
SEAWEED SOIL
CONDITIONERS

AVAILABLE FROM STEWARTS

TEL: 0131 663 6617

FAX: 0131 663 0651

AND FROM GEM PROFESSIONAL

TEL: 01254 356611

FAX: 01245 236775

Servicing

WINTER SERVICING and SHARPENING

- ★ Free appraisals and estimates
- ★ Free collection and delivery
(within 75 miles of Milton Keynes)

USED MACHINERY - SPARE PARTS
- REFURBS + MODS A SPECIALITY

ADVANCED TURF MACHINERY

Tel: Milton Keynes (01908) 281660

GREENKEEPER International

Greenkeeping's
premier
publication

Job Shop

Reliable, hard working 21 year
old with National Certificate in
Greenkeeping and one year's
full time employment as a
greenkeeper, seeks full time
employment on a golf course
in Scotland, although all offers
considered.

Experienced in drawing up
work programmes and man
management as well as all the
main practical duties of a
greenkeeper.

Box No JS 61/97, BIGGA, Aldwark
Manor, Aldwark, Aline, York YO6 2NF

27 year old, currently working
in Ireland with nine years
experience, four as Head
Greenkeeper, currently holds
City & Guilds Phase II, III and
IV and PAI and PAII Spraying.
Extensive Bent Grass and
USGA Greens experience,
willing to relocate to England
or Europe.

Good organiser,
good motivator, excellent
technical ability and dedicated.

Box No JS 60/97, BIGGA, Aldwark
Manor, Aldwark, Aline, York YO6 2NF

Scottish Head Greenkeeper
aged 36 with 18 years experience
seeks position overseas. Would
consider either Course Manager or
Deputy position. Qualifications
include 1st, 2nd and 3rd year
greenkeeping certificates,
management certificate,
bookkeeping/accounts certificate
and currently studying for HNC.

Wide experience of machinery
maintenance, course presentation
and construction methods.

Box No JS 62/97, BIGGA, Aldwark
Manor, Aldwark, Aline, York YO6 2NF

Will you soon qualify?

Are you living abroad but
looking to move to the UK?

Perhaps you just fancy
a new job?

For only £19.95,
this space could be
working for YOU!

Job Shop

Call Amanda or James on
01347 838581
for details of
Greenkeeper International's
Job Shop feature.



BRITISH AND INTERNATIONAL GOLF GREENKEEPERS ASSOCIATION

is looking to appoint a

REGIONAL ADMINISTRATOR (Part-time)

The successful candidate will cover the Northern Region with responsibilities for the Northern, North East, North West, Cleveland, Sheffield and North Wales Sections where there are currently 1,225 members.

Applicants should possess sound administration and communication skills whilst computer literacy would be an advantage. In addition to serving the needs of the Regional Board, a positive contribution to promoting the Association and the welfare of greenkeepers will be required.

The post holder will be expected to display initiative and enthusiasm particularly in a drive to introduce new members. Regular contact with golf clubs and greenkeeping staff will be an essential element of the post. Ideally applicants should be able to display an affinity with the greenkeeping profession and the game of golf.

It is envisaged that the average working week will be 27.5 hours and the post will be home based.

A job description and further details are available from the Executive Director, BIGGA,
Aldwark Manor, Aldwark, Alne, York YO6 2NF.
Telephone 01347 838581 Fax: 01347 838864

Sennelager (British Army) Golf Club (Germany)

requires two

ASSISTANT GREENKEEPERS

for their 27 hole Golf Course and Driving Range.

The successful applicants will be suitably qualified with course and machinery maintenance experience.

An attractive package and accommodation is available.

Please apply for an application form to:

**The Secretary, Sennelager Golf Club, BFPO 16
or telephone 0049 5252 53794.**

Closing date: 14 March 1997

Howley Hall Golf Club Ltd

wish to appoint a

DEPUTY HEAD GREENKEEPER

Applicants must be experienced and preferably hold recognised qualifications and PA1 plus PA2 and PA6.

Experience in golf course management and willingness to work as part of a team is essential.

Salary negotiable according to experience and qualifications.

Please apply with full CV to:

**Mrs A Pepper, Secretary Manager, Howley Hall Golf Club Limited,
Scotchman Lane, Morley, Leeds LS27 ONX**

Canford Magna Golf Club

invite applications for the position of

ASSISTANT HEAD GREENKEEPER

Applicants must have greenkeeping qualifications to at least NVQ Level 2 or otherwise, Spraying Certificates PA1, PA2, PA6.

Canford Magna is a new 36 hole golf complex built to USGA specification with a dedicated team of nine men.

BIGGA rates apply. No accommodation.

Closing date for applications: 20 March 1997.

Applications with CV in strict confidence to:

**Mr T Smith, Course Manager, Canford Magna Golf Club,
Knighton Lane, Wimborne, Dorset BH21 3AS**

GREENKEEPER *International*

**Call Amanda or
Jenny on:**

01347 838581



EAST SUSSEX

NATIONAL GOLF CLUB

Set in the beautiful rolling countryside of the South Downs in the heart of East Sussex, the East Sussex National Golf Club is looking for a

HEAD GREENKEEPER

to join its team of hardworking, conscientious staff.

With five years experience and a minimum qualification of NVQ I, II, III in Greenkeeping, the successful applicant will be required to motivate and supervise staff and take responsibility for programming and overseeing the day to day maintenance of one of the 18 hole courses under the guidance of the Golf Course Manager.

This is an excellent career move for an ambitious and confident greenkeeper who can demonstrate sound and positive team management, self motivation and a willingness to learn new methods and techniques.

Please apply in writing enclosing a current CV to:

Ken Barber, Golf Course Manager, East Sussex National Golf Club, Uckfield, East Sussex TN22 5ES

Closing date: 31 March 1997

The Enville Golf Club Ltd

COURSE MANAGER

Enville Golf Club, founded in 1935, is situated in the heart of the West Midlands. There are two 18 hole woodland and heathland courses and an active private membership of 900, plus many visitors.

Applications are invited for the new position of COURSE MANAGER. A thorough knowledge of modern greenkeeping practices will be required together with a wide experience of equipment, machinery and irrigation systems. Management responsibilities will include leading a team of experienced employees, controlling budgets and initiating any changes necessary to take the course into the next millenium.

The attractive salary is negotiable.

Applications with CV to:

The Secretary Manager, Enville Golf Club Limited, Highgate Common, Enville, Stourbridge, West Midlands DY7 5BN

IF YOU DON'T DRIVE WITH AN ALLEN PUTT, PUTT, PUTT.

FROM
£4425
+ VAT



THE
NATIONAL
68

THE
NATIONAL
84

ALLEN
ALL
PROFESSIONALS
NEED

The National 68" triple mower from Allen. The choice of true professionals when it comes to staying the course.

Cuts on banks where others fear to tread, it drives the full distance of two acres in under an hour, giving a closer, cleaner, more accurate cut.

Powered by a Kawasaki easy-start engine with belt drive to the cylinders, ensuring ground contours are followed closely.

For even greater clout, the National 68 D/L offers electric starting, full-width steel rollers, hour meter and transport speed. For the ultimate driving machine, the National 84" with its powerful 16hp electric start engine carries you to over 3 acres in a mere 60 minutes.

All National machines take the rough with the smooth, also bunkers, tees and approaches. Add low capital outlay and low maintenance costs and you'll understand why Allen is the professional choice.

**LET ALLEN PROVE WE'RE THE BEST.
POST THE COUPON OR CALL
01235 813936 NOW.**

TO: ALLEN POWER EQUIPMENT LTD.,
THE BROADWAY, DIDCOT, OXON OX11 8ES.

NAME

ADDRESS

POSTCODE

TEL:

Please tick for a demonstration ☐

Please send me details of:

National 68 ☐

National 68 D/L ☐

National 84 ☐

Plus the name of my nearest stockist.

GI.3.97

ASK TO SEE THE NATIONAL 68" D/L
• ELECTRIC START • TRANSPORT SPEED • FULL WIDTH STEEL ROLLERS



The 68th
GCSAA
International
Golf Course
Conference
and Show in Las
Vegas last month

attracted a great many visitors including a delegation from BIGGA which included Chairman Pat Murphy and Miracle Professional Premier Greenkeeper of the Year Cedric Gough (pictured above) who won the trip as part of his prize.

Cedric took time on his return to write about his experiences while Stateside.

Having been fortunate enough to win the 1996 Miracle Professional Premier Greenkeeper of the Year Award my prize was a trip to Las Vegas to the GCSAA Conference and Show.

Before we were due to fly out my wife, Judith and I, met up with the BIGGA team. It was nice to see some familiar faces Pat Murphy and his wife Linda, their son Ian, Neil Thomas, John Pemberton and Sami Collins who helped to guide me through my stay in Vegas.

After a long flight we arrived keen to see the sights and sounds of Las Vegas. We checked into the Las Vegas Hilton at the same time as the Lennox Lewis/Oliver McCall world title fight was on and no sooner had I arrived than I found myself bumping into ex World Champion Jim Watt and Reg Gutteridge who were over to commentate on the fight.

The accommodation was out of this world – the food and drink being so cheap and petrol just 80p a gallon. The show was mammoth and it was quite an experience just walking around it. You would have needed a week to take it all in.

The American Greenkeepers and Course Superintendents I met and spoke to were very welcoming and really interested to hear what you had to say... when you could get a word in. They had plenty of interesting ideas some of which I plan to put into practice. Because I got on so well with them I found myself inviting them back to Broadway for a round of golf. I just hope they don't all turn up on the same day!

There were plenty of new products and ideas on show and I would strongly recommend anybody who gets the opportunity to go to it.

I was lucky enough to attend a top quality banquet with Kenny Loggins providing the music and where Ben Crenshaw was presented with the "Old Tom Morris Award" by our American counter-

Viva Las Vegas!



Scenes from the GCSAA show in Las Vegas and, above, BIGGA's Neil Thomas and John Pemberton flying the flag on the Association's stand

parts for services to golf.

I stopped on in the US, as it was too good an opportunity to miss, for another eight days to take in the sights and included a helicopter flight over the Grand Canyon.

Unfortunately my trip back home was not as straightforward as my flight out as somewhere between Phoenix and Los Angeles I lost one of my bags. This has since been returned to me but my other bag also disappeared at

Heathrow. This contained my passport and has yet to be found. So if you come across somebody in your street called Cedric Gough please give me a call.

May I pass on my thanks to Miracle Professional Products through Greenkeeper International for sponsoring the Miracle Professional Greenkeeper of the Year Award – my lads would also like to say a special thanks for the £500.

Further thanks also to Miracle Professional Business Manager Roger Mossop, to Richard Minton and to the present BIGGA Chairman Pat Murphy, Neil Thomas and Scott MacCallum.

To Sami Collins and the other BIGGA girls and to my fellow finalists whom it was a pleasure to meet. I wish them all the best for the future.

May I also say to other greenkeepers like myself, who may have second thoughts about entering the new Toro Excellence in Greenkeeping Award, or indeed any award, go for it.

The reaction I have received from everybody I meet is pleasantly surprising – the Wolves Manager Mark McGhee has even been in touch to congratulate me on my achievement. In return I have given him a few tips and since then Wolverhampton Wanderers have gone from strength to strength.

The lads and I have also risen in stature at the club and the members of Broadway Golf Club are genuinely pleased for us.

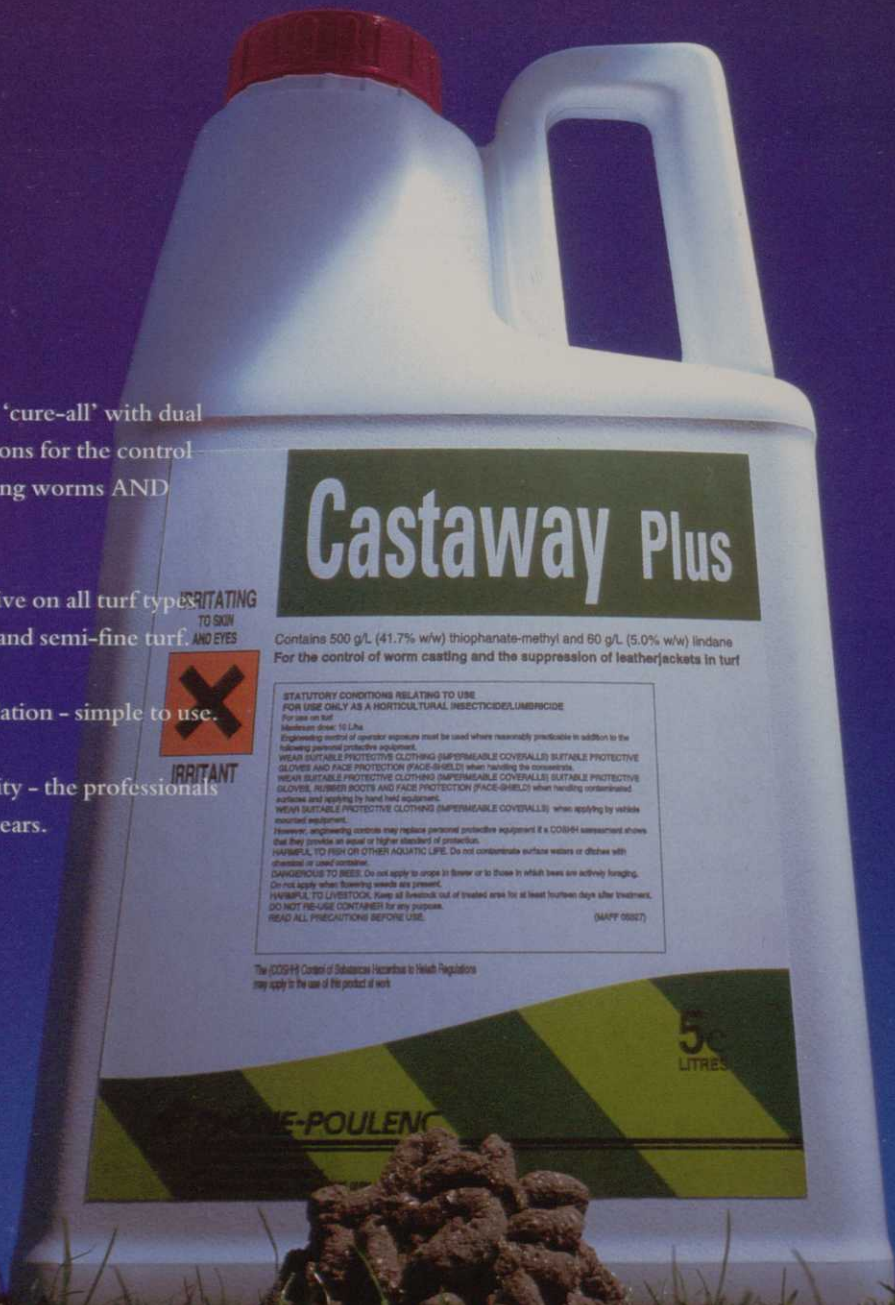
They won't wriggle out of this one...

- Turf managers 'cure-all' with dual recommendations for the control of surface casting worms AND leatherjackets.

- Safe and effective on all turf types including fine and semi-fine turf.

- Unique formulation - simple to use.

- Proven reliability - the professionals choice for 10 years.



Castaway Plus

Contains 500 g/L (41.7% w/w) thiophanate-methyl and 60 g/L (5.0% w/w) lindane
For the control of worm casting and the suppression of leatherjackets in turf

IRRITANT
TO SKIN
AND EYES

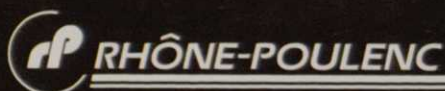
STATUTORY CONDITIONS RELATING TO USE
FOR USE ONLY AS A HORTICULTURAL INSECTICIDE/LUMBRICIDE
For use on turf
Maximum dose: 10 L/ha

Engineering control of operator exposure must be used where reasonably practicable in addition to the following personal protective equipment:
WEAR SUITABLE PROTECTIVE CLOTHING (IMPERMEABLE COVERALLS) SUITABLE PROTECTIVE GLOVES AND FACE PROTECTION (FACE-SHIELD) when handling the concentrate.
WEAR SUITABLE PROTECTIVE CLOTHING (IMPERMEABLE COVERALLS) SUITABLE PROTECTIVE GLOVES, RUBBER BOOTS AND FACE PROTECTION (FACE-SHIELD) when handling concentrated surfaces and applying by hand held equipment.
WEAR SUITABLE PROTECTIVE CLOTHING (IMPERMEABLE COVERALLS) when applying by vehicle mounted equipment.
However, engineering controls may replace personal protective equipment if a COSHH assessment shows that they provide an equal or higher standard of protection.
HARMFUL TO FISH OR OTHER AQUATIC LIFE. Do not contaminate surface waters or effluents with chemical or used container.
DANGEROUS TO BEES. Do not apply to crops in flower or to those in which bees are actively foraging.
Do not apply when flowering weeds are present.
HARMFUL TO LIVESTOCK. Keep all livestock out of treated area for at least fourteen days after treatment.
DO NOT RE-USE CONTAINER for any purpose.
READ ALL PRECAUTIONS BEFORE USE. (MAFF 05027)

The COSHH Content of Substances Hazardous to Health Regulations
may apply to the use of this product at work

5L
LITRES

Castaway Plus smooths out the problem of worm casts



Rhône-Poulenc Amenity, Fyfield Road, Ongar, Essex CM5 0HW. Telephone 01277 301116 Fax 01277 301119.
CASTAWAY PLUS CONTAINS THIOPHANATE-METHYL AND LINDANE. READ THE LABEL BEFORE YOU BUY: USE PESTICIDES SAFELY. (MAFF 05327)

For details of your nearest Rhône-Poulenc distributor, call (01277) 301116

AD
REF
59



Spraying in the wind? It's a breeze!

You often have to cancel spraying because the wind's too strong... You want to apply a turf herbicide but it's too close to flower beds... You urgently need to spray against fusarium but golfers are playing nearby.

Recognise the problems? Hardi does!

That's why we have introduced the new range of Windfoil drift control spray booms.

Greensfoil GF 1000/2000

Hose fed walking booms.

Lightweight, precision balanced design provides fingertip control. Durable, puncture proof tyres will not mark greens.



These booms enclose the spray within a flexible shield preventing the escape of pesticide particles into the environment. Because the spray is contained, the undesirable effect of drift, operator exposure and public hazard are greatly reduced.



Windfoil SP 4500 Choice of hydraulic, electric and manual folding boom options. Breakaway feature follows ground contours and prevents damage. Fitting kits available for all power units.

By containing the spray a greater proportion of the droplets hit their intended target. This improved coverage ensures greater spraying efficiency, more economical use of chemical and a better end result.

Hardi, advancing technology to improve the environment.



We've got it covered

For more details or the name of your nearest Hardi distributor call

01455 233811

