

The rise and rise of Martin Twist, Hillside's head greenkeeper

Journal of the British and International Golf Greenkeepers Association

Take the your sh

With the new Nomix[™] Compact there's no cumbersome knapsack, just a handy, 750 ml pack of herbicide which gives you all the weedkilling power of two full knapsacks of conventional water-based herbicide.

The pack simply 'snaps' into the Compact ready for use. There's no mixing, no complicated calibration and no contact with chemicals — the system is completely sealed and leakproof.

Use it around trees and shrubs, on paved areas, along fence lines or keep it in your pick-up to deal instantly with weeds as you find them.

Whatever the job, Nomix has the right herbicide: a choice of herbicides specially formulated for the Compact by companies like Monsanto, BP and Cyanamid.

weight off oulders.

Send the coupon off now for product information and a demonstration video. Nomix. A weight off your shoulders.

Name	
Position	1
Address	The general f
Telephone	- A - A - A -
Please send me: Product information Demonstration video	GI.5.91
Complete, then send this coup marked FREEPOST Market Nomix-Chipman Ltd, Por Portland Street, Staple Hill, B	ing Department, tland Building,

TM: Trademark of Nomix-Chipman Ltd. Read the label before you buy: use pesticides safely



Wetta Soil

GREENKEEPERS WOULDN'T GIVE A XXXX FOR ANY OTHER WETTING AGENT.

KEEP YOUR TURF IN SHAPE THIS SUMMER WITH WETTA SOIL AUSTRALIA'S NO.1 WETTING AGENT AND

WITH EVERY 20LTS PURCHASED KEEP YOURSELF COOL WITH A FREE COOL BOX PACKED WITH CASTLEMAINE ONE OF AUSTRALIA'S MOST POPULAR LAGERS.

SIMPLY COMPLETE THE READER REPLY PAID CARD IN THIS MAGAZINE.



HEAD OFFICE Winnersh, WOKINGHAM, Berkshire RG11 5HF Telephone: Wokingham 0734 785655 Facsimile: 0734 785805

NORTHERN SALES & DISTRIBUTION CENTRE 17 Adlington Court, Birchwood, WARRINGTON, Cheshire WA3 6PL Telephone: Padgate 0925 825501 Facsimile: 0925 812712

FREE READER **REPLY SERVICE Advertisers' Index**

A Greenkeeper International service to show on which page companies' advertise-ments can be found. For further information about their products or service, simply use the free Reader Reply Service card to be found facing Page 4 in this month's issue

Ad Ref Page AC & M Birch 58 35 Agripower 262 43 Atterton & Ellis 7 17 Bobcat 272 29 BP Zennapron 188 39 Brian D Pierson 40 43 Brittanic Garden 205 34 British Seed Houses 87 28 Bucher Guyer 223 44 CDC 142 26 Claymore 315 54 Devenish 307 47 Dixon & Holliday 218 34 Donath Seeds 316 27 DW Frost 192 31 Eric Hunter 73 46 Flanderblade 218 13 Gloster 204 34 Howard Evans 29 6 Huxleys 60 44 Intercoastal Manufacturing 311 43 Interseeds 173 44 Interseeds
Agripower 262 43 Atterton & Ellis 7 17 Bobcat 272 29 BP Zennapron 188 39 Brian D Pierson 40 43 British Seed Houses 87 28 Bucher Guyer 223 44 CDC 142 26 Claymore 315 54 Devenish 307 47 Dixon & Holliday218 34 Donath Seeds 316 27 DW Frost 192 31 Fianderblade 218 13 Gloster 204 34 Howard Evans 29 6 Huxleys 60 44 Interseeds 173 44 Intury 3
Atterton & Ellis 7 17 Bobcat 272 29 BP Zennapron 188 39 Brian D Pierson 40 43 Britanic Garden 205 34 British Seed Houses 87 28 Bucher Guyer 223 44 CDC 142 26 Claymore 315 54 Devenish 307 47 Dixon & Holliday218 34 Donath Seeds 316 27 DW Frost 192 31 Eric Hunter 73 46 Flanderblade 218 13 Gloster 204 34 Howard Evans 29 6 Huxleys 60 44 Intercoastal Manufacturing 311 43 Intercoastal Manufacturing 55 Kubota 86 Lawn Tech 301 18 144 Intury 31 13 24 John Deere
Bobcat 272 29 BP Zennapron 188 39 Brian D Pierson 40 43 Brittanic Garden 205 34 Brittsh Seed Houses 87 28 Bucher Guyer 223 44 CDC 142 26 Claymore 315 54 Devenish 307 47 Dixon & Holliday 218 34 Donath Seeds 316 27 DW Frost 192 31 Eric Hunter 73 46 Flanderblade 218 13 Gloster 204 34 Howard Evans 29 6 Huxleys 60 44 Interseeds 173 44 Interseeds 173 44 Interseeds 173 44 Inturf 31 21 John Deere 103 55 Kubota 86 8 Lawn Tech 31
BP Zennapron 188 39 Brian D Pierson 40 43 Brittanic Garden 205 34 Brittanic Garden 205 34 Brittanic Garden 205 34 Brittanic Garden 205 44 CDC 142 26 Claymore 315 54 Devenish 307 47 Dixon & Holliday 218 34 Donath Seeds 316 27 DW Frost 192 31 Eric Hunter 73 46 Flanderblade 218 13 Gloster 204 34 Howard Evans 29 60 Huxleys 60 44 Interseeds 173 44 Interseeds 173 44 Inturf 31 21 John Deere 103 18 Lawn Tech 301 18 Lawn Tech 35 34 RFE 8 46
Brian D Pierson 40 43 Brittanic Garden 205 34 Brittanic Garden 205 87 British Seed Houses 87 Bucher Guyer 223 CDC 142 CDC 142 CDC 315 Devenish 307 Jonath Seeds 316 Donath Seeds 316 Dixon & Holliday 218 34 Donath Seeds 316 Fich Hunter 73 Brior Hunter 73 Flanderblade 218 Gloster 204 Howard Evans 29 Huxleys 60 Hat 41 Interseeds 173 John Deere 103 Stubota 86 B 818 Maxwell Hart 15 4 43 Nomix 211 John Deere 301 Lawn Tech 301 Maxwell Hart 15
Brittanic Garden 205 34 British Seed Houses 87 28 Bucher Guyer 223 44 CDC 142 26 Claymore 315 54 Devenish 307 47 Dixon & Holliday 218 34 Donath Seeds 316 27 DW Frost 192 31 Eric Hunter 73 46 Flanderblade 218 13 Gloster 204 34 Howard Evans 29 6 Huxleys 60 44 Interseeds 173 44 Interseeds 173 44 Inturf 31 21 John Deere 103 55 Kubota 86 8 Lawn Tech 301 18 Lely 61 14/15 John Deere 33 34 RFE 8 46 Rhone Poulenc 59 38
British Seed Houses 87 28 80 87 28 Bucher Guyer 223 44 CDC 142 26 Claymore 315 54 Devenish 307 47 Dixon & Holliday 218 34 Donath Seeds 316 27 DW Frost 192 31 Eric Hunter 73 46 Flanderblade 218 13 Gloster 204 34 Howard Evans 29 6 Huxleys 60 44 Interseeds 173 44 Inturf 31 21 John Deere 103 55 Kubota 86 8 Lawn Tech 301 18 Maxwell Hart 15 4 Nomix 211 2/3 Pattissons 35 34 RFE 8 46 Rhone Poulenc 59 38 <
87 28 Bucher Guyer 223 44 CDC 142 26 Claymore 315 54 Devenish 307 47 Dixon & Holliday 218 34 Donath Seeds 316 27 DW Frost 192 31 Eric Hunter 73 46 Flanderblade 218 13 Gloster 204 34 Howard Evans 29 6 Huxleys 60 44 Interseeds 173 44 </td
Bucher Guyer 223 44 CDC 142 26 Claymore 315 54 Devenish 307 47 Dixon & Holliday 218 34 Donath Seeds 316 27 DW Frost 192 31 Eric Hunter 73 46 Flanderblade 218 13 Gloster 204 34 Howard Evans 29 6 Huxleys 60 44 Interseeds 173 44 Inturf 31 21 John Deere 103 55 Kubota 86 8 Lawn Tech 301 18 Maxwell Hart 15 4 Nomix 211
CDC 142 26 Claymore 315 54 Devenish 307 47 Dixon & Holliday 218 34 Donath Seeds 316 27 DW Frost 192 31 Eric Hunter 73 46 Flanderblade 218 13 Gloster 204 34 Howard Evans 29 6 Huxleys 60 44 Interseeds 173 44 Inturf 31 21 John Deere 103 55 Kubota 86 8 Lawn Tech 301 18 Lely 61 14/15 Vomix 211 2/3 Pattissons 35 34 RFE 8 46 Rhone Poulenc 59 38 Supaturf 164 28 Supaturf 164 28 Supaturf 164 28
Claymore 315 54 Devenish 307 47 Dixon & Holliday218 34 Donath Seeds 316 27 DW Frost 192 31 Eric Hunter 73 46 Flanderblade 218 13 Gloster 204 34 Howard Evans 29 6 Huxleys 60 44 Interseeds 173 44 Interseeds 161 14/15 Lawn 36 18 Lawn 31 18 Lawn 35 34 RFE 86 8 SISIS 176 33 Supaturf 164 28 Supaturf 164 28
Devenish 307 47 Dixon & Holliday218 34 Donath Seeds 316 27 DW Frost 192 31 Eric Hunter 73 46 Flanderblade 218 13 Gloster 204 34 Howard Evans 29 6 Huxleys 60 44 Intercoastal Manufacturing 311 43 Interseeds 173 44 Interseeds 173 44 Interseeds 173 44 Interseeds 173 44 John Deere 103 55 Kubota 86 8 Lawn Tech 301 18 Maxwell Hart 15 4 Nomix 211 2/3 Pattissons 35 34 RFE 8 46 Rhone Poulenc 59 38 SISIS 176 33 Supaturf
Dixon & Holliday 218 34 Donath Seeds 316 27 DWF Frost 192 31 Eric Hunter 73 46 Flanderblade 218 13 Gloster 204 34 Howard Evans 29 6 Huxleys 60 44 Intercoastal Manufacturing 311 43 Interseeds 173 44 Inturf 31 21 John Deere 103 55 Kubota 86 8 Lawn Tech 301 18 Lely 61 14/15 Vomix 211 2/3 Pattissons 35 34 RFE 8 46 Rhone Poulenc 59 38 SUSIS 176 33 Supaturf 164 28 Supaturf 164 28 Supaturf 164 28 Supaturf 164
Donath Seeds 316 27 DW Frost 192 31 Eric Hunter 73 46 Flanderblade 218 13 Gloster 204 34 Howard Evans 29 6 Huxleys 60 44 Interseeds 173 44 Interseeds 173 44 Inturf 31 21 John Deere 103 55 Kubota 86 8 Lawn Tech 301 18 Lely 61 14/15 Lindum 38 18 Maxwell Hart 15 4 Nomix 211 2/3 Pattissons 35 34 RFE 8 46 Rhone Poulenc 59 38 SISIS 176 33 Supaturf 164 28 Supaturf 164 28 Jopa Turf 293 <t< td=""></t<>
DW Frost 192 31 Eric Hunter 73 46 Flanderblade 218 13 Gloster 204 34 Howard Evans 29 6 Huxleys 60 44 Intercoastal Manufacturing 311 43 Interseeds 173 44 Interseeds 173 44 Interseeds 173 44 John Deere 103 55 Kubota 86 8 Lawn Tech 301 18 Maxwell Hart 15 4 Nomix 211 2/3 Pattissons 35 34 RFE 8 46 Rhone Poulenc 59 33 SUSIS 176 33 Supaturf 164 28 Supaturf 164 28 Supaturf 164 28 Hore Edit 318 40 Tip Top Turf
Eric Hunter 73 46 Flanderblade 218 13 Gloster 204 34 Howard Evans 29 6 Huxleys 60 44 Intercoastal Manufacturing 311 43 Interseeds 173 44 Inturf 31 21 John Deere 103 55 Kubota 86 8 Lawn Tech 301 18 Maxwell Hart 15 4 Nomix 211 2/3 Pattissons 35 34 RFE 8 46 Rhone Poulenc 59 38 SUSIS 176 33 Supaturf 164 28 Supareme Mowing 57 56 Tee Range Golf 318 40 Tip Top Turf 293 21 Trielleborg 137 31
Flanderblade 218 13 Gloster 204 34 Howard Evans 29 6 Huxleys 60 44 Intercoastal Manufacturing 311 43 Intercoastal Manufacturing 311 43 Intercoastal Manufacturing 311 43 Interseeds 173 44 Inturf 31 21 John Deere 103 55 Kubota 86 8 Lawn Tech 301 18 Lely 61 14/15 Lindum 38 18 Maxwell Hart 15 4 Nomix 211 2/3 Pattissons 35 34 RFE 8 46 Rhone Poulenc 59 38 SISIS 176 33 Supaturf 164 28 Supaturf 164 28 Jopa Turf 293 21 <td< td=""></td<>
Gloster20434Howard Evans296Huxleys6044Intercoastal Manufacturing31143Interseeds17344Interseeds17344John Deere10355Kubota868Lawn Tech30114Lely6114/15Lindum3818Maxwell Hart154Nomix2112/3Pattissons3534RFE846Rhone Poulenc5938SISIS17633Supaturf16428Supaturf16428Supaturf16429Tip Top Turf29321Trelleborg13731TRIMS31713
Howard Evans 29 6 Huxleys 60 44 Intercoastal Manufacturing 311 43 Interseeds 173 44 Inturf 31 21 John Deere 103 55 Kubota 86 8 Lawn Tech 301 18 Lely 61 14/15 Lindum 38 18 Maxwell Hart 15 4 Nomix 211 2/3 Pattissons 35 34 RFE 8 46 Rhone Poulenc 59 38 SISIS 176 33 Supaturf 164 28 Supereme Mowing 57 56 56 Tee Range Golf 318 40 Tip Top Turf 293 21 Trelleborg 137 31
Huxleys 60 44 Intercoastal Manufacturing 311 43 Interseeds 173 44 Inturf 31 21 John Deere 103 55 Kubota 86 8 Lawn Tech 301 18 Lely 61 14/15 Lindum 38 18 Maxwell Hart 15 4 Nomix 211 2/3 Pattissons 35 34 RFE 8 46 Rhone Poulenc 59 38 SISIS 176 33 Supaturf 164 28 Supreme Mowing: 57 56 Tee Range Goif 318 40 Tip Top Turf 293 21 Trelleborg 137 31 TRIMS 317 13
Intercoastal Manufacturing 311 43 Interseeds 173 44 Inturf 31 21 John Deere 103 55 Kubota 86 8 Lawn Tech 301 18 Lely 61 14/15 Lindum 38 18 Maxwell Hart 15 4 Nomix 211 2/3 Pattissons 35 34 RFE 8 46 Rhone Poulenc 59 38 SISIS 176 33 Supaturf 164 28 Supaturf 164 28 Tee Range Golf 318 40 Tip Top Turf 293 21 Trelleborg 137 31 TRIMS 317 13
311 43 Interseeds 173 44 Inturf 31 21 John Deere 103 55 Kubota 86 8 Lawn Tech 301 14 Lely 61 14/15 Lindum 38 18 Maxwell Hart 15 4 Nomix 211 2/3 Pattissons 35 34 RFE 8 46 Rhone Poulenc 59 38 SISIS 176 33 Supaturf 164 28 Supreme Mowing 57 56 Tee Range Golf 318 40 Tip Top Turf 293 21 Trelleborg 137 31 TRIMS 317 13
Interseeds 173 44 Inturf 31 21 John Deere 103 55 Kubota 86 8 Lawn Tech 301 18 Lely 61 14/15 Lindum 38 18 Maxwell Hart 15 4 Nomix 211 2/3 Pattissons 35 34 RFE 8 46 Rhone Poulenc 59 38 SISIS 176 33 Supaturf 164 28 Supreme Mowing:57 56 Tee Range Goif 318 Tip Top Turf 293 21 71 Trelleborg 137 31 71
Inturf 31 21 John Deere 103 55 Kubota 86 8 Lawn Tech 301 18 Lely 61 14/15 Lindum 38 18 Maxwell Hart 15 4 Nomix 211 2/3 Pattissons 35 34 RFE 8 46 Rhone Poulenc 59 38 SISIS 176 33 Supaturf 164 28 Supreme Mowing:57 56 40 Tip Top Turf 293 21 Trelleborg 137 31 TRIMS 317 13
John Deere 103 55 Kubota 86 8 Lawn Tech 301 118 Lely 61 14/15 Lindum 38 18 Maxwell Hart 15 4 Nomix 211 2/3 Pattissons 35 34 RFE 8 46 Rhone Poulenc 59 33 Supaturf 164 28 Suppaturf 164 28 Superem Mowing 57 56 Tee Range Golf 318 40 Tip Top Turf 293 21 Trelleborg 137 31 TRIMS 317 13
Kubota 86 8 Lawn Tech 301 18 Lely 61 14/15 Lindum 38 18 Maxwell Hart 15 4 Nomix 211 2/3 Pattissons 35 34 RFE 8 46 Rhone Poulenc 59 38 SUpsturf 164 28 Supaturf 164 28 Superme Mowing 57 56 Tee Range Golf 318 40 Tip Top Turf 293 21 Trelleborg 137 31 TRIMS 317 13
Lawn Tech 301 18 Lely 61 14/15 Lindum 38 18 Maxwell Hart 15 4 Nomix 211 2/3 Pattissons 35 34 RFE 8 46 Rhone Poulenc 59 38 SISIS 176 33 Supaturf 164 28 Supreme Mowing:57 56 40 Tip Top Turf 293 21 Trelleborg 137 31 TRIMS 317 13
Lely 61 14/15 Lindum 38 18 Maxwell Hart 15 4 Nomix 211 2/3 Pattissons 35 34 RFE 8 46 Rhone Poulenc 59 38 SISIS 176 33 Supaturf 164 28 Supreme Mowing 57 56 Tee Range Golf 318 40 Tip Top Turf 293 21 Trelleborg 137 31 TRIMS 317 13
Lindum 38 18 Maxwell Hart 15 4 Nomix 211 2/3 Pattissons 35 34 RFE 8 46 Rhone Poulenc 59 38 SISIS 176 33 Supaturf 164 28 Supreme Mowing 57 56 Tee Range Golf 318 40 Tip Top Turf 293 21 Trelleborg 137 31 TRIMS 317 13
Maxwell Hart154Nomix2112/3Pattissons3534RFE846Rhone Poulenc5938SISIS17633Supaturf16428Supreme Mowing 5756Tee Range Golf31840Tip Top Turf29321Trelleborg13731TRIMS31713
Nomix 211 2/3 Pattissons 35 34 RFE 8 46 Rhone Poulenc 59 38 SISIS 176 33 Supaturf 164 28 Supreme Mowing 57 56 40 Tip Top Turf 293 21 Trelleborg 137 31 TRIMS 317 13
Pattissons 35 34 RFE 8 46 Rhone Poulenc 59 38 SISIS 176 33 Supaturf 164 28 Supreme Mowing 57 56 Tee Range Golf 318 40 Tip Top Turf 293 21 Trelleborg 137 31 TRIMS 317 13
RFE 8 46 Rhone Poulenc 59 38 SISIS 176 33 Supaturf 164 28 Supreme Mowing 57 56 Tee Range Golf 318 40 Tip Top Turf 293 21 Trelleborg 137 31 TRIMS 317 13
Rhone Poulenc 59 38 SISIS 176 33 Supaturf 164 28 Supreme Mowing 57 56 Tee Range Golf 318 40 Tip Top Turf 293 21 17 18 31 Trelleborg 137 31 7 13
SISIS 176 33 Supaturf 164 28 Supreme Mowing 57 56 56 Tee Range Golf 318 40 Tip Top Turf 293 21 Trelleborg 137 31 TRIMS 317 13
Supaturf 164 28 Supreme Mowing 57 56 Tee Range Golf 318 40 Tip Top Turf 293 21 Trelleborg 137 31 TRIMS 317 13
Supreme Mowing 5756Tee Range Golf 31840Tip Top Turf29321Trelleborg13731TRIMS31713
Tee Range Golf 318 40 Tip Top Turf 293 21 Trelleborg 137 31 TRIMS 317 13
Tip Top Turf 293 21 Trelleborg 137 31 TRIMS 317 13
Trelleborg 137 31 TRIMS 317 13
Trelleborg 137 31 TRIMS 317 13
Turfland 170 21
Watermation 33 26
Western Log Co 319 36
WW Johnson 64 30
Colleges • 22
Recruitment • 48/49

2
48/49
50-5
5

At home and abroad, Greenkeeper International is rapidly becoming the best used magazine in our industry. Greenkeeper International certainly produces results for its advertisers. We know, as an average, 75% of the display advertisers in our first two issues had response, because we received Reader Reply cards for them. Some might be sceptical about our 'International' title. However, in recent weeks, display advertisers have received enquiries from Sweden, Ireland, Germany, Holland, Austria and the USA. Greenkeeper International works use it! **Ring Bill Lynch on 091** 413 7218 or Carol Dutton on 0207 570117.





EDITOR David White Tel: 0323 891291 • Fax: 0323 895593

DESIGN/PRODUCTION EDITOR Tim Mo: Tel: 0904 610611 • Fax: 0904 643074

SALES AND MARKETING MANAGER Bill Lynch Tel/Fax: 091 413 7218

ADVERTISING SALES EXECUTIVE Carol Dutton Tel/Fax: 0207 570117

PRINTING

Hi-Tec Print, Unit 7, Universal Crescent, Houghton Road, North Anston Industrial Estate, Dinnington, South Yorkshire S31 7JJ Tel: 0909 568533 • Fax: 0909 568206

Greenkeeper International is the official magazine of the British and International Golf Greenkeepers Association and is published monthly at BIGGA Headquarters, Aldwark Manor, Aldwark, Alne, York YO6 2NF. Tel: 03473 581/2 • Fax: 03473 8864 Please address all advertising, subscrip-

tions and address changes to BIGGA. Contents may not be reprinted or other-

wise reproduced without written permission Return postage must accompany all materials submitted if return is requested. No respon-sibility can be assumed for unsolicited materials. The right is reserved to edit submissions before publication. Circulation is by subscription. Subscription

rate: UK £29 per year, Europe and Eire £39. The magazine is also distributed to BIGGA members, golf clubs, local authorities, the turf industry, libraries and central government.

Editorial Offices

All magazine contributions should be sent to: The Editor, Greenkeeper International, 13 Firle Close, Seaford, East Sussex, BN25 2HL. Tel: 0323 891291. Fax: 0323 895593 Although every care will be taken, no respon-0323 895593. sibility 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 Asso-ciation for such content, advertising or product information that may appear.

> ISSN 0961 - 6977 © 1991 British & International Golf Greenkeepers Association

CONTENTS

Twist in the tale

Martin Twist, Hillside's talented young head greenkeeper, demonstrates sound thinking in his quest to make management of a top golf course his career. His single-minded determination illustrates forcefully that when you want something - you get stuck-in and get it!Pages 10, 11

Keeping records

The modern course manager can no longer justify keeping records in a biscuit tin or box file. Steve Isaac



Internationa

from the STRI unfolds the mystique of computerisation and invites you into the world of TRIMS and the 21st Century.Pages 12 – 15

Selective weedkillers - getting it right

Want to know how to tackle weeds before they get a firm grip, or even worse, flower and spread seed? Jon Allbutt guides you in his inimitable manner through identification, product selection and perfect timing.....Pages 37, 38

Education Conference shows way ahead

The Association Conference proved that education can be entertaining, informative, thought provoking, all adjectives continually used. And thought provoking might also be applied to Nick Park's statement behind developments emanating from "The Way Forward".....Page 23

Soiled again: choosing the right turf

All the cost of a high specification sand/soil green construction will be wasted if turf grown on the wrong soil type is used. Read the rules and Tim Fell's expert opinions.Pages 19, 20

DEPARTMENTS

Around the Green Competitive golf and ISEKI '91 is now in full swing. Don't miss out!.....Pages 45, 47, 54 Education Follow David Norton's trip to Massachusetts and beyond; seven weeks of Americanisation .. Page 24 **Trade Topics** Hot news of innovative products, what's going on and recent legislationsPage 33 **Advertising Features** Golf Course furniture and fittings - is your course properly dressed?Pages 35, 36 Landscape Industries '91 Preview Pages 27 - 32

COVER PICTURE:

All smiles from Martin Twist, ambitious and determined young head greenkeeper at Hillside

Important tax benefits for BIGGA memb

The Inland Revenue has published its updated list of "professional bodies and learned societies" whose members may claim tax relief on the cost of subscriptions. The Daily Telegraph reports that new entrants to the list whose activities are so vital they deserve subsidy, include the British and International Golf Greenkeepers Association.

Members are reminded that the Association is now recognised as an approved body under Section 201 Income and Corporation Taxes Act 1988. Should any member experience difficulty in obtaining a deduction for their subscription, they should refer their local tax inspector to the updated list and can additionally quote reference SAPP/T1644/47/1989.

Rapid take-up of stands for '92 Exhibition

Plans are now under way for the 1992 BIGGA Turf Management Exhibition to be held in Harrogate from 22 - 24 January.

Already, half of the exhibiting companies from 1991 have pledged a firm commitment for next year. Applications for stands are also arriving all the time from companies, keen to use the success of the BIGGA Turf Management Exhibition for the first time.

An exciting Seminar Programme is being prepared, which will begin on Monday January 20, with two-day Workshop Sessions, followed by a general Seminar Programme during the course of the exhibition itself.

The first meeting of the 1992 steering committee, which consists of representatives from exhibiting companies, will take place this month. A report will follow in next month's issue

More details of the 1992 exhibition from Debbie Savage at BIGGA HQ, telephone 03473 581/2.

The BIGGA Code of Ethics – a reminder

As a reminder, the Code is as follows and members pledge themselves to:

1. Set standards of personal conduct which will enhance the stature of the profession of golf course management. 2. At all times carry out their duties and responsibilities in such a manner as to reflect favourably on the profession and Association.

3. Seek to use every opportunity to broaden their professional expertise for both self-improvement and the good of the profession.

4. Follow, as a basic tenet, sound business and turf management principles in exercising the responsibilities of my post.

5. Observe the highest standards of personal integrity in their relationship with fellow greenkeepers as well as other associated individuals and at all times, as far as they are able, assist fellow greenkeepers.

6. Pursue job advancement only where vacancies arise

and not at the expense of a fellow greenkeeper and abstain from any action, comment or communication not founded on truth which is likely to harm the profes-

sional reputation or practice of another greenkeeper 7. Give endorsements of any kind only upon satisfactory personal experiences of the item identified.

8. Refrain from encouraging or accepting considerations of any value which might be deemed an inducement to find favour for a particular party or influence decisions in relation to that party and at all times avoid any exploitation of my Association, Industry or Profession

9. Support at every opportunity the Association, its Regions and Sections in seeking to improve the public understanding and recognition of the profession of golf course management.

10. Report to the Association any evidence likely to be in violation of this Code of Ethics



David Rovle

It is with great sadness that we learned of the sudden, untimely death of David Royle, Ransomes Northern Area Sales Manager. David was well known to many BIGGA members, especially for his involvement at the Association's National Golf Tournament, where he always assisted with the scoring. David made many friends in the industry and was particularly admired for his loyalty to Ransomes, liking nothing better than discussing machinery with greenkeepers and listening to constructive comment. It earned him huge respect wherever he went. A great supporter of the Association, David will be sorely missed and our thoughts are with Susan, his wife, and his family at this sad time.

David Golding

Howard Evans

Financial Services is an

> of _ife

10

• Pictured: David Royle (right) presenting the Ransomes Prize to David Murtagh at Ganton GC at the 1990 National Tournament.

THE BIGGA PERSONAL PENSION PLAN

BIGGA is pleased to announce that with immediate effect, the minimum premium for the BIGGA Personal Pension Plan is reduced to only £15 per month or all greenkeepers. So now you can take full advantage of the tremendous benefits that the plan offers for a lower monthly outlay.

THE BIGGA MORTGAGE SERVICE

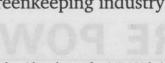
BIGGA is pleased to announce a new service for all members, which will make it easier for greenkeepers to secure the best mortgage offer when they are either buying a new house or refinancing the purchase of their existing property. The Association is well aware of the exceptional demands placed upon its members because of the nature of their work. Greenkeepers do not always have the time to explore all the mortgage possibilities available.

NOW is the time to find out more. Please complete the form below and post to: Executive Director, BIGGA, Aldwark Manor, Aldwark, Alne, York Y06 2NF

GI.5.91 Deck at early line particle and the line in the line of the line of the	Tiol how i resentative
	TICK DOX Standard L
1. I will soon be/am in the process of buying a house. Please send me details of the new BIGGA Mor	
2. I already pay for a mortgage on my house, but I wish to know if any better mortgage arrangements	are available to me advisor to BIGGA. Pe
3. I am/am not in a Golf Club Pension Scheme. Please send me details of the new 1991 BIGGA Pens	sion Plan
NameDate of Birth	ments, Savings, L
Golf Club and Job Title	Assurance Mortgages
Home Address	Commercia Loans, Tax
	and Finance
	1 manageme
Tel No. (Work) (Home)	Lauto

6

Who and what are moving on and moving in, in the greenkeeping industry



■ Sheffield's section scribe, Ian Collett, wrote to inform on a namesake, one Ian Whitehead of Hallamshire GC. who is now "a true Green keeper" upon marrying Hayley Green on March 16th. We join with friends in wishing them both great happiness together.

■ My grapevine 'spy', Gordon Moir, tells me that Alan Strachan of Montrose has been appointed Assistant Head Greenkeeper, Royal Dornoch GC, taking over from Kevin McGrath; who has moved to Austria. When the grapevine whispers, Gordon is sure to be listening. We wish both Alan and Kevin good fortune.

■ Another on-the-ball 'informer', Paul Worster, tells of the move from Wells GC of Cary Rawlings, who is joining his old boss Nigel Pring at the new golfing complex under construction at Collumpton. Having seen the site from a distance it looks both exciting and a huge challenge. Good luck to them both.

■ Bob Bennett, mentioned briefly in Faces & Places in March, spoke recently of establishing his Fine Turf Management Consultancy, LOGRO, following his return to Scotland from Sunningdale. Contracts are progressing very nicely, I'm told, with a neat twist in the tail being that Bob has been retained as consultant adviser to Sunningdale GC., responsible for technical liaison between the Club and Watermation Ltd in respect of the refurbishment of their irrigation system. In addition, LOGRO will continue to provide Sunningdale with consultancy advice during the interim period prior to Lawson Bingham's appointment as course manager.



■ SISIS Equipment (Macclesfield) Ltd are delighted that Keith Morris has joined forces with them as Area Representative for Kent & Sussex. Keith comes from a farming background and has spent five years selling agricultural machinery. An ex-rugby player, married with 10 month old twins, his hobbies are cookery, photography, reading and, no doubt, infant care!

■ Supaturf Products Ltd have recently appointed a Sales & Marketing Officer, a position created in order that a student of Harper Adams Agricultural College, David Rodda, could join Supaturf for a 'year out' in industry as a fundamental part of his course. David, 21, is studying for his HND in Agricultural Marketing and Business Administration, and will be responsible in assisting the development and marketing of new Supaturf products during his year with the company.



■ Patrick Goldsworthy, a familiar figure to almost everyone in the golf industry and one whose impact has been considerable, is leaving his job as Training and Development Manager with ICI Professional Products to join the BAA (British Agrochemicals Association) as their Marketing Resources Manager. This appointment is an upward step for Patrick where his undoubted ability can now be used to

the benefit of the whole industry in providing a common platform and improve the general public's understanding of the industry and the benefits of the careful use of its products. That stated, Patrick assures us that the amenity sector, and the use of pesticides in public places, will remain close to his heart in his new position.



■ Mark Jenkins of Nailsea, Bristol, has been appointed Western Area Manager for MASPORT (UK) Ltd. Mark, previously with G D Mountfield and Dynamow Ltd, is already well known to many Masport dealers, especially in the South West.

■ Known as The Ipswich Initiative, the launch of The 1991 Ransomes Foundation Award for Young Technologist of the Year took place recently with a cheque for £45,000 being handed to Borough officials and representatives of Suffolk 2000. The competition is intended to promote excellence in Design & Technology in schools and will give youngsters the spur of competition with the added knowledge that if they win, they receive a cash prize and their school will be able to buy more technological equipment. Projects will be displayed at an exhibition to be held in Ipswich on June 25th.



Karl Litten, pictured standing with Colin Snape, has accepted his first UK commission and is to design two championship 18 hole courses at the £30 million multi-sports complex at Leek Wootton near Warwick, which is being developed by The Golf Fund PLC. Commenting on Litten's appointment, Colin Snape, CEO of The

Golf Fund said: "Karl is, in my view, one of the best in the business and I am particularly impressed with his designs at the Emirates GC, Dubai and at Boca Raton, Florida."

■ Work has begun on the first new 18 hole course at St Andrews since 1914, with construction specialists Brian D Pierson Ltd anticipating main construction to be complete by the end of July. The new course, designed by Donald Steel and known as The Strathtyrum, lies close to the Eden and will be the first visitors will see as they journey to the Home of Golf along the A91 leading into St. Andrews.

A brand-new 'championship course featuring the third longest hole in Europe – The par 72 Wellington at Belton Woods – opened for play on March 18th. The 18th hole on the course is 613 yards long, or, as the old caddie might say "three of them and two of those... and maybe one more"! A second 18 hole course – The Lancaster – is planned to open in June.

■ Kubota (UK) Ltd and Lackham College,Wiltshire, have reached a mutually beneficial arrangement which demonstrates the importance of links between education and industry. The arrangement will allow Lackham students access to a £145,000 fleet of Kubota tractors and machinery and will provide the company with a valuable SW base for its demonstration fleet.



Brian Hurtley, V.P., Kubota UK Ltd shows Peter Morris, Principal, Lackham College some machinery controls

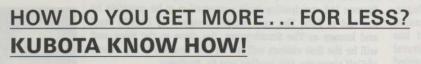


Colin Hennah has been appointed South Western **Regional Manager** for Kubota (UK) Ltd. With over 14 years experience in the tractor industry Colin will be responsible for the management of Kubota's 23 strong S.W. dealership network, stretching from Worcestershire in the North to the Isle of Wight in the South and from South Wales in the West to West London in the East - a big patch!



Michael Thomas has been appointed Chief Engineer at Charterhouse Turf Machinery, a move from his previous job as design engineer. Before joining Charterhouse Michael spent 20 vears with Fison's Scientific Division. Michael has wide technical experience ranging from stress and vibration analysis and precision mechanisms to research into new materials and metal forming techniques.

MORE POWER. LES<mark>S EFFORT.</mark> LESS WEIGHT. MORE ECONOMY.



The new Kubota L5450 is the biggest Kubota yet. And the lightest 4WD in its class.

With a rating of 59.5hp, and a powerful new 5 cylinder direct injection diesel engine, it has the power and the lugging power for efficient cutting of even the largest areas.

Its new 'Ever Clutch' – multi-plate and oil immersed – is the first clutch to be guaranteed for <u>1500 hours</u>. And operation of the clutch pedal requires only 10% of the effort necessary with conventional 'dry' clutches. Hydraulic shuttle transmission means it can be driven and reversed without using the clutch – important for loader work. And a lift capacity of 1900kg gives it even more versatility.

Yet the tractor weighs in at just 4200kg, giving the new Kubota the high power-to-weight ratio necessary for both trailed and PTO-driven attachments with minimal turf damage.

In the UK-designed integral cab, the operator works more efficiently, for more hours, with less effort.

If you want to know more about Kubota know-how, just complete the coupon.



More Power. More Choice.

Tel:

Post Code:.



POINTS OF SALE

Every Kubota machine incorporates key features for powerful, productive working. These are the points to look for when considering a purchase.

L5450
59.5HP • 5 CYLINDER DIRECT
INJECTION DIESEL • EVER CLUTCH
• 4WD • HYDROSTATIC POWER
STEERING • HYDRAULIC SHUTTLE
TRANSMISSION • 1900KG LIFT
CAPACITY · INDEPENDENT PTO
• LOW (4200KG) WEIGHT •
INTEGRAL LOW NOISE CAB
Golf-Challenge-

AD

USGA spec sand greens: would they work over here? JIM ARTHUR speaks out

An agronomist's view

t would seem an opportune moment to try and clarify what is meant by 'USGA spec sand greens', as extolled in the article on East Sussex National in the March issue of Greenkeeper International.

The claim is made that such greens "planted with Pennlinks bent grass CAN be a huge success in Britain". So they can, subject to certain conditions, one of which is that such U.S.-influenced courses are not built 'North of Watford'! Equally, which in fairness is fully acknowledged, their management is entirely different. If you have upwards of 40 greenkeeping staff; unlimited budgets; do not want to play winter golf (closing in January and February being a requirement to producing superb conditions in summer); and limit play to 500 rounds a week, then I accept it can be done - if only for a period - and the proof exists in Uckfield. I must admit that I have not seen the course completed -

only when half the Sussex Wealden clay was being moved from A to B and back to A again, which is not good for construction costs or the retention of natural drainage on heavy land sites.

However I do feel that we need to bring a little perspective to the problem. Whether such Nothing's impossible vastly expensive projects will ever pay, or indeed meet a need, is arguable. What is not, is that such costs must be reflected in the cost of golf and clearly such courses do not in any way meet the needs (real, however exaggerated, in The Demand for Golf) of ordinary golfers.

Equally we need to take note of the advice and research which is available - to have the ability to learn from other peoples mistakes and expensively acquired experience.

Research carried out by the STRI and funded by the Royal and Ancient on pure sand greens and the use of Penncross (and allied strains), is clear and unambiguous and very much in line with Punch's advice to those about to get married!

In an article by three senior STRI staff (Amateur Golf, September 1990) one sentence sums it all up. "If the authors seem unduly pessimistic about the use of creeping bent grass (i.e. Penncross etc.) then this is justifiably so. We have seen too many greens in Britain which, seeded with bent grass appeared wonderful in their first few years but later degenerated to produce a very poor playing surface ".

In no trials have creeping bent grasses outperformed especially the newer strains of browntop bents

and they have incurable faults in Northern European temperate zone climatic conditions. They all become dormant in our not particularly cold but wet winters. This matters little if, as in Canada, no winter golf is played, with courses under several feet of snow, nor equally in Florida or Texas ' where there is no winter '. Here, with incessant and increasing winter play it is a fatal fault. Not all of us can close our courses for 2-3 months in winter. Fewer still can afford 36 greens to 18 fairways, playing to winter hardy greens from October to April and summer bent grass ones from May to September!

It is however in the obvious misinterpretation of the term 'USGA spec sand greens' that correction and education is closely needed. Strictly the description should be USGA Green Section Specification, which as is specifically and

'We need to take note of the advice and research which is available... '

pets.

'I do feel we

need to bring

perspective

to the prob-

a little

pointedly emphasised does NOT mean pure sand but a sand/soil mix. Such greens are designed to produce a perched water table, retaining a controlled amount of water. Unsuprisingly, this is not acceptable in the hot arid zones of the Southern States of America, nor in other neartropical conditions, where the sheer volume of water required to keep grass alive and cool means maximum conductivity and thus pure sand construction. This is of course totally irrelevant to UK conditions and in fairness East Sussex National greens are sand/peat.

What I must emphasise is that pure sand greens, depending on intensive NPK fertiliser treatment as there is no buffer to retain water or plant nutrients, inevitably revert to Poa annua and unless limed are quickly destroyed by Ophiobolus ring disease. This does not happen in, for example, Southern Arizona, because the summer heat kills any

other grasses than the sown (heat tolerant) ones.

What must be understood is that the term USGA Green Section Specification is only one aspect of building underdrained greens. I know of no reputable new construction where greens are not built on stone drainage carpets, but few if any are really 'USGA spec'. I have been specifying such under-drainage for over 25 years. Equally the root zone over the carpet must have a high conductivity rate but it must also have a buffer to retain plant food and moisture. The ideal mix is one of what, for want of a clearer description, we must call fen soil. - (not a monopoly of any one firm!) - which is a humus-rich sandy soil containing not more than 5%

clay/silt - with an appropriate proportion of a very carefully specified sand. It has many physical advantages over a sand/peat mix.

The use of local top soil for this root zone is virtually always out of the question. Even if the sub-soil is sandy, the depth of suitable top soil is so shallow that acres have to be stripped to provide the 9" - 10" of root zone. Furthermore such 'borrow' pits have to be restored and it is cheaper to buy in, especially where there is a guarantee of consistent quality. It is worth while noting that the greens on even the new sixth course at St. Andrews, (the Strathtyrum) being built to my specification, are on stone car-

The 'USGA spec' advises 4" of 4 mm gravel, with a suitable blinding layer. Such a shallow depth is totally impracticable, demanding hand work, and precludes speedy and therefore cheaper construction with mechanisation, as the gravel merely sinks onto the sub-base. Another major error perpetrated last year with disasterous results is to use a geotextile membrance, which quickly clogs and seals, instead of a compatible blinding layer, e.g. 4 mm gravel over 150 mm of 40 mm clean stone.

Writing with the assurance which comes from having been involved in the building of over 2500 golf greens, none of which when built as specified has ever given problems and many being over 25 years old, I can assure you this method works and is totally relevant to UK (and Northern European) conditions.

• The author, Jim Arthur, is known world-wide as the consultant agronomist who, in 1971, became consultant to the R. & A. Championship Committee, a position he held until his retirement from active practice in 1988. He has long been a champion of the greenkeeper, a person he believes is underestimated in the

booming golf industry. GREENKEEPER INTERNATIONAL May 1991 9



When lucky breaks came his way, Martin Twist seized them with both hands. But it has taken more than good luck to become Hillside Golf Club's Head Greenkeeper as JOHN NELSON discovers

Martin Twist, Head Greenkeeper at Hillside Golf Club, is the man in charge of the course over which the first ever European Amateur Championship is to be held in 1992 and which has been selected as a qualifying course for The Open at Royal Birkdale. In addition, successful competitors in the ISEKI-BIGGA Championships will be exposed to its charms when their Grand Final is held there on September 12th.

These events are in good hands. Indeed, the choice of Hillside owes more than a little to Martin's skills and experience. He has set out a course which provides a first rate test of links golf, creating a course which looks the part, looking good and inviting.

Still only 26 years old, Martin is no stranger to the big event, which hold no terrors for him. He already has the 1989 Amateur Championship under his belt and was a member of the greenkeeping team which prepared the course for the 1982 PGA Championship held at Hillside.

How come so young a man has been entrusted with such responsibilities? It's quite a story – and it's still unfolding. He had his lucky breaks – which he seized with both hands – but there's much more to it than just that.

Martin is Southport born and bred. He comes from a family with a background of market gardening, landscaping, beautifying gardens, growing flowers and shrubs. Before leaving school Martin knew he wanted a job outdoors, preferably doing something like his father. A school friend told him he was joining the greenkeeping staff at Southport & Ainsdale as a trainee on the

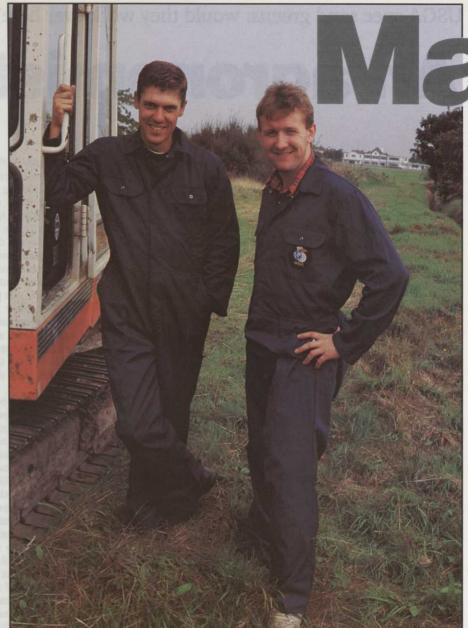
Youth Training Scheme (YTS) and Martin joined him.

This was how it all started. He found he liked the work and there and then decided to make greenkeeping his life and his career. But he didn't want to just be one of the boys. Oh no, Martin wanted to be a master of his craft and reach the top of his profession. He wanted to make it to the top!

He wanted to run his own show. This meant becoming a head greenkeeper – at a top Club, and also meant becoming appropriately qualified through training, certification and experience. So he started the three year City & Guilds Course in Greenkeeping, stuck at it and passed, but didn't stop there, preferring to continue for a further year to study Greenkeeping Management. He passed.

During this time his YTS traineeship came to an end, causing him to look for a permanent job, and one came available at Hillside – across the railway track from Southport & Ainsdale. This was a job as a member of the greenkeeping staff and it was 1981. He now had his foot on the first rung of the ladder, playing his part as a member of the Hillside team for four years – 1981 to 1985. During this time he contributed to and became familiar with the way in which courses are prepared to hold championships – the '82 PGA Championship at Hillside and the '83 Open at Royal Birkdale – for there was, and continues to be, close rapport between the two greenkeeping teams.

In 1985 he got his first break. The assistant head greenkeeper, Stuart McCall, left to run his own show at Eastham Lodge on the Wirral. Martin succeeded him. It turned out to be a triple lucky break. First, he understudied a first rate head greenkeeper – George Lloyd. Second, he was called **10 GREENKEEPER INTERNATIONAL** May 1991



'By the early 1980s it was clear that a golf boom was in prospect and Hillside was determined to be in its vanguard'

Pictured above: Martin Twist, right, with First Assistant and colleague Antony Bailey.

Photographs by ALAN BIRCH upon to take charge in an acting capacity due to George's prolonged illness over several months in 1986/87. Third, and arguably his luckiest break, he came on the scene at the right time.

By the early 1980s it was clear that a golf boom was in prospect and Hillside was determined to be in its vanguard. This meant having a first rate course and therefore appropriate finance was made available. The green committee, under the direction of Ken Seward, instituted systematic review, a programme of planned maintenance and regular replacement of appropriate greenkeeping equipment. One of Seward's colleagues was David Rose, who succeeded him as chairman in 1986. Like Seward, Rose was equally dedicated to the use of modern methods in course management and authorised the introduction of a computerised irrigation control system for both fairways and greens – and was in office when Martin became acting head greenkeeper.

It fell to Martin's lot to prepare the course for The Amateur Championship in 1986 and, judging by the compliments received, he did it very successfully. During this period he also gained valuable experience in handling staff and putting some of his own ideas into practice. For example he believed that bunkers should look classy as well as fulfilling their purpose – acting as a hazard – as one of the ways to defend the playing character of the course as a test of golf.

He became convinced of the importance of a golf course looking inviting – aesthetically pleasing – from tee to green. He realised this meant a tidy golf course and that this depended on attention to detail. It mattered how a golf course looked and appeared – to golfers. Above all, he came

rtin's golden opportunity

to understand that successful greenkeeping was as much a matter of forward planning; investment in the right equipment; budgeting and finance; as it was in leading his team out on the course by example.

This meant establishing good working relationships, in particular with the club secretary/manager and the chairman of green. This entailed projecting the right image; which meant doing his homework and, when the occasion demanded, looking as smart as his golf course. One of the ways he understudied George was by representing him on the green committee. Thus, when he became acting head greenkeeper, he was a familiar figure at its meetings and used to procedures.

Martin had acquired, during his 'acting' period, sufficient self-confidence in his ability to run his own show. That being so, when George returned from illness, he began to look around for head greenkeeper vacancies at other clubs. He sought advice, consulting with Hillside's Secretary /Manager, Peter Ray, and the Chairman of Green, David Rose. Both counseled him to do nothing precipitous. They assured him of their full confidence in him and their recognition of the outstanding work he had done as acting head greenkeeper. They expressed their hope that he would stay – at least for the time being – whilst recognising his wish to progress to the post of head greenkeeper.

In the event George Lloyd left Hillside. He took up a post as head greenkeeper at Fairhaven in 1987 and Martin succeeded him. After six years, four as a greenkeeper and two as an acting head greenkeeper, Martin had realised his dream. He had become the top man at a top club and he was still only 22 years old! It was a big step for Hillside but it has paid off.

What then were Martin's immediate, short term, priorities when he took over? First, to continue to smarten up the course. He tried to see the course as the player might see it, recognising the importance of first appearances, of looking cared for, neat and tidy, with no detail out of place. Second, to maintain staff morale, for as their new boss he wanted them to have just cause to be proud of their work, and in what they were hoping to achieve together. Third, he wished to further the good working relationships he already had with the secretary/manager and the chairman of green.

These three priorities were all linked together. He wished to show straight away the standards he wanted which would, he hoped, get his staff fully behind him and convince the club that it could safely leave the course in his hands. Of course there was a price to pay. To maintain his standards the club would need to continue its investment in maintaining a championship course. There would be times when he would have to do unpopular things and needed the club's backing, e.g. when he restricted pin positions on greens to avoid over-use. Martin got it and achieved these three priorities.

Next he had medium term priorities. These included reequipping Hillside with modern machinery. Naturally he had preferences and having gained support for his case he began to buy. First a Jacobsen Tri-King to cut tees and green surrounds: second, a Ransome Hydraulic 5 to mow fairways (and leave those picturesque broad swathes): third, a Jacobsen Green-King with turf groomers for greens; fourth a new tractor, spray equipment, and a scarifier/collector; fifth and finally; a Verti-Drain for aerification. He has now achieved these medium term priorities and Hillside compares with the best.

Has he got any long term priorities? Yes, he has. He plans to improve the consistency of the turf on Hillside's course - fairways and greens - so that it more genuinely reflects a true links test of golf. At present the course is a mixture of links and parkland/meadowland. His plan will need a worked-out policy of regular aeration, appropriate feeding, controlled (minimum) watering, together with measured grass cutting. In this as in all his other activities Martin has sought the on-going and regular advice of the STRI. Not unexpectedly, the annual reports on Hillside of David Stansfield (STRI's senior agronomist) have been most complimentary!

Martin has now been head greenkeeper for approaching four years. He is still only 26 years old. He is very happy and enjoys the continued confidence of the Club. There is now a new chairman of green, John McMurray, with whom Martin has an excellent working relationship. For the foreseeable future much remains to be done and Martin and his team play a key role in bringing this about. Hillside has its sights set on gaining recognition as a venue for the top tournaments and as an example applied to be the European venue for the 1993 Ryder Cup matches.

To succeed in its aim, Hillside must have a top quality course. That it was included in the recent Golf World survey of Britain's top 50 and ranked 19th was commendable, but not good enough if the club is to fulfil its aspirations.

Hillside is looking to Martin to mastermind the improvement needed as well as training an assistant and putting into place a first class team of greenkeepers. In due course, no doubt, he may well be tempted by the prospects opening up in Europe for top flight proven head greenkeepers, and he also has a developing interest in golf course architecture and design.

He would like to be a member of a design team, creating and building new courses, and has his own ideas about golf course design. He believes, for example, that fairway bunkers shouldn't be so shallow as to allow a shot to reach the green. A wood from the bunker? 'no way', says Martin, who also has a liking for little fairway pot bunkers.

Martin's family swear he eats, drinks and breathes greenkeeping – as well as being an enthusiastic member of BIGGA. He talks of little else – all the time! Surely he can't have time for interests outside of golf? Well, actually, he has. Predictably they are all outdoor pursuits and include clay pigeon and game shooting; and course fishing. His enthusiasm is infectious.



Attention to detail pays dividends

• The author, John Nelson, is a retired college lecturer and

a member at Hillside.



pain out of paperwork

Keeping golf course records is important, be they kept via the userfriendly TRIMS computer package or through a simple manual system and the greenkeeper should know what to have on file and how to use the information recorded. STEVE ISAAC. Advisory Agronomist with the STRI, asks the pertinent questions and provides many of the answers

A sk any greenkeeper why he entered the profession, and involvement with paperwork will come very low on his list of replies. However, the task of keeping up-to-date and detailed records is more important than ever, now that golf course management is big business. With the distinction between head greenkeeper and course manager becoming less clear; more Clubs prepared to give the head man more responsibility and more head men prepared to take it, the need to maintain a well ordered records system has never been greater.

Storing records is a science in itself. Papers should not be kept in a disorderly biscuit tin, where it will take several hours to find the specific piece you want. All head greenkeepers should be provided with a filing cabinet within which information is grouped into different subject matter. The TRIMS computer package is – in essence – a filing cabinet which contains a number of files detailing different facets of the greenkeepers job. Like all record-keeping, the input of information takes time, be it a manual or computer system. However, once the information is installed, retrieval should be a quick AND simple process, thereby speeding up

the daily tasks requiring the use of paper. Any system used should not only appear logical to the compiler but must be clear enough for deputies to use during, say, holidays or sickness. Equally the system should be in a format that any eventual successor to your post can recover information which will assist him in his first few months of running the golf course.

Organisation

The filing cabinet sits in front of you with an inviting array of files waiting to be filled. Don't panic! Sit down and think about the tasks carried out on the course and the paper-

work involved with each task. Jot down notes and headings for collective tasks. Such a list may include materials, machinery and manpower. Within these main headings all the basic works can be inserted – in separate files if necessary. The purpose of separation to this fine degree is primarily for ease of access, ensuring that when asked a question you can go straight to the appropriate file for the answer. Your filing system may seem logical to you and you may be able to find individual items in seconds. However, others may not think in the same way and could need assistance to locate the information they require.

Perhaps the most important reasons for keeping records are to facilitate the management of the maintenance budget and to aid the organisation of the management programme. Organisation and efficiency are two key words, for without them a records system will have little value and an inefficient and poorly organised greenkeeper does not get the job done. An unkempt, disorderly records system says as much about the greenkeeper as an untidy machinery shed.

The records system

The exact order and division of paperwork is an individual thing, though headings for main or primary files should be fairly universal. In this way the TRIMS computer package highlights the main categories for a record system. Within each main heading the information can be split into sub or secondary files. In most cases this is all the division necessary, but for more complex information, tertiary files and beyond may have to be prepared for ease of access to specific information. Let's consider the main headings and the information that should be stored within them.

Work schedule

The daily work schedule is often monitored on a wall chart planner or diary. This is all well and good as an open display of intent, and is useful to recall the exact timing of works. However, once the year has come to an end, a more permanent and less bulky record of the year's work should be kept.

Personal experience is only valuable if it is reliable; and writing information down is an essential back-

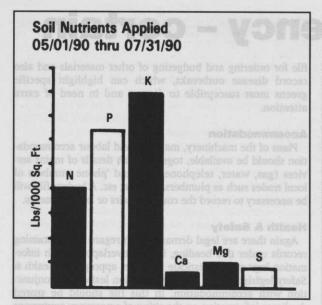
up to memory. Obviously your understudy or successor can also make use of information in this form. This file should contain information to help plan the maintenance workload, not only day to day, but forward planning in terms of months and even years. Details should include the operations necessary throughout the year on areas of the course – including frequency and a brief description.

Such records not only aid in planning future work but can be a useful reference to determining the effectiveness of past practices. It is impor-

tant to keep a record of golfing commitments for the year - i. e. competitions and society play - so that the greenkeeping work can be planned accordingly - with the golfing programme agreed at the start of each year between the head greenkeeper and the club and setting aside adequate time for routine and occasional disruptive maintenance practices. Having such a record enables all staff to be aware of what is expected from them. Long term planning is most important and a 5 or 10 year plan should be formalised and agreed within the Club. This should detail on-going maintenance, together with proposals for construction works (tee enlargement, bunker work, etc) and forward budget plans, perhaps even a copy of STRI reports! In such a file it is useful to keep a record on weather conditions. All Clubs should have access to information on daily rainfall, ambient and soil temperature readings and also record frost days and waterlogged green days.



'Don't panic! Sit down and think about the tasks carried out on the course and the paperwork involved with each task'



Manpower

Use in conjunction with the Work Schedule file to make sure you are getting the best out of the available manning levels, for man management and efficient labour utilisation are key areas for head greenkeepers wishing to get the best from their course. Keep a record of permanent and temporary staff through the year, which will help pin-point future busy periods and aid plans for early recruitment and thus avoid undue staff stress factors. Overtime, holidays and other personal data should be recorded, together with personal details - strengths and weaknesses, training and education - all are important.

Equipment

Detailed information must be kept on machinery, with information on the stock, purchase date, service, repairs etc. together with comments on performance and proposed



Soil Nutrient Bar Charts, such as this, illustrate the cumulative amounts of Primary, Secondary and Micro-Nutrients applied to designated ground areas within a specified time period. These charts, used in conjunction with soil tests, help evaluate the effectiveness of your nutrient applications

dates for replacement. In the latter respect a throughout the year, which record of demos. with comments on perforwill help pin-point future mance is useful. Maintaining a well ordered list of machinery should ensure that all equipment is in working order and serve to remind of in-house maintenance schedules and dates for off-site servicing. Planning service timing is important, with problems developing if, for example, all greens mowing machinery is off site at the same time. With the name of each unit, record serial and engine numbers so that parts may be ordered more easily and accurately. Sources and cost of hire equipment should also be stored.

Irrigation

It is sensible to use a separate file for irrigation. A copy of the original layout and subsequent additions should be stored. It is not only important to know when the system is to be commissioned or shut-down and drained, but also for noting faults (where, when, how) and how they were rectified. Record the areas on greens/tees not adequately covered so that you know where hand watering should be concentrated, and where the system might be up-dated. Also record water quantities and time spent watering through the automatic and/or manual sprinklers.

Materials

Not only obvious items like fertiliser, top dressing, sand, seed, turf and wetting agent but also diesel; petrol; oil and sundries such as flags, tee boxes and litter bins. Keep a record of new stock, what is used and when, dates for reordering. It is important to know exactly what has been

Continued

busy periods and aid

plans for early

recruitment'



Contact BIGGA HQ, Aldwark Manor, Aldwark, Alne, York Y06 2NF Tel: 03472 581/2 • Fax: 03473 8864

AD REF

More than just efficiency - certain



A well-ordered set of records improves the efficiency of the course management programme tives if not. Analysis of materials, e.g. top dressing, fertiliser, plus chemical analysis of topsoil from greens, should also be kept. Work out how much fertiliser or dressing is required per unit (e.g. green) at the more common application rates and record these figures – easier than re-calculating for each application or when re-ordering.

Pesticides

Under the COSHH Regulations 1988 it is a legal necessity to keep detailed records on all pesticides and other materials used. With an ever increasing importance placed on the safe use of pesticides they deserve to kept in a separate file. Information leaflets on legislation and how it affects you should be stored, with details of application rates and dilution factors for regularly used materials. Calibration records for all spraying equipment are essential, together with a diary detailing pesticide use around the course. Keep a stock file for ordering and budgeting of other materials and also record disease outbreaks, which can highlight specific greens most susceptible to disease and in need of extra attention.

Accommodation

Plans of the machinery, materials and labour accommodation should be available, together with details of mains services (gas, water, telephone etc.) and 'phone numbers of local trades such as plumbers, builders etc. A budget file will be necessary to record the cost of repairs or improvements.

Health & Safety

Again there are legal demands with regard to maintaining records under this heading, in part overlapping with information kept within pesticide files, i. e. appropriate Health & Safety legislation and other information leaflets. In conjunction with accommodation, in this file should be stored duplicate information on the siting of emergency equipment and a record of protective clothing, its condition and use. Keep the 'phone number of doctor, hospital, police and fire service handy and that of the local Health & Safety Executive.

Words and Pictures

It is all well and good keeping records in this way, but they must be used to your advantage. Obviously, some record keeping such as budgets and pesticide information is a necessity, whilst other material can also be of great value but needs to be used to its full potential.

Records can be stored in a more legible way if documents are typed. You may be able to decipher your own handwriting but chances are no one else will! Ideally you should have access to a typist in the club secretary's office and should keep a record of all communications between yourself and your contact (secretary, green chairman et al) within the

It Stopped Just Long It's Picture Taken.

You're witnessing a rare sight. Toro's Reelmaster 450-D actually standing still. A rare sight because the Reelmaster 450-D is so dependable that it goes and goes and goes. Giving high capacity mowing and precise even cutting. The Toro 450-D gives you protection against hydraulic fluid leaks, with strong steel lines and O-ring seals protecting connections. Toro's exclusive variable clip control allows you to calibrate reel speed and mowing speed to give you the highest quality of cut in varying conditions. Fast mowing speeds, up to 7.5 mph and 15 mph transport speed. All controls are in easy reach of the operator to provide greater comfort. Weight is evenly distributed around a centre mount 50 hp engine for better balance. Ensuring good climbing ability and better traction.

Reelmaster 450-D

Wide 31-inch tyres spread the weight for the lowest PSI.

record-keeping 'a legal requirement'

clubhouse. This should include minutes of meetings you are privy to, memos from/to club contact and information provided by you to the general membership via the notice board. You never know when you might have to justify yourself and dated confirmation of agreed practices could work in your favour.

As a high proportion of the main file headings hold budget information, it may be a good idea to create a separate main budget file that collates all disseminated information. At the present time there are a limited number of head greenkeepers actively involved in the decision making process for formulating a budget, though thankfully we see more and more each year. Only the man doing the job can have com-

prehensive knowledge of forecasting budget requirements. Even those greenkeepers who are simply allocated a budget will find life a lot easier if detailed records are kept and far better than having to explain to a finance chairman why a maintenance budget is over-spent. In such a situation records will prove invaluable in revealing cash inadequacies for work that must be done, along with extras initiated by the green committee!

Facts and figures are all very well, but unless they are presented in an intelligent and simple format much of their impact will be lost. This is particularly true of budget information, where producing reams of numbers will do nothing to convince management that the green

staff is under-funded or under-manned. A visual and easy to appraise presentation might be in the form of a graph or diagram. Pie charts, histograms, scatter and line graphs can exhibit diverse information that is immediate and clear, and can be used to present information in a concise way. As an example, if a graph shows a trend of lowering pH and potash levels,but stable phosphate, it is an aid to manage fertiliser and top dressing inputs. Scatter diagrams of disease incidence can pin-point susceptible greens and times or weather patterns when outbreaks are likely.

In such instances graphs copied can be overlaid on an overhead projection sheet to show connection between, say, the weather and outbreaks of disease.

For the record...

In this article, hopefully, one can appreciate the importance of keeping a well ordered set of records in one's bid to improve the efficiency of the course management programme. Within each main title there is great scope for producing sub-files, but there is little point in separating records in main categories if all the segregated information is then thrown into a single file in no particular order.

What is shown here is purely a personal review and your records system must be designed by you, for you are the one that has to understand and use it. The outline above is a suggested format of how you might organise all the paperwork that is part and parcel of greenkeep-

ing today. The order in which you file is predetermined on computer packages; in a filing cabinet the choice is yours. There is likely to be so much information that it is best to

keep closely related main file headings together, rather than use a convention alphabetical order. There may be overlapping, or repetition, but this is no bad thing as cross referencing information not only speeds up the process but makes your system more user-friendly for others. Duplication of information is useful, especially if vital information is stored in two separate places. Is it worth risking loss of essential paperwork when a filing cabinet burns for the sake of taking photocopies or listing addresses in a book? Computer packages emphasise the importance of such a back-up, storing information on

both hard and floppy disk. If there is any duplication of information remember to change all references if making alterations. Having different addresses for the same company is going to mean a 50% chance of getting no reply!

In addition to all this information filed away, we have discussed the merits of keeping a diary or wall chart planner. It will be more convenient to have a desk-top address book which can be quickly flipped open than wading through files in a record system. At the end of the day, keeping good records is for your own benefit. A deal of time is now spent by head greenkeepers coping with paperwork and this time will be minimised if you know exactly where information is kept.



For faster easier mowing there's nothing to compare with the exceptional productivity of the TORO REELMASTER 450-D. Why not give us a call or pop the coupon in the post.

Please send me full details of the TORO REELMASTER	
450-D and CONTRACT LEASING TERMS	-i-
Name	
Address	i i
terrenter mether believeld, ew. terren	1
Post Code Tel	AD
	01

TORO

Distributed by LELY (UK) LIMITED Station Road, St Neots, Huntingdon, Cambs PE19 1QH Tel: 0480 76971 Telex: 32523 Fax: 0480 216167



'Facts and figures are all very well, but unless they are presented in an intelligent and simple format much of their impact will be lost'

TORO

in a class of their own

Part 3 Work recording

 asparate places, is perverit when a fitking plattecepies or parloges emphasize ing information on allocation of informaallocation, fitaving altocation, fitaving

have discussed the will be more convebe quickly flipped . At the cud of the One of the more difficult tasks for a new chairman of green is to understand the various jobs that are done on the course, their frequency and work content. It is absolutely essential for him to have a full grasp of this information when preparing annual budgets, manning level calculations and costing for specific projects.

Short cuts

to efficiency

I discussed the problem with Jim, the greenkeeper, and asked for his advice. He maintains a personal diary and from this and his knowledge of work done on the course he prepares a written report once a month for the committee. This types of report requires the extraction and selection of details together with some input from memory. Although well prepared it requires valuable greenkeeper time to produce.

I feel sure that no chairman or any member of his committee can remember the detail of, say, the previous two years reports. When detailed information is required the written reports have to be analysed. We decided to short circuit the analysis stage and devise a reporting system that was easy to understand, required minimum effort to complete and gave us meaningful answers at the end of each reporting period.



The maintenance schedule: Proving to disbelieving members when greens are cut and other vital work undertaken...

We settled on the idea of a tick sheet with job descriptions down the side and days across the top. Entries should be made each day or on the completion of a job, a weekly total would be entered in a column on the right.

Our discussions soon led me to understand that course work was covered by three headings, Maintenance, Project and Other, which we defined under each heading as:

Maintenance: That work necessary to maintain the existing features for them to be displayed to their best advantage. We agreed that this work may absorb 100% of available manpower during the Summer but may be as little as 30% during the Winter period. As an additional refinement we identified certain operations, such as mowing greens, were always or nearly always done at all 18 holes while other operations may be done at one hole.

Project: The modification of existing or the development of additional features on the course. This work would be done during the autumn, winter and early spring.

Other: Those jobs not included under either the Maintenance or Project headings would include Hollow Tining, Vertidraining, Arboreal work after a gale and the repair and maintenance of plant and machinery. While it may be possible to identify some of this other work and its work content we recognised that there will always be contingency work which cannot be evaluated but we must make some allowance for it in any calculations.

By trial and error we determined a description for each work item that has stood the test of time and includes:

At all 18	
Mow	Greens
Mow	Tees and Surrounds
Mow	Fairways
Mow	Rough
Switch	Greens
Cut	Holes
Rake	Bunkers
Slit Tine	Greens
Slit Tine	Tees added the added the
Fertilise	Greens
Fertilise	Tees

At one hole (write hole numbers)

Maintain	Bunkers - Annual - including cut new edge
Maintain	Bunkers - Periodic - including strim edge
Fungicide	Greens
Top Dress	Greens
Scarify	Green

Other work - give detailss

After a trial period we introduced a Weekly Report Form capable of accepting daily entries. Individual weekly totals would then be entered on to a Quarterly Report Form. We also recognised that subsequent similar quarters could be compared to determine an average frequency for each job during a particular quarter. An immediate benefit would be that the greenkeeper would spend less time preparing his written report.

Information gathered would be meaningful and used to determine both the quarterly and annual frequency of regular and irregular maintenance work, together with examples of the other unscheduled work. The detailed data would also be used to produce more accurate budgets and manning level calculations.

After one year the results gave us quantified common sense answers. While we knew that greens were cut more often in the summer than the winter, we now know that the frequency varies during the quarters from 6.9 to 0.8 times per week.

To date this method has had two side benefits, we can now prove to disbelieving members when the greens were cut and to suit certain competitions we have modified, weather permitting, actual cutting days during the darker months of the year.

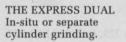
As well as being used for both the preparation of budgets and manpower calculations the results are also used to discuss the frequency of operation during the annual visit of the agronomist from the Sports Turf Research Institute at Bingley.

Practice makes Perfect

Here at Atterton & Ellis we have been making Grinders for over 100 years and although we say so ourselves, we are rather good at it and our Grinders prove it!

It is hardly surprising that during this time we have made Grinders for just about every type of cylinder on the market and for most of the prominent Grounds and Golf Clubs around the country.

> In fact, in our work shops at the moment we have Express Duals ready to go to America – the Atterton is well proven on the other side of the Atlantic too!



THE ANGLEMASTER

Bottom blade grinder

for all machines.

Our customers tell us the reasons we are still in demand 100 years on - our dedication to service, the quality of build, the value for money – they all add up to the finest Grinders available today.

We have constantly changed and adapted our

manufacturing techniques to combine the best of yesterday's skills

with the benefits of tomorrow's technology.

But more important than all that we are first and foremost Grinding enthusiasts and are happy to talk and give advice whatever your grinding requirements.

The Atterton Master leads the field – The Express Dual a technological revolution, in-situ and separate cylinder grinding – The Anglemaster, a bottom blade grinder to complement the best in cylinder grinding machines.

ATTERTON & ELLIS LTD Manufacturers of Fine Grinders for over 100 years

Manufacturers of Fine Grinders for over 100 years Iron Works, Haverhill, Suffolk CB9 8QH. Tel: (0440) 702312 Fax: (0440) 712138

The Master

THE MASTER For fast accurate grinding of larger cylinders.

AD





Lindum - the perfect turf for golf greens, tees, fairways and landscaping.

A range of the finest quality seeded turf; seed prescriptions and fertilisers matched to customers special needs; with a full preparation and after-care advisory service.

Ne la

For golf courses, Lindum are the leaders, of course!



Church House, Horkstow, Barton on Humber, South Humberside, DN18 6BG. Telephone (065 261) 564 or 329. Fax (065 261) 447

DE

For the best finish and fastest establishment A variety of turf grades available, laid more efficiently and economically in big 25 sq.yd. rolls.

Lawn Technology Ltd., Turf House, 16 Invincible Road, Farnborough, Hants. GU14 7QU. Tel: 0252 370101. Fax: 0252 370241



18 GREENKEEPER INTERNATIONAL May 1991

brings with it such "nastins" as compaction, dry parch and a higher probability of turf disease and it is small wonder the poor

have the privilege, in my job, of visiting a large number of golf courses, old and new. It distresses me on many occasions to see that the high specification used in the construction of greens and tees is not continued when it comes to the turf that is laid on top. Turf described as "having been grown on a sandy loam" generally will have far too high a percentage of fine particles.

CHOICE

The increased number of rounds of golf pushed through our golf courses places enormous demands on the turf where play is concentrated; these demands being met only by giving the grass the best possible growing conditions, one of the most important of which is a free draining rootzone. Without a growing medium that has sufficient air-filled porosity, the surface water cannot get down to the drains beneath at a fast enough rate, resulting in waterlogged conditions.

Not only does the rootzone material have to show good aeration initially, it also has to resist the effects of compaction over time. Compaction, of course, is the result of heavy wear under wet conditions. Sand has excellent drainage characteristics and low compaction potential, and that is why its use has become so important in the construction of high quality natural turf surfaces where heavy use is expected in the winter months; and indeed where irrigation levels are high during the summer.

Of course, the quality of sand used it crucial and must be chosen carefully with respect to its size and uniformity of grains, so that the air spaces between the larger particles cannot become clogged by smaller particles.



DECESONS

Choosing the right cultivated turf for sand/soil mixture constructions is a task not to be taken lightly, says TIM FELL

Picture: Ideal for golf courses – cultivated turf, such as Rolawn, grown on light, sandy soil proper rootzone infridue. It is really the combination of bary wear and writ conditions bat causes the problem. Turf that

This is why a cheap source of local sand may prove a false economy.

Experience has shown that pure sand constructions lead to other problems, namely the difficulty of maintaining adequate levels of fertility, and their tendency to dry out. For these reasons, top soil and organic matter is mixed to provide a buffer. The amount of additive must not exceed a critical threshold level above which the infiltration rate drops off dramatically. The threshold can only be predicted by having a mechanical analysis done on both the sand and additive.

All the above is important when it comes to considering the laying of cultivated turf in sports constructions using sand/soil mixtures. It is no exaggeration to say that all the cost of a high specification sand/soil construction will be wasted if turf grown on the wrong soil type is used. One fundamental rule is to buy turf that is grown on soil that resembles as closely as possible the rootzone material. I cannot over-emphasise this critical point.

It follows that when looking for turf it is important to ask for a mechanical analysis of the soil that the turf is grown on. Those turf growers with a concern for the needs of their customers will be able to supply one. A high specification rootzone material will have less than 25% particles smaller than 0.25mm. In addition, the material will contain less than 5% silt and less than 3% clay. The infiltration rate of compacted laboratory samples should be at least 150mm per hour. However, it is very rare that naturally occurring soils meet these speci-• Continued overleaf

Expect 'disastrous' results from turf grown on the wrong soil

• From previous page

fications, and so one has to accept a compromise when buying turf. As long as turf is grown on soils that do not have more than 20% of particles smaller than 0.125mm and less than 10% of silt and clay then the chances of success are greatly increased.

The consequences of using turf grown on soil containing a high percentage of fine particles are disastrous. What happens, under wet conditions, is that the fine particles migrate into the air spaces and effectively block off the natural drainage channels. Rain and irrigation water cannot get down to the underlying drains and the turf stays wet and spongy. The only recourse in this case is a prolonged period of intense aeration, hollow coring and top-dressing with the proper rootzone mixture.

It is really the combination of heavy wear and wet conditions that causes the problem. Turf that is suitable for countless other situations may not be appropriate for the demanding job that is expected of today's golf tees; greens; and surrounds. It is crucial in any specification for turf for these situations to include the correct physical soil characteristics, as well as the other quality features expected to produce the highest standard of playing surface.

• The author, Tim Fell, is Managing Director of Tillers Turf Company Ltd.

the **B** side



FROM THE EDITOR

ne of the greatest pleasures afforded me each April is my visit to Augusta and The Masters. This year was no exception and I was as thrilled as anyone to actually witness 'Woosie' - or 'that darlin' boy, Iron Woodsman' as he was christened by one softly spoken Southern Belle - win in such dramatic fashion. Whilst the victory was a personal triumph for Ian and another shining nail in the coffin of American golfing dominance it raised one point that just will not go away. I refer to the continuous chuntering of TV and radio commentators, officials, journalists and especially players, all

expounding upon the great green speed saga - an everyday story of slick and trick. No doubt vou received the same treatment via satellite TV and I can imagine both your reactions and those of your club members. Thus it seems appropriate at this time to place on record a view that I have long held, one which greenkeepers throughout Britain and Europe will no doubt be in total accord - speed kills!

The Masters has no monopoly when it comes to rapid putting surfaces, indeed having played at Augusta National and many other championship courses in America and on close to 200 courses in Britain, I feel as well qualified as any to opine that it's the wretched stimpmeter - or the thinking behind it - that has done more to set the rank and file golfer on a stampede toward demanding quicker and quicker greens, to the great detriment of club golf generally and at the cost of vastly increased green maintenance costs.

In the United States, where they have a knack for measuring everything and a penchant for using the latest in high-tec to prove the point, the noted architect, Pete Dye, had old movies of a US Open in the sixties analysed by mathematic boffins, discovering that green speeds then, although believed to have been "very fast", were something like two or three inches slower than the average championship speeds of today.

That stated, British club golfers - indeed golfers everywhere - fired by the sight of superstars and

"You know Terry.

green-keeping is similar to,

Politics . don't you think?

No. enlighten me

year to keep the course open ...

their undoubted ability to shoot low numbers on beautifully manicured and ultra-slick turf, continue to howl for a course in their back yard that exhibits the same characteristics, mistaken in their belief that quicker is better and emerald green the only correct colour.

Now this 'demand' philosophy has spilled over to the superstars themselves, with carping remarks made recently about the condition of St.Mellion, where the budget is undoubtedly a much smaller one than that of Augusta National and where weather, turf and growing characteris-

tics are totally different.

Perhaps golfers should be aware also that those escalating costs - which they pay for in ever increasing subscriptions - are due to factors for which our forefathers cannot be blamed. These include the practice of cutting greens seven days a week at many British courses, the introduction of thinner bottom blades which allow greens to be scalped, the introduction of verticutters and groomers which remove excess growth and the increase in top dressing, once a practice that took place twice a year and now a regular (and in view of the above) necessary monthly exercise.

Add to these factors the vastly increased traffic experienced almost everywhere, traffic which brings with it such "nasties" as compaction, dry patch and a higher probability of turf disease and it is small wonder the poor greenkeeper is tearing out his hair.

Returning to Dye, comment-

ing on the USGA's attempt to raise \$10 million to find a hardier turf, his suggestion is one that deserves exposure beyond those shores: "All that is necessary," he says, "is for them to raise the height of cut!" If all this seems too simplistic, tell your members that green speeds - and the increased management programme necessary to maintain them - have increased in direct proportion to their subscriptions. See how that grabs them!

David White

Slow down Your speed is killing me!



be Libera with watering and. Oh, 1 get it, and we never know what Well we must be Conservative chemicals, Labour all the the Greensil do next ! ... very true Terry

All characters are fick tissues



REF

TC APPROVED OLLEGES

GRICULTURAL OATRIDG COLLEGE

LOTHIAN REGIONAL COUNCIL offer the following full time courses NATIONAL CERTIFICATE IN SPORTS GROUND AND GOLF COURSE MAINTENANCE & MANAGEMENT and NATIONAL CERTIFICATE IN AMENITY HORTICULTURE NATIONAL CERTIFICATE IN LANDSCAPE CONSTRUCTION and NATIONAL DIPLOMA IN LANDSCAPE CONSTRUCTION

For further details please contact: The Registrar, Oatridge Agricultural College, Broxburn, EH. Tel: (0506) 854387 Residential Hostel facilities available



LANGSIDE COLLEGE

SPORTSTURF - F.T. 3 yr DR & evenings

A programme of introductory and specialised SCOTVEC modules tailored to meet the needs of Greenkeepers, Groundsmen (and women) engaged in the establishment, care and maintenance of Sportsurf and artificial playing surfaces. The course includes tractor operation, golf course construction, turf management and technology. The modular programmes are approved by BIGGA and I.O.G.

A SHORT 4 WEEK EVENING CLASS FOR CHAIRMEN AND CONVENORS OF GREENS COMMITTEES

FULL TIME SPORTSTURF S.N.C. FROM AUGUST 1991

Contact: Mr. Colin Urquhart, Langside College, 50 Prospecthill Road, Glasgow G42 9LB Tel: 041 649 4991

The Career choice that's open to everyone

turf machinery * Residential Accommodation * Excellent Career Opportunities * B.I.G.G.A. approved centre

We provide the highest standards of Training & Education. Our practical teaching facilities are excellent - providing valuable "hand's-on" experience while studying Sportsturf Management. * The use of £200,000+ worth of

- Full time (one and three years)
- and part time courses
 Opportunities to work on Golf Courses in Florida
 A Nationally recognised BTEC
- qualification
- Contact Liz James or Richard Gibbs LANCASHIRE COLLEGE OF AGRICULTURE & HORTICULTURE
 - Myerscough Hall, Bilsborrow, Preston, Lancs., PR3 ORY. Tel: 0995 40611 Fax: 0995 40842

SPARSHOLT **GREENKEEPING & GOLF COURSE** COLLEGE HAMPSHIRE MANAGEMENT TRAINING

Sparsholt is unique in offering a wide range of full and part-time practical training, including

Full-time Courses

BTEC National Diploma in Golf Course and Sportsground Management (3 years) National Certificate in Greenkeeping and Sportsground Management (1 year) Part-time Courses

A full range of day, evening or residential block courses.

For further details contact: The Courses Adviser, Sparsholt College, Hampshire,

Nr Winchester, Hants S021 2NF (Tel: 0962 72441). Sparsholt is a Greenkeeper Training Committee Approved College

> Warwickshire College of Agriculture offer the following specialist courses in

GREENKEEPING

Day-Release over four years leading to CITY AND GUILDS OF LONDON INSTITUTE GOLF GREENKEEPING qualifications. ADVANCED NATIONAL CERTIFICATE IN GREENKEEPING (One year, or over two winter periods)

For further information please contact:

WARWICKSHIRE COLLEGE

The Registrar, Warwickshire College of Agriculture, Moreton Morrell, Warwick CV35 9BL. Tel: 0926 651367

Education

Seminar success

The recent Elmwood College Greenkeeping Conference, which followed on from two days of specialist seminars, proved so popular that further one day seminars are planned for the future. The conference was chaired by Elliott Small, pictured, the BIGGA Scottish Regional Administrator, who skillfully guided the speakers and audience through an enjoyable day. It was announced during the week-end



that Elmwood will be offering a new one year full-time National Certificate in Greenkeeping.

Myerscough (Lancashire College of Agriculture) is holding a two day event on May 14th/15th which will specialise exclusively in golf course construction and maintenance. The underlying theme will be to invite manufacturers of construction and maintenance equipment to use the College golf course to demonstrate, not only to clients, but to the many greenkeepers and recreation managers who are expected to attend. As an added feature, the College is also organising seminars relating to current developments in this specialist field. The event is being held at the Myerscough centre of the College, which is situated on the A6, 5 miles from junction 32 on the M6. All those interested in golf course construction- or in sportsturf generally- are welcome to attend. Entry is free, from 10.30am to 4.00pm each day.

Highly successful - that was the opinion of 19 greenkeepers who attended Elmwood's supervisory course for practicing or prospective head greenkeepers and course managers. This intensive course covered a variety of topics including Time Management; Budgeting & Accounts; Health & Safety; COSHH; Public Speaking and Computers- including an introduction to the TRIMS Ground Management Softwear Package.Highlights of the course were the interview sessions where each greenkeeper was 'subjected' to the ordeal of facing a panel of well-known people from the industry for 20-30 minutes. One such session was video recorded to allow further feedback to take place. The course was over subscribed, so another is scheduled for November.



Book now for Management Courses

Following the success of previous in-house Management Courses over the past two years, five more one week courses are scheduled for the coming autumn, all such courses specifically programmed to attract greenkeepers who may not have received further education or greenkeeper training.

The magnificent Aldwark Manor will accommodate over one hundred greenkeepers during the five courses and for those who have not yet visited HQ, will provide the ideal opportunity to luxuriate at a four star hotel with five days of education.

Those members who have attended either first or second year courses will again have an opportunity to attend, with week five specially created for them. It is anticipated that all five courses will be in heavy demand and members are requested to note specific week numbers and course content before completing the pre-paid booking card to be found facing Page 4 of this issue.

The costs for 1991 are again subsidised by generous support from Kubota (UK) Ltd and The Greenkeepers Training Committee.

YEAR 1

Week 1:28 October - 1 November inc.

Week 2: 4 November - 8 November inc.

Course content to include: Time Management; Introduction to Computers; Communication Skills; Problems associated with the Management of Tees, Greens; Fairways, Bunkers & Surrounds, Health & Safety, Turf Diseases; Conservation; and Grasses for the Golf Course.

YEAR 2

Priority will be given to those having attended the YEAR 1 Course in 1989 or 1990.

Week 3:11 November - 15 November inc.

Week 4: 18 November - 22 November inc.

Course content to include: Presentations to a Committee (verbal and written); Preparing a CV; Report Writing; Interviewing; Public Speaking; FEPA/COSHH; Spraying; Health & Safety; Turf Nutrition.

YEAR 3

Priority will be given to those who have attended the YEAR 1 and YEAR 2 Courses.

Week 5: 25 November - 29 November inc.

Course content to include: Discipline Amongst Staff; Preparing for Job Interviews; Irrigation; Tee & Green Construction; Preparing & Implementing a Course Maintenance Plan.

Lecturers for all courses will be drawn from GTC Approved Greenkeeper Colleges, The STRI and Private Training Organisations. All courses begin noon Monday and close noon Friday. Costs are inclusive of all meals and accommodation.

COST PER WEEK: £225 + VAT = £264.38. Please make cheques payable to BIGGA.

Early booking is strongly recommended - select chosen week and complete pre-paid card facing Page 4.

DAVID WHITE reports on the third BIGGA National Education Conference, York 1991 **Greenkeeping issues in a walled city**

he Romans came to York in AD 71, an occupation that lasted Sweeping new for 340 years. The greenkeepers came, specifically occupying York's Langwith College, nearly 2000 later when about 170 people from around the globe gathered for the most ambitious conference yet staged by BIGGA, made possible through the generous support of Lindum Turf & Associates.

No less than 17 papers were presented, a remarkable feat demanding total adherence to schedule and made possible only by the firm rein taken by Chairman, Gordon Child. Educational opportunities were abundant, and following George Malcolm's introduction, America's Dr Roy Goss began with The Influence of Soils and Management Practices on Anaerobic Rootzones. That Roy is an entertaining fellow is well known, though as one in favour of pure sand for green construction, indeed vehemently stating that he cannot recommend other that pure sand, Roy entered what may be thought of in the UK as a 'minefield' of conflicting views. It is perhaps worth noting that such controversy does much to generate a healthy exchange of ideas, which this conference certainly achieved, both on and off the platform.

This report must restrict itself, by the nature of space afforded, to an overview of the proceedings. Thus it may not seem too remiss to skip lightly over that which was no light matter at all -namely the splendid papers presented by College Lecturer, Dr Richard Gibbs; Agronomist, David Stansfield; and Golf Course Architect, Martin Hawtree; for their recorded presentations may well form the basis for future individual articles within our pages. Rounding off day one, let me just mention Larry Gilhuly, Director Western Region, USGA Green Section, and his hugely entertaining The Good, The Bad and The Ugly of Golf Course Management.. Larry, in his USGA role, carries out a function not dissimilar to that of STRI agronomists and his presentation, spiced with the wildest slide show imaginable, took delegates on a tour of those golf course horrors in the USA that all too often looked just like home and perhaps a shade too close for comfort.

Greenkeepers are well known for their temperance and it was therefore no surprise to learn that delegates had all retired early to bed, the better to be bright-eved for eight lectures on Saturday! Dr Bill Adams began with a timely discussion on the Thatch problem, followed by Joe Paulin, whose Greenkeeping from Indiana to Ireland to Gleneagles demonstrated how good management techniques can cross not only regions of the U.S.A., but whole continents. It was all bonny stuff and made us glad this Yank had joined our ranks. George Shiels, Vice Principal of Merrist Wood College, suggested his talk might best be regarded as a commercial break, continuing in his jocular way to expound on how Merrist Wood was breaking new ground

changes in greenkeeper training and financing were welcomed at **BIGGA's** National Education Conference when the R. & A. announced disbandment of the G.T.C. in favour of a new Joint Golf **Course Com**mittee. Our **Association is** to have a much greater say in all future programming

with a PGA endorsed educational course- aimed at low handicap golfers and pro's - regarded in some greenkeeping circles as controversial. He made it sound innocent enough, though I personally found it strange that he parried so many questions from other colleges, with a 'four aces to the chest, musn't tell you too much, you're the opposition', style of reply. One would hope that an educational break-through, if that is what the Merrist Wood course represents, might be shared; rather than guarded in this protectionist fashion.

Geoff Hodson, as many of you know, is the mastermind behind Lindum Turf. It therefore came as no surprise that he had masterminded the nifty little four man presentation, titled: The Golf Course-from Conception to Completion. A whistle-stop tour in just 70 minutes, it was quite stunning. The amiable Steve Cadenelli, GCSAA President for 1991, talked of the role the greenkeeper / superintendent plays and in listening one was struck not so much by high contrasts but by the many similarities revealed. If Stateside greenkeeper status appears different it might be because we in Britain have the unique habit of not selling ourselves too well. Shades of Bobby Gee, one might say.

Freddie Ten Hage is a name familiar with many, and as Holland's greenkeeping ambassador and most enthusiastic BIGGA member he entertained us in fine style, describing his native golfing country in a fashion that was both humorous and informative. As a historian I'm often puzzled that so few Dutchmen have emerged onto the world golf scene, for golf, or colf (the short game) and kolf (the long game) as titled in Holland, originated in the low countries.

Everyone anticipated something special when Nick Park, Chairman of the R.&A./ Unions Sub Committee, chaired a panel on The Way Forward Document & Subsequent Developments. We were not disappointed. First revelation was that a new JOINT GOLF COURSE COMMITTEE - a five man panel from the home unions and the R.& A .- had been established to co-ordinate the raising of

funds for both technical matters and training and recruitment. In both areas BIGGA was visualised as playing a crucial role, with the Technical Sector envisaged as fulfilling a similar role to that of the USGA Green Section, both the STRI and BIGGA being solidly represented.

Turning to training, the proposal was that the Golf Unions, the R.& A., BIGGA and those representing the educational bodies should form a panel of experts and, once needs had been established and budgets prepared, refer back to the Joint Golf Course Committee. In turn, the JGCS would ensure suitably realistic levies were collected through the unions, with still further revenue added by R.& A. donations. (Continued overleaf) GREENKEEPER INTERNATIONAL May 1991 23

Education

(from previous page)

Summarising, Nick Park impressed upon us three key factors which would bring about change for the better: First, the new structure would ensure total continuity and thus override or outweigh any individual whims or personalities. Second, that greenkeepers (BIGGA) will play a much bigger part in deciding how (much larger) sums of money might be spent. Finally, that this was a genuine partnership between Unions, Clubs and the Association.

Asked if professional golfers might have a part to play, Secretary of the EGU, Keith Wright, suggested that there was no place for them in this endeavour, "indeed", he continued, "the sooner we convince Clubs that greenkeeping is an art and a profession the better it will be for all concerned". A murmur of approval rumbled through the halls.

One might imagine this session a hard act to follow, but with an up-to-the-minute topic like Greenkeeping in the year 2010 – Who are we training and for what? Dr Hugh Nunn took the day to a splendid close, all present being given plenty upon which to cogitate.

Saturday night was given to merriment, with a fine banquet set before us in the historic Merchant Adventurers Hall, followed by the riotously funny act of Barry Williams, which proved to be an inspired choice in sealing the high mood of the evening.

With a somewhat subdued audience, following Saturday's excesses, Larry Gilhuly judged the mood perfectly with It's a matter of Quality, for although specifically informative it had just the right seasoning of humour to bring sparkle back into weary souls. Two young masters of their craft followed. Ken Siems first; demonstrating both visually and vocally that bent grasses (and other innovative features) at East Sussex National were no myth, with Peter Jones following in fine style to tell us (again with splendid pictures) how at Collingtree Park he had mastered the pure sand greens and Penncross conundrum. Both left us on a 'high', which remained to the end, Dr Roy Goss winding-up by discussing alternatives to our old 'friend' Poa annua.

Leaving York, we are heartened by the good news from Nick Park, inspired by the good vibes that such conferences instil within us and gladdened that old friendships have been renewed and new ones created. We shall be back for more!

A learning experience

David Norton, the TORO Greenkeeper of the Year, recently spent two months in America as part of his winners award. These are his observations...

A irports can be chaotic enough in themselves and I had seen quite enough organised chaos on both sides of the Atlantic, with my journey taking over 20 hours from Beverley to the University of Massachusetts. Just when I felt the worst was over along came a sting in the tail. That sting was the 15 minute ride on Boston's underground, though without taking you on a similar ride I cannot begin to explain its nastiness. Suffice to say that in the whole eight weeks away it was the lowspot of my tour, and I count myself lucky to have arrived with luggage intact. When I finally reached the campus it was dark; below freezing; snowing; and the dormitory was locked!

I was soon inducted into American ways and began the seven-week, eleven subject, course in fine spirits. These included turfgrass management; golf course architecture; turfgrass diseases; entomology; irrigation; physiology; personnel management; calculations; soils and fertilisers; trees and shrubs; and the equipment shop, with students being tested by exam or practical project, sometimes both.

There was never a dull moment, for the excellent course material was both informative and practically based and though classroom days were long – 8am to 5.30 pm – the time flew past. Some of the material was familiar from my days at Askham Bryan, with the presentation made doubly fascinating by its 'Americanisation'. For example, our meadow grass is known as Kentucky Blue Grass (which sounds much nicer) and came to light when latin names were used in the classroom. My fascination grew when talk turned to American warm season grasses – so different from those few varieties we have here in Britain – and the management practices necessary for their survival.

The essential ingredient in any learning experience is, in my opinion, the dialogue that comes after school. My unfounded though long-held views on America and the Americans were soon changed through such conversations and I now feel that no big gap exists in the capability of 'them' as opposed to 'us'. What is clear, however, is that education is a high priority, high profile subject, and this we must emulate at every opportunity if we are to gain the same professional recognition enjoyed by our American cousins.

Did I tell you about the war? It broke out whilst I was there, giving me an exposure to American news coverage that was truly mind-blasting. Twenty-four hour TV coverage on four channels, newspapers crammed to capacity and in Amhurst itself the sight of demos and peace protesters marching on the streets. This climaxed on George Washington's Birthday when a peace protester incinerated himself on the village green. Thankfully a cease-fire was called before I flew home.

This was no "all work and no play" trip and I lived it up in Las Vegas at the GCSAA show. I had been psyched by fellow US students into believing the show would be enormous and indeed it was quite big, though not as big as they would have it. It was good though, with many excellent short, sharp and snappy 20 minutes lectures and a chance to see the Hydrojet, both on show and later in action in California. Suddenly familiar faces appear at the BIGGA stand, Neil Thomas, Debbie Savage and Ivor



The Tamarisk Course, southern California

Scoones, and a chance to meet ICI Premier Greenkeeper Award winner, Anthony Davies, who had also won a trip to the show. Likewise familiarity at the TORO exhibit where Graham and Dave presided and where I was invited to participate in still more merriment – this time at TORO's reception party.

On campus I had met folks from Sun City; Pebble Beach; Butler National; Pinehurst and Pole Creek, to name but a few of the famous courses represented, whilst at the show I was privileged to meet and talk with many other important and influential people in the golf industry. Truly a learning experience.

Las Vegas itself will long live in my memory, with its gambling tables and over-the-top extravaganza style. Could you really believe it, I even saw white snow tigers guarding the entrance to the Mirage Hotel?

Returning to school, a final grand dinner (coinciding with celebrations of the 60th anniversary of the turf school) was shared with lecturers and students, before we all received our certificates at a passing-out parade. I had learned so much, mixed with so many fine people and was reluctant to move on, but California – in the shape of TORO's Irrigation Plant at Riverside – beckoned.

So to the final week, with a conducted tour of the plant proving most interesting and hugely informative. A real 'home cookin' meal of delicious taste and proportion with Bill and Carol Theole was followed by a trip with Bill to the desert. Palm Springs is where TORO have a desert outlet and from this base we visited several eye-popping courses and talked with green maintenance staff. The courses at PGA West, La Quinta and Tamarisk especially impressed me and it was at Tamarisk that I saw my first ever Poa trivialis greens, which in both Britain and America we were taught were 'no go'. Seeing was definitely believing! Funny thing, they were suffering the effects of a 5 year drought, though on the day I visited it rained more than it had in two whole years – typical!

One day to go, with the morning spent at Riverside in mind-blowing discussion with Jon Williams on irrigation systems past, present and future. I do hope he achieves all that he is aiming for. Indeed, on reflection, I'm sure he will. Now the end is looming, though I could happily stay on for several more weeks in California, and I am sorry to leave. The airport newsstand offers an English newspaper for £5.50 and I begin to feel drawn homeward bound. Calculations now reveal that I've covered 20,000 miles, being transported through Boston's subway nightmare to the tables of Vegas and the beaches of California. A great and rewarding experience which I shall never forget. There are too many people to thank individually, but to everyone concerned - the organisers, TORO as sponsors and all Americans who made me feel so welcome - thank you all. May all future winners enjoy equal pleasure and delight and, perhaps most important of all, gain true and lasting benefit from the learning which such a trip affords.

Part Two

A fter spending considerable time and expense in making a planning application, it will eventually seem worthwhile after the agonising wait is over and consent is granted. Sometimes, however, the case may arise when a District Council will only allow development to go ahead after a number of specific criteria have been satisfied, the requirements normally coming in the shape of a Section 52 Agreement. The developer must satisfy these demands as soon as the information is available, which may pertain to such matters as site access, or further more detailed landscaping plans. In any case, all relevant information must be submitted to the District Council, to help them visualise the extent of the proposals.

From this point, it is effectively possible to begin construction works on site if the design has been finalised and a contractor appointed. It is, however, more often the case that detailed design work must still be prepared. The plans submitted to the District Council will invariably have shown the overall design layout of the golf course and therefore it will be possible to use the Routing Plan for the major design work.

The Routing Plan alone will be insufficient in providing the detailed information necessary for construction of the course as it will only show a relationship between greens, tees and fairways, as opposed to finished levels of the proposed features. It will therefore be necessary to produce construction drawings for greens, tees, fairways and all other features on site, such as lakes and moundings.

To prepare these, a thorough topographical and site survey will need to have been carried out, showing all existing contours and other interesting features such as hedgerows, lakes, streams, marshland, public footpaths, mature trees and woodlands, badger setts, sites of special scientific interest, and any conservation areas that may exist.

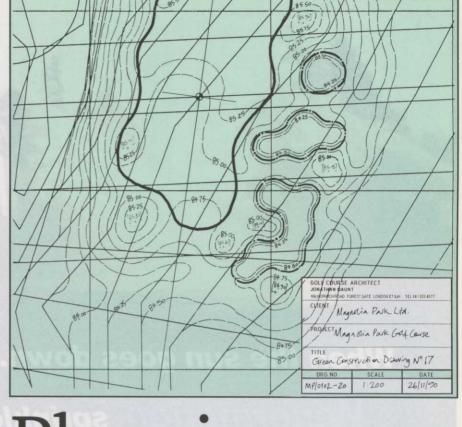
The routing plan will have taken these important factors into consideration, as will all detailed con-

struction drawings. Each construction drawing will show the area where a proposed feature is to be located and indicate, by showing proposed contours in relation to those existing, how much earth movement will be necessary to create a feature. The scale of the drawing will be sufficiently large in order that accurate measurements may be taken off in setting out the design on site.

Each green, tee and fairway drawing will provide the contractor with an accurate means of pricing the construction, however these drawings should only be read in conjunction with a specification and accompanying Bills of Quantities.

Once a contractor has been chosen, by competitive tender or by negotiation – (usually based on the cheapest quote, though sometimes uncertainty about the lowest bidders ability to complete the contract before going broke may see the second lowest accepted) – it is his responsibility to provide both architect and client with a construction programme and timetable, indicating the period necessary to build the golf course and including an agreed completion date. Sometimes a contractor can suffer major set-backs due to inclement weather or with differing soils, which can make it very difficult to estimate just how the contract is due to progress. The construction programme, therefore, is produced purely as a guide-line.

The contractor must also provide the architect with samples of soil, peat, sand and seed mixes for approval and analysis prior to any orders being made. Once a design is finalised the contractor is responsible for the accurate setting out of the design on site, which is checked and approved by the architect before construction proceeds. The architect must also ensure the golf course is being built according to specification and that correct materials are used. He will normally visit the site once or twice a month to supervise construction and certify completed work. The contractor will provide sample stockpiles of materials on



Planning APPROVED

site, which must be available for random testing should the architect feel such tests are necessary.

During the construction the contractor will submit to the client a valuation related to works completed. This is normally at the end of each two or four week period. It is the architects responsibility to then issue a certificate which confirms that the contractors calculations are true and correct. The client will employ a Clerk of Works throughout to oversee the works, however, the architect will act as an unbiased judge should complications or disagreements arise between either party. Once the architect has signed a certificate the client will release payment to the contractor.

As the contract progresses, meetings will be set up on site by the architect, involving both contractor, client and himself and established to ensure progress is satisfactory and the contractor is keeping to construction schedules.

There are many imponderables, but if the contractor has adhered to specifications, drawings and his programme and there have been no major difficulties, the golf course will be finished on time, enabling the architect to grant the contractor a Certificate of Completion. This is only issued when both architect and client are fully satisfied and will, as a normal course of action, include a defects correction clause. This clause is a negotiable factor and is dependant upon individual client wishes, however it usually extends for twelve months after completion. If any part of the golf course fails in this time, the responsibility lies with the contractor to return to site and make good those faults.

Once construction works have been completed the course should be left to establish and mature for 18-24 months – dependant upon the construction specification – and it is during this period that course grooming will play a vital role and a maintenance contract will be established.

• Next month – A golf course without players – maintenance is the key to success before opening day. Building a Golf Course – from virgin territory to opening day. Golf Course Architect JONATHAN GAUNT continues his series

• The author is currently designing the 27 hole Farrington Golf Club, near Bristol, the 18 hole Breinholtgard Course in Denmark and re-designing the Leasowe Course near Liverpool.

When the sun goes down...

Watermation sprinklers pop-up

See us at Landscape **Industries** '91 Stand L14

For the best in automatic irrigation

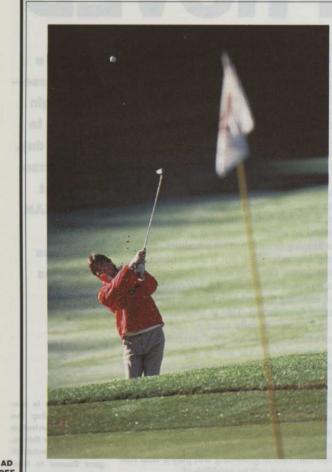
Watermation Ltd Tongham Road, Aldershot, Hants GU12 4AA Tel: 0252 336838 Fax: 0252 336808

THE LATEST **THINKING IN GOLF COURSE** CONSTRUCTION

The kind that gives you a championship calibre golf course within the limitations of your budget. CDC's unrivalled package means expertise at each stage of design, construction and maintenance. That's why we're the fastest growing golf course constructors around. So call us for our brochure or talk to us about your new project today.



CDC GROUP PLC, Chapel Works, Waldringfield, Woodbridge, Suffolk IP12 4PT Tel: Waldringfield 791/2/3/4 A member of the British Association of Golf Course Constructors



Landscape Industries '91 Show Preview

<complex-block>

The Landscape Industries event is proving to be an important focal point for this growth industry. Now in its fourth year, it has established itself as the major exhibition, growing by 30% every year since its inception. Over 240 companies and organisations, covering all aspects of this diverse industry, chose to exhibit at Landscape Industries '90 including 13 colleges and 29 technical and educational displays. Landscape Industries differs from the other events by its concept. It is put together not just as a trade fair, but as a valuable source of technical and educational information. The benefit of Landscape Industries is for the whole industry, funds are ploughed back into research, education, training and development.

The exhibition is also intended to contribute to a more integrated approach to the development of landscaping and the environment, and has the long term aim of bringing together those who manage land with those who have the technology and skills to create and adapt the landscape to reflect the changing needs of the community.

The landscape industry is a growth sector and landscap-

FINN Hydroseeders and tackifiers

CONWED Fiber mulches

Full range of amenity and wildflower species

ing issues in their broadest sense are assuming greater significance in all aspects of life.

Landscape Industries '91 provides the ideal business forum for everyone with an interest in this diverse but specialist industry.

The event has the sound backing of the three key organisations: RASE (Royal Agricultural Society of England), BALI (British Association of Landscape Industries) and ILAM (Institute of Leisure and Amenity Management), together with the committed support of such organisations as the National Turf Grass Council, the Association of Playing Fields and Leisure Managers, the ABT and many others. By working together, these organisations provide a partnership with the sole purpose of developing an event which will help to stimulate the growth of the landscape and leisure industries.

Companies and visitors alike can meet in a vibrant business forum within an effective market place to develop and exploit existing and new opportunities.

Landscape Industries offers the unique combination of a • Continued on Page 29

Dona

SEEDS

A growing exhibition for a growth industry... the Landscape Industries '91 show, at the National Agricultural Centre, promises a wealth of technical and educational information

Pictured: a Bobcat on the Golf Course

Donath Seeds Ltd. Priory Industrial Estate Tetbury Gloucestershire GL8 8HZ Phone: 0666 502834 Fax: 0666 502401

Fast application and reduced labour costs.

One operation for multiple products Cost effective landscape revegetation Reclamation and erosion control Enhanced establishment for longterm satisfaction and results.

Come and see us on Stand A20

AD REF 316

AREYOUA GRADE-A GREENKEEPER?

Grade A Amenity seeds from British Seed Houses are for groundsmen who want only the highest quality turf.

Whether your requirement is for golf courses, sports grounds, parks, urban areas, road verges and reclamation sites – British Seed Houses can supply the right mixture for your needs.

At their extensive grass trials ground at Lincoln, British Seed Houses evaluate hundreds of different cultivars. Only the best are selected for use in Grade A mixtures.

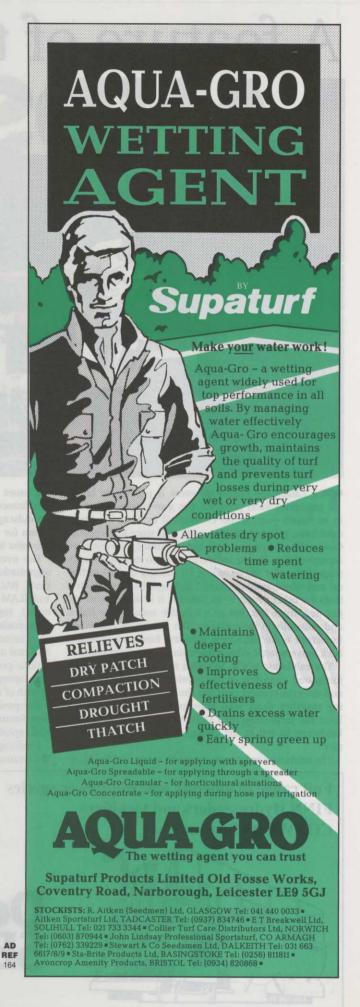
With 24 different mixtures available, advice on the appropriate Grade A mixture to use for specific site requirements can be obtained from our experienced and technically qualified staff.

AMENITY MIXTURES

Send for a catalogue for more details of Grade A Amenity Seeds from British Seed Houses Ltd., Bewsey Industrial Estate, Pitt Street, Warrington, Cheshire WA5 5LE. Or telephone (0925) 54411.

) BRITISH SEED HOUSES LTD

WARRINGTON 0925 54411 · BRISTOL 0272 823691 LINCOLN 0522 86714 · EDINBURGH 0968 78480 · BANBRIDGE 08206 62207



REF

'The industry has come of age'

From Page 27

quality indoor presentation of static stands together with outdoor working demonstrations. With all the leading commercial companies presenting the latest technology, equipment and services, Landscape Industries is a show providing the visitor with the most comprehensive range of exhibits covering all aspects of landscape and leisure.

The event aims to attract the key decision makers within local authorities, landscape architects, county councils, specifiers, designers, contractors, and golf greenkeepers and provides the opportunity for

companies to meet with their customers and prospective customers.

Last year over 7000 visitors took the opportunity to see the static exhibits, working demonstrations and technical features on this compact, accessible site.

Visitors will be able to see the established mix of trade stands and technical and education displays alongside working demonstrations, all designed to communicate new developments and technology and encourage further growth of the industry as a whole.

There will be products and services covering:

- Interior and exterior landscaping.
- · Machinery and equipment.
- · Grass seeds, turf, nursery stock and chemicals.
- Fencing and paving.
- · Forestry, amenity and leisure exhibits.
- Financial, design, advisory and consultancy services. Special features include:

- Informative seminar programme covering quality assurance, contract monitoring and alternatives to peat.
- BALI pentathlon.
- ATB/BALI Training In Action demonstrates the type of training available by means of various working projects
- Demonstration of tree climbing and equipment by the Arboricultural Association.
- Safe handling with forklift trucks demonstration.
- Teach-in by the National Turfgrass Council on reinforcement materi-

als and turf quality. Landscape Industries '91 is expected

to attract the usual professional audience including landscape architects, local authorities, contractors, engineers, specifiers and designers....in fact, representatives of the whole cross-section of this diverse industry.

Bill Hickey, Chief Executive of BALI feels, "For the first time all those concerned with the landscape business have an exhibition of their own, where they can meet to concentrate on all issues necessary to discuss and develop matters of common interest and exert a measure of control over the future of their industry... Landscape Industries is

more than a trade show, it is a statement that the landscape industry has come of age and is capable of standing on its own feet".

The event takes place on 5th and 6th June 1991 at the National Agricultural Centre, Stoneleigh Park, Warwickshire and is open from 9.30am to 5pm on both days. Admission is free.

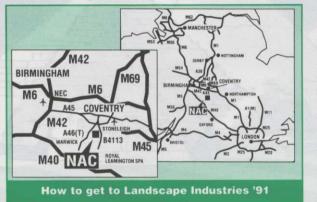
• Run-down of some of the exhibitors: Pages 31 and 32.



Golf Course Ground and Irrigation Works. General Landscaping. It's all Bobcat Territory.

Real mechanical manpower with exceptional workload versatility is what Bobcat compact construction equipment offers. Skid steer loaders, excavators and trenchers. Comprehensive range of easy to fit attachments provide economic working solutions to general landscaping worksexcavating, grading, backhoeing, trenching, digging, post holing, tree transplanting, raking. And more. Bobcat. Technically and mechanically superior.

Contact for further information: Bobcat — Melroe Europe, 8-12 Coventry Road, Hinckley, Leicestershire LE10 0JT. Tel: 0455-251725. Fax: 0455-637574. Tx: 34330. Bobcat Parts and Services Support from a National Dealer Network.



From dozens of different playing surfaces to re-claimed spoil heaps, from sand dunes to low maintenance highway verges, the J Team has the technology, the varieties and the mixture to give practically anywhere you can think of a strong, healthy grass covering. As soon as you start thinking grass, call us in straight away.

can

If anyone can

A LAN



W.W. Johnson & Son Limited Boston Lincs. Telephone: (0205) 365051 Branches at Haydock & Woodley

AD

Landscape Industries '91 Show Preview

Who to watch for at the Show



Rolawn (Stand E7) are exhibiting four grades of purpose-grown turf at Stoneleigh: Advantage - supplied guaranteed free of annual meadow grass and professionally maintained to enable greens to be brought into play quickly; Select - a really fine turf for

areas where non-ryegrass turf is essential; Medallion - for more hard wearing tees and landscaping sites around the clubhouse; Sports - an extra hard-wearing grade of turf. Recent prestigious Clubs using Advantage include Ballybunion and Turnberry and the new Jack Nicklaus course at Mount Juliet in Kilkenny. Pictured is Wavendon Golf Centre, turf with Rolawn Advantage.



Nomix Chipman (D7). Just one year after its widespread launch into the amenity sector, the Nomix Compact, pictured, has received a 1991, Design Council, British Design Award. Key to the system is a snap-in chemical cartridge that significantly reduces the risks of operator contamination. With properly formulated chemicals and a unique disc design, the company has also been able to demonstrate a forty-fold reduction in spray drift compared to knapsack sprayers. It retails at £86. plus VAT.

Interseeds Ltd (J9) will be detailing their 23 specialist 'PRO' range of grass seed mixtures, 10 PROFLORA wild flower mixtures and 20 PROFERT Fertilisers. Their main grass varieties include Lisabelle & Lisuna perennial ryegrasses, Lifalla Chewings fescue, Liprosa slender creeping red fescue and Limousine smooth stalked meadow grass - the latter top-rated in the UK and used in the PRO 40 and PRO 45 mixtures for golf tees and fairways. Two new mixtures - PRO 5 and PRO 55 have been launched this year for use on golf greens. Of particular interest is their 'Liquid Sod' pre-germinated grass seed which provides rapid establishment of grass on golf greens, tees and fairways.

ICI Professional Products (D16) will be displaying their wide range of products including the highly successful range of 'Longlife' fertilisers, plus the specialist tree and shrub fertiliser 'Enmag', a unique product that provides plant nutrients in a slow soluble form. Major emphasis at the show will be placed on the 'Caseron' range of pre and post emergent herbicides where two applicators will be featured. These are the 'Cascade' hand held applicator, pictured, and the 'Urgent' 101 back pack machine. A new Technical



Information Bulletin covering all aspects of 'Caseron' will be available for the first time. Call on the ICI stand for a free copy.

An exciting feature at this years Rhone-Poulenc stand (E11) will be a demonstration of DATACHEM, a new computerised interactive information system on the safe handling and use of pesticides. Also displayed will be the extended range of CDA products, new up-dated CDA equipment with added safety features plus two granular herbicides -Simfix Granules and Borocil K. The Rhone-Poulenc Team will be on hand to assist with technical advice and information and extend a warm welcome to all visitors.

Watermation (L14) will be showing their very comprehensive range of irrigation equipment covering all aspects of water requirements, including long range golf course automatic sprinklers and controllers. Their latest long range sprinkler is the GN5 pop-up, designed and manufactured in England by Watermation. This comes with an optional turf top and has a throw between 85 -100 feet.

Shelley Signs Ltd (C6) will be exhibiting examples of their manufactured GRP signs and interpretive panels. This material - Glass reinforced plastic - has the advantage of being extremely durable and is ideal for external use. Shelley Signs also specialise in golf course entrance signs (which can be free-standing), layouts, plans and tee





AD

REF 137

Landscape Industries '91 Show Preview

Who to watch for at the Show

Watermation's GN5 pop-

up, long-range sprinkler

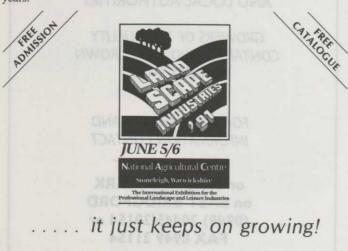
marker plates, and will draw up design proposals to meet individual requirements. Shelley Signs Ltd are at Eaton-on-Tern, Market Drayton, Shropshire TF9 2BX.

D.W.Frost (Wholesale Nurseries) Ltd (M11) aim to provide their customers with good quality plants, backed up by an efficient service generated from their Nursery situated at Old Fosseway, on the A46 Leicester-Newark Road one mile north of Bingham. Here at their container unit of 15 acres they produce high quality container grown trees, shrubs, roses and amenity plants for use by Local Authorities and Landscape Contractors. They also produce a large number of open ground trees; whips; and amenity type shrubs of all sizes for supply between November and April.

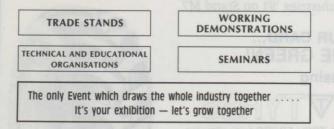
Brittanic Garden Furniture (A9) produce a collection of high quality teak outdoor furniture in designs that are simple, sturdy and stylish. Benches range from 4ft two seaters to 8ft four constant s, all with matching armchairs. New to Britannic's range is the tree seat made to surround any size of tree and available in various styles. Brittanic are in the Good Wood Guide, the Friends of The Earth Handbook. They provide a carving or engraving service for donated benches.

Donath Seeds (A20) are proud to have been appointed the UK distributors for the Finn Corporation: manufacturers of quality hydroseeding equipment, and Conwed Fibers: manufacturers of hydraulic wood fibre mulches and mattings. These two product lines complement Donath's main seed business

where they specialise in the formulation of customised grass and wildflower mixtures. Hydroseeding, as a method of seed application, is widely used on golf courses throughout the USA, where the cost effectiveness, germination enhancement and consequent speedy seedling establishment of the technique have proved invaluable over many years.



Landscape Industries '91 provides the ideal business forum for everyone with an interest in this diverse but specialist industry



The expertise and superb facilities of a major exhibition supported by the key players in this dynamic industry.

Organised by For ROYAL AGRICULTURAL SOCIETY OF ENGLAND RO BRITISH ASSOCIATION OF LANDSCAPE INDUSTRIES NA INSTITUTE OF LEISURE AND AMENITY MANAGEMENT Tel

or details contact ayne Spence toyal Agricultural Society of England lational Agricultural Centre toneleigh Park, Warks CV8 2LZ. al- (2020) Second **Gloster Leisure Furniture (M18)** is introducing new additions to its range of solid teak furniture at Landscape Industries '91, including a new bench for feature locations, a new table ideal for outdoor caterers and a new litter bin which can be fixed directly to concrete. The 'Sunray' bench features a unique sunburst design on twin back panels, a contoured seat panel and wide flat arms for comfort. A medium weight design, the new bench is available in 4 & 5ft lengths.

The **Bobcat Melroe Europe** display (**FLD 75T** and **75W**) will feature new machines amongst their existing range of skid-steer loaders, compact excavators and trenchers including specialised easy-to-fit attachments. From the ten model skid-steer loader range the new gen-

eration 50 series will predominate, supported by models 443 & 543, all popular in landscaping operations with major attachments being the landscape rake, post hole auger and dirt buckets.

Amenity Land Services (F7) offer a wide variety of goods and services to the landscape, forestry and amenity sectors. Featuring this year will be their Tree & Shrub Plant fertiliser, Fine Turf products, Contract Weed Control services, Tree ties and planting sundries. Amenity Land Services welcome customers old and new and are holding a free draw for several Nomix Compact Sprayers for those registering at their stand.

Sierra (UK) Ltd show **(D22)** their most recent addition in specialist turfcare controlled release fertiliser: Sierra turfmix (28:5:7+Fe), the first turf feed to combine readily available iron, nitrogen and phosphate with

controlled release NPK. Thus one application in early spring promotes rapid greening and controlled regrowth of outfields and fairways for up to 7 months. Also on show are Osmocote N (39:0:0) which enhances tee turf repair and steady growth without flushes and 5-6 month Osmocote Mini granules (18:6:11), which provide complete controlled release nutrition for fine greens turf without disruption of play. Sierra CRF's release nutrients according to soil temperature, thus matching turf growth.

Melcourt Industries (5T&5W), leading producers of bark and bark based products will be making good use of an outside stand to show their full range of mulches in a landscaped setting which shows the variety of effects that can be achieved. produced from home grown timber, Melcourt's range of mulches, soil conditioners and surfaces are all 100% organic and free from pesticides and chemicals.

Supaturf Products of Narborough, Leics. **(L19)** will be showing their new, totally organic based fertiliser -Greenex. Specially mixed to a 5:0:3 formula for fine turf areas, Greenex is made from the very best organic materials including hoof and horn, dried blood, seaweed meal and cocoa shell. Also on display will be a range of Aqua-Gro wetting agents and the Advantage applicator for applying Aqua-Gro through a standard hose-pipe during normal irrigation. Look also for the Even-Spred fertiliser spreaders, Top-Line marking machines and speciality turf care and amenity products.

Johnsons Seeds (H20) has not only updated many existing mixtures but introduced a series of classifications for their 1991 J Range – including some for golf courses. Although prominence will be given to the JL Range, Johnsons other five seed mixture ranges will also be featured. They are: J range for overall sports and amenity applications; JR range for reclamation work; JF range for naturalistic landscapes; JT range for turf growers and JG range for golf course renovation and creation. The Golf range includes six mixtures – JG61 to JG65 plus Greensmaster – providing a recommended mixture for Greens, Tees, Fairways and Roughs.

British Seed Houses (EX L3) will be exhibiting an interesting display of photographs covering some of the major projects where their range of amenity grass seed, sportsground fertilisers and wild flora conservation mixtures have been used over the past 18 months. They are particularly pleased with the results that have been achieved with their A22 low maintenance ryegrass mixture, which shows a saving of up to 40% less cutting than a normal ryegrass mixture. A new booklet has recently been prepared giving details of their 15 different wild flora mixtures, which contains full cultivation and management information. During the exhibition the company's fully qualified staff will be available to answer technical questions on their range of products.



Talking with Jon Allbutt recently I learned that despite a lapse of 15 months since the introduction of the COSHH Regulations many Clubs are still deferring a decision to carry out risk assessments. This prompts me to suggest that they might do well to listen to some of their colleagues who are currently labouring under Enforcement Notices issued by Inspectors after a visit and inspection. There is also some action being undertaken by Inspectors under the Control of Pollution Act where it was found that disposal arrangements were inadequate and considered to be a source of river pollution. The River Authorities are also active in investigating sources of high levels of pesticides in water. This is not the professional approach that is expected of our industry. Need help? Perhaps Jon is your man - call him on 0959 75575.

The exceptionally hot summer of 1990 found many greenkeepers in trouble, with recommended greases melting, causing turf damage and leaving unsightly marks. The green staff at New Zealand GC, Surrey, discovered a grease previously used in the bakery industry that enabled them to extend the lube intervals from a recommended once daily to once every five days on their turf aerators. The procedure for just one machine was reduced from 7.5 hours weekly to just one application taking 1.5 hours, and the synthetic grease, made by Pen Lubrication Ltd, Woking, (tel: 0483 765233) did not melt.

John Deere's commitment to the groundcare market in the UK has increased further with the announcement of two new dealer franchises in Suffolk and Lancashire. The signings - with Tomlinson Groundcare of Stowmarket and Cornthwaite Farm Equipment of Ormskirk - coincide with the introduction of a number of new machines for the pro. market including riding mowers, lawn tractors and trimmers.



Douglas Walker, M.D. of John Deere, with Cornthwaite's **Groundcare Manager, Walter Pearson**

Supaturf Products Ltd of Narborough, Leicester, have introduced a new, totally organic fertiliser to their amenity range named Greenex. Specially prepared to a 5: 0: 3 formula for fine turf areas where quality is important, it can be used from January to October. The nitrogen content is made of organic materials such as hoof & horn, dried blood, seaweed meal and cocoa shell, formulated to release nutrients that correspond to normal growth patterns of grass in prevailing climatic conditions. A descriptive brochure is available, Tel: 0533 750256

Available from Mommersteeg, A Seedsman's Guide to Amenity Grasses is a most useful little manual, covering sowing techniques, weed invasion, land reclamation etc. With many illustrations, a copy may be obtained from Mommersteeg Seed Co. Finedon, Wellingborough, NN9 5NT.

The HSE have issued a new guidance note: (GS 48) Training Standards of Competence for Users of Chainsaws. It sets out the guidelines for the selection of chainsaw operators, their training and certification. Having seen some pretty bloody accidents I feel this is long overdue and all who have chainsaws will need to check that they comply. The Guidance Note also sets out the Levels of Certification and who the recognised training bodies are. Inspectors use these Notes when inspecting premises and will be expecting employers to be aware of them and have taken action to meet the standards. Being warned is one thing, being trained is another... perhaps another case for calling Jon Allbutt?



AD REF 176



Golf Course Furniture



ew things are more off-putting to members or visitors

than the sight of totally clapped-out shoe brushing

equipment, scruffy signs (or none at all) and tatty perimeter

fences with broken chains. Taken further, a lack of seating,

tee markers made from upturned buckets of concrete and

shortage of litter bins are constant irritants. On the other

hand, attractive premises demonstrate the professional

image the modern greenkeeper seeks to project which, apart

from impressing outsiders, help also to improve employee

Perhaps the most obvious and certainly the most useful

memorial a Club might install when a well respected mem-

ber 'shuffles off this mortal coil' is the bench seat. Speaking

with Alan Bradley, Marketing Director of Lister by Geebro,

he advises that if such a memorial is to be a lasting one

there are certain criteria to be observed, with the most obvi-

ous being 'make sure it can't be stolen'! Though teak made seats (the number one choice, being totally maintenance

free) are very heavy, a determined gang of thieves might

still man-handle them and the recommendation is that solid

anchorages be used. Further points to insist upon are

morale and performance.

moves to make...

> The state of Golf Course furniture, equipment and signs, mirrors the image of the club... at least to the casual observer. Greenkeeper International

suggests ways to give every club that certain something to make golfers keep on coming back



the anatomy, sloping backrests, screws that are dowelled and, above all, units that are heavy in weight. The temptation to choose lightweight seating should be avoided, for solid teak - taken from state controlled plantations in Java outlasts other timbers and will survive perfectly for more than 100 years. Inscriptions, either directly carved onto a backrest or engraved on brass plates, are available from most leading manufacturers.

rounded, substantial armrests, contoured seats that mirror

There is no excuse for a lack of litter bins. These are comparatively inexpensive and in some cases, if on-course advertising is not anathema to a Club, may be paid for through local trade support. Personally, I'm all for the neat and uncluttered look and would plump for a well designed, solidly made job that blends sympathetically rather than distracting. The choice is wide and we should remember: far more litter is discarded indiscriminately when bins are not readily to hand.

Remember those sweltering summer days? Are your water fountains in working order or do they need replacing? There is a growing demand both for standard fountains

 Continued overleaf



REF

Pictured: left, the teak Mendip seat by Lister/Geebro. Above: vandal-resis tant fountain by Mae

You can be as comfortable on the course as you are in the clubhouse...



...with a Western Log Company Golf Shelter to protect you against unpredictable weather

Derek Ganning, Course Manager at The Belfry, has recently had 12 shelters installed along with some benches and litter bins, and he says: "I'm absolutely delighted with the quality and durability of these Western Log Company products. Not only are they well-made but they are very pleasing aesthetically. I can certainly recommend them."

...but we do more than just Golf Shelters...

Our company is one of the leading producers of machine rounded and traditionally peeled timber products in the UK. All of our timbers are manufactured in our mills, which are equipped with state of the art machinery.

We only use selected British home grown timber machined to a uniform diameter and pressure impregnated to correct specifications for prolonged life.

As a result we can offer a variety of sizes, and customised designs to accommodate every conceivable need where timber is required in landscape schemes.

- ... Tee boxes
- ... Water hazard retaining walls
- ... Path edgings
- ...Bridges

AD REF

- ... Various styles of fencing
- ...Earth retaining walls
- ...Bark products
- ... We can even supply litter bins!



Golf Course Furniture

GRP sculptured sign by A.C.& M.Birch Ltd



Signs to be seen

From previous page

tapped into a mains supply and for water coolers – more applicable perhaps when major tournaments are staged. Manufacturers have made huge strides in producing vandal-proof units and though not cheap they offer a most welcome break that is always remembered.

Today's golf course signs really are excellent and are guaranteed to enhance any course. Choose from glass reinforced plastic, which is virtually maintenance free and strong and chip resistant, or pressed metal, wood or even granite, which is ideal in areas that experience high vandalism. There appears to be no limit to the multiplicity of designs, course data and logos that manufacturers now offer, with some prepared to give a tailor-made service that includes individual hole plans contoured in relief. The appearance of any course is instantly uplifted by such signs and most require little or no maintenance.

Neglect of obvious little items can mean instant irritation, so when installing shoe cleaning equipment make sure that replacement brushes are readily available, keep spares close to hand and replace them regularly before they begin to fall apart. Keep ball washers filled; and if you're still using those dreadful tin box and sliding brush affairs, take a close look at the foolproof rotary style cast metal ball cleaners or the many enterprising designs imported from the USA.

Neat direction indicators, maintenance free plastic coated chain fencing, putting green flags, water hazard ball retrievers, when in apple-pie order, (which means free from rust and not ready for the scrap-heap,) these will create an orderly appearance that will say to the visitor or member – here is a Club that is proud, stylish and orderly. The kudos will quite rightly belong to the greenkeeper.



Tree seat by Britannic Teak

And and an an an an an and an all
Boom sprayer calibration chart
Read vehicle/sprayer handbook, read label and note the following:
Vehicle details
Spraver details
Application rate of productSpray quality
Water volumePressure
1. Calculate forward speed
Time to Forward travel 100m speed
anona preasar or use avgutan onto-
Seconds KM/hour Now enter forward speed in the second box of Step 2 and middle box of
second row in Step 5 below.
2. Calculate nozzle output required
In the first box below put in the target volume of water per hectare, chosen
after reading the label.
Target Nozzle Target nozzle
X X ÷ 600 =
Litres/HA KM/hour Metres Litres/Minute
3. Select correct type of nozzle and pressure,
as near to the target nozzle output required as
possible, using the operator handbook:
Nozzle and pressure details
ilbrate the sprayer. It is printed here for the guidance of that
4. Now fit nozzles and check the actual output achieved, using a measuring jug
achieved, using a measuring jug
to provide the state of a state of a state of the state o
I 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 Left side Right side
sure to dispose of faulty nozzles to avoid using another time. Enter the actual average output of one nozzle obtained in the jug test in the first box of Step 5 below.
5. To find out the actual output of the machine (in litres/HA), using the nozzles and pressure selected
Output of Number of Total output
one nozzle nozzles of machine
oulenc offers a range of leading seeding weeks are
Litres/Minute Litres/Minute
Total output Speed Width of Water volume
Check
Litres/Minute KM/hour Metres Litres/HA
6. To calculate the quantity of concentrate
required Water Tank Tanks per
volume capacity hectare
Litres/HA Litres
Concentrate Tanks per Concentrate
Product
Application
Litres/HA Litres Tanks per Area.zo Tanks Part Tank Amount of
Tanks per Arga.zo Tanks Part Tank Amount of hectage - be treated required tank capacity water require
Sq. metres
Tanks Concentrate Total concentrate
required per full tank required
x =
7 To mix a next land
7. To mix a part load
Amount of water Tank Concentrate Concentrate required capacity per full tank for part load
Litres Litres/ML Litres/ML

Selective weedkillers: **Finding the problem, and solving it**

by Technical Consultant JON ALLBUTT

The drought of last summer has given greenkeepers many problems to solve this year. On some soils the traditional balance of grass against weed has changed and suddenly, as if from nowhere, there are large patches of Yarrow; Clover; Parsley Piert; Woodrush and others in evidence. The problem is how to tackle these weeds before they get a grip, and even worse, flower and spread seed all over the place.

The Amenity Code of Practice requires that the all important decisions about what to use and how to use it be taken well in advance of the actual spraying day so that the job can be properly planned: the days of last-minute decisions on spraying are over! The reasons for the poor performance of weed-killers is usually due to bad timing; incorrect calibration; incorrect selection of the spray volume (wrong nozzles!) and selecting the wrong product. Following the guidance in the Code ensures that the job of spraying is effective and accurate and therefore cost effective.

IDENTIFYING THE PROBLEM:

The task begins with identifying the problem. It is not enough to know the names of the weeds found; equally important is establishing the visible density of one weed in relation to the other e.g. 25% Yarrow, 40% Woodrush etc. This helps with deciding on the product to use and whether there is need for one or two applications. Remember the iceberg principle with creeping weeds in turf; for what you see may be as little as one third of what is threaded amongst the grasses. This will be important when deciding on spray volume and spray quality. Weeds that have small leaf areas and a creeping habit make difficult targets. A fine spray quality and a water volume at the lower end of the label directions will not give the penetration to make contact with the target: this results in poor control. Increasing the water volume and choosing a medium spray quality can make the difference between success and failure. The keeping of records is vital here, not just a record of what was decided but a note made three weeks ago or so after spraying of the result.

It would be nice to think that all Clubs now have staff trained according to the Regulations, who are able to make these decisions, but unfortunately many are still clinging to the myth of the 'grandfather clause'!

CHOOSING THE PRODUCT:

An important part of the decision making involves reading all about products that are available to do the job. All manufacturers produce excellent technical leaflets so there is no need to have the actual product sitting on the desk. When picking a product to control more difficult weeds it is a fact that two applications are often essential for effective control. Making this decision may require that the manufacturer is consulted further about rates and timing.

The confusion over the permitted uses of Ioxynil has resulted in many Clubs deciding to stop using this chemical. Ioxynil when combined with others such as Mecoprop and Dicamba is still the best to use against the finer leaved weeds. Ioxynil is approved for use in vehicle mounted boom sprayers and there are no proposals to further restrict its approvals. The choice of water or oil based formulations is also important – the advantages of using a shower-proof weed-killer are obvious – but improved droplet retention and more efficient diffusion into the leaf of the target weed are factors that can make all the difference.

New developments in formulations are slow to reach the amenity turf sector. There are CDA selective weed-killers available and they can be very efficient, however they require skillful use and may not give the essential penetration into the dense canopy of fine turf to give a good leaf coverage. The introduction of Isoxaben as Knotout is a very interesting development; the use of a residual weed-killer to take out the germinating weed seedlings at the critical stage of early grass growth on renovated or re-seeded areas will give a great advantage to rapid establishment of a new sward. Hopefully this is the first of a new range of novel formulations to come in the future. An important part of

The trick is to get the timing right

product selection is to be sure that a risk assessment has been carried out in accordance with the COSHH regulations (see article: April Greenkeeper International).

TIMING:

There are two factors to consider in the timing of applications.

(1) As a general rule it is vital to treat weeds when they are growing strongly and making new leaf. In this condition they are much more receptive to weed-killer and a more complete 'kill' can be expected. The spring is usually regarded as the ideal time, however there are other occasions when weeds are in a more vulnerable state. Conditions in the autumn are often more suitable and some very good results have been obtained during a late flush of growth. Some weeds are almost impossible to kill once they commence flowering: Speedwell, Woodrush, Yarrow and many others become tough and leathery, making spraying a waste of time and money.

(2) The effective control of a bad weed problem can leave the site with large bare patches just when it is required to be at its best! Think a month or so ahead and consider whether the results of a good 'kill' might just be an embarrassment? There are times when the greenkeeper is grateful for anything green! Following a major weed control operation with top dressing or over-seeding may also be an important factor to consider in the seasonal programme. There will be a rush by opportunist weeds to occupy those bare spaces and if you are unlucky it is even possible to remove a large patch of clover and see it replaced by Poa annua! It may be more suitable to wait until autumn before spraying and follow this with renovation and seeding or even turfing in severe cases. Remember that the choice of product may restrict the period between spraying and re-seeding. When all else fails; read the label!

GETTING IT RIGHT!

It must be accepted that all sprayers are inclined to have minor leaks. In accepting this fact the wise operator will have a supply of spare 'O' rings; washers; check valves etc. ready to use when setting up. Don't expect to be able to use the sprayer within minutes of fitting it to the machine, plan ahead and give it a thorough check including a pressure test to show up those inevitable problems.

Some greenkeepers are still adding wetters to weed-killer in the mistaken belief that it will enhance the effectiveness of the product. In fact it can have the opposite effect: entirely wasting the product. If you are unlucky it might also cause severe scorch as the droplets cling stubbornly to the blades of grass. Occasionally a label will recommend the addition of an adjuvant to control particular weeds and in this case there should be no problem, providing the exact amount is mixed - you know - use a measuring jug! The use of unauthorised adjuvants and tank mixes is also a breach of the Regulations.

All the above decision making is of course a waste of time if the sprayer is not calibrated to accurately apply the product. Fitting the nozzles, deciding on speed and pressure and then carrying out a flow test to determine the actual output of the sprayer is the first part of calibration. The second part is to calculate the number of tanks (including part tanks) to do the job; the exact amount of product that is to be added to the spray tank (including the part tank) and finally how much product is needed to do the job.

There are many ways to do this, but what is certain is that the Code of Practice requires it to be done as part of the whole decision making process, well before the job is to be done. This allows for adjustments and changes of nozzle to ensure that the job will be done with due regard for the safety of all concerned.

We have developed a calibration sheet that is short on text and has the space to calculate and record all the information needed to accurately calibrate the sprayer. It is printed here for the guidance of those who may be confused and need a simple procedure to follow. If it confuses you even more, let me know!

There is no substitute for training to make us competent in the eyes of the Law. The greenkeepers who return to work after attending our training courses on the use of pesticides and checked their figures for products; spray quality; and pressures previously used - not to mention the general condition of their sprayers - were suitable embarrassed. The sprayer is also an important tool in the accurate application of soil conditioners, liquid iron and fertilisers. Calibration is just as important here to avoid the embarrassment of striped fairways. It's never too late to learn the right way to do the job!

WELCOME TO A WORLD THAT CARES FOR FINE TURF.

Rhône-Poulenc offers a range of leading selective weedkillers with a unique reputation for consistent high quality and effectiveness in controlling turf weeds.

CLOVOTOX controls clover and many other broad-leaved weeds with a single application. The unique Tip 'n Pour container is designed to reduce exposure to the chemical making it easy to use.

SUPERTOX 30, also in Tip 'n Pour pack, gives effective control of a wide range of broad-leaved weeds and can be used on all turf areas. It's non-volatile formulation is ideal for use near ornamental plantings.

DICOTOX EXTRA economically controls at least seventeen weed species and is specially suited for use on outfield turf.

Supertox 30 and Dicotox Extra are also available in CDA formulation. No water to add, no mixing, no handling of chemical - the product can be applied through most CDA lances with a droplet size of 200-300 microns.



Environmental Products, Regent House, Hubert Road, Brentwood, Essex CM14 4TZ. Telephone 0277 261414

CLOVOTOX CONTAINS MECOPROP. SUPERTOX 30 CONTAINS MECOPROP AND 2,4-D. DICOTOX EXTRA CONTAINS 2,4-D. READ THE LABEL BEFORE YOU BUY: USE PESTICIDES SAFETY.

DICOTOX CLOVOTOX

EP Zennapron the power from BP that puts you in control

It's the special BP oil content that makes the difference. The BP oil aids adhesion and spread with large easily visible droplets that minimise drift and penetrate the weed's defences faster. But there are other excellent reasons for selecting Zennapron. It's ideal for established turfed areas - golf courses, sports grounds, playing fields and amenity areas, suitable for application from April until September, and it's conveniently ready to spray.

When used with any CDA sprayer it also offers you the cost-effective benefits of simple calibration and bigh work rate for selective weed control on turf. And, of course, there's no messy mixing or measuring and no operator contact with the herbicide. No wonder Zennapron is the perennial solution for annual weed problems.

ing is	THE OPTIMUM TIME TO USE ZENNAPRON											
J	F	M	A	M	J	J	A	S	0	N	D	

Zennapron contains 2,4-D iso octyl ester 6.7% w/w acid equivalent, CMPP iso octyl ester 13.4% w/w acid equivalent.

Read the label before you buy - use pesticides safely.



Growing ...





Going ...

The Power to Control

For further information on Zennapron and other BP herbicides contact BP Chemicals Ltd, Tel: 071 581 6171 or use the reader reply card

AD REF 188

Letters

To The Editor

Please let me give you my view on a recent visit to the GCSAA Show in Las Vegas. There will be some greenkeepers who may want to skip this piece – that is called freedom of choice – but I would like to emphasise the importance of BIGGA's role in the States. Many will be unaware that the Association had a stand at the exhibition and I witnessed the determined marketing of our Association – I even had a go myself and let me tell you it's not easy.

For example, whilst manning the stand, interested parties would approach, pick up Greenkeeper International and casually browse through it. Then the voice of BIGGA would speak: 'having a good time, Sir?, please feel free to take a complimentary magazine; what line of business are you in?; have you ever thought of advertising in the British market? – you have – well we have a special package for overseas clients...'

This would continue all week long and I must admit that whilst on the stand I was certainly glad that Neil and Debbie were there to back me up.

BIGGA took over 2000 copies of Greenkeeper International with them and I can honestly say not one was wasted – they went like hot cakes. Americans, Canadians, Australians and many more all wanted to know about British greenkeeping and there was nowhere better to look than in our magazine. And of course from all this our organisation can only benefit.

I certainly enjoyed my trip to the States and would encourage anyone to enter for Premier Greenkeeper and be given the chance to visit our counterparts in America.

The Range Finder Golf Ball Collector



The Range Finder is a most effective way of retrieving golf balls. Not only effective but the speed of the machine saves you time, ensuring a smooth and efficient running of the driving range.

efficient running of the driving range. The golf balls are channelled towards the wheels (the only moving parts of the Range Finder) and are then gently rolled up between the rotating outer wheel and stationary inner wheel.

The wheels are covered with small rubber bristles which grip, and more importantly protect the balls before depositing them in the large removable basket. The basket holds upto 600 balls and is also available in an 8ft. version holding 1200 balls, or a 16ft. version which holds 2400 balls.

16ft. version which holds 2400 balls. The lightweight aluminium cast wheels ensure minimal turf damage, and the design also allows ground contours to be followed.

The Range Finder is available in four widths including 5ft. hand pulled, also 8ft., 16ft. and 24ft., which can be used with any suitable power unit.

VGF

During my trip I had the pleasure of meeting the Master Groundsman, Alan Lewis, which brings me to raise another point. Some will have read recent issues of Horticultural Weekly or The Groundsman in which Alan Lewis expresses his opinion that all sporting bodies should come together, i.e. The IOG and BIGGA should be known as The Association of Turf Culture or something similar. However, in my opinion IOG and BIGGA should remain as two separate organisations. The Institute of Groundsmanship, of which I am a member, has been established since 1924. Most of its members are a highly motivated group of professionals – their tasks covering a wide range of skills. BIGGA has been established since 1987 and is growing from strength to strength. It has experienced small hitches like any other new organisation, but look what it has done for greenkeeping.

We use separate skills, we need separate organisations. It would be interesting to hear other views on this matter.

Anthony Davies – Premier Greenkeeper

To The Editor

My first assistant and I attended the recent Kent Section BIGGA seminar, thoroughly enjoyed our day, and look forward to more of its kind. I would like to reiterate the comments of Danny Godfrey concerning Poa annua and the unfortunate greenkeeper who had 95% of dreaded Poa annua on his greens, but was keeping the clients happy.

I have been attending meetings of this nature over the past 32 years and there have not been many times when this ugly beast has not reared its head (I don't mean Danny!) and must add that we do not seem to be making any progress in getting shot of it! Danny might have been talking about our greens.

As far as I am concerned, I am stuck with what I have and I'm surely not alone, for most greenkeepers in this country are in the same boat. Apart from the limited budgets we must work to, there is also the common problem of traffic. When can we do all the necessary basic work to alleviate the modern problems?

Our greens are in the 95% 'garbage' category, but we know what we have and treat them accordingly, for with modern machinery it is possible to keep the customers happy. We do not use temporary greens and members play in frost and wet throughout the winter. We are told by both pro and amateur that our greens are the best around.

I do feel we tend to 'make mountains out of molehills' on this subject and must declare that the greens we have satisfy me.

Mike Travers – Lamberhurst GC Mike Travers served an apprenticeship as a greenkeeper in Scotland for six years before becoming a professional golfer 22 years ago. His multi-role at Lamberhurst is that of PGA Professional, Course Manager and Chairman of Green.

To The Education Officer

Having recently completed a two year YTS Scheme in Greenkeeping, based at Barony Agricultural College and seconded to Castle Douglas Golf Club, I hope to make greenkeeping my career and write to seek your help.

I am nineteen, single and have a clean driving licence. I was educated to 'O' level standard at Castle Douglas High School and my hobby is golf, with a handicap of 4 at Castle Douglas GC.

I have sought employment at numerous Clubs in this region but have not been successful, thus I am prepared to consider employment within greenkeeping anywhere in the country.

Stuart Brydson

■ Stuart, who passed out from Barony with flying colours and has excellent work experience and college references, may be an innocent victim of the YTS two year system. Can any Club help? – David Golding

7 Kirby Road, Lomeshaye Ind. Est, Nelson, Lancs. Tel: (0282) 67829 Fax (0282) 697749

40

REF

GREENKEEPER'S LIBRARY

Champion in chains

iss, to become a story, to tell stories'. If there is an awan or the best gulf book of 1991 this fine work will be a pring gone when a call to the local gravel merchane will take car of supplies for the adversity of applications on a golf course

Lifting the lid on unlikely hero Harry Vardon's tragedies and triumphs

Harry Vardon – The Revealing Story of A Champion Golfer – by Audrey Howell, is the intimate and touching biography of a great golfing champion – the greatest player to ever grace a course and a man idolised on both sides of the Atlantic as the King of Golf.

Revealed for the first time are details of Harry's private life – including the hitherto unknown fact that he fathered a son – the result of a love affair he never made public. This son, Peter Howell, is married to the author.

Harry Vardon rose to fame with a golf swing that brought him six Open titles. Even now, fifty years after his death, that record has never been surpassed. Yet he was an unlikely hero. Born in 1870, Vardon had stood in hand-me-downs and bare feet studying his "betters" at the Royal Jersey Golf Club, and mentally perfecting his own game. It was he who adopted the controversial "overlapping' grip first used by Johnnie Laidlay, a grip that was to become known universally as the 'Vardon' grip. He developed phenomenal accuracy by lofting the ball high for a softer landing, and when he took his first Open in 1897 he launched a legend as the 'Greyhound' with knickerbockers and nerves of steel.

Even so he was a modest and private man who kept his feeling bottled up. When he won his first Open he did so after suffering personal grief; and at the height of his fame he was struck down by tuberculosis, the effects remaining with him for much of his life. Some secrets he never revealed – the sadness of a loveless marriage leading to a secret love affair and the birth of a son. Recalling the great golfing performances of Vardon's career, Audrey Howell has written the intimate and touching story of a man of few words, who expressed all his genius with his golf clubs.

Harry Vardon - The Revealing Story of a Champion Golfer, is published by Stanley Paul, priced £16.99.

Sand, sand and still more sand. The editorial office seems to be ringing to sounds of 'The Desert Song' these days. Although there are only a handful of golf courses today without sand bunkers (and in the opinion of many none the worse for it) the days are long

• Continued overleaf

GREENKEEPER'S LIBRARY

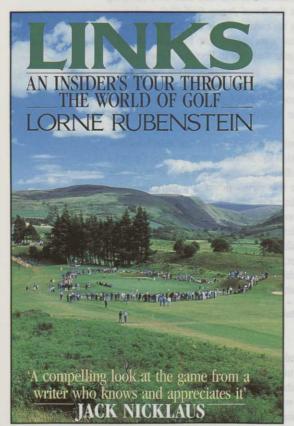
Wisdom from the 'ultimate storyteller'

From previous page

gone when a call to the local gravel merchant will take care of supplies for the adversity of applications on a golf course. Thus the specialist publication issued recently by the STRI and authored by Stephen Baker fills a most important gap in the greenkeepers library, describing as it does in great detail how choice of sand type and quality can be vital in all aspects of turfgrass construction and management. Chapters include data on sources, eg river washed, quarried, sea dredged, sandstone rock, and sand waste from China clay extraction, together with their characterisation and chemical properties. The influence that grain size has on its performance, recommendations for bunkers, top dressing, drainage or blinding, all are examined with great thoroughness and provide the reader with a working manual which will prove indispensable.

Available from the STRI, the 67 page publication, Sands for Sports Turf Construction and Maintenance is priced at $\pounds6.50$ post inclusive

The Royal Worlingham and Newmarket Golf Club is the finest nine-hole course in the world'. This is the opinion of Lorne Rubenstein, acclaimed Canadian golf writer, player and former caddie; in his magical book 'LINKS'. Lorne is a regular Tour journalist and has played perhaps more of the great courses in the world than any other, for golf is his passion. What separates him from most of his contemporaries however is his belief in the simple basic premise that golf is



better played over natural unspoiled terrain and his turn-off is that which is patently manufactured. Strategic architecture, where a golfer can select possible from routes according to ability, confidence, or courage is this man's meat, and his rich descriptive prose does more for me than any other in painting vivid scenes of places and events that I know I simply must visit. There are no pictures in 'LINKS' and it has no need of them, for Lorne is the ultimate storyteller. In his own words. 'Golf

encourages reverie. To be part of golf is to come upon stories, to become a story, to tell stories'. If there is an award for the best golf book of 1991 this fine work will be a prime contender. I wholeheartedly recommend it.

Links – An Insider's Tour Through the World of Golf – is published by Stanley Paul at £12.99

The name of James B Beard is one that is instantly acknowledged wherever turfgrass science and culture is discussed, and no further proof of the man's huge knowledge and great skill at holding an audience spellbound need be sought than that which was witnessed at BIGGA's own seminar held recently at the BTME at Harrogate. Those fortunate in attending Beard's lectures were unanimous in their praise, not only for his ability to make an essentially technical subject entertaining but in his talent for really imparting true knowledge to his students. Under the sponsorship of BIGGA, the complete content of his mammoth two-day presentation is available in book form, categorised in sections under: Turfgrass Growth, Turfgrass Species Descriptions, Soils and Soil Modification, Construction and Turf Establishment and Basic Cultural Practices, ending with a further reading list and biographical notes about the author. For the student it is clearly essential work material and for the practicing greenkeeper a unique opportunity to have at his disposal the transcript of a learning experience which has been termed 'priceless'.

From BIGGA Headquarters, the ring bound, soft covered 84 page volume entitled – A Manual on Golf Course Construction, Turf Establishment and Cultural Practices – is priced at £22.00 inclusive of postage.

Despite what might be seen in some circles as condemnation of the practice of installing Sand Greens to USGA Specifications (USGA Spec), the feeling filtering through to us is that many greenkeepers would welcome the chance to at least give them a try. Seen to be successful at such prestige British locations as Collingtree Park in Northampton and East Sussex National, with such greens being openly discussed and seriously analysed at BIGGA's National Education Conference, the availability in Britain of the USGA's booklet on the subject could not have been better timed. Written by members of the USGA Green Section Staff and edited by William H Bengevfield, the contents are a complete step-by-step guide which take the reader through such stages as subgrading, drainage, gravel and course layering, root zone mixtures, top mix covering, placement, smoothing and firming. The concluding chapter, entitled Tips for Success and Opportunities for Error, will enable those who have experimental nursery areas on their course to at least give the USGA Spec green a fair crack of the whip. To echo Ken Siem's words, 'the transition from soil based greens to those which are sand based is a difficult one ... but practices change and technology races ahead'.

From BIGGA Headquarters, the 24 page booklet, entitled Specifications for a method of Putting Green Construction, is priced at $\pounds 2.50$ inclusive of postage.



CROQUET LAWNS

FOOTBALL PITCHES

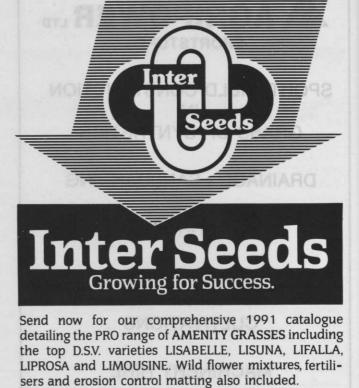
BA.G.C.C.

Member British Association of Golf Course Constructors Member Golf Course Builders of America GOLF COURSE AND LANDSCAPE SPECIALIST HOMESTEAD FARM, RINGWOOD ROAD, THREE LEGGED CROSS,

Brian D. Dierson (Contractors) Limited

HOMESTEAD FARM, RINGWOOD ROAD, THREE LEGGED CROSS, WIMBOURNE, DORSET. BH21 6QY Tel: Verwood (0202) 822372, 824906 & 825979 Fax: (0202) 826447 AD





Inter Seeds Limited

Thorn Farm Evesham Rd. Inkberrow Worcestershire WR7 4LJ REF Tel. (0386) 793135 Telex 336870 INTERS-G Fax. (0386) 792216/792715

Looking for real capability?

Bucher's new Elite makes two wheel tractor capability complete, guaranteeing you the very best in productivity and all year round versatility – from sweepers to mowers, from graders to blowers.

Add in stepless hydrostatic transmission, unique servo steering and a powerful 13 horsepower engine, and you can see why Bucher brings you to new working standards – in short the Elite.

Join the Elic. EUGEALEGA To: Bucher Marketing, P.O. Box 344, Malmesbury, Wiltshire SN169QD. Please send me details on the new Bucher Elic. GI.5.91 Name Job Function Address Post Code

REF

AROUND THE GREEN

Keeping in touch with news and comment from the regions

SHEFFIELD

Our winter (March) lecture was held at Thryburgh with a fine turnout of 35 members and including our President, Mr A.K.Arnold. The lecture was presented by Howard Evans, the BIGGA adviser on pensions, his address stirring much comment and causing him to still be talking individually with members some two hours later! Thank you Howard, for your time and patience.

Please note that players in any BIGGA golf tournament or competition MUST have paid the 1991 subscription. You may be asked to produce your membership card as proof, so don't put this matter off for another moment.

A chance to see before buying is the idea behind exhibiting all BIGGA merchandise at Sheffield Section functions with whatever takes your fancy being ordered through Tony Renshaw, Sheffield Section Secretary.

The new entry fee for competitions will rise to £10.00 from July 17th, this being necessary due to rising administration costs, postage and food prices at Golf Clubs.

Notes for your golfing diary are: July 17th – Annual Tournament at Hillsborough GC. September 9th – Autumn Tournament at Brough GC. (this is NOT as printed earlier – please correct your diary).

IAN COLLETT

SOUTH WALES

March 18th saw several members of both BIGGA and IOG gather at the comfortable Southerndown GC for entertainment in the shape of Bob Priddle, who gave a talk on Conservation. As one associated with the World Wildlife Fund, Bob's talk was most interesting and prompted much discussion and enquiry. In total some 31 people attended and it was nice to observe new faces in the audience, which we hope will be a continuing trend. Bob is to be thanked for turning out on such a dreadful night, as are the Club committee for their generosity; and our sponsors of the evening-Celtic Mowerswho have also donated a substantial sum for section upkeep. Perhaps this is a time when we can thank all our supporters, Celtic Mowers and all other traders, for past help, present support and future anticipation of generosity.

The news that Michael Harrison has been forced to give up his job at Southerndown, due to ill-health, is not good, but we hope that he will soon be recovered and may continue to participate in section events.

Neil Smith of Southerndown has left for Royal Porthcawl and Mike Wilson, who left these parts for Scotland, has returned and been successful in gaining a position at the Bowood Estates GC at Chippenham. We wish all three the very best in their different jobs and to Mike's wife, who by the time this newsletter reaches publication will have given birth to their first child, which will be even more precious after previous disappointments.

Colin Murphy thanks everyone who sent cards and good wishes during his recent illness. There is a good way to go yet before his recovery is complete, but it was good to see him at Southerndown.

FIXTURES: May 15th-Glamorgan GC., Jacobsen Cup & Brown's Shield. June 27th-Tredegar Park GC., Iseki Regional Qualifier (this is definitely 27th, not 17th as in fixture card) July 30th: Royal Porthcawl GC., Birdie Cup. Aug. 8th: Southerndown GC., Match, Greenkeepers V Secretaries. Sept 18th: Morriston GC., Autumn Comp. Oct 3rd: St Pierre G&CC., Match V South West. Dec.11th: Pyle & Kenfig GC., AGM and Vitax Cup Competition.

PHILIP SWAIN

NORTH SCOTLAND

By the time this reaches print I'm sure everyone will join with me in wishing Peter Tait, head greenkeeper at Inverurie GC. a speedy return to his work after suffering a mild heart-attack in February. At the time of writing, good progress was being made and, who knows, maybe he'll appear at the Spring Outing with his camera?

There are certainly plenty of job opportunities going in the North

Section at the moment with Huntly, Buckpool and Rothes Golf Club's all currently seeking head greenkeepers and still more looking for first assistants. Whilst some of these vacancies have arisen through people moving to other Clubs, a disappointing trend is that many result through leaving the profession altogether for jobs outside, such as oil-rigs. Can there be an obvious reason for this?

May I make an appeal for magazine section news items? Please contact me on 0346-26931.

GORDON MOIR

SOUTH WEST

'Rain, rain go away, come again another day'. Miraculously it did! In the midst of the wettest spell for what seemed like years, our opening 91' fixture – The ICI TECHTURF sponsored day at Saltford GC on March 21st – remained blissfully rain free. Despite the forecast, we were greeted on the first tee with bright, breezy conditions, a perfect morning for golf on the first day of spring.

The course, whilst suffering muddy, sticky pathways, (along with most of us) was in excellent early condition, for which our thanks to Ian and his staff- and not forgetting the redoubtable Leslie Johnson- for preparing it for us. The results were: 1st: Vion (Buster) Lewer, Wells GC., 37 points. 2nd: Cary Rawlings, Wells GC., 34 points. 3rd: John York, Wells GC., 34 points. 4th: James Taylor, Tall Pines GC., 33 points

It is possible to discern certain similarities between the top three places, though rest assured they did not all play together. I'm certain the handicap chairman will be watching future results

very closely and probably dish out the first ever group handicap at this rate! Our thanks go to ICI and Avoncrop Amenity for prizes and a worthy mention for Richard Minton of ICI. His 37 points put him amongst the prizes but he nobly refused, saying he was overpaid as it was!

After lunch, generously provided by ICI., it was over to Gordon Rolfe and his Techturf Team for an interesting and enlightening talk featuring this exciting new product. Thank you gentlemen, for your time and trouble, and may I say how we were particularly impressed by the calm manner in which you parried the awkward questions at the end. On a personal note, I was very pleased with the overall turn-out, which vastly improved on this time last year when an audience of just seven listened to John Hinton. Thank you all.

PAUL WORSTER

NORTHERN

With another season underway after a hard winter, it's all hands on deck everyone hoping for another nice summer. As the Spring Tournament approaches the golf competitions are filling up well. Invitation day at York is now full, though places for the Roses Match and the Autumn Tournament are still available. The 'Roses' will be held at Crossland Heath GC on August 22nd (no deposit for this one -just send me your name!) with the Autumn Tournament at Garforth GC on October 1st. Those wishing to play in the Presidents day at Lightcliffe GC on June 11th are advised to contact Bill Mountain on 0532-533230.

Our winter lectures ended at a wet West Bowling GC with the ISEKI Roadshow, for which thanks to both ISEKI and EFG of Halifax for kind support. Once again the turn-out was poor, with our past two lectures attracting just twenty people between them! Can you imagine how embarrassing this may be for the speakers? – it certainly is for me. Do you – the members -want lectures? We've tried different venues, different times, so please let me have your ideas on what you want and when the timing would be best.

Continued on Page 47



Vion (Buster) Lewer

LET US GIVE YOU THE EDGE THESE CLUBS ALREADY HAVE IT!

• Carnoustie Golf Links

- Cawdor Golf Club
- Collingtree Leisure
- Crompton & Royton Golf Club
- Delapre Golf Complex
- Ely City Golf Club

Gleneagles Hotel Goring & Streetley

- Haggs Castle Club
- Kinross (Green Hotel)
- Leek Golf Club
- Lingfield Park
- Massereene Golf Club
- Mere Golf & Country Club
- Muirfield (Gullane) Golf Club
- Ormonde Fields Golf Club
- Ponteland Golf Club
- Royal Ashdown Forest Golf Club
- Royal Dornoch Golf Club
 Royal Liverpool Golf Club
- Royal Liverpool (
- Rye Golf Club
- Slaley Hall G&C Club
- Washington Moat house
- Whitecraigs Golf Club



42" capacity Mower Cylinder and Bottom Blade Grinding Machine. A truly 'precision' grinder, built to last half a century. Used and preferred by Professionals.

SATISFIED CUSTOMERS

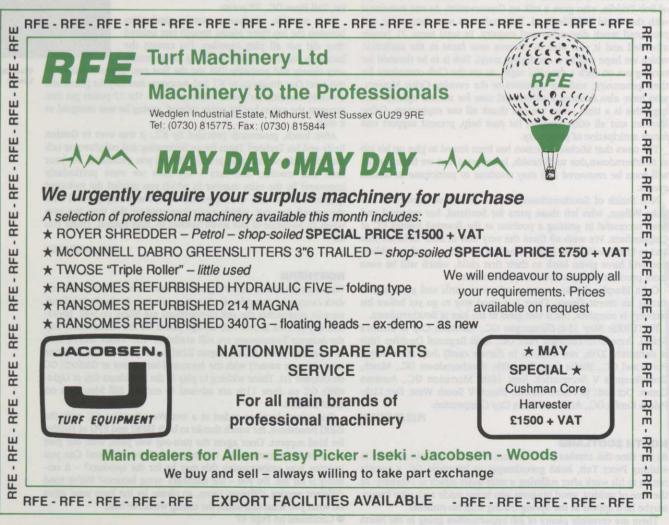
"The Juno is an essential piece of equipment for any golf course workshop." Mr. Alistair Connel, Course Manager, Cawder Golf Club.

"It is the best piece of machinery this course has ever invested in, a fine machine that I would recommend to anyone." Mr. John Bashford, Head Greenkeeper of the Green Hotel Golf Course, The Kinross Estate.

"A quality machine that gives a superb finish to our cylinders, and saves money." Mr. Derek Green, Head Greenkeeper of Royal Liverpool Golf Club.



ERIC HUNTER GRINDERS LTE HOBSON INDUSTRIAL ESTATE, BURNOPFIELD, NEWCASTLE UPON TYNE, NEI6 6EB. TEL: (0207) 70316 FAX: (0207) 70312



AD

REF

• From Page 45

The main social event of our year – the Dinner & Dance – took place at Baildon Rugby Club in March, where a grand time was enjoyed by all. Here once again, just as it is in the lecture programme,the turn-out was pathetic with just 40 members and guests attending, this from a section with nearly 300 members! Come on all you guys, support your section. Everyone at BIGGA is working hard on your behalf but, UNLESS YOU ARE PREPARED TO CON-TRIBUTE YOU WILL NOT GET MAXIMUM RETURN. You know it makes sense. BOB LUPTON

GREEN

due to the tented village arriving without notice! At very short notice Richard Minton of ICI agreed to step in – good stuff and our thanks Richard.

RICHARD WHYMAN

EAST ANGLIA

There has not been much going on lately, except for a rather disturbing letter from a fellow head greenkeeper in our region about an over-enthusiastic member. Apparently this fellow had been sending notes to the committee about how he thought the course should be run, how the litter bins were never emptied etc.etc. ad nauseam... I'm sure we've all got one in our Club, recognised a mile off by a copy of "Be your own Lawn Expert" under the arm and a know-it-all attitude.

This is all very well until these know-alls get elected to the green committee, when the fun really starts. Then the greenkeepers every move is questioned. Three quotes needed before you buy a tin of paint and half your working time spent trying to prove that you already have the best system – one which works! It is not enough that the course has never looked better and that you've been at the job for twenty years and never lost a green!

I recently heard his suggestion that two experienced men could run an 18 hole course with – just maybe – an extra hand in the summer. Why not have three animals, say a goat for the rough, a sheep for the fairways and a goose for the greens. At Christmas he could kill the goose. Then, when spring comes he'll say 'The greens are getting long, where is the goose? Ah yes, I remember, I killed him last year'. Exactly Mr Know-it-all, exactly.

I wonder how many good greenkeepers have said 'I don't need this', and left the profession because of a Barrack Room Lawyer? Too many, I would guess. I remember when I was a young greenkeeper (many years ago) reading the definition of a committee which read: THE COMMITTEE: THE UNFIT, APPOINTED BY THE UNWILLING, TO DO THE UNNECESSARY. That seemed to sum it up nicely.

MICK LATHROPE

DEVON and CORNWALL

East Devon GC.was the venue for our March meeting, with members taking to the course in sunny conditions to play for the SUPATURF and MAY & BAKER Trophies. At the same time, players were trying to qualify for the regional final of the ISEKI Championship. Our thanks and congratulations to Paul Newcombe and his green staff for a course in excellent condition. Also thanks to John Palfrey of Avoncrop and Mike Berriman of Monro for donating and presenting prizes as follows: SUPATURF (Head Greenkeepers and Trade) 1st: J.Mills (Woodbury) 37 points. 2nd: T.Pipe (Honiton) 36 points. R.Minton (ICI) 36 points. MAY & BAKER (Assistants) 1st: A.Woolnough (Teignmouth) 37 points. 2nd: C.Pine (Churston) 36 points. 3rd: N.Gagg (Churston) 35 points.

The ISEKI qualifiers were: (0-9) N.Gagg, R.Hall, P.Newcombe, N.Pring. (10-18) J.Mills, A.Woolnough, T.Pipe, S.Dymond. (19-28) C.Pine, T.Blackburn, J.Breyley, N.Clark.

Unfortunately Roy Battishill was unable to attend and make his presentation on 'The Ups & Downs of Holding a Major PGA Event',

NORTH WEST

On March 20th, in the magnificent clubhouse overlooking the wellmanicured course of Tytherington GC., an 'Educational Afternoon' was presented jointly by the N.W.Section and the Cheshire Golf Union. Brian Moss, a N.W. committee member welcomed 44 attendees and introduced the speakers and our President, Arthur Harrison, who was attending his first event in this new capacity.

David Golding, BIGGA's Education Officer, chaired the afternoon session and also spoke of the Association's progress and the importance of education and its availability at recommended colleges. David was followed by Peter Dutton, past President of the C.G.U., speaking on 'The Role of a Green Chairman'. Peter is well qualified on this subject, having been a green chairman himself and stressed the importance of working closely with the greenkeeper in order that a first hand report may be made to the green committee.

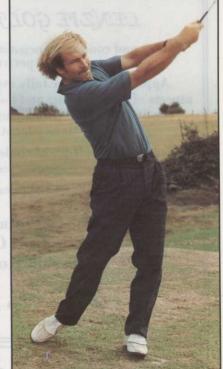
John Hacker, Consultant Agronomist, gave an interesting talk on 'Coping with Play' and of how

increased rounds played is causing compaction problems. He also spoke about the recent and widespread problem of Dry patch and of ways to tackle the problem.

The M.D. of Tytherington GC., Patrick Dawson, then addressed us on 'The Golf Business' and explained how he had designed the course, was present throughout construction, and now runs both the golf and other sports facilities at Tytherington, together with his managerial staff. Some interesting points which came to light were: no green committees; no house committees; no captains, yet 2500 members enjoy facilities of the highest order.

Anthony Davies, Course Manager, Prestbury GC., then gave his "Oscar Winning", or should I say "Greenkeeper of The Year" award winning talk on 'Where the greenkeeper fits In'. he related various aspects of greenkeeping and forward planning at Prestbury, again stressing the importance of close communication between greenkeeper and green chairman.

Continued on Page 54



Jeff Mills: winner of Supa Turf Trophy 1991

GOOD REASONS WHY YOU SHOULD USE COCKLESHELL FOR ALL YOUR PATHS 1. No damage to your mowers – saving you time and money 2. It always looks clean – especially after rain 3. It can be used on all paths – right up to the edge of the grass 4. You can put it directly onto sand – and it stays on the surface ...and if you want a 5th... over 150 golf clubs already supplied can't be wrong! (Including Sunningdale, St Georges, North Hants, Knole Park, and Gerrards Cross). Contact us today for a leaflet and a sample – or you can do it tomorrow, because we've been in business for over 100 years so we'll still be here! Deliveries nationwide. DEVENISH LTD suppliers of shell sand and top soil 60 Hambro Hill, Rayleigh, Essex SS6 8DH Tel: (0268) 743866/7

AD REF 307

RECRUITMENT

HEAD GREENKEEPER



LENZIE GOLF CLUB

Salary and conditions negotiable depending on age and experience.

Applicants must be fully experienced in all aspects of greenkeeping and hold a City and Guild or SCOTVEC Certificate in Greenkeeping Management.

A practical knowledge of modern machinery and automatic irrigation systems is essential.

For further details and application form write to

The Secretary, Lenzie Golf Club Crosshill Road Lenzie Glasgow, G66 5DA.

Mallow Golf Club

require a

HEAD GREENKEEPER

Applications are invited for the above position, to take charge of our 18 hole Golf Course (inland).

Applicants should be fully qualified and experienced in all aspects of greenkeeping.

A practical knowledge of modern machinery is also required.

Apply in writing to the Secretary, enclosing full CV.

Mallow Golf Club Ballyellis Mallow County Cork Ireland



MILL RIDE GOLF CLUB

has an immediate vacancy for

2 ASSISTANT GREENKEEPERS

Applicants should be qualified in all aspects of greenkeeping, with experience of modern machinery and post-construction maintenance. Salary negotiable. Help with accommodation may be provided.

Apply in writing with full CV to: Gordon Irvine, Course Manager, Mill Ride Golf Club, Mill Ride Estate, Mill Ride, North Ascot, Berkshire SL5 8LT

THE BOTLEY PARK GOLF AND LEISURE CLUB

require a

HEAD GREENKEEPER

For this year old 18 hole course set in 176 acres. Applicants must be fully experienced in all aspects of greenkeeping. Very high standards, good leadership skills and the ability to motivate staff are essential attributes.

> Applications to Mr G Aymes (enclosing full CV) Botley Park Hotel and Country Club Winchester Road Boorley Green BOTLEY Hampshire S03 2UA

RECRUITMENT

NORTH FORELAND GOLF CLUB

(Open Championship Final Qualifying Course)

QUALIFIED 1st ASSISTANT GREENKEEPER

Applicants must be fully qualified and have practical knowledge and experience of correct turf management and irrigation systems.

Conditions of service in line with BIGGA recommendations, according to experience.

No accommodation available with this position.

Send application, with CV, to:

R. J. Preston, Secretary North Foreland Golf Club Convent Road BROADSTAIRS Kent CT10 3PU

TEMPLE GOLF CLUB

invites candidates for the position of

1ST ASSISTANT GREENKEEPER

The successful candidate must have two years work experience or Phase 1 City & Guilds Certificate in Greenkeeping. Salary in line with BIGGA rates. No accommodation available.

Please contact Mr M Gunn, Temple Golf Club, Henley Road, Hurley, Maidenhead, Berks SL6 5LH.

GIRTON GOLF CLUB CAMBRIDGE LTD require a HEAD GREENKEEPER

Applicants should be fully qualified and capable of managing a maturing 18-hole parkland golf course.

A thorough knowledge in the use and maintenance of modern greenkeeping machinery and the ability to organise and motivate staff is essential.

Salary is negotiable according to qualifications and experience. Apply in writing to:

The Secretary Girton Golf Club Cambridge Ltd Dodford Lane Girton Cambridge CB3 0QE

ROMFORD GOLF CLUB

require a

FIRST ASSISTANT GREENKEEPER

to commence employment during **October 1991.** Applicants should apply in writing stating qualifications, be fully experienced in the use of modern equipment and familiar with all aspects of Greenkeeping and turf culture.

Salary negotiable. No accommodation.

Replies in writing with CV to:

The Secretary, Romford Golf Club, Heath Drive, Gidea Park, Romford, Essex RM2 5QB

GREENKEEPERS AND COURSE MANAGERS Seeking a career move?

SEVMOUR PERSONNEL is an agency designed to help you meet your requirements. Confidential and effective service For further details contact:



84a Guarlford Road, Malvern, Worcestershire, WR14 3QT Telephone: (0684) 569204

Employment Agencies Act Reg. M4363

Bexleyheath Golf Club

require a

HEAD GREENKEEPER

Salary negotiable. Accommodation available.

Full CV to: The Secretary Bexleyheath Golf Club Mount Road Bexleyheath Kent DA6 8JS Tel: (081) 303 6951



Princes Risborough Golf Club require immediately a

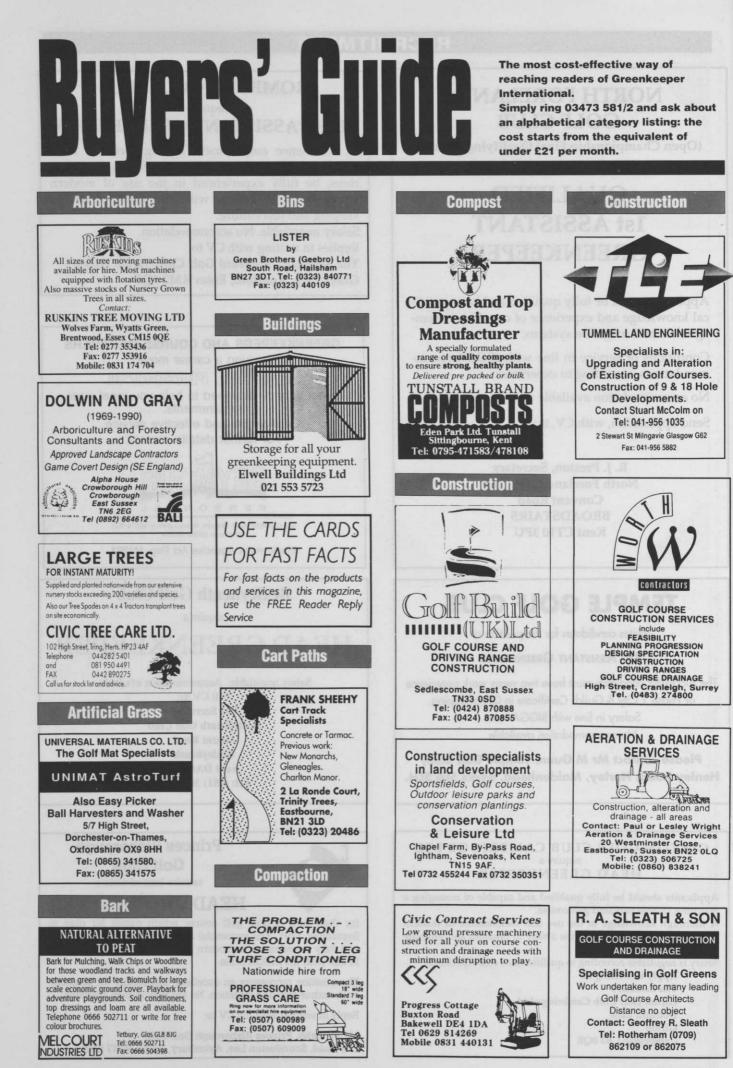
HEAD GREENKEEPER

for their new 9 hole golf course which opens for play in September 1991. The successful applicant should be qualified and fully experienced in modern methods. Rate of pay will be in line with the BIGGA scale.

The position represents an excellent opportunity for someone with enthusiasm and ambition. No accommodation available.

Reply in writing with full CV to:

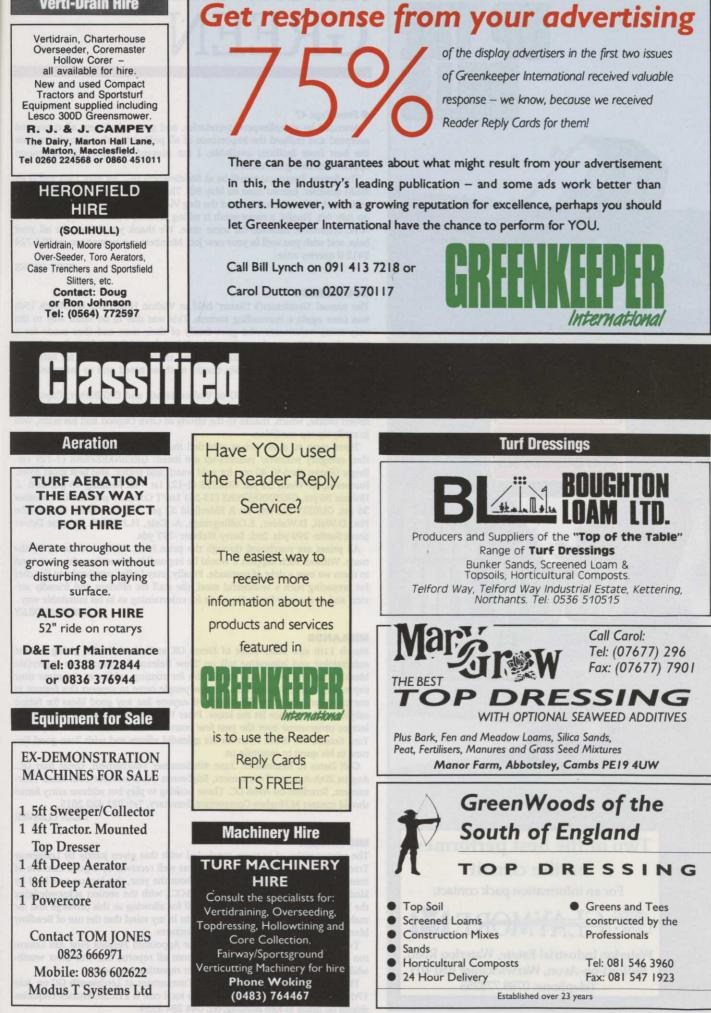
Mr J F Tubb, Princes Risborough Golf Club Lee Road, Saunderton Lee, Aylesbury, Bucks HP17 9NX

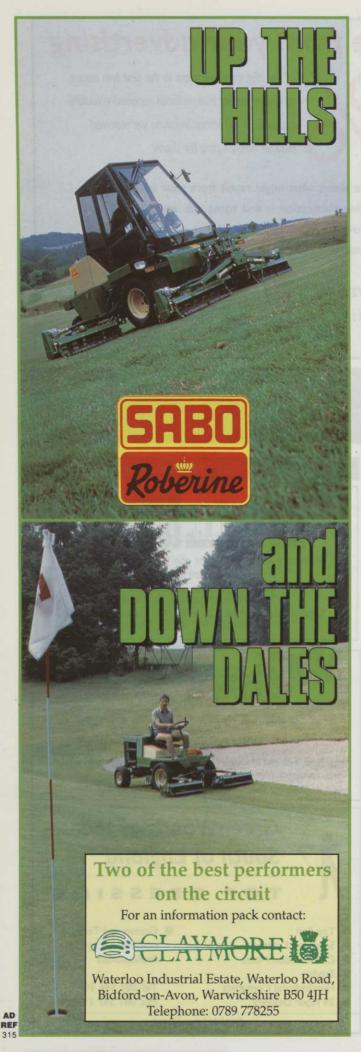






Verti-Drain Hire





GREEN

• From Page 47

Attended by greenkeepers, secretaries, and green chairmen, all concerned accepted and realised the importance of all pulling together in order to gain the best from facilities available. I am pleased to report the afternoon appeared to be a great success.

The Spring Tournament will be at Saddleworth GC., on May 15th and is an ISEKI qualifier. Entries close on May 8th. The ISEKI Regional final will be held at Keswick GC on June 19th and the Reg Vickers Memorial at Birchwood GC., on July 4th. Finally, a move south is taking place by Julian Covey; who was a N.W. committee member for some time. We thank you Julian, for all your help, and wish you well in your new job. Members can contact me on 051 724 5412 if queries arise.

BERT CROSS

SOUTH EAST

The annual 'Gentlemen's Dinner' held at Walton Heath GC. on March 15th was once again a resounding success. This was due in no small way to the very many volunteers who gave freely of their time and thus made for a 'smooth ride'. To mention a few: John Edwards and Ron Jobson for ticketing and score board; Dennis Smith for acting as starter; Alan Stow for ball spotting and raffle ticket sales. My thanks to those noted and to many others I may have missed.

Mr Norman Dampney, CEO of Walton Heath and D.G.Barber, Captain of The Club, must be thanked for allowing us the privilege of playing such a hallowed course, which, thanks to the efforts of Clive Osgood and his team, was in really tip-top condition.

There were so many prizes awarded that space prevents inclusion of all, thus category winners/ runners-up are listed: GREENKEEPERS (1-12) 1st-Roger Glazier (hcp 9) 40 pts for gold watch and putter, also best gross score. Runner-up-D. Wood 38 pts. GUESTS (1-12) 1st – M. Redding 36 pts. 2nd- J. Holmes 36 pts. GREENKEEPERS (13-24) 1st- T Couill 37 pts. 2nd-D. Coomber 36 pts. GUESTS (13-24) 1st R Elderfield 37 pts. 2nd H.J.O'Neil. Nearest the Pin: D.Wall, D.Walder, S.Collingridge, A. Cale, H.J.O'Neil. Longest Drive: Steve Suttle- 299 yds. 2nd: Barry Webster -297 yds.

All prizes are purchased through the prize fund, which is donated by the trade. Without such support it would be impossible to continue this event and to them we owe a debt of gratitude. Finally, may I offer our thanks to the chef for preparing such a wonderful meal, the staff for efficient and friendly service, and to the very funny Dave Lee for entertaining us in his inimitable way. NORMAN EXLEY

MIDLANDS

March 11th saw Mark Hunt of Sierra UK at Telford G&CC, giving a most entertaining and interesting talk on 'Slow Release Fertilisers'. We appreciate Mark's time and effort and thank him for coming, whilst at the same time expressing disappointment that so few people came to support this feature in our calendar. Whilst on the subject, if anyone has any good ideas for future subject matter, please let me know. Peter Woodward has been arranging our lecture programme over the past few years and the mantle is now to pass to Tom Kelsall. We thank Peter for his splendid efforts and wish Tom good fortune in his quest to entertain us.

Golf Dates to Remember: June 4th-Summer Tournament, Great Barr GC. August 20th-Autumn Tournament, Edgbaston GC. December 10th-Xmas Tournament, Stratford-on-Avon GC. Those wishing to play but without entry forms should contact M.Hughes-Competition Secretary, Tel: 021 422 2615.

DEAN CLEAVER

MID ANGLIA

The winter series of lectures concluded with that given jointly by Lodgeway Tractors Ltd and Zetor Tractors. This was well received by a good turn-out of members. As has been the case throughout the year, this lecture was held by kind permission of Beadlow Manor G&CC., with the section acknowledging the kindness of Mr Minashi and his staff for allowing us this privilege and for making us so welcome. There is no doubt in my mind that the use of Beadlow Manor ensures a good turn-out for our lectures.

Twenty members were present at the Appointed Persons First Aid Course run at the St. John Ambulance HQ. From all reports, this was most worthwhile and is something we shall consider repeating next year.

The next golf event is the Summer Tournament at Letchworth GC on July 17th. This will be over 36 holes and the total cost is £16.50. Entries/enquiries should be made to Ken Bunting, tel: 044 284 3359.



Your golfers will love the way it leaves your greens, too. That's because its new offset design leaves less compaction on the playing surface. Which gives your golfers a better shot at improving their game.

To reduce harmful rutting and compaction, John Deere uses a unique offset design that lets you change the direction of your perimeter cut each day. Giving your greens a well deserved rest. Your golfers a better shot at a birdie.

The 2243 also features a liquidcooled, 18-hp (13 kW) engine, steerable cutting units, power steering, hydrostatic drive and more.

See your dealer for all the facts on the John Deere 2243.





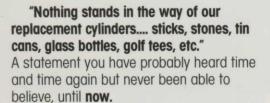
NOTHING RUNS LIKE A DEERE

AD

103

ALGS 1600

NOTHING STANDS IN THE WAY OF OUR CYLINDERS.



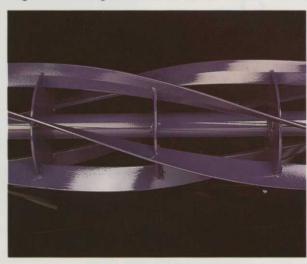
At Supreme Mowing we not only state this fact, but more importantly guarantee our replacement cylinders against breakage

upon hitting a movable object. The use of the finest British Steels

and advanced

methods of production and heat treatment enable us to manufacture products that are renowned for their accuracy and reliability, therefore giving you a longer working life and a cleaner cut.

There is a cylinder to fit any make and size of mower, Ransomes... Toro... Jacobsen... Dennis... Shanks... Atco...



Nickerson... Agria... Hayter... Greens... National... Morrison... Sabo...



Wet Moor Lane, Wath–Upon–Dearne, Rotherham, S63 7LR. Tel: (0709) 873436 Fax: (0709) 878005 A Ransomes PLC Company

AD REF 57