

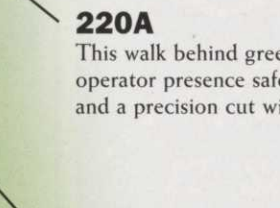
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## Essex

In November we would have seen the last big football match of this century with England v Scotland fighting it out for a place in Euro 2000. The highly probable result will be a disaster for our friend Douglas (Mc)Smith, so the next time he pays your course a visit, "do not" mention where will he be spending his holidays this summer.

Now on to more serious matters, our winter golf tournament held at Wanstead GC, kindly sponsored by Gem Professional, with thanks to Richard Haynes.

Despite the strong winds, the weather was mild and the course was in excellent condition, as one would expect with Reg at the helm, and our thanks go to Reg and his staff for preparing the course. We would also like to thank Wanstead GC and their staff for their kind hospitality, and Ray Driver for an excellent meal.

Results: Overall winner: Ray Clark 37 pts, 0-14: 1. John Jackson 34 pts; 2. Matthew Allen 28pts; 3. Steve Crosdale 25pts; 4. Dominic Rodgers 24pts, 15-28: 1. Martin Forrester 32 pts (back 9); 2. Mark Stopps 32 pts; 3. Malcolm Smith 25 pts; 4. Jack Shelton 24 pts, Guest: Steve Thorogood 36 pts, Trade: Andy Church 32 pts, Longest drive: Steve Crosdale (bionic man), Nearest the Pin: John Jackson. Thank you to Greenkeeper Supply Company, Mick, Bill and Liam for the two marvellous prizes, a driver and putter.

Not forgetting the trade, Avoncrop, Bourne Amenity, Does, Driving Force Leisure, Grass Roots, Rigby Taylor and Bishop Brothers for their donations towards the raffle prizes.

Our next golf day is combined with the important AGM at yours truly, "Rochford Hundred", on 15 December. This is your Section so please come along and pass on your view. "We do not bite", promise. Details are in the post, any problems telephone Martin 01245 603131.

On to our new recruits, Perry Lowe, Ilford GC, and Malcolm Jervis, Chelmsford GC. We hope to see you both at one of our functions in the future.

Finally, I would like to thank everyone, golf clubs, trade, guests, Writtle College, Derek, members and committee (and anyone I have forgotten, no offence) for their continuing support in making this section successful. Merry Christmas!

Dave Wells.

## East Anglia

Rookery Park GC was the venue for our October meeting sponsored by Rhone Poulenc, with 48 members taking advantage of the glorious sunshine and the above average temperature. The course was in fine condition and had that Autumnal feel, little roll on the ball making each hole play long, and the greens putting on the tricky side. Many thanks must go to John Beamish and his staff for the presentation of the course, and the secretary and committee of Rookery Park for their hospitality. They certainly made everyone more than welcome.

Before the presentation the Club Captain, Mr Goldsmith, welcomed the association in the presence of Mr Rees, the Club President, Mr Fisher, Past Captain, and Mr Kelly, Rookery Park's Secretary.

The overall winner of the Rhone Poulenc sponsored competition, S. Curtis with 39 pts. Results: 1-9 handicap 1. R. Plummer 32, 2. P. Howard 30; 10-18 handicap 1. S. Curtis 39; 2. K. Bunn 35; 3. I. Willet 35; 19-28 handicap 1. J. Wright 34, 2. S. Davidson 30; 3. A. Hollins 26; Nearest the Pin P. Howard; Longest Drive C. Fisher; Toilet Seat M. Taylor (he wore it well!) low score.

Thanks to all the trade for their company and for their help with the prize table: Rhone Poulenc (main sponsor), Ben Burges, CMW Ltd., Colliers, Grass Roots, Rigby Taylor, Rushbrook & Sons, Sisis, Tomlinson Groundcare and Toro UK. Thanks to you all. A belated thanks to Colliers for the prize at the August meeting.

Our next meeting is on Wednesday December 8 at Bungay Golf Club, the format will be as in the past, three man team Texas scramble 1/10 combined handicap. Team entries are fine, all other members will be drawn to decide their playing partners. The golf will be followed by lunch and then the Section's AGM. All members are welcome, and if you do not receive an entry form by early December, do not hesitate to contact Ian Willet on 01728-452759, or me on 01284-725515. The Texas Scramble has shown to be a popular event, so get your entries in early.

Steve Millard

## Surrey

Date: Friday 28 October. Venue: Epsom Golf Club, Code Name Royal Epsom, War. England, Code Name Seller's Southerners versus Scotland, code name Russell's Rangers. Weather conditions: dry, sunny spells and freshening wind. Time: 11am the first battle commences. Every eight minutes another four go over the top. Some later, somewhere in the Clubhouse, code name the 19th, concern and anxiety! Some of our golfers are missing.

What devious plan was afoot? Had the Southerners been nobbled. Had the Head Greenkeeper, Code Name Wee Dougie, spiked their cocoa? The next episode of this exciting saga will appear in the January edition of the Dandy but for those unable to contain their impatience, the result was another rare defeat for England, with Scotland four and a half points, England two and a half. Thank you Epsom GC for the courtesy of the course and the catering staff for a delicious meal. Thanks to Dougie Fernie and his team for the excellent condition of the course.

Chipstead Golf Club has had a number of break-ins and the Course Manager, Andy Davey, reminds all Clubs to regularly check their security and insurance. It is very easy to purchase expensive new equipment and then in the event of a claim find that

the club is under insured.

Update on the improvements to Cuddington Golf Club: The irrigation system is almost complete. The construction of all greens is now complete and they should be turfed by the second week in November. All haulage routes and tee banks have been seeded and the whole project has progressed in a smooth and satisfactory manner. For a visit contact Stewart Sheppard.

Brian Willmott



South West  
and South Wales  
Paula Humphries  
Tel: 01288 352194

## South West

Not a lot to report this month except to remind you that there may still be just enough time to book your place for the Christmas tournament taking place at Kingsdown GC on 8 December. The comedian has already been booked for this event, but I can assure that it will not be the same one which appeared a couple of years ago at a previous Christmas tournament.

Congratulations must go to Nobby Knight who finished third in the Charterhouse/Scotts National Championships at Carden Park in October. The South West and South Wales came second overall in the Regional Team Cup concluding an excellent tournament for this Region.

If you would like to go on a training course next year then take note because I have arranged a number of courses and dates to put in your diary.

Firstly we will be running a one day first aid course at the Southern Ambulance Training College in Chippenham on 5 February 2000. The overall cost of the course will be about £44. Incidentally, it may well be worth checking your present certificates because a number of these will expire in February.

I have also arranged a PA2 Tractor mounted spraying course for Thursday 2 March. I will also be running a PA6 Knapsack spraying course on Wednesday 8 March.

All these courses still have spaces that need filling, so if you haven't already put your name on the waiting list, just telephone me on 01249-783382 for more information.

Paul Cunningham

## Devon & Cornwall

Seasons greetings to you all.

The Roffeys meeting was our first meeting of the autumn and winter programme which this year was held at Trethorne Golf club on Wednesday 20 October. The day started as usual with golfing members competing for the D O Hunt trophy. Our non golfing members were treated to an excellent guided tour of the course, after an excellent lunch. Joe Turner, of Bernhard & Company, presented our afternoon educational talk covering the subject of

"Keeping your Edge". After Joe's excellent talk, Don Hunt, on the behalf of Roffeys, presented the prizes for the singles Stableford golf competition for the D O Hunt trophy. 1. Mark Tucker, Saunton, 38 pts on back 6; 2. Tony Gooch, Torrington, 38 pts; 3. Harry Robberts, Crediton, 36 pts.

The Section would like to express its gratitude to the day's sponsors, Roffeys and Don Hunt, for their support and to Mike Davey the owner of Trethorne Golf Club for allowing the Section use of his excellent facilities and to all the staff at Trethorne for making the Section so welcome.

Our first meeting in the year 2000 will be held at The Warren Golf Club on Wednesday 26 January sponsored by Barenbrug Seeds. The morning will start with a singles Stableford golf competition with starting times between 8.30am-10am. The usual course walk for non golfers will leave the club house at approximately 10.30 am.

Have you booked your place on the Region's package to BTME 2000, which includes transport, accommodation and entry to the BTME show and seminars. There's only a few places left, so hurry.

Richard Whyman.

## South Wales

The sun was shining and a great day was had by all at St Pierre G&CC for the match, S. Wales versus S. West. We shone by winning 4 points to 2. Many thanks to St Pierre for courtesy of the course and to all from BIGGA's West who made the day possible.

The Rigby Taylor Matchplay finals held at Royal Porthcawl GC had considerably better weather than last year. It was great to see a large support following the group which consisted of two teams being Daryll Bray and Leigh Jones who beat Mike Jones & Douge Donne 8 & 7. Despite the large win, both teams battled around the course which was in tip top condition. Well done David Ward and the lads and not forgetting myself of course. Thanks to Rigby Taylor for the prizes and their continued support.

Some movement in the Camp again with Neil Harris from the Royal Porthcawl being appointed First Assistant at Glyn Abbey GC. Kidwelly and Alan Walker becoming Head Greenkeeper at Caerphilly GC.

Our evening lectures beginning on 12 January at Pencoed College with guest speaker Tony Horne giving us an insight into the millennium stadium.

I'll bring you up to date with the gossip at Pyle & Kenfig with the winter tournament/Christmas Dinner in the New Year, so without further ado I wish you all a Merry Christmas and a prosperous New Year.

Richard Hatcher



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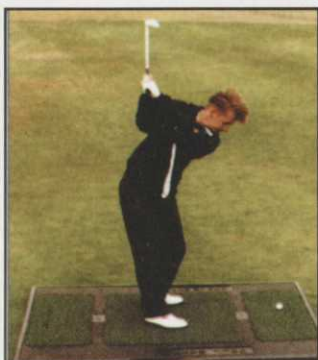
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# GREENKEEPER TRAINING

The Greenkeepers Training Committee (GTC) are continually reviewing the approved status of colleges offering greenkeeper training courses. This guide shows colleges offering courses to craft, supervisory and management levels, but it must be stated that until the GTC review is completed only the green coded colleges are approved to train greenkeepers beyond craft level. The introduction of vocational qualifications into industries, has

caused the colleges to re-think their training policies and the GTC will be issuing guidelines for the golf greenkeeping industry as to which colleges employers and their staff should be supporting. Anyone with a query regarding greenkeeper training should contact the Greenkeeper Training Committee at Aldwark Manor, Aldwark, Alne, York YO61 1UF, Tel: 01347 838640 or visit their website at [http://www.the\\_gtc.co.uk](http://www.the_gtc.co.uk)

## NORTH



**ASKHAM BRYAN COLLEGE** Askham Bryan, York YO23 3FR. Contact: Central Admissions Tel: 01904 772211. National Certificate in Horticulture, National Diploma in Horticulture (Turf Option), Higher National Diploma in Horticulture (Golf Management Option) all available full or part time. Block release courses: NVQ Level 2 Greenkeeping, NVQ Level 3 Greenkeeping and Sportsturf Maintenance, NVQ Level 4 Amenity Horticulture. Short courses: FEPA spraying, chainsaw and brushcutter courses.



**REASEHEATH COLLEGE** Nantwich, Cheshire CW5 6DF. Tel 01270 625131 Fax 01270 625665 E-mail: [rheath1@reaseheath.ac.uk](mailto:rheath1@reaseheath.ac.uk). Website: [www.reaseheath.ac.uk](http://www.reaseheath.ac.uk). Full time First Diploma Horticulture (Sportsturf Option) - 1 year National Diploma Horticulture (Sportsturf Option) - 2 years. BTEC Higher National Diploma Golf Course Management - 3 years. Part time: HNC Golf Course Management - Distance Learning NVQ Levels 1-4 Greenkeeping - Day Release, IOG National Intermediate Diploma in Turf Culture - Day Release, IOG National Diploma - Day Release. Short Courses: FEPA Chemical Safety; Safe Lifting; Chainsaws; Off-road Vehicle Driving; First Aid. NVQ2-4 Fastrack and HNC learning available.



**EAST DURHAM AND HOUGHALL COMMUNITY COLLEGE**, Houghall, Durham DH1 3SG. Contact Tony Milan, Tel: 0191 386 1351. Full time courses: National Certificate in Horticulture/Greenkeeping and Groundsmanship - 1 year; National Diploma in Horticulture Turf Option - 2/3 years. Part time courses: Greenkeeping and Sportsturf Management Level 2 - Day release; NVQ Level 3 Amenity Horticulture - Afternoon-Evening. Short Courses: Health & Safety Legislation; Turfcare; Machinery & Mechanisation. All courses contribute towards NVQ Levels 1 and 2.



**CITY COLLEGE MANCHESTER**, Moor Road, Baguley, Manchester M23 9BQ. Contact Martin Webb. Tel: 0161 957 1527. College website <http://www.ccm.ac.uk> Part-time courses leading to NVQ L2 and L3 in Sports Turf Maintenance and Decorative Horticulture. Also RHS General and Diploma, Cert. Arboriculture and FEPA Spraying courses.



**MYERSCOUGH COLLEGE**, Bilsborrow, Preston, Lancashire PR3 0RY. Tel: 01995 642211/642222 Fax: 01995 642333 Email: [mailbox@myerscough.ac.uk](mailto:mailbox@myerscough.ac.uk), [www.myerscough.ac.uk](http://www.myerscough.ac.uk). Full time courses BSc (Hons) Turfgrass Science; HND Turf Science and Golf Course Management; ND Turf Science & Sportsground Management; NC Groundsmanship and Greenkeeping. Part time courses NVQ Level 2 and 3 Greenkeeping and Sports turf Maintenance (day/block release or fast track work based training qualification) HND Turf Science and Golf Course Management; Certificate and Diploma in Turf Irrigation; FEPA Short Courses. Myerscough Turf Club holds an Annual Conference and Regular Education Seminars.



**RODBASTON COLLEGE** Rodbaston, Penkridge, Stafford ST19 5PH. Contact Nigel Foskett. Tel: 01785 712209. Courses offered: NVQ Level 1,2,3 and 4 by Day Release. FEPA and chainsaw training.



**Broomfield College**

**BROOMFIELD COLLEGE** Morley, Ilkeston, Derby DE7 6DN. Contact Admissions Officer. Tel: 01332 836600. NVQ Level I and Level II. Amenity Horticulture (Greenkeeping) Block Release course. Two years duration presented in 12 one-week blocks following guidelines of GTC Training Manual. NVQ Level III gained by 9 x 3 day blocks or day release or APL service. Also available TDLB, Pesticides, Chainsaw and First Aid Training.

Profit through Skill



**MOULTON COLLEGE**, Moulton, Northampton, NN3 7RR Tel 01604 491131 Fax 01604 491127. Full time: BTEC First Diploma in Horticulture - 1 year, BTEC National Diploma in Horticulture - 2 years. National Certificate in Horticulture - 1 year. Part time: NVQ2 Amenity Horticulture with Sports Turf Care. NVQ3 Sports Turf Maintenance. Both NVQs - 1 day per week over 2 years Short Courses: FEPA - 2 days. Chainsaw Operators Certificate - 1 week



**DE MONTFORT UNIVERSITY**

**DE MONTFORT UNIVERSITY SCHOOL OF AGRICULTURE**, Caythorpe Court, Caythorpe, Grantham, Lincolnshire NG32 3EP. Contact Student Admissions Tel: 01400 272521, Fax 01400 272722. NVQ Levels 2 and 3. Sports Turf Management. National Certificate in Greenkeeping. National Diploma in Greenkeeping and Sports Turf Management. GNVQ Advanced Leisure & Tourism (Golf). Higher National Diploma in Golf and Leisure Management. BSc (Hons) Outdoor Recreation Management (Golf Option). FEPA short courses. Full residential facilities available.



**THE COLLEGE of West Anglia**

The College of West Anglia offers a range of programmes for Greenkeepers including NVQ Levels I, II and III. If you require further information, please do not hesitate to contact our Milton Campus on 01223 860701 or Student Support at King's Lynn on 01553 761144 Ext 271



**BRINSBURY COLLEGE** Brinsbury College, Pulborough, West Sussex RH20 1DL. Tel: 01798 877400, Fax: 01798 875222, Email: [student-services@brinsbury.ac.uk](mailto:student-services@brinsbury.ac.uk) Full-time courses: BTEC National Diploma Landscape Studies (Greenkeeping option), BTEC First Diploma New Entrant Horticulture (Greenkeeping or Landscaping options), City & Guilds National Certificate Horticulture (Greenkeeping & Sportsground Management). Part-time courses: NVQ Level 3 Sports Turf Maintenance (block or day release), NVQ level 2 Amenity Horticulture (Greenkeeping and Sports Turf Maintenance option), Institute of Groundsmanship Intermediate Diploma; plus various short courses, including Chainsaw, Brushcutter/Strimmer, PA1/PA2A/PA6A/PA 9, etc.



**Plumpton College**

**PLUMPTON COLLEGE**, Lewes, East Sussex, BN7 3AE. Contact: David Blackmur. Tel No: 01273 890454 Full time courses: National Diploma in Amenity Horticulture (options in Landscaping and Sportsturf); National Certificate in Amenity Horticulture; First Diploma in Horticulture. Part-time courses: NVQ Level 1, Level 2 Amenity Horticulture in Decorative, Nursery, Hard Landscape and Sportsturf, Level 3 Amenity in Decorative and Sportsturf, Level 4 Amenity. Also available are RHS General and Diploma and IOG National Technical and National Diploma (Int). Short courses are also available for FEPA spraying and chainsaw courses.



**OTLEY COLLEGE**

**OTLEY COLLEGE** Otley College, Otley, Ipswich, Suffolk IP6 9EY. Contact Course Enquiries. Tel: 01473 785543. ESF Bursaries may be available for full-time courses: National Certificate in Horticulture, option in Sports Turf Technology. Part time NVQ 2 Golf Greenkeeping and NVQ 2 Groundsmanship, NVQ 3 Sports Turf Management. IOG Intermediate and Final Diplomas (Evenings). NVQ Horticultural Mechanics. FEPA Courses PA1, PA2, PA6. Otley College \* Developing individuals \* Achieving more.



**OAKLANDS COLLEGE** Oaklands Campus, Hatfield Road, St Albans, Herts AL4 0JA. Contact Ian Merrick. Tel: 01727 737000 Fax: 01727 737752. Full time courses: National Certificate in Greenkeeping and Sports Turf Management. Part-time courses: leading to NVQ Level 2 Greenkeeping, Modern Apprenticeships. Evening courses: leading to NVQ Levels 3 and 4. Short courses: Pesticide, Chainsaw, Greenkeeper Mechanics.



**Berkshire College of Agriculture**

**BERKSHIRE COLLEGE** Hall Place, Burchetts Green, Maidenhead, Berkshire SL6 6QR Tel: 01628 824444 Fax: 01628 824695 e-mail: [enquiries@berks-coll-ag.ac.uk](mailto:enquiries@berks-coll-ag.ac.uk) website: [www.berks-coll-ag.ac.uk](http://www.berks-coll-ag.ac.uk) Full-time courses: BTEC First & National Diploma, Part-time courses: GTC Manual - NVQ2 and 3 Amenity, Sports Turf (day & block release); Short courses: FEPA Horticultural Machinery, Chainsaws, Greenkeeping for Golfers "Regional Centre for Leisure and Land based Industries & Professions"



**WEST OXFORDSHIRE COLLEGE**

**WARREN FARM CENTRE** is the base for West Oxfordshire College to offer education and training in Green Keeping, Sportsturf, Amenity horticulture and allied land based courses for the whole of Oxfordshire. Courses include: NVQ Levels 2 & 3 in Sportsturf, Decorative Horticulture and Hard Landscape. We also offer a range of short courses for the Industry including Health & Safety, pesticide training and chainsaw operation. For more information contact either Alan Brown or John Revis on Tel. no: 01865 351794, Fax No. 01865 385931.

## MIDLANDS

## SOUTH EAST

# A GUIDE TO THE COLLEGES AND COURSES AVAILABLE

**KEY TO COLOURS**

Currently GTC approved at Regional Training Centres, offering courses at Craft, Supervisory and Management levels

Currently GTC approved for training courses up to Supervisory level

Currently GTC approved for training courses up to Craft level only

Not GTC approved

Please note that all the college details published in this guide were supplied by the colleges themselves. Greenkeeper International takes no responsibility for accuracy of information provided. Contact the college directly for prospectuses and comprehensive information.

**SOUTH EAST**



**MERRISTWOOD COLLEGE**, Worplesdon, Guildford, Surrey GU3 3PE. Contact D I Rhodes Tel: 01483 884003. Fax: 01483 884001. E-mail: info@merristwood.ac.uk. Full time courses: National Certificate in Greenkeeping and Sports Turf Management, National Diploma in Greenkeeping & Sports Turf Management. Part time courses; NVQ Amenity Horticulture Level 2 and 3 in the work place - we come to you. Institute of Groundsmanship NID night class, NVQ Amenity Horticulture Sports Turf Maintenance Level 3, NVQ Amenity Horticulture Sports Turf Maintenance Level 3 (afternoon/evening release). Various short courses throughout the year. Please contact us for up-to-date listings and information. We keep on growing!



**HADLOW COLLEGE** Hadlow, Tonbridge, Kent TN11 0AL. Contact Tony Leach Tel: 01732 850551. NVQ Level II and Level III Part-time Day Release with two periods of Block Release or evenings. Level II in Groundsmanship evenings. NVQ Level III Golf Greenkeeping. BTEC First Diploma Sports Turf Management, National Diploma in Horticulture (Sports Turf option). Centres at Hadlow, Canterbury, Maidstone and Nottingham.



**WRITTLE COLLEGE**, Chelmsford, Essex, CM1 3RR. Tel: 01245 420705 Fax: 01245 424200 **SPORTSTURF PROGRAMMES** (Contact - Stewart Brown) NVQ Level 2 - Sportsturf; Options in Greenkeeping (GTC) or Groundsmanship (IOG) NVQ Level 3 - Sportsturf Maintenance. NVQ Level 4 - Amenity Horticulture. HNC - Sportsturf Science. HND - Sportsturf and Golf Course Management. Other Programmes; First Diploma. National Certificate. National Diploma (with Sportsturf Option). BSc (Hons) Horticulture. BSc (Hons) Landscape and Amenity Management. MSc Landscape and Amenity Management. NVQ 2 and 3 Service Engineering. FEPA. Chainsaw. Tractor Driving



**SPARSHOLT COLLEGE** Sparsholt, Winchester, Hants SO21 2NF. Contact Ray Broughton. Tel: 01962 776441. NVQ Level 2 Greenkeeping Practice, NVQ Level 3 Greenkeeping Supervision, City & Guilds Phase IV Management Studies, National Diplomas in Golf Course Management and Golf Studies, GTC: Greenkeeping Certificate, GTC: Certificate in Golf Course Supervision, FEPA: Short courses, Chainsaws. All courses other than Phase IV are offered on block release. Full residential facilities available. Sparsholt college provides education and training in the land-based industries.



**EASTON COLLEGE** Norfolk's College of the Countryside. Sportsturf qualifications, Amenity Horticulture and Rural Resource Management. For details contact the registry on 01603 731200. Easton College, Easton, Norwich, Norfolk NR9 5DX Tel: 01603 731200 Fax: 01603 741438



**EALING TERTIARY COLLEGE** - Norwood Hall School of Horticulture, Norwood Green, Southall, Middlesex UB2 4LA. Contact Declan Gallagher. Tel 0181 231 6295; Fax 0181 571 9479; E-mail declan.gallagher@ealingcoll.ac.uk. Full Time courses National Certificate Sports Ground Management, National Diploma in Sports Ground Management. Part Time courses NVQ Levels 2 & 3 Sports Turf management and Maintenance; IOG Intermediate and National Diploma in Turfculture; FEPA PA1, PA2a, PA6a.

**S WEST**



**CANNINGTON COLLEGE** Cannington Bridgwater, Somerset TA5 2LS. Contact Terry Horne: 01278 655083. <http://www.cannington.ac.uk> Email: hornet@cannington.ac.uk BTEC Higher National Diploma in Sports Science (Golf Option). BTEC National Diploma in Sports Science (Golf Studies), Higher National Certificate Golf Course Management, BTEC First Diploma, BTEC National Diploma in Golf Course Management, BTEC Higher National Diploma Golf Course Management (inc. European Studies) NVQ Level I and II Golf Greenkeeping, NVQ Level III Greenkeeping and Supervisory Management, NVQ Level IV Greenkeeping Management, FEPA Training, Chainsaw Certification, Off-road Vehicle Certification, Greenkeeper Mechanics.



**HARTPURY COLLEGE** Hartpury House, Gloucester GL19 3BE. Hartpury Marketing Tel: 01452 830065 Fax: 01452 700629. Courses available: First Diploma Horticulture, National Certificate Horticulture, National Diploma Landscaping, First Diploma Greenkeeping, Certificate in Greenkeeping, National Diploma Greenkeeping, National Diploma Golf Studies, Modern Apprenticeships, Route 2 Work, NVQs available in Amenity Horticulture, Commercial Horticulture, Amenity / Turf, Amenity / Sportsturf, Decorative Horticulture, plus RHS General Examination, City & Guilds Certificate in Gardening, TDLB Assessor Awards and a full programme of amateur, leisure and day release courses.

**WALES**



**WELSH COLLEGE OF HORTICULTURE** Contact the Registrar, Tel 01352 841000 Email Admin@wcoh.ac.uk Website www@wcoh.ac.uk NVQ Amenity Horticulture Levels 1-4 (Sports Turf Option) Full-time: BTEC Higher National Diploma in Landscape Science (Turf Management option) in conjunction with the University of Glamorgan. BTEC First Diploma in Horticulture (Sports Turf Option), Part-time: Higher National Certificate in Landscape Science (Turf Management option) - day release. Short Courses: FEPA, chainsaw Techniques & Maintenance, First Aid, Health & Safety, ATVs and TDLB Assessor courses



**LANGSIDE COLLEGE** Glasgow, Rutherglen Campus: Contact Colin S. Urquhart, Tel: 0141 647 6300; fax: 0141 647 5895; e-mail: CURQUHART@perseus.langside.ac.uk Full time and day release courses and programmes from SVQII to HND, Pesticides Training, Risk Assessment, Health and Safety etc., Sportsturf, Horticulture and Ecology.



**GOSTA TRAINING LTD.**, Unit 5E, Clydeway Centre, 45 Finnieston Street, Glasgow G3 8JU Contact Chris Bothwell. Tel: 0141-248-2772. Fax. 0141-248-2453. SVQ II and III also Modern Apprenticeship in Amenity Horticulture for all options including Sportsturf and GTC Training Manual. Attendance Day /Block release from Nov-March. Short courses including Pesticides, Chainsaw, First Aid, Abrasive Wheels, Manual Handling. Consultancy covering Site Risk Audits. Machinery Permit to use, COSHH and Noise Assessment, Health & Safety Policy.



**ELMWOOD COLLEGE** Cupar, Fife KY15 4JB. Contact Carol Borthwick. Tel:01334 658974. Fax: 01334 658888 Email: cborthwick@elmwood.ac.uk. Craft Level courses. Full time National Certificate, Block-release, following SVQ Level II and the GTC Training Manual. Six week specialist modular programme (January - February), including Golf Course Construction, Pesticide Application and Plant Protection Procedures. SVQ Level III Block Release and SVQ Level IV coming soon. HNC/HND Golf Course Management available as full-time, block/day release and distance learning. FEPA, COSHH and Health & Safety short courses also.



**OATRIDGE AGRICULTURAL COLLEGE**, Broxburn, West Lothian, near Edinburgh, EH52 6NH. Contact Steve Miller - Tel: 01506 854387 Fax 01506 853373. HNC in Golf Course Management; full time Certificate in Greenkeeping, Block and Day Release SVQ Level II and III (GTC Manuals ) and Modern Apprenticeship. SVQ in Ground Care Machinery, full range of Amenity Horticulture and Landscaping courses at HNC National Certificate and SVQ Level. Short Courses. FEPA, Chainsaw, Forklift.

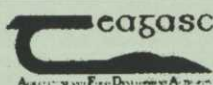
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**Dr Stephen Baker, Head of Soils and Sports Surface Science at the STRI, Bingley, takes a retrospective look at one hundred years of research and progress in golf course agronomy**

# Past masters?



Above: Sowing trials at the Bingley experimental ground in August 1929

## **Introduction**

This is the last issue of *Greenkeeper International* of the century, therefore it is perhaps worth stepping back to consider the progress that has been made in golf course agronomy over the last hundred years. Innovation has come about through many sources. Greenkeepers have been prepared to try new materials and methods and pass their experiences on to colleagues. Universities and research institutes were able to develop a deeper understanding of the

science of soils and turf grasses and to carry out controlled studies on management methods. Similarly grass breeders, the agrochemical industry and manufacturers of maintenance machinery and irrigation systems were able to improve the materials and equipment needed for modern greenkeeping.

The aim of this article is to look at changes in golf course agronomy in Britain over the last one hundred years. I will focus particularly on developments in research as this area

is usually well documented, with information being available from old books and journals.

The modern greenkeeping era probably started during the second half of the nineteenth century as mowing equipment improved and became more widely used. Golfers were no longer reliant on sheep or rabbits to keep closely-cropped turf or on the variable effects of men with scythes. Gradually multiple mowers dragged by tractors began to be introduced, making fairway cutting comparative-

# Past masters?

ly rapid and less expensive. Similarly older practices of heavy rolling were replaced by the use of top dressing to maintain surface levels.

However, there were undoubtedly problems on many courses. In parts of the country golf had expanded away from traditional, low-fertility links and heathland soils, blessed with good drainage and fine-leaved fescue and bent grasses. Instead the newer courses tended to be developed on the heavier, more fertile soils of parkland sites. Furthermore, the application of lime and over-abundant amounts of fertiliser, especially after the First World War, had left a legacy of coarse grasses, weeds and earthworm casts.

## Early Research

In the USA the need for scientific investigation of greenkeeping problems had been recognised before the end of the last century. Testing and selection of fine turf grasses was carried out by J B Olcott at South Manchester, Connecticut, from 1885 to 1910, under the auspices of the Connecticut Experiment Station. In 1890 turf plots were established at the Rhode Island Agricultural Experiment Station and in 1917 Charles Piper and Russell Oakley published a pioneering book on Turf for Golf Courses, supported by the USGA.

In South Africa Dr C M Murray had carried out work at his own home and on the links of Royal Cape Golf Club from 1904 onwards and had shown that naturally acid soils or those receiving acidifying fertilisers generally favoured better quality turf with fewer weeds.

Research on greenkeeping matters began slightly later in Britain. Norman Hackett had started work on grass selection at Keighley Golf Club in West Yorkshire in the early 1920s and was to play a central role in expanding research on golf course turf. Getting started was not easy and an attempt to get up a research station in 1924 by the Green Committee of the R&A was abandoned because of the lack of financial support. However, the R&A Green Committee continued to work behind the scenes, eventually handing over the project to the Home Unions, whose Joint Advisory Committee was eventually responsible for establishing the Board of

Greenkeeping Research at Bingley in 1929. This was to be the forerunner of the Sports Turf Research Institute.

A fascinating booklet *Guide to the Experiments at St. Ives Research Station* published by the Board of Greenkeeping in the summer of 1931 gives a good indication of research and agronomic issues being addressed. At the time there were 11 main sets of trials plus a stolon nursery occupying a total area of about 350 square metres. The first cutting and rolling on pre-existing pasture turf had started in June 1929 and the first new sowings started in August 1929. A selection of trials underway in 1931 included:

- Response of different grasses to a management programme based on applications every four to six weeks in the growing season of a mixture of three parts ammonium sulphate, one part iron sulphate and 20 parts of compost at 140 grammes per square metre. A wide range of grasses was studied including hard fescue, sheep's fescue, fine leaved fescue, meadow foxtail, sweet vernal grass, wood meadow-grass, crested dogtail, annual meadow-grass and a brown-top bent from Rhode Island in the USA.

- A parallel study considered the effects of different fertiliser regimes on mixtures of these grasses. Fertiliser treatments included compost, nitrate of soda, iron sulphate, ammonium sulphate, superphosphate and lime applied at different combinations at various rates and frequencies.

- Trials on mature pasture turf to monitor species changes in relation to different fertiliser programmes. The range of fertiliser treatments was extended to include organic materials such as Peruvian guano, bone meal, rape meal, dried blood, fish meal, flue dust and sewage sludge.

- A further trial sown in 1930 examined improved strains of fescue and bent materials with Chewing's fescue and bent from New Zealand and a mixture of bentgrasses from South Germany.

- For weed control, one of the original trials from 1929 examined the effect of fertiliser treatments (ammonium sulphate, iron sulphate, superphosphate and potassium sulphate) on ribwort plantain, white clover, yarrow and broad-leaved plantain, with the range of weed species being extended in later years.

- Although there were no specific construction trials for golf, a small bowling green was laid with Cumberland sea-washed turf on a foundation of clinker, ashes and sand and this was top-dressed with either lime-rich sea sand or lime-free pit sand. Similarly, a further trial had Cumberland turf over both silty, sea-marsh soil and the local sandy loam soil.

- Other studies included experiments with lawn sand, work on lead arsenate for earthworm control, and establishment studies using seed and stolons.

Two other trials, established away from the main experimental ground, studied grass species and weeds on very acid moorland soils and work on grasses and weeds on heavily limed, woodland soil. Extension trials on grass selection and fertilisers were also set up on the links soils at Muirfield in Scotland and on heavy soils at Pollock Golf Club near Glasgow.

Financial support for the work of the Board of Greenkeeping Research was initially only guaranteed for five years until the end of December 1933. In the Spring of 1934 the director, R B Dawson, reported on the progress that had been made, while noting that a period of four and a half years was "almost negligible as regards the study of the subject and the experiments so far carried out cannot be regarded as having done more than scratch the surface and reveal its deeper nature below." Dawson was however able to report significant developments in many areas. For grass selection, Chewing's fescue, creeping red fescue and browntop bent had proved to be the best grasses for golf greens. Preliminary work was starting selecting British indigenous strains of the grasses with the intention of building up a stock of plants yielding seed capable of producing turf with improved density, colour, persistency and uniformity. Ultimately, this led to the slender creeping red fescue cultivar 'Dawson' which, at the end of the century, is still used on some courses.

For weed killing, trials using arsenic acid sprays had partial success but spot treatments with this acid proved entirely successful and economical. Trials on materials for earthworm control had been carried out and





Above: Installation of a trial for the R&A on construction, nutrition and irrigation of golf greens on virtually the same area (July 1988)

mowrah meal had been shown to be more effective than perchloride of mercury or copper sulphate. Trials on application rates of lead arsenate were also underway. The research station had also developed the St. Ives Leather Jacket Exterminator, an emulsion of orthodichlorobenzene blended with Jeyes' fluid, which was found to be particularly potent in bringing leatherjackets to the surface. Progress on turfgrass disease appeared to have been less successful. Work had been reported in 1931 from the Welsh Plant Breeding Station at Aberystwyth on the occurrence of *Fusarium* on golf greens in Britain, identifying the pathogens concerned. Only preliminary work on control had been carried out at Bingley with watering with iron sulphate giving partial success. Dawson suggested that the field on fungal diseases of turf remained unexplored and that the best methods of prevention and cure were not understood.

The importance of good drainage was recognised but had not been addressed by experimental work. Similarly, the need for research on mechanical treatments such as raking and hollow forking was mentioned in Dawson's report.

Results from many of the trials are reported in early volumes of the *Journal of the Board of Greenkeeping Research*, along with other papers on

such issues as irrigation of golf greens, the control of rabbits and moles, *Corticium* (red thread) disease and one strangely titled article, "The use of rubber in greenkeeping"! These pre-war studies provided a scientific underpinning of our knowledge of turfgrasses and their management and, as is the case today, advisory staff were able to pass on this information during visits to subscribing clubs.

#### The Post War Years

In an article of this length, it is clearly impossible to identify all areas of research affecting greenkeeping and I have therefore concentrated on developments in Britain in the first half of the century. After the Second World War the intensity of research in Britain for golf course agronomy appeared to decline, but work continued elsewhere, particularly in the United States. Through the late 1940s and early 1950s, the main issues covered in STRI research papers were the use of selective weed-killers, earthworm control, turf diseases and soil fertility and soil analysis. Especially in the 1960s, comparatively little research work was being carried out at the STRI that was specific to golf, but there were for example studies on the use of chlordane for earthworm control, slow-release fertilisers and the control

of annual meadow-grass.

So far, virtually no mention has been made of golf green construction and with relative low levels of use and less winter play, soil-based greens generally provided acceptable putting surfaces and were in many respects easier to manage. In 1960, the USGA Specification for a Method of Putting Green Construction was first published, and in the last 30 years several laboratory studies and field trials have been carried out in Britain, especially at the STRI and the University of Wales, Aberystwyth, improving our knowledge of sands and amendment materials for root-zone layers.

The move to more sand-dominated rootzones had implications for the management of golf greens. In consequence, in the late 1980s and early 1990s, the R&A funded STRI research on the nutrition of sand-dominated greens and irrigation studies.

Another main development in the last 30 years has been work on turf-grass wear and the development of techniques to evaluate the quality of new grass cultivars developed by plant breeders for use on the golf course. The annual publication of *Turfgrass Seed* by the STRI means that greenkeepers have guidance on the selection of grass cultivars for greens, tees and fairways through

detailed information on wear tolerance, freedom from disease, fineness of leaf, etc.

With improved funding, the amount of research for golf has increased substantially in the last 15 years and other more recent work has included the development of techniques to measure the playing quality of golf greens, work on dry-patch and wetting agents, and currently the R&A is supporting a major project on earthworm control on golf courses. It is perhaps ironic that research efforts should return to an issue that was being addressed in the 1920s and 1930s, but golf course agronomy must respond to many factors, in this case changes in pesticide legislation that have ruled out previously effective management techniques.

Although the amount of information available to the golf greenkeeper has increased enormously over the last 100 years, the example of earthworm control illustrates that there are always new challenges to be faced in relation to patterns of use, players' expectations, pesticide legislation, availability of irrigation water and even climatic change. Next month, we will be into the new millennium and in the January 2000 issue of *Greenkeeper International* I hope to consider current research problems and possible future trends.

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