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International



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should be with you by July 12

GREENKEEPER

International

JUNE 1997

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Cooden Beach, venue for this year's National Tournament. Picture by Scott MacCallum.
Inset picture by Margot Briscoe-Knight

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GREENKEEPER

International

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Water relief is sure to be temporary

There are occasions when a person's unfailing selflessness and general concern for others should be both recognised and rewarded. All too often good deeds remain in the background and the beneficiaries do not have the opportunity to make good their debt of gratitude.

I firmly believe that we have arrived at one of these occasions and I would like to put forward someone who in the last month has ensured that the lives of BIGGA members have been just a little bit easier.

It's me!

About a month ago I decided that such was the current situation regarding the drought I should turn a proportion of the June issue of the magazine over to the subject.

As you will see I have invited four experts to look at the current situation with regard to water shortages and project what potential solutions are available.

Since then it hasn't stopped raining and, for a short time at least, golf courses are looking a bit greener.

See. I'm your guardian angel and you didn't even know. All tokens of your appreciation gratefully accepted.

Seriously though, it may soon get to the stage that Britain is no longer considered a wet country and we will have to accept that water is a valuable, not to say expensive, commodity. Leaving taps, or irrigations systems, running will become a luxury few can afford. Umbrella, welly boot and waterproof salesmen must be extremely worried by the situation but in the league table of concerned professions greenkeeping is also well clear of the relegation zone.

Alleviating the problem will mean a major rethink in working practices on golf courses and irrigation water could well edge its way up the list of major annual

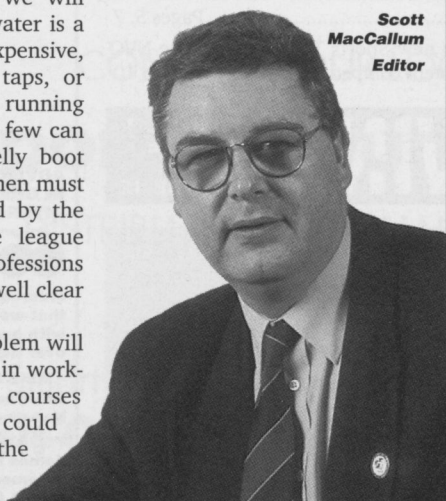
expenditure alongside that new ride-on triple.

I hope that the views of our four experts will give you food for thought and some ideas which could perhaps be put into practice now.

Elsewhere in this issue is a look at Cooden Beach, the venue for this year's National Tournament sponsored by Miracle Professional. This traditional event has a loyal band of entrants but anyone wishing to play for the first time will find a excellent golf course and a town, Bexhill-on-Sea and surrounding area, which offers much for the holidaying greenkeeper and his family.

As this month's Editorial is a general look at what's in the magazine can I make an appeal for something I'd like to see more of in future. I would like any member with a camera to take photographs at BIGGA events whether they be Sectional Regional or National. Try to avoid the posed presentation shot anything relaxed, unusual or funny has got a chance of being published.

You never know I may even offer up a BIGGA umbrella for the best picture of the month! Going by what I've said earlier it might well turn into something of rare value in the years to come and appear as an object on Going for a Song.



Scott MacCallum
Editor

As I see it...

BY PAT MURPHY
BIGGA CHAIRMAN

Last month was quite a quiet one for me and it gave me a chance to spend some much needed time on the golf course. It really has started to go and we're now cutting the greens every day, the tees three times a week and fairways three to four times a week.

I wasn't totally free from the duties of the Chairman, however, and one of the highlights

of the month was a visit to Westurf on the last day of April – the day before the General Election. I remember clearly when it was because I was chased off the motorway on the way down by a bomb scare. I left home at 10am but didn't arrive at our hotel until 4.15pm.

It was certainly well worth the trip, though, as it was a brilliant day and quite a few people left with sunburn.

It was a good chance to meet up with one of my predecessors as Chairman, Ivor Scoones, who was Chairman in 1990 who is the Course Manager at Long Ashton GC, venue for Westurf.

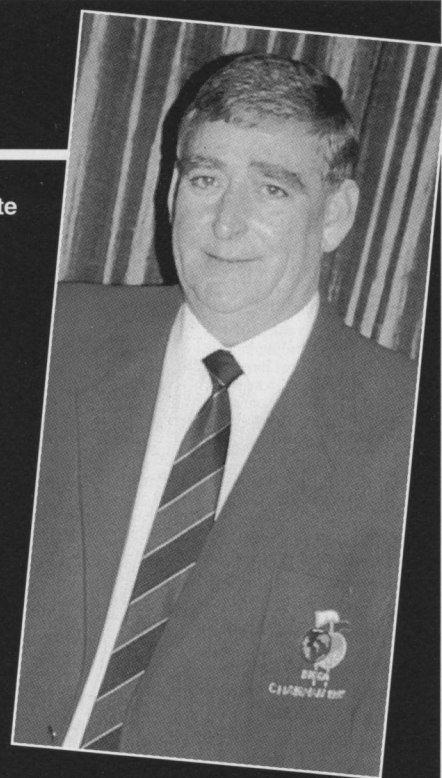
I was asked to judge the best stands along with the Captain of the Club and Jim Fry, the President of the South Coast Section. It was a task we took extremely seriously and it took us around two and a half hours to get round them all. It was a good opportunity to meet all the exhibitors and I enjoyed the company of my fellow judges.

It was also my first chance to meet the two newest members of staff, Jenny Panton, from the Sales and Marketing Department, and Paula Humphries, the new South West and South Wales Regional Administrator.

Paula is taking over from Gordon and Marion Child, who had organised their final Westurf Show. To recognise their magnificent efforts over the last ten years a presentation was made to them on behalf of the Region by Regional Chairman, Richard Whyman. I was also the recipient of a presentation and I would like to thank the Region for their kindness.

Another of my duties was much closer to home... at Shipley College where there was a careers seminar. I did a talk on greenkeeping looking back at the beginnings of the industry and describing how I have seen the job of the greenkeeper develop. I would like to thank the STRI and in particular Roger Evans for the use of the slides.

Towards the end of the month I had a Moderation meeting at Askham Bryan in my role as Internal Verifier and another GTC meeting at Aldwark Manor while I'm looking forward to visiting Scotland for the Hayter Regional Final.



Birdwatching 'Ryder Cup' sparks interest

Europe took on the USA in a special bird watching competition – on golf courses late last month. This ecological twist to golf's traditional transatlantic rivalry was billed as the first ever "Bird watching Ryder Cup". It was one of a number of green initiatives leading up to the 1997 Ryder Cup matches to be held at Valderrama, Spain, in September.

The competition proved a light hearted way to focus attention on the fact that properly designed and managed golf courses can provide important habitat for wildlife. It also provided some useful information concerning what species of birds are actually using golf courses.

Following the Ryder Cup format, a team of 12 European bird watchers on golf courses throughout Europe challenged a team of 12 Americans on prime sites in the US. Over the 24 hour period, each team member scoured a particular golf course with the task of observing as many bird species as possible. The team collectively scored the highest total won. However, to allow for America's naturally richer bird life, the European team had a handicap – they only had to find five species to match every eight species scored by the USA team.

Among the list of European golf courses competing in this event were famous names such as St Andrews, Falsterbo in southern Sweden and San Lorenzo in Portugal.

The premier site was none other than Valderrama, where local naturalist Martin Jacoby had the honour of spearheading Europe's bid to outwit the Americans. A site which is home to over 100 bird species, Jacoby thinks of Valderrama as "a nature reserve in which people play golf".



Lessening the burden

A new deal between Kubota and ING Turfcare Finance means that a new range of finance plans is now available to Kubota customers.

Called Kubota Credit, the joint finance venture is designed to provide finance solutions for compact tractors, ride-on mowers and implements.

Rene Orban, Sales Director,

Kubota (UK) Ltd said: "We believe this new scheme will satisfy the funding needs of Kubota users and owners operating in four distinct areas golf turfcare, estate management, amenity management and landscape and growing."

Pictured is Rene Orban, (right) and Bob Wilson, of ING Turfcare Finance Ltd.

Two golf courses in Hungary and one at Bled in Slovenia made up Eastern Europe's contribution to the team. These were important sites because more species occur in eastern countries than western ones. Another key location was the magnificent Domain Imperial set in wooded parkland on the shores of Lake Geneva at Gland, Switzerland.

Both teams had non-playing captains – David Stubbs for Europe and Ron Dodson for America.

Prior to the big day David revealed that the Americans would start as favourites. "They have chosen pretty wild places but we have some very good sites of our own. I think people will be surprised just how many species of birds will be found on these golf courses. It is only to be hoped that the Americans have not found a Tiger Woods with binoculars."

■ **Stop press:** Europe won by 347 (including handicap) to 237. Full story next month.

FLYING DIVOTS



■ Karen Smith who has worked for Jacobsen E-Z-GO Textron as a freelance for the last three years has

been appointed Marketing Manager of the company.

Peter Bell Managing Director of the UK Division of Jacobsen E-Z-GO Textron commented, "As a Sales and Marketing organisation we are delighted to announce the appointment of Karen Smith as Marketing Manager for the company. We believe that the role of marketing is of key importance to the long term development of the various brands we provide as a company."

Karen graduated from Cardiff University with a degree in business Studies and has worked within the horticulture, amenity and golf market in a marketing and PR role for over seven years.



■ Peter Clark has joined Charterhouse Turf Machinery as Product Manager of the new Connoisseur range of products. He has over 20 years experience within the trade promoting such products as Poulan, Alpine, Solo and Dolmar Chainsaws.

■ Ruud Franciszen, who has been a Board member of Charterhouse for the last four years and Managing Director of Redexim BV has retired.



Ruud, as he is widely known, introduced the verti-drain on to a world market after it had been developed by Dutch contractor Aaron deRidder.

■ Leigh Siddon, Collier Turf Care Distributors Ltd's Sales Representative for East Bedfordshire, North Buckinghamshire, Cambridgeshire, Essex, Hertfordshire, South Lincolnshire, East Northamptonshire and part of Suffolk has passed his Amenity BASIS exam.

Collier's has also appointed Daren Smith as Sales Representative for Norfolk and parts of Cambridgeshire and Suffolk.

Tribute to Gerald Haynes

On April 18 Gerald Haynes, Course Manager of the Hartbourne Country Club, Herts died. He was 52.

Gerald had fought an unrelenting battle against a lung illness for a number of years. In this time never once did he lose his dignity, his passion for his work or his sense of humour.

I only knew Gerald for a relatively short time but will always remember him for his unbiased

honesty and natural talents as a greenkeeper and manager. He had supported greenkeeper education for many years through student placements and it is surely a fitting tribute to him that a great number of young professionals owe their knowledge to working with him.

Gerald was laid to rest close to the family home in Powys, Mid Wales, a spot chosen by himself, to be near the two great loves of his life, his family

and the countryside of the area.

Gerald leaves two fine sons, Richard and Martin and a widow, Susan. On behalf of them I would like to thank the staff and members of Hartbourne GC for the support over the years.

I am sure all those who knew Gerald will be saddened by his untimely demise and our thoughts are with Susan for the future.

Pete Bradburn

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HAYTER CHALLENGE

Event is gathering pace

The Regional Finals are now looming into view and for those successful in the Sectional events, a rare opportunity of playing on one of the country's finest in-land courses is tantalisingly close. The fact that the chance involves playing on another excellent course is an added bonus. There are, of course, also places on offer to represent the Rest of the World team to play against the Americas in the Hayter International Cup to be played in the USA next year.

Ganton Golf Club, near Scarborough, has hosted many major events including the Ryder Cup, in 1949, and regularly welcomes The Amateur Championship.

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

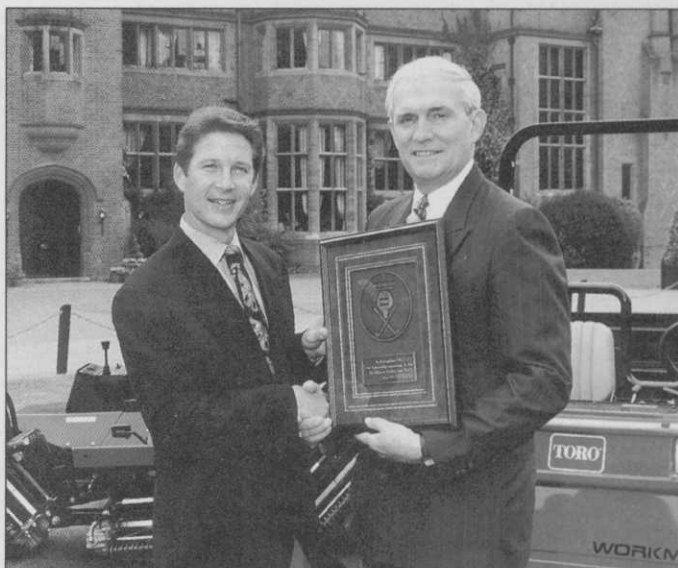
That team will have the chance to avenge the narrow defeat inflicted on the Rest of the World by the Americas at West Lancashire Golf Club last year.

The Regional Qualifiers are to be played at:- Scottish - Loch Green GC, Troon, May 27; South West and South Wales - Burnham and Berrow GC, June 11.; Midland - Warwickshire GC, June 26; South East - Ham Manor GC, June 27; Northern - Matfen Hall GC, July 9;

National Final: Ganton GC, September 17 & 18.

Supporting role

TIS now support any requirement for Toro Irrigation product installation, service or retail in the south of England. Contacts are Colin Clark, Tel: 01903 859933 and John Roberts, Tel: 01425 479232.



Don Masini, right, Toro's MD of worldwide sales and Marriott's Rob Baruck

Toro's hotel deal

The Toro Company has secured a multi-million-pound partnership agreement with Marriott Hotels in the UK, part of the Whitbread Hotel Company, as exclusive suppliers of golf course turfcare machinery and irrigation systems.

The deal covers all eight Marriott Hotel & Country Clubs with golf courses, as well as two others where new 18-hole courses are under construction. It is for an initial two-year term, with a view to a further three to five years after that.

"For six months the Whitbread Hotel Company golf development team has been assessing the turf management needs of the four 36-hole, one 27 and three 18-hole golf courses we own," said Rob Baruck, Marriott Hotels' Director of Golf and Leisure, speaking after the agreement was signed at Marriott Hanbury Manor Hotel & Country Club in Ware, Hertfordshire, the venue for the recent Alamo English Open.

"We made a detailed assessment of the turf equipment industry and short listed four companies that we considered potential partners for our company," he explained.

"Of the four, Toro was considered to be the most pro-active candidate to develop the partnering process."

"The Toro Company is also the largest manufacturer of irrigation equipment and brings the design and technical support of this specialist field into the deal," added Rob.

The deal was signed on behalf of The Toro Company by Don Masini, Managing Director of Worldwide Sales in the international division. He was joined by Toro's European General Manager of Sales, Bob Buckingham.

"It proves again that Toro not only has winning products, but provides a total solutions package which includes training, technical expertise and agronomic advice. Also, we are the only company in the industry who can cover both machinery and irrigation aspects together," said Bob.

As will be the case for all future machinery aspects, this was handled through Toro's UK commercial products distributor Lely UK in St Neots, Cambs; while the irrigation side will be catered for by TIL Irrigation in Ringwood, Hants, the UK distributor for Toro irrigation products.

Bailey's open their doors

Bailey's of Norfolk has issued a general invitation to BIGGA members and their families to join them in celebrating 21 years in the turf dressing business.

All the events happening throughout their open week, July 7-12 are free and include a Family Fun Day, barbecue and dance, machinery demonstrations and a chance to look round the production and laboratory facilities.

Two golf competitions with prizes worth over £500 will also be taking place. Bailey's will also be welcoming greenkeepers to come and look round the production and laboratory facilities.

The Open Week is designed to take place in a relaxed atmosphere. For further information call Bailey's on 01603 754607.

FLYING DIVOTS



■ Amenity Technology has made three new staff appointments. Steve Coleman, top left, becomes a



Director of the company responsible for commercial development. Lee Robertson, centre, has



been appointed Northern Technical Sales representative and Gary Haines is the Technical Sales representative for the Midlands.

The company has also relocated to new offices with larger warehouse space. The new address is: Reading Business Centre, Weldale St, Reading, Berks, RG1 7BX.

■ Simon Hannam has left Inturf after seven years as Technical Advisor to take up a position with Allied Dunbar. Derek Edwards and all the staff at Inturf wish Simon well in his new career.



■ Briggs & Stratton has promoted Robert Preece to the new position of Technical

Sales representative. Previously Service Administrator and an Instructor at their Brentwood Training facility Robert, a Master Service Technician, will be supporting Registered Service Dealers in the Southern half of the country. Assuming Robert's previous roll will be Paul Shuttleworth, a Master Service Technician with 28 years experience problem solving and repairing Briggs & Stratton engines.

THE FACTS: NOT THE HYPE

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John Wells
Course Manager
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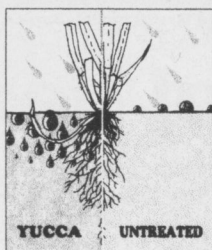
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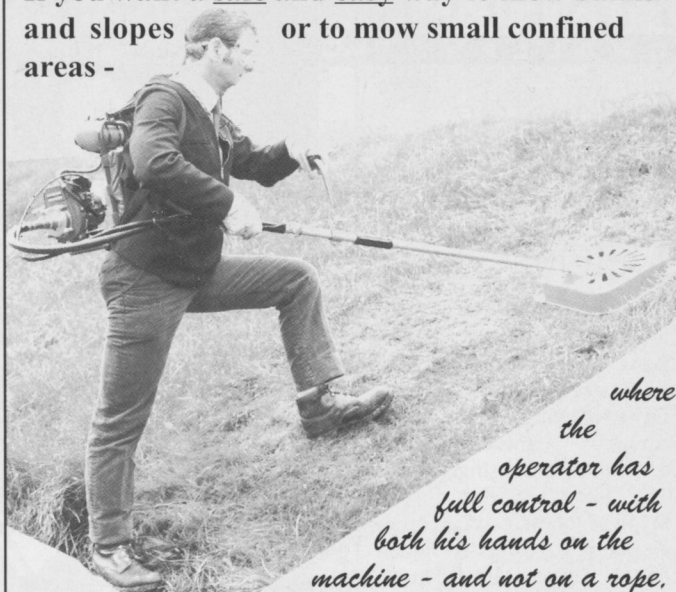


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Fintan Brennan, Toro Student Greenkeeper of the Year, reports on the "adventure" which followed winning the prestigious title



Fulfilling a dream

A wonderful weekend at BIGGA Headquarters at Aldwark Manor last October, during which I was fortunate to meet a lovely group of people, was capped by my becoming Toro Student Greenkeeper of the Year. As a result I found myself, at the beginning of January, en route to the Winter Turf School in the United States which was part of my prize.

Preparing for the trip I recalled my Irish colleague, Bridie Redican, winning the same competition in 1993. It was the year I started greenkeeping and I remember thinking will that be me someday? Then I realised that dream and it was me with my picture on the front cover of *Greenkeeper International*!

Sitting in the departure lounge in Dublin Airport with my family, wife Bernie and boys Mike and Joe I had mixed feelings... loneliness, fear of the unknown, excitement. Yes, I was very excited about setting off on my adventure.

And an adventure from start to finish it certainly was. Three flights and 22 hours after leaving Dublin I landed at Bradley Airport, Hartford, Connecticut and it was another hour's journey to the Econo Lodge which was to be my home for the next seven weeks.

The weather which varies from zero to minus 10 and colder was the initial shock and then there was the College Day which began at 8am and finished at 5.30pm. It had been a while since I had sat in a classroom for that length of time.

The course was more intense than I had previously experienced. Eleven subjects were covered including: Plant Physiology, Turfgrass Management, Turfgrass Insects, Weed Man-

agement, Arboriculture Calculations, Organisational Management, Irrigation, Soils, Golf Course Design, Construction and Turf Grass Disease. Examinations were to be taken on most of the subjects and two projects to be completed. Each of the 11 subjects were studied in depth and even though some of them did not apply to my present position they will be of great benefit to me if I wished to work overseas.

A trip to a trade show in Boston, organised by the college, was of interest to me but the highlight of my stay was the visit to the GCSAA Show and Conference in Las Vegas. My first port of call was, of course, the Toro stand which consisted of Toro Machinery, Toro Irrigation and the newly-launched Site Management Programme. I also visited the BIGGA stand where I met the newly-appointed National Chairman, Pat Murphy. While in Las Vegas I made a flight over the Grand Canyon and enjoyed a bus ride to the Hoover Dam.

During my total of eight weeks away I also visited Boston, Vermont, New York and had a very informative trip to the Toro Machinery Headquarters in Menna and Toro Irrigation in Riverside, California.

I have made quite a few friends while in the States and to Jim, Steve, Noel and Ron I would like to thank you all for your companionship, friendship and kindness during my stay.

I have gained an invaluable experience that I would not have got elsewhere and for this I sincerely thank Toro for sponsoring my trip and giving me an insight to other golfing worlds. I would also like to thank BIGGA for organising the competition.

BOOK REVIEWS

Several interesting books have arrived recently at BIGGA HQ from the USA. Although aimed at American Superintendents, they contain a great deal of useful information for the British greenkeeper. All of the following books are available from: Cassell plc, Stanley House, 3 Fleets Lane, Poole, Dorset, BH15 3AJ.

The Mathematics of Turf Grass Maintenance

A knowledge of mathematics is required when controlling budgets, applying pesticides and fertilisers and when trying to estimate resource requirements for the building of golf course features. This book gives examples of some of the mathematical problems that may be encountered by greenkeepers with hints on how to solve more complex tasks. Although the examples are in Imperial units ie feet, pounds and gallons the basic concepts still apply and conversion factors are given for those who wish to work in metric units. The authors, Nick Christians and Michael Agnew have managed to avoid the trap of making the simple complex and the book is reasonably easy to follow. Priced at £24.95, this book would be a useful reference for Head Greenkeepers' offices.

Colour Atlas of Turf Grass Diseases

One of several references for the identification of turf grass diseases currently on the market, this book, written by Toshikazu Tani and Dr James Beard, gives general information on diseases and more specific guidance on the identification of warm and cool season grasses. Although some of the full colour pictures would have been clearer if they had been enlarged, the notes accompanying each plate ensures that mistakes are not made in disease identification. A useful book for anyone with an interest in the identification of diseases especially students and academics, this book costs £54.95.

Guide to Golf Course Irrigation System Design & Drainage

This book's title is slightly confusing due to the term drainage at the end of the sentence. The book does contain information on the design of irrigation systems and on the theory and installation of drainage systems. As our weather changes and drought conditions worsen, irrigation is becoming increasingly important. Moreover, the demand for all round play and our damp winter conditions make adequate drainage equally essential.

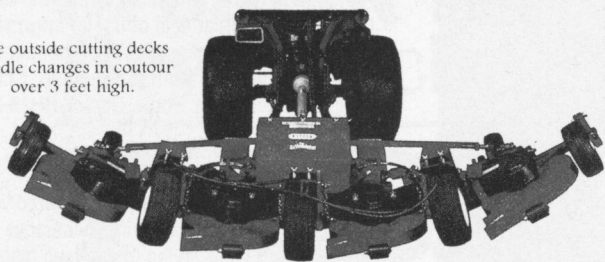
Written by Edward Pira, Professor Emeritus at the University of Massachusetts, this book looks at the theory of irrigation system design and compares and contrasts the various types of pumps, pipes, valves and controllers. The sections on drainage look at surveying, types of drainage system and some of the mathematics required. Each chapter includes practical examples to illustrate the principles involved. This book would be a useful introduction to the techniques of drainage and irrigation for those just entering the profession and for any greenkeeper thinking of installing a new irrigation or drainage system. Priced at £39.95 this book is good value, especially if it saved you from buying the wrong irrigation system and making a very expensive mistake.

KEN RICHARDSON, EDUCATION OFFICER

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Pace is hotting up

This month's article looks at the new Sports Turf Maintenance National Vocational Qualifications, the Slide Library, the Education and Development Fund the Golf Course Environment Competition and the Learning Experience 1998.

National Vocational Qualification in Sports Turf maintenance

As you may have read in the May Edition of *Greenkeeper International*, fine turf ie greenkeepers and groundsman now have their own National Vocational Qualification at Levels 2 and 3. This qualification supersedes the existing NVQ in Amenity Horticulture (Greenkeeping) and it is a close match to the Standards in the Greenkeepers Training Manual. The GTC, with the support of colleges and BIGGA has lobbied hard for more than three years to gain acceptance for this Turf qualification. An exciting feature of this award is that the GTC will be responsible for setting and monitoring the levels of equipment, resources and standards of training needed by any training provider wanting to offer it. The industry now has a qualification that it owns and it is industry that must ensure that Standards are met.

BIGGA Slide Library

I am beginning to gather a wide range of 35 mm colour slides for the BIGGA Slide Library. After my appeal last month, two companies, Rhône Poulenc and Sisis have said that they will supply some slides. My thanks to them, their contribution is welcome. We still have room for more slides and if any company wants their product shown in green keeper presentations please contact me at HQ.

Education and Development Fund

You should all have received a copy of the programme for this year's Regional Supervisory Management courses, which thanks to contributions made to the Education and Development Fund are offered at a very competitive rate. Other projects supported by the Fund this year have been the Golf Course Ecology Video and a reprint of the Pests and Diseases Field Guide. Head



Education Update

BY KEN
RICHARDSON

Greenkeeper members will shortly be receiving an ecology poster with three more field guides due later in the year and a full catalogue of all of BIGGA's education and training opportunities is "at the printers". The Education and Development Fund is supported by 26 companies, who are acknowledged on the inside cover of this magazine, and by many individuals. Our latest individual contribution of £100 was handed in, anonymously, at Westurf and we are very grateful to Mr X.

The Learning Experience 1998 in association with Ransomes

Thank you to all those who have volunteered to speak at Harrogate, in January, at the Learning Experience. We have been able to put names to sessions and, thanks to the continued support of Ransomes, we should be able to provide another excellent Conference, Workshops and Seminar Programme.

Golf Course Environment Competition

The Golf Course Environment Competition, in association with Amazone and Rhône Poulenc is reaching its next stage. Thirty excellent entries were delivered to STRI on 16 May and a further batch sent at the end of May. Bob Taylor now has the difficult task of judging the entries before we can announce the National Winner and four Regional Winners, later in the year.

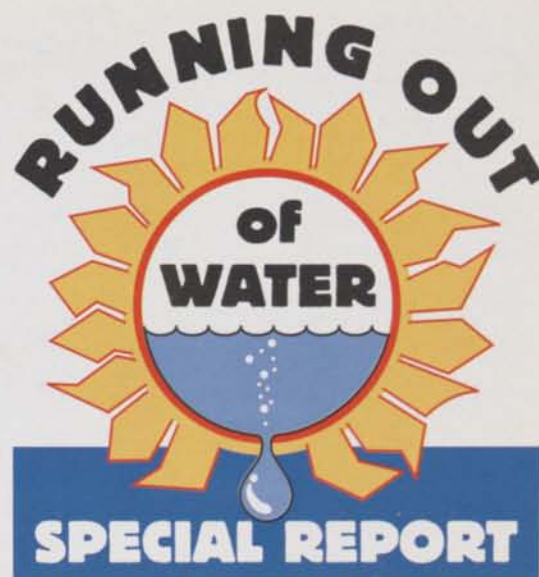
■ Sami Collins is pictured below with just some of the entries before they were delivered to the STRI.



AS WE ENTER THE THIRD DROUGHT SUMMER it is beginning to dawn on us that water is no longer the inexhaustable resource it once was and the phrase "spending money like water" is no longer relevant.

To examine the implications of the prolonged, perhaps indefinite, water shortage *Greenkeeper International* asked four experts from the irrigation field to take a look at the situation and explore possible solutions.

Giles Wardle, who has written for the magazine before and who is an independent irrigation consultant; Roger Davey of Ocmis Irrigation (UK) Ltd; Graeme Francis, of Toro Irrigation Ltd, and Richard Pocock, of Watermation Sprinklers and Controls Ltd have each produced an excellent examination of the situation.



The efficient use of water

Why and how we should conserve a finite and valuable resource. By Giles Wardle BSc, MSc, MIAgrE.

We have, apparently, just experienced the driest 20 month period since records began. As the demand for water increases and its supply seemingly diminishes, competition for this essential resource will become more heated.

The consumption of water for irrigation by agriculture, horticulture, amenity and sports turf combined, comprises less than 2% of total water consumption. The use of water for irrigation pales into insignificance when compared to domestic and industrial use. So why does irrigation get disproportionate attention and criticism in the media?

The reason is that while the annual proportion of water used for irrigation is small, the consumption of that water is concentrated in the summer months, when supply is at its lowest.

Long term weather forecasting is fraught with difficulties. There is, however, a generally accepted view by meteorologists that the climatic trend in the British isles is that of increased temperatures, hotter and drier summers, more frequent droughts but not necessarily less average annual rainfall. The trend, we are told, is towards wetter winters and longer and drier summers.

Irrigation therefore is set to feature still more prominently in the water debate. Irrigators do not have a very good public image.

This, whether it is deserved or not, needs to be improved if irrigators are to be listened to in the debate. This can be done by showing that irrigators are using this valuable resource in a responsible and efficient manner?

1. Winter Storage of Surface Water

On the face of it a simple solution. The Environment Agency is encouraging the construction of reservoirs for storage of winter water and look upon this favourably when awarding licences. The messages is when water is plentiful "grab it while you can". Once you have stored this water it is yours to use, as and when you please. Farmers see the advantages in this, as it avoids having their licenses revoked in the middle of irrigating their potatoes. There has thus been a boom in the reservoir construction industry... in agriculture.

But this has not necessarily been the case for the golf sector. Farmers generally have a large area of land to find a suitable site. Where golf clubs are concerned land is at a premium. So why not incorporate a lake around the golf course? It would not only provide a reliable source of water but would add to the strategic and aesthetic value of the course.

The reason is that non-impounding reservoirs ie. lakes and ponds are less cost effective than impounding reservoirs as there is less volume of water stored per cubic metre of earth

excavated and the removed earth has to be disposed of. Further more during the summer months the water level drops exposing the dry banks.

If water storage reservoirs are to be used on a golf courses and combined as a water feature, it is preferable that they are steep sided so that small variations in height of the water do not expose large areas of the banks. This can be achieved for example by using railway sleepers as the siding of the embankment, or using stone to face the banks. Careful thought must also be given to the siting and design of the reservoir with consideration given to cost, engineering implications, safety, aesthetic and strategic value to the course and disposal of the excavated material.

If there is a suitable site then the construction of an impounding reservoir is more cost effective as the cut and fill can be balanced to avoid having to import or dispose of earth.

Reservoirs/irrigation lakes can also add to the environmental value of the golf course and serve as a valuable wildlife habitat, if the design and construction is undertaken with sensitivity to conservation issues. Irrigation lakes should also, where feasible, be incorporated into the drainage system of the golf course.

2. Irrigation Scheduling

The best irrigation scheduler is the greenkeeper/irrigation technician. There are many tools at his disposal in order to perform the task accurately.

■ Weather stations: Visit a golf course in Florida or California and you will invariably find the golf course has its own weather station with software to calculate the evapotranspiration rate and a link to the irrigation controller.

Yes they are expensive but in climates where the irrigation season is nearly all year round and all the fairways are watered, a 5% saving in water consumption results in huge savings in water and energy costs. More than enough to justify purchasing the weather station on financial grounds let alone environmental ones. This is not really the case in Britain, where irrigation is often confined to merely greens, tees and approaches. However on courses with full fairway irrigation the installation of a weather station is certainly justifiable. (see Learning Experience article elsewhere in this issue)

There are alternative, cost effective ways of irrigation scheduling.

■ Balance Sheet Method: This can be done manually, using a computer spreadsheet or purpose written software. This method when properly carried out can give very accurate results. Crop (grass), meteorological, rainfall and irrigation data are used to calculate rates of evapotranspiration and soil moisture deficits.

This method, however is only as accurate as the data fed in (soil type, rainfall, irrigation etc). The method is really no different to using the weather station above, but the meteorological data is input from the local met station ➔

'Water everywhere but not a drop to spare'

This may be the case in the not too distant future, as the pressure increases on the water companies, those golf courses with "mains" water feed irrigation system may need to ensure that every drop is accountable. Those, however, with existing abstraction licences and storage reservoirs will do no harm by ensuring that each application of water to each green, tee, approach and fairway is exacting and precise.

The Environment Agency is, and will as time progresses ensure as far as is practically possible, that water abstraction from natural ground water reservoirs is used to its utmost effectiveness by limiting amounts/periods of abstraction and implementing time limits/review periods on abstraction licences.

Savings in water (be the water from a borehole, winter storage reservoir or mains supply) will increase the long term cost efficiency of the golf course, by reducing leaks or over irrigation it is possible to reduce pumping costs and water charges. With mains water costing approximately 70-80p per cubic metre and an average golf course using approximately 100 cubic metre per night at peak irrigation period every cubic metre of water saved is a financial saving.

To this end, today's modern irrigation equipment is armed to the teeth regarding conservation and efficiency, pinpointing exact areas of irrigation.

All existing irrigation systems waste water to some extent, whether through old and leaking pipes, inefficient and ineffective sprinkler heads, too high application rates or unmanageable control systems. All these areas can be improved by today's modern equipment and design capabilities, for example:

Old UPVC - (glue jointed) underground mains can be replaced with 100 metre coils of Medium or High Density Polyethylene jointed at

intervals by compression fittings or electrofusion welding.

Sprinkler heads such as the Rainbird Eagle 700/900 series have built in solenoid valves (valve in head) so enabling each sprinkler to be switched on for a separate run time and separate application rates, particularly useful on large areas such as fairways where soil types and ground contours change and blanket coverage would produce one area of "run off" while the other receives the correct amount of precipitation. These sprinklers are also fitted with automatic pressure regulating valves, therefore every head delivers even flow and uniform coverage no matter how far away or close they are to the pumping set.

Today's control systems feature hydraulic and electrical optimisation, on course hole graphic pictures and have the ability to cycle and soak - (apply 8 x 1 minute applications in a 3/4 hour period instead of 1 x 8 minute applications which produces run off and water wastage). These systems such as the Rainbird Nimbus are now PC based and can control up to 1000 individual stations.

The irrigation designer has also a very large part to play and we, Ocmis, do not underplay our role. Every aspect of water conservation is looked into, specifying a fairway or greens irrigation system is no longer a case of blanket flows and blanket coverage. State of the art design systems can simulate water flows and areas of coverage, these can be linked to the irrigation control programmes ensuring a design with conservation of both water and finances. Each project is individually specified, to save water may require an initial investment but this will reap rewards in the future years. Remember more maybe less.

Roger Davey
Senior Design Engineer,
Ocmis Irrigation (UK) Ltd
Tel: 01460 241939

degree of arc in the case of part circle sprinklers).

Upgrading your controller to a PC based unit, will remove the repetitive task of calculating sprinkler run-times and will allow you to program watering on the basis of depth. There are many PC control systems on the market now, of varying costs and specifications. Most PC control systems can be retrofitted to your existing control system.

Alternatively draw up a table with the run times for given water applications (say 1,2,3,5,7 and 10mm) for each station on the controller.

How often do you repro-

gramme your irrigation to take into account changing conditions? Do you program the irrigation according to the conditions of each individual station or do you program according to station type ie. tee station, green station etc? Do you have a flow meter? If so do you check that the actual water consumption matches that calculated by the irrigation controller?

4. Irrigation System Design

The design of your irrigation system is probably the most important factor in enabling you to operate your system effectively and efficiently. Good design is

fundamental to the long term success of an irrigation system.

The two keys design factors affecting water use efficiency are: a) Uniformity of water distribution by the sprinklers. This is a factor of sprinkler model and nozzle, sprinkler spacing, sprinkler configuration (triangular, square, single-row etc), operating pressure and wind speed.

The most commonly used measurement of distribution uniformity is known as Christiansen's Coefficient of 'Uniformity (CU)'. A CU of 80% is acceptable but ideally a figure in excess of 90% should be attained.

b) The level of control of the sprinklers. The ability to differentiate the sprinkler run times for certain areas to match their individual conditions is paramount. Avoid systems with too many sprinklers grouped to one control station and systems with two solenoid valves attached to one controller station.

5. Irrigation Operation, Service & Maintenance

Not all golf courses have well designed irrigation systems, whether through lack of funds, poor design or that the system has been extended and modified over a number of years. If you do not have the funds available to replace or upgrade your existing irrigation system, what can you do to improve its water use efficiency?

Poor uniformity is manifested by dry or wet spots. The dry/wet spot maybe due to a variation in soil type or topography. However a dry spot in the middle of a green or tee is almost certainly a problem of poor sprinkler uniformity. Firstly you should check that the sprinklers are running at their design operating pressure. Do you have the correct sprinkler nozzle and operating pressure for the spacing? Is the sprinkler appropriate for this application? Are the sprinklers poorly positioned? Is the area particularly susceptible to wind?

If you do have dry spots, they should be watered manually using a hose rather than the sprinklers. Alternatively get an irrigation engineer to check your system to see if the problem can be remedied.

rather than recorded on site. There are companies (eg ADAS, Levington) that offer an irrigation scheduling service using this method.

Incidentally, if you don't have one; get a rain gauge!

■ Plant stress indicators: There are methods (infra-red thermometry, displacement transducers, chlorophyll fluorescence, porometers) that identify the first signs of drought stress in the plant. These methods, while in use for research purposes, are not widely used in the irrigation industry as they do not indicate the amounts of water required.

■ Other Methods: Electrical resistance measurers, neutron probes, tensiometers, time domain reflectometry etc. are of limited use in golf because they are not suitable for taking measurements on sports turf. The probes must be permanently placed in the soil profile, thus being destroyed during maintenance operations such as verti-draining, otherwise they have to be placed too deep in the profile to be of interest. With the neutron probe, method holes are dug and lined as observation pits, furthermore a licence is required to store the radio-active source.

3. Irrigation Programming

Determining how much water is required is only one half of the story. Programming the irrigation to apply the requisite amount of water is just as important.

Irrigation programming is the easiest part of irrigation scheduling, yet rarely is it done properly. When an irrigation operator is asked how much water he is applying the answer is often in minutes per day this could mean anything between five to 25 millimetres of water per week, depending on the design and type of the irrigation system.

Irrigation should be programmed on the basis of depth of water applied. However, most irrigation controllers are programmed in minutes rather than inches or millimetres. One must therefore calculate the run time in minutes for a given depth of water.

To calculate this, one needs to know the desired depth of water to apply and the precipitation rate of the sprinklers (a factor of sprinkler flow, spacing and

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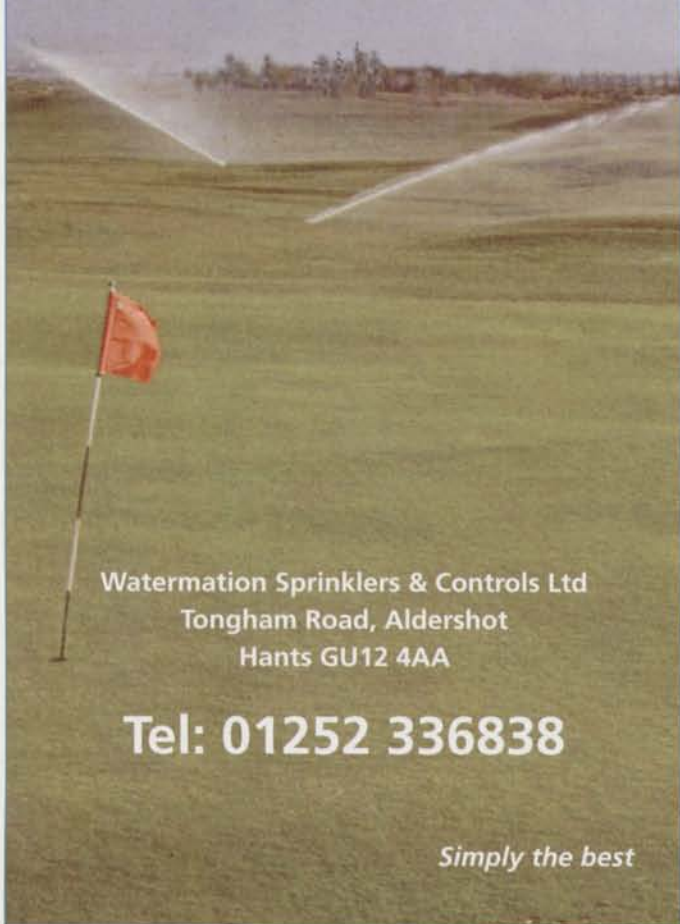
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'Methods such as reverse osmosis and desalination have been successfully used to provide irrigation quality water from the sea'



Sometimes the conditions may be such that you do not want "uniform" watering eg a green that has a low lying and wet corner. If you have a valve-in-head system, or a block-system with say only two sprinklers per station then you can accommodate differences in conditions (soil, topography, shade, etc) in the irrigation programming.

However, if you have a block system with many sprinklers per station you cannot differentiate the run times. A simple solution to this problem is to change the sprinkler nozzle to match the conditions surrounding it.

There are valve-in-head systems with up to three heads grouped together on one control station. This is poor design and I would urge anyone that is offered such a system to reject it. For those of you that already have such a system, the best way to accommodate differences in watering requirements, within a control station, is to run the individual sprinklers manually with the valve key. This obviously time consuming and if is done during the day disrupts play.

Do you have a rain sensor to stop the controller in the event of rain? These items are very inexpensive and very effective, with the exception of one I once saw that had been used by birds as a base on which to construct a nest.

Pipe bursts and leaks are a more obvious waste of water. Once the pipes are in the ground there is little one can do to remedy the situation. The working life of a pipe network is affected by hydraulic design, material choice and installation. Make sure your irrigation system is designed by a qualified engineer with experience in golf.

Good design is worth more than a guarantee as your irrigation system should last much longer than the period of time for which the installer is likely to offer a guarantee.

6. Alternative Sources Of Water

Methods such as reverse osmosis and desalination have been successfully used to provide irrigation quality water from the sea. The situation in the British Isles

Importance of encouraging water conservation

To quote Benjamin Franklin, "We know the worth of water when the well is dry". Contrary to the perception of the British nation being a country with constant rain; the average lower precipitation rates over recent years, combined with the changes in urban and industrial water requirement, have left us no option but to ask ourselves the following questions; "what is water conservation?", "why do we need it?", and "what do we intend to do about it?"

"Conservation" is defined as the preservation of the natural environment, and in this case water, secondly, we leave this earth to our children, so let's leave it in a better state than when we arrived, and thirdly to do something about it we need to adopt some common sense strategies:

- We need more public education and awareness programs aimed at educating the end user in efficient water use;

- We should investigate price structures on water usage that buy "water usage" saving by providing a financial incentive for using water more efficiently, or by encouraging the use of alternative water sources such as reclaimed water;

- We need to improve efficiency within the water system itself, such as ongoing maintenance of irrigation systems, and optimisation of existing systems by conducting irrigation system audits;

- we need to improve system design by getting "back-to-basics" and designing more efficient systems, without going to great expense, and to getting the optimal operating costs in line with irrigation system efficiency.

In line with the above facts, as a responsible public we must get our irrigation moral codes right if we have any obligation toward our future. The irrigation designer or

contractor is not the consumer who pays the water bills. Life-cycle costing is not factored into the decision making process. Instead the irrigation system with the lowest initial cost is often favoured. This quite often leads to disaster, as apples were not compared with apples. The first time I went to the USA I became aware of why the Apple Computer Company called its up-market PC "Macintosh". This had always been a mystery because to me a Macintosh was a raincoat but in discussions about apples, when I issued the wisdom that Australians probably ate more green apples than red, I learned that for Americans green apples were not for eating, only cooking. Red apples were for eating and why there was really only one red apple – the Macintosh.

That observation taught me a very important lesson and that is that when you start making decisions about anything you really need to know everything there is to know about what you are deciding about.

Your natural expectation is that irrigation designers keep their information up to date as possible. Certainly some do, but sadly some don't and equally certainly some "designers" are not truly designers at all, but are merely product salesmen masquerading as designers. The true designer will have a very broad spread of knowledge in a given area, and as will, will have a depth of technical knowledge which takes him past the problems which he immediately has to deal with. He will also know what he does not know but know to whom to talk if he does not know.

Over the years greenkeepers have accumulated a lot of wisdom about what they use and will have options about certain equipment which either they swear by or swear at.

If you swear at it why did you buy it in the first place? Did you com-

pare apples with apples or did you compare a lemon with an apple.

We must ask, "What do we want from our irrigation system?"

Basically we are trying to emulate useful rainfall, trying to make a turf-grass are playable and visually enticing.

There is no "secret formula". It is obvious that lower pressures and precipitation rates to match soil infiltration rates will mean energy saving and water conservation. The initial cost savings will be augmented by such long term benefits as extended system life, and lower ongoing maintenance costs.

You might ask yourself if there is, or, if there should be any commonality between golf courses and agriculture. I happen to believe there is, let's face it, they are both in business to make a profit, and it makes good business sense to invest in good equipment, good people, and any tool that can make the operation more efficient.

Therefore the anatomy of future golf course irrigation systems should contain the principles of low pressure, controlled volume, precipitation rates that match soil requirements and uniform sprinkler distribution.

The future of control has to lie in the direct measurement of soil moisture in the root zone and climatic condition at the irrigation site linked together with lower pressures and precipitation rates to match soil infiltration rates.

The end result of this is that I have endeavoured to bring some very important irrigation considerations forward for the late '90s'.

Apples may be red or green, but they still need to be apples – not lemons.

Richard Pocock CLIA, MASAE
European Contracts Sales Manager
Watermation Sprinkler & Controls Ltd

however does not call for such drastic and expensive measures ...yet.

The use of Treated Sewage Effluent (TOE) is becoming more widespread across the continent as a source of irrigation water, one such example is Mallorca

which has a long history of stretched water resources. The feasibility of such measures will depend on various factors. One such factor in Mallorca is that there is simply no water and you will not get planning permission for a new golf course unless you

provoke alternative sources of water. Other factors are proximity to source of TOE or treatment plant, amount of TOE available, health and safety, implications for turf management and irrigation system, storage of TOE, reduction of odour and aeration of TOE.

The future of irrigation



The recent dry weather and the apparent trend towards drier conditions in the UK make adequate irrigation provision more important than ever. Indeed it's the unpredictability of the weather which makes irrigation planning increasingly more difficult.

The inevitable result of the drier conditions is that water is being recognised as an increasingly valuable resource.

For greenkeepers there could be some very serious implications, restrictions on using the potable water supply have already been seen, and in the longer term the cost of mains supplied water could go up significantly.

The greenkeeping professional needs to consider long term irrigation planning. This involves investigating alternative sources of water such as boreholes. If the alternative use of water from rivers or streams is envisaged it will only be allowed on the basis that all the course's irrigation water is taken from the river during the winter and stored in a

reservoir. In order to know the reservoir capacity, greenkeepers will have to know how to plan and calculate water use and water budgeting, both financial and quantitative, will become a standard course management task.

Effluent water is another potential source as yet undeveloped in the UK.

If lakes and reservoirs are being used for irrigation purposes the water in them will have to be maintained and long term solutions such as water aeration will form part of the essential process of irrigation water quality management.

Once a suitable and tenable water source is secured the next stage is to optimise the use of this water. This can only be achieved by having a well designed, well installed, well operated and well maintained system. All of these factors are interdependent and are key to effective irrigation.

While many greenkeepers will not have the opportunity to start with a new system those who are looking for replacement or exten-

sion must involve themselves and the other relevant people at the club in a thorough evaluation of what they want, and how to get it.

All too often decisions over golf course irrigation are made based around the contract price with little consideration of the longer term economics. Golf clubs must look for, and should expect, to buy not just an irrigation system, but an all round package of products and, perhaps more importantly, services. Long term support from the installer and his suppliers is key to a successful irrigation system. Investment in the right system will go a long way to offsetting the problems we are currently seeing, but time needs to be taken in selecting that system. Make sure you have enough technical and commercial information to allow an informed view to be created, price is important, but it is not the sole criteria upon which to make a decision about something as complex as a bespoke irrigation system. There is a wealth of experience and expertise in the specialised golf course irrigation companies and advantage of this must be taken.

Control systems, sprinklers and pipes are examples of areas where technology has moved on a long way from the early days. Inaccurate control systems are no longer acceptable, nor are pipe systems which allow significant amounts of water to be lost through joints.

For those not in a position to replace an existing system, correct maintenance and operation need to be the priority.

Poorly maintained systems cost

more to run and waste water and, as with most things, the breakdown is sure to occur at the most inconvenient time. Pro-active and regular maintenance should be the norm.

When it comes to operation there is much to do in regards to effective watering scheduling. Current control systems allow a high level of flexibility, in not only the amount of water to apply, but also in how it is applied. As an example, splitting the applications up into smaller amounts can ensure that water is not lost through runoff. Combinations of different schedules linked to other turf management programmes can make best use of available water. More consideration of creating a sward with better drought resistance will allow a more consistent irrigation regime.

We will see an increase in the use of products such as wetting agents and soil moisture retention compounds all aimed at optimising water use, but all with a degree of additional cost.

Greenkeeper training with specific regards to irrigation provision needs to be accelerated to the necessary levels.

We must remember that in the future water will be a more valued resource, we within the golf course industry must take responsibility for optimising water use for commercial reasons, and because quite simply, without it there be no courses to manage.

Graeme Francis
Marketing Manager
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Research surprises

The Golf Research Group has published a new report based on a telephone survey of every golf course in the UK. One of the big surprises was that 34% of them were proprietary – golf in Britain is not as dominated by private member courses as people thought.

Searches of company accounts show that 76% of the new built courses continue to be in financial danger (two years ago 88% of them were in jeopardy).

What's happening to cause this gradual improvement? In part some courses are managing to trade themselves out of trouble, average turnover at the new

courses rose a healthy 31% to £776,000. In part the weaklings are being bought by strong hands. Sale of golf properties were at a record level last year, 42 courses sold. The total spent on these purchases was around £80 million.

Certainly this type of money being put into golf is a major sign of investor confidence in the industry. On a more sombre note it should be remembered that these new courses are going for 40p in the pound on their original development cost. Projecting this up, of the £2.5 billion spent on golf development in the 1990s, 60% is likely to end up being lost.



A GREENKEEPER'S DIARY

IN ASSOCIATION WITH
PERRYFIELDS HOLDINGS LTD
THE AMENITY SEED SPECIALISTS



June at the Oakwood Club

by **WILLIAM P MONTAGUE, MG**

The Oakwood Club was founded in 1905 with our first nine opened in 1906 and a second nine built in 1915 to a Donald Ross design. We are a private club with full facilities from bowling alleys, indoor tennis, exercise rooms, Olympic size pool, eight outdoor tennis courts, and the list goes on with a 66,000 square foot clubhouse. Our course measures out at 6,289 from the white tees with bent tees, greens, and fairways. Greens are maintained at 0.137 of an inch, tees and fairways are cut at 7/16 of an inch. Many of our greens are still the original push up greens from 1905 and two are 1972 built to USGA specifications, each green has its own personality in management needs. We are located on heavy clay soil that drains very poorly and to add to that we have a mile of creek running through our course that drains the neighbourhood. If we receive more than a half inch of rain in a short period of time two of our fairways will be under water for several hours.

Oakwood Club is located on the border of what is called the "snow belt". In Northeastern Ohio. This area receives excessive snow fall and rain from a "Lake Effect" caused by Lake Erie to our north. Our average snowfall for the months of November through April approaches 100 inches yearly. Last November we had over 20 inches of heavy snow in a one week period which was devastating to our trees, all of our Hawthorns were wiped out, and the damage to other trees was in excess of £20,000 in clean up costs alone.

In the past five years we have installed a new irrigation system, completely renovated all 68 bunkers, added additional tees, and will start on building a new 12,000 square foot practice green on September 2 of this year. We are now in the process of a large scale tree preservation program for £150,000. On top of our tree

preservation, since we are a very old club and the city has closed in around us, we will be screening our fence lines with over 450 additional trees and shrubs this year. Our 1997 spring was one of the wettest and coldest on record through mid May, so much so that I saw active fusarium on our fairways on May 16 this year.

June in this part of the States usually brings us our first heat of the summer, and sometimes a very dry stretch. Our 2,000 gallon per minute pump station is ready to go to boost our city water pressure, we purchase city water at a tab of about £50,000 per season. Due to the media our membership allows us to make chemical applications on Mondays when



**'Our average
snowfall
approaches
100 inches yearly'**

we are closed or at night only. We spray every Monday, one week greens and tees, and the next Monday fairways. When we do need to spray at night it is because of bad weather on Monday or something unexpected shows up. Due to the close proximity of houses and membership concern we apply as much as possible in granular form. We buy all of our chemicals with safety to operator and environment being our main concern and the cost we just deal with accordingly.

Our summer schedule kicks ➔

Course tired, listless, feeling worn out?



Golf course turf is continually under pressure, constantly suffers from stress and is regularly subject to an amazing range of injuries deliberately inflicted. Is it any wonder that sometimes it looks a little off colour!

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Pulling out the tulips...

into high gear in the month of June. Every Tuesday is ladies' day at our club, Wednesday is typically packed, and Thursday in the last two years has been almost as busy as Wednesdays anymore, Friday mornings are slower with the course filling up by 2pm. Saturday and Sunday the members do not what to see us around, and by 10am our maintenance crew can hardly move around the course it is so full.

Our tulips, which we are known for, have just expired (over 12,000 new ones each year) and will all be pulled out this month so we can begin planting our annuals which will number about 300 flats. By the middle of this month we will hopefully be up to full staff although the labour market is extremely bad at our location, being an in town facility most city kids have no idea what work is all about and many of them go to work for fast food chains or department stores.

June is the most pleasant

month for us as staff because the members are enjoying the course, playing all they want and getting ready for their matches. The crew is enjoying working outside after months of cabin fever, working on equipment, and plowing snow. Almost everyone is happy with the first great weather of the year and we are at full speed ahead for the next four months.

Most of our June work is involved with bringing the course to the finest condition possible for July and August, and maintaining it through Labor Day at its peak. Our Club Championships are held in Early August and finish in mid August. A few weeks after Labor Day, September 1 this year, our play will diminish rapidly.

A GREENKEEPER'S DIARY IS
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Staff from Wilders at Jacobsen E-Z-GO headquarters with Peter Bell, left

Dealer appointed

Jacobsen E-Z-GO has appointed Walter Wilders as the official dealer for North Surrey, Middlesex and West London, Berkshire, Buckinghamshire and Oxfordshire.

Depot Manager Jason Scott commented, "We are delighted with this appointment and the opportunities it provides, and we feel we can provide our existing customers with an even better service and look forward to attracting new customers now that we have this premier range of fine turf

equipment to promote."

He added, "It is our goal to be the easiest company to do business with, achieving this through one stop shopping."

Walter Wilders is a well established company with over 50 years in business behind them. The main groundcare office is in Reading but it also has an additional depot in Wallingford. In the last two years they have been successfully promoting the Iseki brand of compact tractors for which Jacobsen is now responsible.

WHOLE IN ONE

"Tournament® has been used at Barton-on-Sea Golf Club for the past five years, with superb results. The density of the sward has greatly improved. We also use the product at half rate in early September to enhance colour and quality of sward for our traditionally late major competitions."

Tony Gadd, Course Manager
Barton-on-Sea Golf Club

"I have been using Tournament® for over two years and usually apply it to the greens two or three times between April and September. Major benefits include a rapid, consistent green-up, which lasts 4-6 weeks, and steady nitrogen release as opposed to a 'flush' of growth which quickly tapers off."

R. Thomson, Head Greenkeeper
Hoebridge Golf Centre, Surrey

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Roy Charman, Turf Manager
Devonshire Park, Eastbourne

INTERNATIONAL FOOTBALL

"I first used Tournament® just before the play offs in 1995. Since then I have used the product regularly and the pitch has continued to improve. I applied Tournament® just prior to the Euro'96 Cup Final because I knew I would get a quick green-up without the worry of any blackening of the turf."

Robert McCullagh, Head Groundsman
Wembley Stadium



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Get the low down on Cooden Beach

Cooden Beach, right on the south coast, is probably the lowest golf course in the country. As Scott MacCallum found out it's not only right at the bottom of the map it's so low it's well below sea level.

To all intents and purposes Stefan Antolik appears quite normal. He doesn't have any obvious quirks or mannerisms to mark him down as someone different but, in reality, he is probably unique among British greenkeepers.

Stefan is Head Greenkeeper at Cooden Beach Golf Club, Bexhill on Sea, the venue for this year's National Tournament sponsored by Miracle Professional, and it was the matter of fact way in which he said "To be honest I hope we have a dry year" which makes him just a little bit unusual.

So why is it that while 99.9% of greenkeepers have been enrolling in night classes to sharpen up rain dance routines Stefan is happy to keep his dancing shoes in the cupboard?

Well, the answer lies in the fact that it is perhaps not Stefan who is unique but his golf course. Cooden Beach is built on reclaimed land and is in places up to seven metres below sea level. There are certain spots where you have to look up to see boats sailing past within a few yards of the course for heaven's sake.

"There can be few courses in the country which are below sea level and there can't be many which are entirely SSSI sites," explained Stefan, who is only the fourth Head Greenkeeping in the Club's 85 year history.

Although beside the sea Cooden Beach isn't built on sand. Go down 18 inches under the silt and you'd find two feet of clay and under the clay, three feet of decaying timber. Below



Stefan Antolik: Head Greenkeeper

that there is lovely blue alluvium clay.

"That's excellent for ponds as it retains the water well but it doesn't allow the course to drain."

The answer is to pump water off the golf course and this is exactly what happens at Cooden Beach where a pump is a necessary piece of equipment and the club has one which can operate at 3,000 gallons a minute.

"If we go beyond the prescribed limit of rainfall on the course we pump out to sea so we can control the water levels throughout the course."

What it all means is that Cooden Beach is a popular place to be in the summer when the

rest of the country's golf courses are gasping for drop of water.

"People know that we will have grass cover and reasonably lush fairways," explained Stefan.

The downside, and there always is one, is the winter when as Stefan so succinctly put it, "you really have to paddle your way round".

"We spend in the region of £3,000-£5,000 a year on drainage and a lot of it is surface drainage to greens which we do ourselves as a team."

But perhaps the courses was never designed for winter play.

"In the past when membership subscriptions were light compared to now golfers would be members of Cooden for summer play and members of Rye, eight miles down the road, for winter play. Cooden was never played in the winter."

It brings Stefan nicely on to his pet subject. One he aired during the final of the '94 ICI Premier Greenkeeper of the Year Competition, in which he finished runner-up behind David Walden, when he was asked what one aspect of golf would he change.

"I said I'd make waterproof clothing illegal in golf. The biggest burden to any greenkeeper is Goretex waterproof clothing because if he's going to get soaked to the skin he's not going to go. Now he can come in off the course in any conditions as dry as when he set foot in it and in a lot of instances that's to the detriment of the course," explained Stefan.

Stefan is coming up for his sixth year at the club following on from his predecessor who was in position for 40 years.

"When I started here the greens were on almost 100 millimetres of thatch, it had been very much a case of feed, water and cut. We still have spongy greens but the thatch layer is

now around 20-25 millimetres," he explained.

While being SSSI means a prohibition on spraying of insecticides and weed killers and that written permission must be sought before using certain fungicides it doesn't preclude the installation of more ponds on the course.

"The reason we have SSSI status is that we have invertebrates and crustaceans in the dyke system and anything we can do to stabilise the water level in the dykes is welcomed by English Nature. By digging a pond, and we've put in five, it enlarges the catchment area and the water holding capacity so the surface levels don't fluctuate as much."

The National Tournament, sponsored by Miracle Professional, competitors will face a fine test of golf and one which has faced some of the greatest players ever to wield a niblick. The venue for many challenge matches in the early days no less a figure than James Braid described it as "a good sporting course" while the other two members of the Great Triumvirate Vardon and Taylor also played Cooden. Famous golfing members have been Harold Hilton, two time Open Champion and the greatest amateur until Bobby Jones' arrival who also was the first Editor of Golf Monthly magazine and, still a member, Joyce Wethered now known as Lady Heathcoat Amory, whom Bobby Jones described as being the best golfer he'd ever seen, male or female.

The Professional was once Fred Robson, who played in the first Ryder Cup match and who twice was runner-up in The Open. He was instrumental in bringing Walter Hagen to the course for a challenge match which Robson won. It is fair to say that every big name in golf played the course in its early history.

Conceived by the 8th Earl De la War, who had originally intended it to be a motor racing circuit, it was designed by Herbert Fowler who designed Walton Heath.

It is still an extremely traditional course and one of the few remaining "foursomes clubs" in the country although the rules have been relaxed slightly in recent times.

"The fairways are very generous and the rough it set at a height that an aging membership can get out of but we may tighten it up a little bit for the greenkeepers - we might forget where the mowers are for a week or two before they come!" joked Stefan.

Water comes into play on three holes but there are holes that are bounded by dykes.

Every hole is an individual and on all but a couple of them you could stand in the middle of the fairway and hit a driver in any direction and not touch another hole.

"There are 246 acres of which 232 are SSSI - only the clubhouse and the small practice area are not."

The 9th is regarded as perhaps the finest hole on the course but Stefan has made a few alterations to the 8th and lengthened it to around 530 yards making it another to remember.



"The highest part of the course is the 13th green which is level with the ground floor of the clubhouse and from the 13th you can get a lovely view of Eastbourne and Beachy Head.

Although set low wind is a large part of the course's armoury.

"There were only eight days last year when we could spray which meant wind speed of under 5mph. I don't think the greenkeepers would play on a course where there wasn't a wind," laughed Stefan.

As a marker to how windy it gets Stefan uses quarter rather than half tee flags as the wind pulls the half flags out of the hole.

"I'm really looking forward to welcoming the National competitors. Greenkeepers are generally far more understanding of the problems that we face than the average golfer. There is no greater critic than the person who is paying your wages."

Bexhill-on-Sea offers much for the holiday-maker. the De La War Pavilion theatre has shows most nights in the summer, there are two nightclubs while a short train ride to Ashford sets you up for a trip through the chunnel to France for the day.

With Brighton and Eastbourne not far away and the Battle of Hastings country for any history buff to explore the 1997 National Tournament sponsored by Miracle Professional is an attractive proposition for BIGGA members and their families.

1997 NATIONAL GOLF TOURNAMENT

The Cooden Beach Golf Club

Cooden Beach, Bexhill-on-Sea, East Sussex

4th, 5th and 6th August 1997

Sponsored by

MIRACLE

Miracle Professional

Anyone wishing to enter the
Tournament should contact Karen
Conroy at BIGGA Headquarters
Tel 01347 838581

Monitoring the weather

Reliable weather forecasting is a fundamental part of every greenkeeper's day-to-day operations. The ability to determine with accuracy the expected weather over the coming hours and days has increased greatly in importance due to the growing number of weather-critical tasks being carried out on the golf course.

Fortunately, there is now plenty of help at hand. The launch of a series of earth-orbiting and stationary weather satellites over the past 10 years has removed the need to guess what the weather will be doing the day after tomorrow or having to stick one's finger in the air to determine if rain is on the way. Beaming information continuously to ground stations, these advanced satellites track weather conditions day and night, giving forecasters the ability to provide a clear and instant picture of what is in store for different parts of the country for a week ahead, and sometimes even longer.

This long-range information is freely available to anyone able to watch BBC 1's weather forecast for farmers at noon on Sundays. It is also provided in regularly-updated text format on the BBC's Ceefax service, where maximum and minimum temperatures and weather conditions for five days ahead are given for 12 principal cities around the UK.

Similarly, ITV's Teletext provides a concise 48 hour regional weather forecast and also offers viewers the opportunity to call a premium rate number – Tel: 0981 333123 – at any time to obtain a detailed seven-day forecast for different parts of the country. The cost is 50p per minute.

Most of the weather information broadcast by national and local TV and radio is provided either by the Meteorological Office or another specialist commercial operator such as Oceanroutes.



The Environmental Monitoring Station provides reliable and cost-effective methods for recording meteorological and environment data

In common with Oceanroutes, the Met Office offers customers a detailed regional weather forecast costing 50p/min. Known as MetCALL and MetFAX, the service provides a constantly updated five-day forecast available by phone or fax, the latter also delivering surface pressure charts and satellite images. Further information on the range of services available, together with free index cards, can be obtained by telephoning the Met Office's Helpline – Tel: 01344 854435 or Fax 01344 854018.

Additional Met Office services include MORECS which produces a calculation of soil moisture and evaporation for all parts of the United Kingdom, essential for anyone wishing to gauge their irrigation requirements. Costing from £10 a week, this service includes a record of past and pre-

sent soil moisture status highlighting both averages and extremes.

A personal telephone consultancy is also available from the Met Office, enabling callers to speak directly to a weather forecaster local to their area. Prices will vary according to the level of information required and the frequency of the calls. Further information on the data available and the likely cost can be obtained by calling your local weather centre – the number will be found under Meteorological Office in the phone book.

Visit any number of North American golf courses and it is not unusual to see a computer screen on the Course Superintendent's desk displaying moving satellite images cabled or beamed in from the local weather station.

Although the majority of British

courses are some way from achieving this level of sophistication, it is now possible to access up-to-the-minute weather information using a desktop computer connected to the Internet via a modem and standard telephone line – all for the cost of a local phone call. The Meteorological Office, for example, has its own Web site which can be reached at the following address: <http://www.met-office.gov.uk>.

Having accessed this address, computer users will find an additional charged-for service available to commercial users who require more information than is provided by a free public service. Known as MetWEB, the service presents a host of information including weather records, current weather reports, satellite images, rainfall radar pictures, surface pressure charts and detailed five day forecasts.

Access to MetWEB can be achieved by buying a "book" of tickets by credit card from the Met Office's Web site. £10 buys 20 tickets which allows the user to access various services costing between 50p and £1.50 according to their complexity and the depth of information supplied.

Although not dedicated totally to the weather, Farming On-line's Internet site is also able to provide highly detailed, localised weather data from 96 sites nationwide run by Oceanroutes. Updated twice daily, the service offers both hour by hour, daily and 6 day forecasts. The operators plan to improve accuracy in the near future with the introduction of site-specific information, covering the immediate area of the subscriber.

For an annual fee of £234, Farming On-line gives subscribers worldwide access both to farming information and the Internet, the ability to send Email to other computers and to place classified ads, as well as access to detailed weather forecasts.

GOLDEN AND SILVER KEY MEMBERS... OPENING THE DOORS TO GREENKEEPERS' EDUCATION



In 1997 the companies named below will between them make a major contribution to BIGGA's Education Fund. Golden key members contribute a minimum of £3000 per year while Silver Key members contribute a minimum of £1000 per year.

BIGGA will utilise the money to:

- Subsidise Management supervisory courses.
- Produce Educational posters
- Provide Field Guides
- Provide an Education and Training Opportunities booklet

The Golden and Silver Key scheme has been in operation for six years. In that time members' contribution to BIGGA's Education and Development Fund have facilitated the following association membership benefits and services:

- Management supervisory courses at reduced rates.
- Golf Course Preparation Video
- Golf Green Reconstruction Video
- Golf Course Ecology Video
- A Practical Guide to Ecological Management of the Golf Course Book
- Field Guide Booklets

Golden and Silver Key members continue to share a commitment to the future of the greenkeeping profession, raising its profile and educating its members.

BIGGA THANKS THEM FOR THEIR CONTINUING COMMITMENT TO GREENKEEPING

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Monitoring the weather

Anyone with an Internet computer connection and an interest in the weather can keep an eye on developments using one of the recognised Internet "search engines" such as Yahoo, Infoseek or Alta Vista. Simply tap in the key word "weather" and you'll be presented with a host of web sites featuring this topic which can then be explored.

There will, of course, be managers, greenkeepers and assistants who have sufficient interest in the subject to undertake their own forecasting using specialist instruments installed in a suitable position on the course.

Dorset-based firm, Sutronics - Tel: 01929 426400 - offers a selection of weather forecasting equipment ranging from a simple desktop digital weather station costing less than £100 up to the WM918 professional weather station at £445.50.

Incorporating a thermometer, hygrometer, barometer, wind speed and wind chill meters, rainfall counter and dew point meter, this collection of instruments is claimed sufficient to provide advance notice of the predicted weather conditions over the coming 12 to 24 hours.

Symbols are presented on the WM918's main digital display panel to provide the weather outlook "at a glance". The unit also has a built-in memory and manual alarm settings to warn of the approach or occurrence of severe

conditions. There is also an optional PC connection enabling weather data to be recorded and stored on a desk-top computer.

Environmental monitoring specialist, ELE International - Tel 01442 218355 - produces a range of professional instruments able to record and display a full range of meteorological and associated data.

Of specific interest to golf clubs will be ELE's standard weather station which has sensors for wind speed, wind direction, air temperature, relative humidity, rainfall and barometric pressure, all linked to a battery-powered four channel data logger which records and displays the information transmitted by the sensors. Complete with support frame and data logger, this unit costs a little under £4,000.

Alternatively, customers can choose to design their own weather station, selecting from a "library" of high quality sensors capable of monitoring wind, air, solar radiation, rainfall, soil, water and gas.

Add-on options include a portable computer for downloading data, a modem and a remote collection device.

All ELE environmental monitoring stations come with computer software designed to guide the user through all of the operations required to operate a monitoring station and the processing of the collected data.

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Tel: 0378 603091 (mobile) or 01977 662187

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Anyone with an Internet computer connection and an interest in the weather can keep an eye on developments. This is from Farming on-line



Pesticide drift is a hazard to the environment and a waste of money, but what can we do to minimise the risk.

Pesticide drift contributes to environmental pollution, incites public concern, it wastes chemical and is often the cause of variable control of the spray target. What may not be realised however is that drift is not a local problem, in some instances pesticides can carry up to half a mile from the site of application if wind or application conditions are just right.

The two types of drift that are responsible for off-target application are – particle drift and vapour drift. To compare the difference between the two types just visualise a pile of dry leaves that have been raked together in a park. A gust of wind will easily scatter the leaves throughout the park but the majority will be blown downwind. This illustration describes particle drift; Just like the scattered leaves, pesticide particles are actually carried on the wind and land in a different, though usually localised area.

Particle drift is caused when the wind, and/or inaccurate application procedures, scatters the actual spray droplets away from the application target onto adjacent areas, including shrubberies, ornamental plantings and neighbouring domestic gardens.

Now consider that same pile of leaves, heaped together and set on fire. In this instance it is the smoke column, not the leaves that drifts over the park.

Don't get my drift...



Like smoke from a fire, chemical vapour moves unpredictably and over a much greater distance.

Because of the high risk from Vapour drift, extreme caution is needed when applying highly volatile chemicals, such as those manufactured as ester formulations.

These formulations containing 2,4-D and dicamba were particularly volatile in the summer when temperatures exceeded the mid eighties.

Today, the majority of chemicals manufactured for the amenity industry, are formulated as low-volatile ester and amine formulations and are much less likely to evaporate during spraying. To prevent vapour drift it is essential to check the label to make sure the pesticide brands you select are amine or low-volatile ester formulations.

Controlling Particle Drift

Unlike vapour drift, the formulation of the pesticide doesn't affect particle drift and spray operators can exercise control by following some basic principles and application procedures.

Read the label

It is considered that the majority of drift cases are caused by operators not following the directions on the label or applying the spray through the wrong nozzle. To help ensure a safer, more accurate use of pesticides it is important to remind all operators to read the product label before each and every application.

Check weather conditions

Wind speed and direction are the most critical factors affecting drift. Check both before spraying. If at all practical plan

the spray operation to take place early in the morning and late in the afternoon when the air is more still. Wind gusts of up to 3-4 metres per second (m/s) are manageable, but don't consider spraying if winds exceed 5 m/s. If the wind direction is likely to blow the spray towards sensitive areas, leave an area of at least a 60 metres as a buffer zone.

Minimise fine droplets

Reducing the number of 'fines' in the spray is likely to be the single most important thing you can do to reduce particle drift. The larger the spray droplet, the less likely it is that pesticides will drift off-target.

Select the right nozzle

Some manufacturers make available nozzles that have been designed to reduce drift during turf pesticide applications. To ensure the correct nozzle is selected it is important to understand the role of operating pressure.

The pressure exerted at the inlet valve is what causes the liquid going through the nozzle to atomise. At low pressures the result is the formation of heavier droplets, while at high pressure, smaller, more atomised droplets are formed.

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...just some of the benefits, to know more contact:

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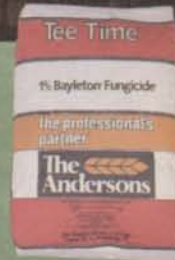
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THE ANDERSONS

QUALITY TEE TIME PRODUCTS FOR THE GOLF COURSE PROFESSIONAL.



Quality Tee Time® Products for the Golf Course Professional

Tee Time® Premium Fine Turf Spring Fertilizers

PRODUCT ANALYSIS	SIZE GUIDE NUMBER	RATES			kg/NUTR/hect*			NUTRIENT SOURCES		SPREADER SETTINGS		
		gms/m²	kg/hect	bag/hect	N	P	K	NITROGEN	MICROS	LESCO	SCOTTS R8A	AMTEC 50
13-2-13 w/ 100% Ammonium Sulfate	100	20	200	9	26	4	26	13.00% Ammoniacal N	18.3% S, 2% Fe, 0.1% Cu, 0.1% Mn, 0.1% Zn	D 1/2	I 1/2	3 3/4
19-5-19 Spring Starter w/ 25% Nutralene®	100	20	200	9	38	10	38	1.95% Ammoniacal N 12.88% Urea Nitrogen 2.44% SAWSN* 1.73% WIN**	6.5% S, 2% Fe, 0.1% Cu, 0.1% Mn, 0.1% Zn	D 1/2	I 1/2	3 3/4
25-5-15 w/ 50% Nutralene®	125	20	200	9	50	10	30	1.96% Ammoniacal N 12.14% Urea Nitrogen 6.40% SAWSN* 4.50% WIN**	5.1% S, 1% Fe, 0.1% Cu, 0.1% Mn, 0.1% Zn	F	L	4 1/4
14-28-10 Seed Starter w/ 50% Nutralene®	100	20	200	9	28	56	20	5.60% Ammoniacal N 2.27% Urea Nitrogen 3.59% SAWSN* 2.54% WIN**	3.4% S	E	J	3 3/4
18-6-15 w/ 65% Nutralene®	100	20	200	9	36	12	30	2.35% Ammoniacal N 5.41% Urea Nitrogen 6.00% SAWSN* 4.24% WIN**	5.1% S, 2% Fe, 0.1% Cu, 0.1% Mn, 0.1% Zn	E	J	3 3/4

Tee Time® Premium Fine Turf Summer Fertilizers

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

Tee Time® Premium Fine Turf Autumn and Winter Fertilizers

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

Tee Time® General Purpose Fairway & Sports Grounds Fertilizers

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

*Slowly Available Water Soluble Nitrogen

**Water Insoluble Nitrogen

***Coated Slow Release Urea Nitrogen

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

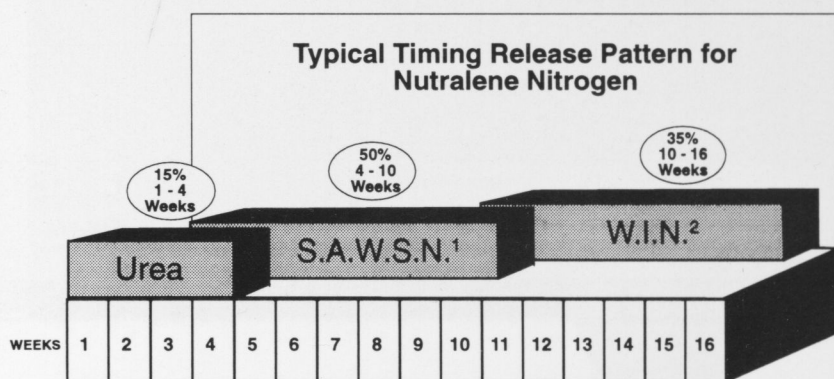
•Bag Weight = 22.68 Kilos



The Andersons range offers comprehensive formulations of both slow release and conventionally available plant nutrients. **THE CHOICE IS YOURS!** The Andersons offers the flexibility to choose your fertilizer based on the needs of the turf at all times of the year. As we know, the weather is not always as predictable as we would like. Here at The Andersons, we offer products with various amounts of slow release nitrogen so that the nutrients are best utilized at the time of application.

THE HIGHEST QUALITY NITROGEN SOURCE IN THE INDUSTRY TODAY

The Andersons Tee Time® with Nutralene® formulations incorporate the industry's ideal nitrogen source together with advanced, mini-granular fertilizers. Nutralene methylene urea nitrogen offers the advantages of "tri-phase" technology – designed to give short, medium and long term release. Nutralene releases both by hydrolysis and microbial activity which means that this methylene urea is not solely dependent upon either soil moisture or temperature for its ideal release pattern.



Nutralene - Trademark of Nu-Gro Corp.

¹ Slowly Available Water Soluble Nitrogen
² Water Insoluble Nitrogen

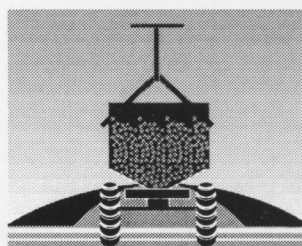
This chart demonstrates Nutralene's fractional release availability over time. The water soluble portion, slowly available water soluble portion and water insoluble portion have overlapping release to provide efficient nitrogen availability as plants require it.

NOT ALL PARTICLES ARE CREATED EQUAL

The Andersons precise screening and processing ensures that all particles are consistently uniform in size. As a result, we've been able to eliminate the majority of variability and resultant "speckling" that can occur due to the "flight path" of particles. You can count on getting an even application of product that you need for your fertilizer program to be successful.

The Andersons offer you three particle sizes, defined as "size guide number" or "SGN", ranging from GREENS GRADE 1 mm (SGN 100) to 1.25 mm (SGN 125), and FAIRWAY GRADE 2.15 mm (SGN 215). The Andersons greens grade fertilizers (SGN 100) will apply 16 particles per square inch, **MORE THAN ANY OF OUR COMPETITORS!** Product uniformity and precise sizing of particles ensures that the fertilizer gets under the turf canopy where they can't be seen, picked up by a mower, or deflect the path of a ball.

Application Uniformity



Trajectories For Several Sizes Of Granular Raw Materials (Granular Urea)

- 3.3 mm / 6.2 ft.
- 1 mm / 5.2 ft.
- ▨ .5 mm / 4.2 ft.

The importance of uniformity in application is demonstrated here if a wide disparity exists in particle sizing the risks of uneven - and improper - product coverage increases.

Application Flow Through



Ratholing Severe Funnel Flow Uniform Flow

The Andersons greens grade product uniformity helps deliver the product to the turf consistently for maximum effectiveness.

**Having the technical expertise
to produce the finest particle size
in the business is one thing.**



**Applying that expertise
particle after particle, after particle,**

**is an entirely unique achievement in advanced formula
product production for performance consistency**



The Andersons.

Uniformly the best in the business.



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A Tour de Force



The PGA European Tour recently became a Golden Key supporter and Scott MacCallum visited their Headquarters to find out more about the importance they place on sound greenkeeping.

The European Tour is one of sport's great success stories of the last 25 years. Over that period it has grown from a division of the Professional Golfer's Association to the extent that the overall standard of golf played can rival the US Tour, which was historically the benchmark for any golf Tour.

The truest measure of that is the Ryder Cup which was an enjoyable picnic for the American superstars until the early 80s, since when Europe has held the famous Trophy from 1985 to 1991 and again from '95 to the present day.

The beauty of the European Tour is its diversity and any player who succeeds must show an ability to adapt his game to any number of different conditions, while at the same time coping personally with the different cultures, languages and food with which life on Tour brings him into contact.

To highlight the point let's count the countries the 1997 European Tour visits. 1. Australia 2. South Africa 3. Dubai 4. Morocco 5. Portugal 6. Spain 7. Italy 8. England 9. Germany 10. France 11. Ireland 12. Scotland 13.



Helping hand: John Paramor, right, with Bernhard Langer and his family

CHARLES BRISCOE-KNIGHT

Holland 14. Sweden 15. Czech Republic 16. Switzerland. Of course if you take into account Approved Special Events you can add the United States to that list.

While there are so many variables one thing the Tour likes to keep consistent is the condition of the course. The responsibility for that falls to the Director of Tour Operations, John Paramor, who works closely with the Director of Greenkeeping, Richard Stillwell.

It could be said that Richard is a little like Peter Mandelson. While the acknowledged architect of Labour's election win is now the Minister without Portfolio Richard is the greenkeeper without a course. Like Mr Mandelson, though, Richard's influence is all pervading and he ensures that when the professionals arrive on the week of the tournament the conditions are as near ideal as is possible in the circumstances.

It was in a brand new suite of offices at the Tour's Headquarters at The Wentworth Club that John and Richard described what the Tour looks for in a venue.

"What we are trying to produce is firm greens whereby if a professional misses a fairway he's going to have the devil's own job to stop the ball on the green but if he hits it on the fairway he's going to be able to provide enough backspin to stop it on the green," explained John, speaking just a week away from one of his main duties of the year – Tournament Director of the Volvo PGA Championship.

Wentworth is anything but a typical venue for the Tour. It's right on their doorstep and in Chris Kennedy they know they are dealing with a Course Manager who knows exactly what is expected for the flagship event of the Tour's season.

A more typical venue for the Tour would ➔

involve Richard, the Tournament Director and usually the Tournament Promoter visiting the course just as soon as it has been chosen as a venue.

"We would check the whole course with the Head Greenkeeper, Course Manager or Superintendent depending where in the world we were," explained Richard.

"We cover every aspect from tee to green as well as the practice ground. One of the most important thing is to get the tees level and weed free. However, we can't just demand what we want done because it may be that the greenkeeper already has a policy of his own.

"All these things have to be taken into consideration but you generally find the more talented the greenkeeper the more likely he is to welcome you with open arms. The less talented see you as a threat."

The usual requirements for a tournament are level tees, firm fast putting surfaces and a specific depth of sand in the bunkers.

"We ask for an inch of sand or, abroad, we normally ask for half a golf ball. It's a nice, easily understood yardstick.

"We then put in a programme of what we recommend should be done with the single biggest problem usually being the eradication of thatch. If the club agrees we would go back nearer the time to make sure it was done," said Richard.

Depending upon the expertise on tap at the club the Tour might put in one of their own greenkeepers to work on the course in the run up to the tournament. They are Roger Stillwell, Richard's son, Mark Lewis and Martin O'Rourke. At the Moroccan Open in March a Tour greenkeeper was on site seven days a week for five weeks and was joined for the final fortnight by another.

The Tour also receives great support from Ransomes and Levingtons. Ransomes indeed supplied a container load of machinery for the Moroccan Open and greenkeepers have a direct line to Ipswich for any assistance they require while Levington have been particularly important with regard to soil analysis and preparing papers on



I believe that BIGGA should be all over Europe and feel that is where the Tour can help the Association

European legislation for each country the Tour visits.

"Each golf course is an individual and you treat the greenkeeper in a different way. If I go to The Oxfordshire I ask him how he's doing and we go for a coffee before having a walk round the course. At other courses you have to cajole them, bully them, but the main thing is to become their friend and be close to them. We are there to help."

Richard is in his 11th year working on the Tour, having previously been Course Manager at Royal Porthcawl, and he can still remember his first brief.

"It was that we must never take credit and we are never there at the prize giving and never there to say 'we did it'. Once the greenkeeper has learned that you are not going to pinch his kudos, or his job, he welcomes you the second year.

Our communication level is very high. We get endless phone calls from foreign greenkeepers asking our advice and we pick up loads of information helpful to other greenkeepers. Guys get very worried when an event is coming to their course," said Richard.

"I believe that BIGGA should be all over Europe and feel that is where the Tour can help the Association. If we want information we know we can contact BIGGA and ask for it," said Richard.

Some of that worry might be generated from the reputation the Tour acquired for killing golf courses – demanding perfection for the one week of the year and to hell with the other 51.

"Some years ago a greenkeeper might prepare his course by cutting everything down, stopping watering, all sorts of strange things, just to get it right. Then the course would die and he'd blame the tournament. That's how reputations like that get around.



"The truth is now we make it very clear that we are removing the thatch. We never turn off the water – we may use judicious amounts of water but we do not turn it off and we rarely cut below 3.5 mil."

John reinforces that view by saying the Tour is very much of the opinion that they don't want a greenkeeper to kill his course.

"Our main priority is to provide a fair golfing test. We want the greens smooth and if that means 9.5 on the stimp meter instead of 10 we'd say to the players 'That's it guys. That's the best we could get.' We will get the maximum speed provided it doesn't affect the smoothness of the putting surface," explained John.

What is achieved is often a revelation to the Course Manager himself.

"I'd say that at 60% of events, at some stage during the week, they come along and say this is fantastic how can we keep it like this," said Richard. "They could, the greens would have to come up a bit but from tee to green it could be. 'Most people could do what we do if they used the correct technique and managed their man power to the best of their ability.'"

From his position John is well placed to comment on greenkeeping and greenkeepers.

"I get very frustrated when I see the Chairman of Green at private member clubs, without any formal training in soil, grass or irrigation, trying to tell someone who has spent his life learning the job what to do. Somewhere along the line that is not right," said John. "I like to think that where we go we try to raise the profile of that greenkeeper," he added.

While the quality of greenkeeping has improved over the last few years so has the interest level and knowledge of the players.

"The average member plays something like 25 tournaments on Tour but taking in the other courses he plays and other events in the rest of the world he plays a great many courses.

"He wants to learn why he putts better on certain greens. Is it the speed, the smoothness, the climatic conditions or the grass plant?" said John.

Richard added, "I worked for a year on the Tour and no-one knew who I was. Now the players just love sitting down and talking with me in the evenings. A lot of players are getting involved in the business and I know Rodger Davis, for example, has his own turf nursery."

The downside is that detrimental comments occasionally appear from disgruntled players in the press.

"I do feel that the players are put on pedestals nowadays. Some generally believe that it must be the golf course's fault if they miss a putt and unfortunately they say it to the press and get headlines for it," commented John.

What advice would the Tour give to a BIGGA member who learns that his course is to host a European Tour event next year?

"I'd say to the greenkeeper enjoy it and I know that he will enjoy it. He'll meet a whole lot of new people and everyone is extremely friendly," said Richard, who added that it was normal practice to invite a greenkeeper to another event before his own so he can learn how things operated.

"He'll also come out of the event with an awful lot more than he went in whether that be more machinery or a better watering system. Personally they also benefit. There is a Spanish greenkeeper who has written a book on how to prepare a course for a tournament and now works for the King in his botanical garden as a sideline," revealed Richard.

The Tour also holds a Greenkeeping Conference in Penina, Portugal every other year.

"It is a way of getting all our tournament greenkeepers and some club officials together and getting them to communicate in a social atmosphere.

"There is a universal language of greenkeeping and this is tremendous because as well as the formal lectures much of the information is exchanged in the bar afterwards," said Richard.

"It is the brotherhood thing as they are all in the same boat – in charge of tournament venues," he added.

CD REVIEW

Into the computer age

The management of turfgrass diseases has entered the computer age with the arrival, on the market, of a Compact Disk ROM which can help you to identify diseases, determine causes, discover cures and introduce management techniques to prevent further attacks. Details of the package are:

CD ROM

Turfgrass Diseases, Diagnosis and Management

by Gail L Shumann and James D McDonald

Published by the American Phytopathological Society

Cost \$310 (single user), \$410 local network

Hardware Required (PC)

486 processor or higher

8Mb RAM minimum

VGA colour monitor

Double speed CD ROM Drive

Mouse

with Windows 3.1 or Windows 95

Hardware Required (Mac)

68030/25 Mhz processor or faster

8Mb RAM minimum

VGA colour monitor

Double speed CD ROM Drive

Mouse

with system 7.0.1 or higher

The hardest part of using this programme is the meaning of *Phytopathological** but once I had looked that up in the dictionary, the rest was simple. The CD looks like any other and has a title sheet which gives instructions on how to install it. I used a Macintosh Powerbook running system 7.5.0 but PC operation is also straightforward. Once the disk was in, I double clicked on Main menu and I was presented with the Introductory page. This page gives access to all parts of the package, simply by clicking buttons and lets you select a number of options. Clicking on the Non Infectious diseases button gives you access to two other buttons, Biotic Agents ie Algae, Black Layer, Insects and Moss and Non Biotic Agents. Clicking on Non Biotic Agents gives access to three more buttons, Chemical, Mechanical and Physical. Clicking on the chemical button lets you select more options ie Pesticides, Animal urine/salts, Fertilisers etc. Each selection gives you access to the identification, control and prevention of each type of agent. The final button in the Main Menu list is Other Diseases and Disorders. This button gives access to Endophytic Fungi, Mycorrhizae, Primitive Organisms, Bacterial Diseases, Nematodes and Viral Diseases. Further buttons give access to identification aids, disease development information and references for each disease/disorder.

The second part of the main menu is titled Short Cuts. This section is sub-divided into: Diagnostic Guide to diseases, Diseases of Specific Grasses, including Annual Bluegrass, Bentgrass, Fine Fescue, Ryegrass etc and a Turf Grass Identification Guide. For each grass selected, either from the Specific Grasses Menu or through the Turfgrass Identification Menu, you can view a calendar, which shows when various diseases may be present, you can then take a closer look at the various diseases, see how the diseases develop and look at suggested management techniques.

Despite some American spellings and a few American terms eg Annual Bluegrass (Meadowgrass), this is a very useful guide for anyone wanting to learn about diseases or needs to identify a particular disease. It contains some very clear pictures (most of which may be enlarged) and allows fast and easy access to a wide range of information. The disk would be a very useful asset for colleges and for any golf course manager with access to a computer which has a CD ROM drive.

* *Phytopathology* – the study of plant diseases

■ The CD is available from APS Press Europe Branch Office, Broekstraat 47, B-3001, Heverlee, Belgium Tel: 32 16204035 Fax: 32 16202535. E-mail apspress@pophost.eunet.be

■ Ken Richardson at BIGGA HQ, Tel: 01347 838581, can be contacted for further information on the CD.

KEN RICHARDSON, EDUCATION OFFICER

Around the Green

Keeping in touch with news and comment from the regions

SCOTTISH REGION

Elliott Small
Tel: 01259 731445

North

My first report of the summer yet, while I am writing this, there is a blizzard outside and I am wondering if I will make Stirling for the Scottish Executive Meeting tomorrow! After quite a good spring we do seem to have gone back to winter instead of forward to summer. Fingers crossed that this is just a blip and good weather is round the corner.

This month we have the Scottish National at Craigmillar Park in Edinburgh and the North is going for the Team Trophy for the third year in a row. So a good turnout of members is needed. Talking of golf competitions, next year Scotland hosts the BIGGA National Tournament and they will be in our Section at



Letham Grange so we can look forward to that in August 1998.

I have been organising some golf for a couple of friends coming over from the States and would like to thank the helpful colleagues that have fixed up times for me. In recent weeks I have played at Royal Birkdale, Royal Dornoch and Nairn which, if I had not been a BIGGA member, would have been a great strain on my wallet! Yet another great reason to renew membership to the Association.

A correction from my April notes – the Management Courses will cost £75 and not £50 – but this is still amazing value.

Last month I attended my first Board of Management meeting at Aldwark Manor in my capacity as Deputy Member for Scotland and I can honestly say I was really impressed how well the Association is being run by both

staff and Board Members. We are in safe hands as long as they don't call me in if Jim Paton can't make a meeting!

Finally, members take note, last month's outing at Duff House Royal (details to follow) was full up and some people did not get in! Make sure future entries are in quickly if you want to guarantee a place.

Iain Macleod

West

Talk about election campaigning. Who has been out for the West Section? Someone has obviously been pushing BIGGA. New members this month are Donald Robertson, Scott McLeod, both Ralston GC; Ken Siems, Loch Lomond GC; John O'Donnel, Kenneth Love, both Cowal GC; Stuart Taylor, Gleddoch CC, Stuart Pirie, Haggs Castle GC; Colin MacFarlane, Mount Ellen GC;

John Caldwell, Stewart Donald, both Renfrew GC; Stuart Crossan, Craig Winters, both Pollock GC; James McNicol, Blairbeth GC; Brian Forrest, Andrew Priestley, both Dumbar-ton GC; and finally Lee Jenkins, Kilmacolm GC. A couple of famous names there – nice to see such an encouraging intake of new members and long may it continue. Hope to see you all at future events and don't forget we are open to activity suggestions.

The results of the Spring Meeting held at Eastwood GC are as follows:- Gross – S. Taylor, Killermont, 72; Cat 1. 1. C. Goodall, Balmore, 77-4-73; 2. C. Wyllie, Killermont, 81-8-73; 3. I. Smith, Drumpellier, 80-7-73. Cat 2. 1. A. Wilson, Kirkhill, 87-14-73; 2. I. Wilson, Hamilton, 90-15-75; 3. S. Brawley, East Kilbride 92-16-76. Cat 3. 1. R. Grainger,

TAKE A LOOK AT THE WORKMAN 3000 SERIES.



Cawder, 86-20-66; 2. G. Shearer, Balmore, 90-22-68; 3. N. Gibb, Hilton Park, 95-21-74. Trade prize. R. Bruce, Ritefeed, 85-16-69. Visitor. G. Mulloch 109-24-85.

All these people will qualify for the Hayter Challenge along with G. Dingwall, Crow Wood, and M. Corey, Balmore. Best wishes to all at the Lochgreen Course.

Many thanks are due for this recent outing – firstly to the catering staff and Club Master for the attention given and their ability to make everybody feel important; the Captain and Committee along with members for allowing courtesy of the course and for presenting the prizes on the day and last, but certainly not least, to Donald McLellan and his staff for presenting a course which was absolutely beautiful. You are all complimented on your presentation and hard work.

Remember to submit your entries for the five-a-side tournament as entries will close quickly this year. It is hoped 16 teams can compete. Certain rules apply, only two clubs can join forces, players are restricted to a maximum of seven players, strips must be worn, shin guards are to be worn and referees will control

events on the pitch! Let's hope the weather is as good as last year. This time Camsie/Russells will have a fight on their hands for the trophy.

Remember all those people wishing to help at Loch Lomond should contact Cecil George or the Secretary to make sure you don't miss out.

Finally, can I wish all members a good season. Please don't forget to inform me of any interesting information – births, deaths, promotions or retirements. A note for future reference, Brian Hillan, Drumpellier, is now dealing with matters regarding 11-a-side football and Loch Lomond, I believe, are interested in a challenge!

Stewart Taylor

NORTHERN REGION

Bob Lupton
Tel: 01782 750539

Sheffield

Yes, I am still doing the Section notes even though my name has not been appearing at the foot of the notes recently (apologies from the Editor).

On April 7 we held our Spring Competition at Wath GC which was also the qualifier for the Hayter Tournament which gave us a very good turnout of 56

players.

Wath was in excellent condition and our thanks go to Dean Abdy and his staff for all the hard work they have done on the course.

We would also like to thank Wath GC for the courtesy of their course and to the steward and his staff for providing an excellent meal which I think was enjoyed by everyone.

Our thanks also go to Alan Dyson, from GEM, for sponsoring the competition and providing an excellent prize table. Our thanks also go to Steve Burroughs, Peter Fell and Les Purdy who also provided prizes and thanks to Hayter for the prizes for the division winners.

Congratulations go to everyone who won prizes at Wath and well done to Kevin Lock, who won the competition with a very good score. Well done Kevin!

Results:- 1. K. Lock; 2. B. Bonring; 3. D. Norton; 4. G. Marsh. The nearest the pin prize was won by G. Marsh and our guest prize was won by our President, Ken Arnold.

All the qualifiers for the Northern Region Final are:- Cat 1:- 1. K. Lock; 2. D. Norton; 3. D. Chappel; Res. J. Darroch. Cat 2:- 1. B. Bonring; 2. G. Marsh; 3. M. Coltas; Res. R. Ward. Cat 3:- 1. P.

Neve; 2. M. Crawshaw; 3. I. Clark; Res. S. Hurd. Good luck to you all in the final.

Our next golf competition will be held at Silkstone GC on July 7 at 10 am.

John Lax

North Wales

Our annual North Wales v North West competition took place at Hill Valley Country Club on April 16 and our thanks are due to Andrew Mitchell and his father for providing us with a wonderful venue for this event. Thanks also go to Bert Cross for organising the North West Team and most especially to Terry Adamson for his hard work in supervising the day and to GEM for their sponsorship. The match resulted in a draw and therefore we get to keep the trophy for another year.

Over 80 members and guests took part in our Spring Tournament at Frodsham GC on April 30. Our thanks are due to Eric and Sheila Roylance for their generosity in providing us with a wonderful venue and courtesy of the course for the day.

The course, which is in a beautiful location on top of Frodsham Hill was in excellent condition and superbly presented, a credit to Paul Massey and his team.

SO VERSATILE, IT'S EASY TO GET ATTACHED TO.



Whatever time of year, this busy greenkeeper needs the right tools behind him to keep the golf course superb. With the Workman 3000 Series which boasts a large flexible carrying capacity, four-wheel stability yet three-wheel manoeuvrability, that's precisely what



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he's got. Toro attachments or those of other manufacturers can be mid or rear mounted in almost any combination. It's another example of how we've worked to provide you with precision engineered tools for the perfect finish. Four-wheel drive version available. Give us a call. We'd like to walk your course with you and recommend the best Workman to meet your precise needs. You can trust Toro expertise and quality. For a Workman that will tackle anything simply telephone 01480 476971 and we will arrange for a local dealer to contact you.



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Our thanks must also go to Frodsham GC's President, Rob Andrew and Lady Captain, Hilary Welsh for taking part in our tournament and for making us feel so very welcome. Congratulations go to Russell Lewis, of Northop, who was the winner of the Hi-Speed Rose Bowl for the best gross of 74 and also to Haydn Jones, of Chirk, who with a best nett of 70 was the winner of the Richard Campey Trophy. Colin Davies was the worthy winner of our nearest the pin competition on the 5th being only 14 inches from the cup. In fact if there had been two nearest the pins Colin would probably have won both since he was only four inches from a hole-in-one on the 9th! The winners and runners up of the three divisions are listed below, however, at the time of writing I have not been able to contact all concerned to confirm which three from each division will be representing the Section at the Regional Final on July 9 at Matfen Hall, Northumberland.

Cat 1:- Andy Peel, Russell Lewis, Darryl Davies, Steve Roberts, Dave Parry, Trevor Johnston. Cat 2:- Dave Evans, Graham Timmis, Les Parry, Matthew Pooley, Ken Jones, Dave Proctor. Cat 3:- Haydn Jones, Don Rowlands, John L. Jones, Emyr Rowlands, Peter Sproston.

Our thanks to our sponsors on the day, Hamish Macfie of Hayter, Acorn, Gem Professional, John Osman, Mommersteeg, Walker Engineering, Richard Jones of Motrac and especially to Richard Campey and Paul Shaw of Hi-Speed Oils whose trophies we played for.

We can now look forward to our Autumn tournament which is now confirmed at Abersoch GC on October 8. Our Section has now grown to 146 with the addition of 3 new members, Carl Rogers, from Chirk GC, and Gareth Hughes and Ellis Mostyn,

Around the Green



from The Plassey GC.
Trevor Johnston

Cleveland

A meeting of assessors was held at Middlesbrough Municipal GC in April, chaired by Internal Verifier, Tony Mears. In attendance was Tony Milan, lecturer at Houghall College, Durham, who was very helpful in explaining about training and assessment and how to judge your young trainees with evidence. He made it all sound so easy. We are now preparing for another assessor training day so if anyone is interested please contact Tony Mears.

Castle Eden GC are rebuilding a bridge at the par 3 6th hole. They have also reconstructed the 14th green on a porous base root zone and laid their own turf. They have also planted 800 trees. Glenn Baxter, Head Greenkeeper at South Shields GC, and his staff, have reconstructed the 3rd and 9th tees plus a number of greenside bunkers.

Hartlepool Head Greenkeeper, Alan Evans and his staff, have been busy improving paths using red track material which looks beautiful. He also told me that his greens have been disease free for the past seven years and he has used no fungicide. Congratulations Alan, I wish I could say the same!

Bruce Burnell

North West

Our annual tournament with the North Wales Section was played at Hill Valley GC on Wednesday April 16. The weather was great with sunshine from start to finish. The course was in lovely condition thanks to Andrew Minshall and his staff. The result was

a halved match which means North Wales retain the GEM Trophy for a further year. I would like to thank Hill Valley GC for allowing us courtesy of the course and their excellent facilities. Thanks also to GEM for sponsoring the day once again.

The next golf competition is the summer meeting at Longridge GC, on Wednesday June 25, and all applications must be received by Friday June 20. Send your cheque for £15 made payable to BIGGA N/W to:- Bill Merritt, 255 Utting Avenue, Clubmore, Liverpool, L4 9RB, telephone 0151 284 4416. Soup and sandwiches will be served between 12 noon and 1pm and the tee is available from 1.30 pm. The evening meal will be followed by a prize presentation. The draw for the support team at The Open has now been done at HQ and obviously some will be disappointed but it was all done on a fair basis. To those of you who have been lucky enough to be picked out of the hat I am sure you will enjoy the experience and I will see you at Troon on July 16.

Anyone with any news, views or queries please contact me on 0151 724 5412.

Bert Cross

Northern

This year's Spring Tournament was held at Wakefield GC. Although the forecast was not too good, the rain held off apart from a quick shower around early afternoon.

Many thanks to County Crops for providing sponsorship for this event and to Glen Hardcastle for attending on their behalf.

Thank you to Wakefield GC for kindly hosting the event at a time when finding clubs that will give courtesy to greenkeepers is becoming more difficult to find.

Thanks also to Stewart Marston and his staff for presenting the course in such good shape and to the catering staff

for feeding us so well.

The results for the day were as follows:

Cat1: 1. Need I say the name! Dave Collins, 68; 2. Dave Spurdin, 69; 3. Tony Gerrard, 7. Cat 2. 1. Gerald Smith, 69; 2. Alan Baxter 70; 3. John Waite (El Chair) 73. Cat 3. 1. Richard Smith 73; 2. Alan Gamble 77; 3. Les Kirkbright 80. Trade Prize. 1. Alan Cordingley, Ritefeed, 69; 2. Alan Dyson, Gem, 73.

Well done to all the lads for qualifying and good luck in the Hayter Regional Finals at Matfen Hall on Wednesday July 9.

Again may I remind people wishing to play in future golf events that if I have not received their deposit at least seven days prior to the event we can not allow you to play. Unfortunately this is happening too frequently by people who put their name down with a rep or somebody else and expect to pay and play on the day. It will not be accepted any longer. At the Spring Tournament the section lost out by people who said they were going to come, then on the day sent an excuse along with a third party. Meals that have been booked still have to be paid for.

Finally anyone with any news or information that may be of interest for future magazine inserts please contact me on Tel: 01484 - 519829
Simon Heppenstall

MIDLAND REGION

Peter Larter
Tel: 01480 437507
East Midlands



This year's Spring Tournament and Hayter Qualifier was played on General Election day, May 1 at Cosby GC. On a fine Spring day 44 competitors competed for the Hayter Challenge Tournament with the successful qualifiers listed below.

Cat 1: 1. A. Duncan, Kettering, 76-8-68; 2. R. Barker, Kirby Muxloe, 74-3-71; 3. A. Foulds,



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Manor, 85-8-77; 4. D. Leatherland, Kedleston, 87-9-79. Cat 2: 1. A. Porter, Greetham Valley, 86-13-73; 2. A. Shilcock, Lutterworth, 90-15-75; 3. I. Needham, Beedles Lake, 90-14-76; 4. D. Bagshaw, Stanton, 89-11-78. Cat 3: 1. S. Heap, Rothley, 89-22-67; 2. M. Bindley, Kirby Muxloe, 94-21-73; 3. G. Arnold, Erewash Valley, 101-20-81; 4. W. Bevan, Greetham Valley, 105-23-82. Trade & Associate:- Kevin Kinzer 94-24-70.

I would like to thank E T Breakwells for their generous sponsorship on the day which was reflected well in the prize table. This is greatly appreciated by all members. Also I would like to thank Cosby GC for hosting our Tournament and allowing us courtesy of their excellent golf course. Thanks should also be extended to the steward for a superb evening meal and not forgetting Dave Sankey and his staff for setting up a challenging and well presented course.

The Autumn Tournament will be held at Chevin GC on September 3, hope to see you all there.

This year's annual East Midlands versus East of England Golf Match will take place on Wednesday August 20 at Melton Mowbray GC. The 1st tee has been reserved from 3.45 pm and the format for the day is a Four Ball Better Ball. A team of 10 members will be required and anybody wishing to represent the Section can contact me and I will forward you a entry form.

Finally I would like to wish a very Happy Birthday to Eileen Hopkins whose birthday is on June 27. She is a very keen reader of this article and the magazine.

Antony Bindley

Midland

The Spring Tournament was held at Harbourne GC, on April 24. The day was an excellent success and a good time was had

by all. Many thanks go to Harbourne GC, especially the green-staff who presented the course in such great condition under some diverse weather conditions leading up to the tournament.

The winners were as follows:- the Gross Cup went to Tony Cheese and the nett prizes went to M. Jones, J. Chesern and G. Hunt. The trade prize was won by Acorn Equipment.

I would also congratulate all the players who qualified for the Hayter Regional Final to be played at The Warwickshire on June 26. Good luck to you all. Can I also thank our sponsors for the Harbourne day - ET Breakwells, County Crops, Ruffords and Grass Roots Trading?

For those members who are playing in the Rigby Taylor Doubles or the Ritefeed Matchplay Singles may I remind you that the first round for the Doubles has to be played by June 27 and the singles by July 18. The Summer Tournament which will be held at The Worcestershire GC on July 7 requires those intending to play to get your applications in quickly as the demand for places is growing.

Finally I would like to welcome the following new members:- Trevor Askew, Andrew Smith, Nicholas Lewis, Wayne Smith, Robert Pain, Ian Robertson, Thomas Houghton, Patrick Teegan, Robert Benamore, Tracy Stephens and Patrick Cosby. Jonathan Wood

B B & O

At the time of writing this article we had received 40 entries for the first golf day which was the maximum allowed. It looks like we are carrying on where we left off last season. A full report of all the day's action will be in next month's article.

The draw for the Rigby Taylor Fourball has been made and I will be posting every competitor a full copy of the draw in due course.

Having nothing to report this month I will tell you a strange but true happening at Badgemore recently. For those of you who are squeamish, read no further!

During the prolonged dry spell back in April I was carrying out some irrigation with hose-pipes and static sprinklers. On this particular morning I was watering the practice green. I connected the hose to the irrigation point and cranked open the valve which was about 100 metres from the green. As I went to inspect the sprinkler there was nothing coming out, not a drop. It had to be a blocked nozzle so I turned the valve off and inspected the sprinkler. As suspected it was a blockage but not with a stone or debris, but with a small frog! The poor little blighter had only crawled up into the hose pipe for some sleep only for me to blast a few hundred gallons of water up its rear end! Needless to say it did not survive!

Anyway, back to business. I will be attending a Regional Board Meeting soon so if anybody wants details of subjects discussed then give me a call and I will oblige.

Finally if you have changed your address recently then don't forget to inform Head Office so as not to miss out on any mail shots.

Lindsay Anderson

Mid-Anglia

A talk was given to around 20 members of the Section in early March by Bruce Jamieson, former Director of Agronomy with the European Tour. By all accounts the talk was very informative and our thanks go to Mentmore GC for allowing us to stage the event. Also, Bruce waived his usual fee and donated it to Headquarters to be put towards the building fund so thanks for that Bruce.

Our first golf event of the year

took place at a golf club on the northern borders of our Section, at Wellingborough GC, in Northamptonshire. The course itself is set within the grounds of a country estate with a magnificent old country mansion as its clubhouse. A fine setting indeed to enjoy a days golf and although it was mid-April with not a drop of rain in the previous five weeks, the course was in super condition. Our thanks go to Ian Marshall, the Course Manager, and all his team for their efforts and to Wellingborough GC for the courtesy shown during a very enjoyable day. It was good to see a number of trade members taking the opportunity to play golf and our thanks to Rigby Taylor, our main sponsors and also Tacit, Patissons, Avoncrop, GEM, Boughton Loam and Driving Force Leisure for contributing towards the event. The event itself was the qualifier for the Hayter National Tournament and the following members will represent the Section at The Warwickshire GC on Thursday June 26.

Cat 1. J. Moorhouse; G. Boulton; R. Lawrence; G. Bruce; Res - F. Scullion. Cat 2. C. Brook; N. Whittaker; P. Judd; D. McGilvray; Res - S. Boyes, C. Robinson. Cat 3. L. Cant; J. Hatton; N. Phelan; P. Belton; Res - R. Saunders.

Please note that Richard Coogan, a regular competitor in our Section events would have qualified in the 0-9 handicaps but unfortunately due to his retired status he is ineligible to proceed any further.

The overall results of the day were as follows:- 1. J. Moorhouse 38/34 72pts; 2. R. Coogan 35/36 71pts; 3. C. Brook 37/33 70pts. The nearest the pin was won by Richard Coogan and the longest drive by Mark Whittle. Winner of the best am score was Leon Cant and the best pm score R. Howson.

I would like to welcome the following new members to the

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*Comment From Walter Woods
St. Andrews Links Golf Course supervisor*

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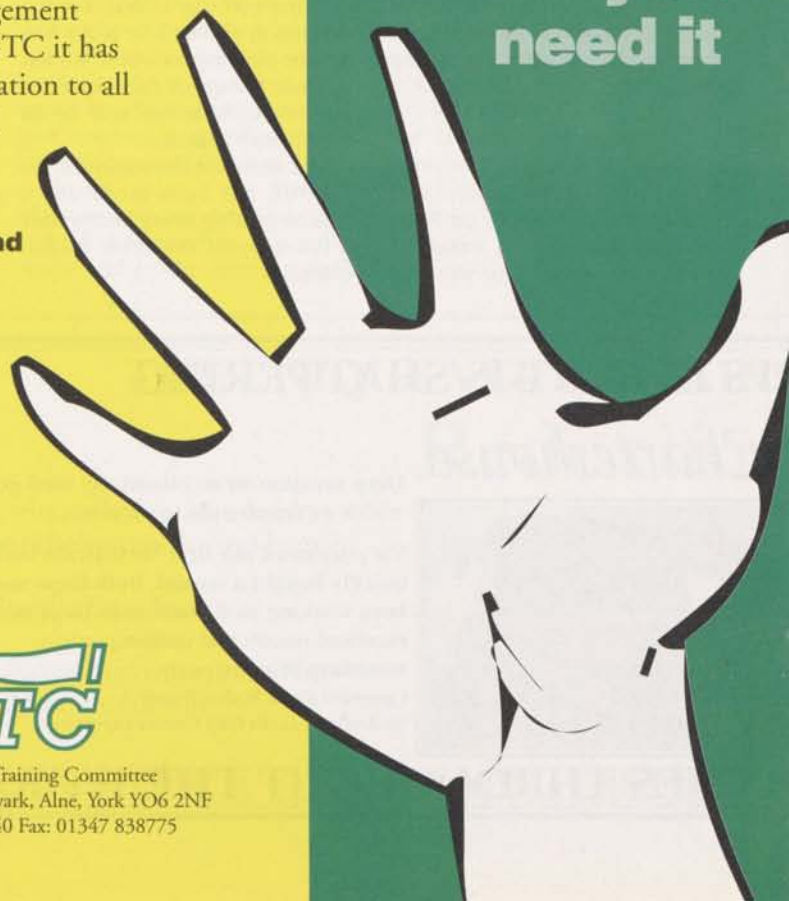
The Greenkeepers Training Committee (GTC), in conjunction with the Sports Turf Research Institute (STRI), have developed a new initiative to enhance greenkeeper training.

The STRI are established as one of the most respected authorities on turf grass maintenance and management throughout the world. In partnership with the GTC it has developed a "book" which will give a firm foundation to all those involved in the maintenance of sports turf.

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Tel: 01347 838640 Fax: 01347 838775

Section:- J. Smith, Rushden GC, M. Campbell, St Ives GC, D. Franklin, Great Hadham GC, M. Dunleavy, L. Rance, A. Howson, all Mentmore GC, G. Bullock, Lamerwood GC, G. Carter, St Neots GC, N. Burns, Windmill Hill GC, D. Greenfield, B. Kingston, both Ashridge GC, E. Burman, S. Kendal, both Dunstable Downs GC, A. Knowles, Mowsbury Park GC, S. Meehan, M. Wilson, N Smith, all Brampton Park GC, M. Osborn, Aspley Guise GC, J. Thresher, Mill Green GC, C. Smith, Stockwood Park GC, D. Mugford, Aldwickbury GC, and finally L.Turner and J. Orme, both Oaklands College.

Our next golf event is to be held on August 22 at Arkley GC over 27 holes.

Paul Lockett

East of England

The Rigby Taylor Cup and the Hayter Qualifier took place at Holme Hall GC. This venue was much talked about within the Section and after my 101 mile drive to get there I was not disappointed. Jim Birkett, Head Greenkeeper, had the course in superb condition – helped by fairway irrigation.

Unfortunately Jim could not play as he is recovering from a car crash but he is well on the mend and back at work. Hope you are playing soon.

The winner on the very hot day was Brian Robinson, Belton Woods, 94-25-69; 2. was John Hewson, Market Rasen, 93-22-71; 3. Graeme Macdonald, Ryston Park, 75-3-72. Trade member winner was Phil Wilkinson, nett 62. Nearest the pin, Chris Colton 12".

All the competitors who have qualified for the Hayter Regional final at The Warwickshire will be notified in due course.

It was nice to see some fellow greenkeepers from other regions as guests on the day.

Our main sponsors, Rigby Taylors, laid on a great prize table and a big thank you to Stuart Jeffs, Sales Manager, for presenting the prizes. Other sponsors on the day were Oliver Seeds, Hayters, Aitkens, Fieldcare, Collier Turfcare and Roy Harrison.

Other news from around the Section. Market Rasen greenstaff defended the trophy against the committee in their annual match. They have now won the cup for the last two years.

SOUTH EAST REGION

Derek Farrington
Tel: 01903 260956

London

The Hayter Qualifier was held at Wyke Green GC in April and the course was presented to a very



Around the Green



high standard. I would like to congratulate Tony Dyke and his staff for all their efforts and wish them the best of luck this month as they prepare the course for the Middlesex County Championship. The Tournament was well supported by our Section and the overall winner of the medal event was Chris Carpenter, from Brookmans Park GC. Runner-up was Peter Creeber and Darren Burdis was overall third. The guest prize was awarded to Johnny Johnson, from Wyke Green.

The qualifiers for the next round are as follows – Cat 1. Chris Carpenter, Darren Burdis, David Montgomery, Res – Robert Phillips. Cat 2. Peter Creeber, Benjamin Knowles-Jackson, James Lomas, Res – Malcolm Storey. Cat 3. Tony Dyke, Richard Elderfield, Clarke Williams, Res – Darren Davis.

The longest drive was won by Johnny Johnson and the results for the King's nearest the pin event were 1. winning a £50 voucher, was Darren Burdis, 2. winning a £30 voucher was Johnny Johnson and 3. winning a voucher for £20 was Chris Carpenter. I would like to thank King's for their support in providing the prizes and also for kindly paying for all the postage etc for the event. I would also like to thank Hayter for providing the category winner medals and Mike Lincoln Smith for presenting the medals. Rigby Taylor provided the overall first and second prizes and your help was very much appreciated. I would also like to thank all the other trade members not mentioned above for their support and help in providing prizes.

The day was very successful and a big thank you must be awarded to Wyke Green GC for their hospitality and for the excellent service that was provided by all the internal staff. Tony Dunstan

Kent

On April 29 we held the Hayter Qualifier at The Ridge GC. We had a reasonable turnout of 39 golfers including seven trade members and on a breezy, sunny day we played a course that is only four years old. Despite drought conditions the course was in excellent condition. Congratulations must go to Ray Malt and his staff for presenting the

course in such good condition. The scores for the Hayter were:- Cat 1. 1. D. Brown; 2. H. Morgan; 3. N. Gillham. Cat 2. 1. R. Malt; 2. M. Mewett; 3. D. Brown. Cat 3. 1. J. Waterman; 2. M. Haver; 3. B. Abbott. The trade/guest prize was won by Grant Elliott, a new greenkeeper from Wilderness. The Kings nearest the pin results were:- 1. J. Wakelin; 2. M. Haver; 3. H. Morgan. The Driving Force Leisure longest drive results were:- 1. P. Belton; 2. P. Hirst; 3. A. Arthur.

Many thanks must go to Hayter for their continued sponsorship and to The Ridge and their catering staff for the hospitality inside.

The Section would also like to thank the following for their agreement to sponsor our golf and raffle prizes for the coming season:- Gem Professional, Parker Hart, Driving Force Leisure, Avoncrop, Rigby Taylor, Barmonset, Ritefeed, Farmura, Kings, Scotts, CMW, Paice and Sons, John Shaw, Bio-Lube, Bournes and Godfreys.

The next golf day is at West Malling in July, details will follow soon. If anybody has any news please contact me on 0860 260240.

Huw Morgan

Sussex

The Spring Meeting was held at Copthorne GC on May 1. Unfortunately I was unable to attend but I have been told it was a good day. The weather was glorious and Mike Gould has the course looking great.

The results were as follows:- Morning Round – 1. Mike Gould 2. Shaun Sturrock 3. Laurie Tremilit. Guest Prize. Gary Ogilvie. Afternoon Round- 1. Mike Gould (again!) 2. Laurie Tremilit 3. Alistair Cale. Guest Prize; John Davies. The prize for the longest walk was won by Dustin Houghton.

The summer meeting will be held at Haywards Heath GC on July 3.

Finally I would like to send best wishes to Chris Allen who was taken seriously ill and is in St Georges Hospital, Tooting. We're all thinking of you Chris. Colin Cathie

Surrey

At last something to write about, and to crow about.

In last month's magazine you all read about the Regional Match at Princes GC. In Sandwich. What Derek did not put in the report was the fact that the teams had to be in Sandwich at 8am and that the cost was £30. Well the committee decided to

help them out a little on that score which I hope you will agree was the right thing to do. The team was captained by Roger Tydeman and consisted of Kevin Boxall, Jimmy Russell, Dave Murdoch, Gareth Roberts, Ron Christie, Paul Robinson, Gavin Kyle, Dave Langhiem, and John Mathis, I know that there are many of you out there saying why wasn't I picked? Well I say to you your turn will come. But the two teams that have gone out are a hard act to follow, plus the other sections will now be "gunning" for us.

One sad note to the day was that Ron Christie had his wallet stolen out of his golf bag while he was on the putting green, I am sure there is a lesson for all of us there, I understand that the boys had a whip round so he got some of the cash back.

Well we held the Spring Tournament at Dukes Dene GC on May 12, and we had a splendid turn out, over 50 playing, Derek still thinks that I left him out deliberately but he played anyway. We had the first lady at one of our events Stella Ingletholpe, from Symbio, came for the meal and she has promised that she will play in the Cresta Cup. "Down fella's". The course was turned out to perfection, and for a course that has only been open for a year it was a credit to Adam and his team. The in-house staff looked after us very well I understand that Julie Wilson had something to do with that. I had an easy ride on this one as Grant Dooley did most of the organising as he is our treasurer, and he works there ~ Thanks Grant. The event was sponsored by Rigby Taylor who put up some wonderful glassware. Our sincere thanks to them.

The overall winners were: 1. Ian Sutcliffe nett 65; 2. Grant Dooley nett 66 (some local knowledge there); 3. Gavin Kyle nett 71; 4. Dave Murdoch nett 72.

This was also the Hayter Qualifier and our thanks to them for the section prizes. The qualifiers were Cat 1. G. Dooley, D. Murdoch, J. Mathis and reserve N. Colley, just transferred down from Sheffield. Cat 2. I. Sutcliffe, G. Kyle, I. Sellars, reserve M. Yorston. Cat 3. A. Carter, and the old fella, T. Stiles. We need two more in this section. Any offers?

The next event is the Cresta Cup at West Surrey on June 10, followed by the McMillan Tankard, at Sunningdale, on July 31, which brings me nicely on to the talk given by Jack McMillan after the meal at Dukes Dene. This is the first time that we

→ have tried this and I am sure I speak for all there that it was very informal just the right tone and I thank Jack most sincerely for his time and trouble for being there. We may try it again. Ted Stiles

Essex

Tuesday April 22, 1997, saw the inaugural golf day of the newly-formed Essex Section of BIGGA – the Spring Trophy at Chigwell GC incorporating the Hayter Qualifier.

A very successful day made all the better by the superb weather, the help of the young lady from the Secretary's Office who acted as starter, the presentation of the course by Alan Sharp and his staff and the quality of the catering provided on the day.

We were pleased to welcome our Regional Administrator, Derek Farrington, for the day and we hope that he will join us again soon.

Another guest was Nick Gadsby, the Captain of Chigwell GC, who joined us for the evening meal and kindly presented the prizes.

The results were as follows: Cat 1. 1. R. Pride, nett 72; 2. A. Sheehan, nett 76 (BIH); 3. S. Crodale, nett 76. Reserve A. Toomey, nett 77. Cat 2. 1. J. Sel-

Around the Green



wood, nett 72; 2. J. Winters, nett 79; 3. B. Speller, nett 80. Reserve C. Ward, nett 82. Cat 3. 1. L. Adams, nett 73; 2. G. Speller, nett 76; 3. M. Stopps, nett 79 (BIH). Reserve, P. Clark, nett 79. Trade prize R. Green 33 Stableford points. Nearest the pin on 10th hole M. Stopps. Longest drive on 18th, R. Pride. Overall winner and winner of the Spring Trophy R. Pride.

I would personally like to wish the best of luck to all our qualifiers in the Hayter Regional Final at Ham Manor GC on Friday June 27.

Once again our thanks go to Hayter for their continued support of this tournament, Avon-crop Amenity for their sponsorship of prizes for the day, the many trade members for their donations for raffle prizes and everyone at Chigwell GC for making us feel most welcome.

Wednesday May 14 saw a good turnout for another evening lecture at Writtle College. Roger Levett and Jeff Tay-

lor, of Johnson's Seeds, and Andy Cawley, from Dow Elanco, gave very informative presentations and the subsequent question and answer session and continuation of conversations in the student bar is always productive.

Congratulations to Dave Rand, who has moved from Thorpe Hall GC to Rochford Hundred GC as Deputy Course Manager, and to John Sinclair, who has returned from Burnham GC to Thorpe Hall as Head Greenkeeper where he was previously Assistant.

Finally the results from studying those questionnaires that were returned have now been correlated and I can assure you that these will be most helpful to the Section committee in the future running of our Section. The Section has made a good start, let's keep it going. Mick Fance

SOUTH WEST AND SOUTH WALES REGION

Paula Humphries
Tel: 01363 82273

South Coast

Our Spring Tournament was held at Broadstone GC on Monday April 28. At the time of writing this report I have not got the




full details of the results. What I can tell you though is that B. Emberly won the scratch prize and trophy and J. Martin the handicap prize and trophy.

The qualifiers for the Hayter Regional Final to be held at Burnham and Berrow GC on June 11 are as follows:- Division 1:- G. Payne; P. Fitzjohn; L. Millar; B. Emberly; T. Gadd. Division 2:- J. Martin; D. Norman; P. Wentworth; N. Stephenson; S. Privett. Division 3:- A. Doolan; A. Archer; A. Ridout; D. Friend; S. Cutler. Congratulations to all the qualifiers.

The weather at Broadstone was perfect and we had a fine summers day in Spring which can't be bad. The course was in fine condition and thanks go to Ady and his team for all their hard work. Thanks also to the caterers who did a first class job in keeping the players well fed and watered during the course of the day. Our thanks also go to the Captain, Committee and members of Broadstone GC for allowing us the courtesy of their course and clubhouse for the day. Last but not least our thanks go to the sponsors for the day namely Huxleys Grass Machinery and our very own President, Jim Fry.

Mark Webb has stood down from the post of Tournament



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Organiser. His place has been taken by Tony Gadd. Our thanks to Mark who has done a grand job over the past two years.

Our next golf meeting will be the Summer Tournament at Bramshaw GC on Wednesday August 6. All applications along with current handicaps should be sent to:- Tony Gadd, Cherry Trees, Lymington Road, Milford on Sea, Hants, SO41 0QL, telephone 01590 643746. The format for this Tournament will be a Four Ball Better Ball Stableford. Members may play with another greenkeeping member from another course or he can bring a golf member from his own Club ie Captain, Committee Member, Greens Chairman, Secretary etc. All entries are to be with Tony 10 days before the Tournament ie first post on Monday July 28. Details of the price for the day are not known as yet.

Westurf has been and gone again. It was good time for meeting old friends again from the other Sections. Our National Chairman was there along with Neil Thomas and some of the attractive ladies from Head Office. However this day belonged to Gordon and Marion as this was their last Westurf. A presentation was made to them by the Chairman of the Region, Richard Whyman. This was in recognition of all the hard work they have put in over the years. Without them Westurf would never have existed. They are Mr and Mrs Westurf. Thank you Gordon and Marion. Enjoy your retirement and put your feet up, you deserve it.

Ken Lodge

Devon and Cornwall

Westurf was the place to be on Wednesday April 30 as visitors to the show were greeted with a lovely warm sunny spring day. It was nice to see so many of you at Westurf to support the Region and wish Gordon and Marion a happy and enjoyable retirement from their post of Mr and Mrs BIGGA in the South West & South Wales. Westurf is an important event for all greenkeepers within the South West and South Wales Region as it not only gives us the opportunity to view all the latest products available to maintain our courses in first class condition, it gives the Region the opportunity from the proceeds of Westurf to offer you its members a subsidised Regional seminar and trip to the BTME show and educational seminars at Harrogate. The Region has also given grants to all our GTC approved local colleges and grants to

members to complete their college course.

Unfortunately the English Golf Union held a workshop in Cornwall for Secretaries, Chairman of Greens and Head Greenkeepers on the same day as Westurf which could have jeopardised the show, so we are grateful to all who attended the show in your bumper numbers. Hopefully in the future BIGGA can work more closely with the EGU so events such as Westurf, Regional Seminar and Section events do not clash with the excellent workshops put on by the EGU. Surely it makes sense not to duplicate on educational talks, but work together to achieve the best greenkeeping education available.

Back to the show which saw an increase in exhibitors on last year. Many of the exhibitors were offering prize draws and of course there was the Region's holiday voucher to be won. Visitors to the show also enjoyed watching all the latest maintenance equipment being demonstrated in the brilliant sunshine.

There was a big Westurf welcome for our Chairman, Pat Murphy and the Executive Director, Neil Thomas and not forgetting the hard working HQ girls Janet and Jenny who helped in the BIGGA tent all day. Also we welcomed Paula Humphries, our new Regional Administrator to her first of many shows.

All in all Westurf 97 continued to consolidate its position as a superb local turfcare show with most of the trade delighted with enquiries on the day.

To mark Gordon and Marion's last Westurf in charge I presented them with a matching decanter and biscuit barrel as a thank you from the Region for all the hard work they have put into running the Region over the last 10 years.

Finally I would like to wish our Hayter Qualifiers the very best of golfing luck at this years Regional Final to be played at Burnham and Berrow GC on Wednesday June 11.

Richard Whyman

South West

The Hayter Challenge took place at the magnificent Orchardleigh GC on a pleasant Monday afternoon. A small but select group took part in this annual fixture to see who could reach the next round which takes place at Burnham and Berrow on June 11. With five people qualifying from three handicap groups, it was a keenly contested affair with

some people displaying a superb golfing prowess despite their handicaps. The said handicaps will of course be reviewed. The winners of the three divisions are:- Cat 1: J. Keenaghan, 68; Cat 2: A. Knight, 67; Cat 3: J. Coverdale, 61. James collected his prize without a hint of shame!

Our thanks must go to Sally Jane Coode, of Orchardleigh, for allowing us the use of their course and to Gary Cashman and his staff for presenting the course in its usual superb condition, with the pencross greens especially coming in for a great deal of praise. Our thanks also go to Hayters for their sponsorship and donation of the first prizes and to BS Mowers for providing the other prizes. A most enjoyable afternoon was had by all.

Education now and anyone wishing to do a PA2 spraying course please could you contact Noel Stevens direct on 01452 526111. Noel, the course tutor, will arrange a time and location convenient to yourself and will also sort out the examination to follow.

Westurf took place on April 30 on a delightful day and reports were generally encour-

aging. There appeared to be quite a good turn out although greater numbers would always be appreciated. Congratulations to Marion and Gordon Child for their superb organisation of this, their last Westurf. Their expertise and experience will be sadly missed although let's hope their smiling faces will be seen at future shows. Gordon has helped the South West Region hugely over the years with his tireless enthusiasm and we are all greatly indebted to him. We wish him and Marion all the best for the future and hope to see them regularly.

The trade appeared to be very pleased with the way things went. It may not be quite as busy as Saltex or the BTME but there were many genuine enquiries about their products and future support looks assured.

Before closing and still on the subject of retirement, Peter Cox from Long Ashton, a stalwart of the greenkeepers tour and section committees retires after 25 years of loyal service. We all wish Peter a long and happy retirement and look forward to seeing him on a regular basis at future tournaments.

Marc Haring

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Don't fall foul of change in law

I have felt it important to write with some important information which should be of interest to BIGGA members.

New Regulations regarding Special Waste became law on September 1, '96. These new Regulations include Fines of up to £5000 and/or two years imprisonment on conviction together with costs. These apply to the actual producer of Special Waste ie the person who created the waste as well as his or her supervisor and employer. In other words the person who emptied the pesticide container or who illegally burned, buried or discarded the waste.

The regulations also introduced new categories now to be defined as Special Waste and among these are waste oils and most cooking oils. It is illegal to store or use out of date chemicals, do you know the date of manufacture and the manufacturers product shelf life? You must by Law, have an up to date Health and Safety Data Sheet for every product you use, not just pesticide. The Regulations changed in September '96 and most Health and Safety Data Sheets dated prior to that date are unlikely to conform.

The new category products, together with those covered by previous legislation, must be consigned as Special Waste using a licensed contractor and the Special Waste Consignment Note, which is issued, for a fee, by the Environmental Agency and has a unique number by which the Consignment can be traced from uplift to final disposal. There is no minimum quantity for pesticides in the Regulations, if you have one ml of chemical in a container, the Regulations apply to you.

There are 'catch-all' clauses, for example, "...any materials, substances or products which are not contained in the above categories". The Regulations apply to premises occupied by a Club, Society or Association. Also to waste from a private garage with a floor area exceeding 25 square metres or which is not used

wholly or mainly to accommodate a private motor vehicle. This last point also raises questions regarding storage.

The Regulations allow for "clean" empty containers to be treated as commercial waste. The definition of "clean" however is very complex and will vary according to the active ingredient. United Nations research shows that even after "30 washings out" the containers are still contaminated. Plastic containers absorb their contents and therefore it is unlikely that any such container can be "clean".

The Environmental Agency and Health and Safety Executive are the enforcing bodies of the Regulations, not the Environmental Health Department of your Local Authority. Never remove or deface the label from the pesticide or any container, it is illegal and the contractor should refuse to accept any unmarked container. There is only one sure and safe way – dispose of your containers as Special Waste, then you are guaranteed that you have complied with the law.

Duncan Stewart
Envirogreen

■ For further information or a leaflet on the above Tel: 0345 125398.

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When the STRI undertakes commercial research for manufacturers, STRI Terms and Conditions state that: "The name or logo of STRI shall not be published by the client or used in any technical literature or advertising or promotional material without the prior written consent of STRI." The advertisement carried on the back page of the May issue of *Greenkeeper International* comprised an advert on Drencher placed by Amenity Technology. This material was used without the prior permission of STRI and therefore Amenity Technology will be solely liable for any action brought by competitors on the basis that the advertisement is unfair. We have taken up this matter with Amenity Technology. The purpose of the STRI Terms and Conditions is firstly to protect

the name of the STRI and secondly to ensure that information based on STRI trial results is used in a fair and equitable manner.

Dr P M Canaway
Chief Executive
STRI

...Sorry for the mistake

Amenity Technology would like to apologise to the Sports Turf Research Institute for any embarrassment caused by contravention of the Institute's terms and conditions in the advertisement which appeared on the back cover of the May issue of *Greenkeeper International*.

As a company we accept that we should not have mentioned the STRI's name in the advertisement without the prior consent of the Institute and will, of course, ensure that Amenity Technology abides by the terms and conditions in all future promotional material.

Carl Crome
Director
Amenity Technology

Overwhelmed by kindness

Since moving to the south west and into the Devon & Cornwall Section of the then BGGA, I have found a warm and genuine welcome from all Section members and trade which I still find hard to take in. Even after 16 years of putting up with me and my Fatherland, the friendship remains as strong as ever. So when BIGGA was formed in 1987 and I was asked to take on the duties of Regional Administrator for the South West & South Wales Region, I could hardly refuse.

Having a full time job the task would have been daunting but for the help of Marion, but the success of the Region is not just down to us. Without the cooperation and support of the Region's Board and Section Secretaries, the Region's success would have been limited.

Westurf is a fine example of what can be achieved with a bit of effort and good relationships

with members and trade. Having decided to stand down as administrators after this year's Westurf it was nice to have a warm sunny day – like the very first year – to remember it by, and to make it complete we were overwhelmed by the kindness shown to us. Our thanks go to all the people who contributed to our presentation.

In my new capacity we hope to find time to visit all Sections and therefore keep in touch with many of the friends made over the years. Meanwhile we wish the Region and our new Administrator continued success.

Gordon and Marion Child

Please contest this proposal

Having just read the amended edition (1997) of the Standard Scratch Score and Handicapping Booklet I am a little concerned of a proposal contained on page 56, Appendix K, Decision 11.

It is with regard to teeing areas and it is proposed that, with effect from 1 January 2001, all distance points shall be positioned on tees so that they are not less than four yards in-front of the rear of the tee. This is in place of the current two yards and my concern is that on small medal tees, or tiger tees, where, because of the topography of the land (or other reasons, SSSI etc) you would be unable to extend the tee size and this would place even more wear on the front of already overused tees.

While it may not be a problem on more recent designed/constructed courses we certainly have a number of Medal tees, as I am sure other well established courses have, that only measure eight to 10 yards from front to back and to lose that two yards is losing up to 25% of the teeing area.

Also to have to remeasure the course and provide new distance markers could prove an expensive operation for no great apparent benefit. I would hope BIGGA as a body would consider lobbying the Council of National Golf Unions to abandon this proposal and retain the status quo.

Gordon A Moir
Head Greenkeeper
Eden Course, St Andrews

Requirements for golf clubs and greenkeepers

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

The Control of Substances Hazardous to Health Regulations (C.O.S.H.H.) regulations originally came into force on 1 January 1988. Since then several amendments have been introduced until today the Control of Substances Hazardous to Health (Amendment) Regulations 1996.

The COSHH regulations seek to control exposure to hazardous substances which arise out of or in connection with work which is under the employers control.

So what is a hazardous substance? To be subject to the COSHH regulations a hazardous substance must arise out of or in connection with work which is under the employers control. The substance can be solid, liquid, gas, fume, vapour or a micro-organism and can endanger health by being absorbed or injected, through the skin or mucous membranes, inhaled or ingested.

Substances listed in the regulations as being hazardous to health are:

■ All substances listed as very toxic, toxic, harmful, corrosive or irritant.



■ All those substances for which the Health and Safety Commission has approved an Occupational Exposure Standard (OES).

■ A substantial concentration of dust of any kind.

■ Any micro-organism which can cause illness.

■ Any other substance which is not listed in any of the above categories but which has similar potential effects.

As we can see from the above the COSHH regulations apply to all hazardous substances with the exception of:

■ Lead – so far as the Control of Lead at Work Regulations 1980 apply.

■ Asbestos – so far as the Control of Asbestos at Work regulations 1987 apply.

■ Substances which are only hazardous because of one or any combination of the following – radio-activity,

explosive properties, flammable properties, high pressure, high or low temperature.

■ Substances administered as part of a medical treatment or in the course of research.

■ Substances found below ground in a mine.

■ Micro-organisms which do not arise out of or in connection with work which is under the employer's control (respiratory infections caught incidentally from fellow employee's)

■ Asphyxiants – these must purely be asphyxiants and non-toxic.

We have so far looked at what constitutes a hazardous substance. Now let's look at what the regulations say we must do.

Regulation 6 – An employer must make a suitable and sufficient assessment of the risks associated with hazardous substances connected with work under his control and review the assessment when necessary. The employer must also inform employees of the assessment and keep written records of all but the simplest assessments.

To comply with this we need firstly to list all the substances we have on site. We need then to ensure that we have Product Health and Safety Data Sheets for each substance.

Our suppliers, by law, must obtain

these. If we have substances on site but no data sheets then we must obtain them.

We should then decide if any substance on site is no longer used. If unused substances are on site we should dispose of these safely. This disposal must be done through a recognised source eg local authority or waste disposal company. We must not just tip them down the drain, bury them or put them out with the general waste.

Once we have established which substances we still use we can then go on and carry out our assessment. This must take into account:- the substances that we use; the way in which we use these substances, who uses these substances or could come into contact with them; where we use these substances; when and how often we use these substances; what safety precautions we are taking when using these substances and how we sort and dispose of substances and packaging after use.

■ Next month we will look at how actually to carry out an assessment as required by the COSHH Regulations.

■ Further information on courses and consultancy contact ATB-Landbase Training Services – Jean John, 01282 617466 or Tony Rees, 01686 622799.

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Hugh Tilley concludes his three part look at aeration with an examination of a selection of slitters currently on the market.

Least complex and mechanical of all aerators – and most inexpensive to buy and run are slitters, and many greenkeepers use these as part of their routine management for aeration, thatch suppression and opening up the surface for drainage.

Most designs are simply a set of flanges with slitting tines bolted to them and mounted on bearings within a frame. Both tractor and turf maintenance vehicle (TMV) mounted models are produced and some – mainly for fairways, are trailed.

Some machines are made so that extra deadweight can be added, such as water, concrete blocks, or other means, but some can be fitted with a hydraulic rams so that they press themselves into the ground. One model has a movable weight which can be used to concentrate weight over the slitting rotor for increased penetration.

The majority of greenkeepers use their slitters in conjunction with other forms of aeration, or anti compaction programmes. Major concerns are over ripping the turf rather than slitting and the fact that subsequent dry weather can cause the slits to open, this is particularly prone on clay. As a result slitters are mainly used in autumn and early winter.

Slitters are usually able to take several types of blade or tine, but narrower or knife blades are the most usual for golf course use – and these are often designated as fine turf blades. Fairway slitters may be designated as “outfield” slitters and usually have larger less pointed tines.

Spacing is entirely dependent upon flange spacing, typically about 150mm, and the location of the blades around the flanges. Replacing the blades can be a time consuming task, although a ratchet spanner or pneumatic wrench will make it faster and easier, however, most of the clubs had seldom had to change blades – and some machines were several years old. As a result tine wear and cost was of little consequence. Where there are alternative spacing options (around the flange) it is vital that the blades

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The SISIS Multislit

are bolted to the correct positions to ensure the correct helical pattern, even penetration and a smoother ride.

Some models are available with rear rollers but most greenkeepers like these to firm and level the turf after slitting and not to control depth.

Without exception maintenance was minimal, nyloc nuts on the bolts hold the tines, but some need regular checking for tightness – perhaps because the tine does not have a “seat” on the rotor. A few greenkeepers experienced problems with these working loose, but none experienced any loss of blades. Sealed bearings are used at the ends of the rotor, most being greasable, but no one said they had any problems with damaged seals or dropping grease. These can be symptomatic of either over enthusiastic or nil maintenance. Fitting the machine to a tractor should be a simple routine, but some tractors need extra weight where wide and/or ballasted slitters are used on the linkage – at least if they are to remain stable.

Sisis Multi-slit at Wrag Barn Golf Club, Highworth – near Swindon

Wrag Barn has two Sisis slitters, an “Airdrain” and a “Multislit”, and uses them extensively over greens, fairways and other areas. Proprietor and Course Manager is Tim Manners and he commented that the machines, which are tractor mounted, have been extremely useful and effective. The Multi-slit is about a year old, it was bought direct, and it is still with its original slitting tines, although Tim expects to replace tines annually if necessary.

The Sisis slitter was bought following a demonstration at which it gave good account of itself. Tim also added that Sisis has an established reputation – and from personal experience he had always found their after sales service good. Nor are prices unreasonable.

The underlying soil at Wrag Barn is part brash – similar to Cotswold, and part deeper silty loam with a few clay caps on some of the tops.

The fine turf slitter, the Multi-

slit, is usually used on the linkage of an Iseki 320, and without any double acting hydraulics to push the machine in, Wrag Barn use tractor type “Jerry can” weights on the slitter frame when necessary to get the necessary penetration. Normal working depth is 5in to 6in (120-150mm). The Multi-slit has a 1.36m width and integrated pressure rollers with floating heads. The Airdrain has a 2.44m width and 300mm slitting tines, and is available with an optional (hydraulic) pressure frame.

Slitting of greens is carried out every month during the winter with the main objective of getting air into the roots. The machines are used during the summer when conditions are suitable and there is a need for aeration.

As was expected there have been no mechanical problems and maintenance is quick and easy – checking round and two grease points to grease.

In summary Tim said the Multi-slit gives good penetration with minimal upheaval and turf disturbance – he was extremely satisfied with it.

Charterhouse Level Spike 2.2 80 at Hindhead Golf Club

Used behind a Ford New Holland 3610, the Level Spike is a 2.2m wide fairway slitter which the club has recently purchased in replacement of an older slitter. David Oliver is course manager at the club, and he commented that the slitter is used as part of an overall programme which includes the use of a Verti-drain annually in autumn. A Huxley greenslitter H84 is used for greens.

The course is basically sandy with a limited amount of sandstone, which can cause some lifting of turf, however overall this is little problem. If any ripping of turf occurs it is at walk-on points where there is a lot of compaction.

The machine was seen as being extremely easy to use and particularly user friendly, and in addition David stated that it was quiet – although the club had at first added weight with concrete blocks in the weight tray and these had rattled, so the greenkeepers had replaced them with wooden blocks and a clamp to keep them firm – and quiet. These blocks (3 sleepers worth)

added about 50kg and allowed the slitter, which has narrow tines, to penetrate to its full 7.5in. potential in most conditions.

In addition to being very cost effective the machine is fast to operate and all (18) fairways can be slit in a single day. It is also very robustly constructed and has a good working width. Slitting is carried out once or twice a month in winter, but only in summer if conditions require it.

Some tines have worked loose, they are held with two bolts with nyloc nuts, thus it is routine to check them regularly. David said that the club gets very good service from Charterhouse and has a very good working relationship with them.

Grays of Fetterangus Slitter at Mount Pleasant Golf Club, near Letchworth

Run by the Simkins family, this is a 9 hole facility with extra alternate tees to add variety. Mount Pleasant was established from farmland nine years ago with the additional tees added in the last two years. Built by a professional course builder and managed by him for the first years, the Grays slitter was suggested as being perhaps the most suitable tool for the fairways especially as those early autumns and winters were more wet than usually. However, although the machine is now some five years old David Simkins said it has not been needed for the last two which have been relatively dry. There was thought of contracting the slitter out, however this has not happened, although several courses have expressed interest. Commenting on weather, David said that it was particularly noticeable that the course is exposed and that the wind can dry out the turf rapidly. Thus care is taken not to slit in spring when it is likely to exacerbate the problem.

Most of the course is on good medium loam, but in the early years the 4th fairway in particular would waterlog – to the extent that in one year they hired a pump.

Greens are built over stone carpets with drainage led to soak-aways – although after experience most is now taken to streams rather than to soak-aways, which proved to lack capacity in very wet conditions.

The slitter is 2.5m wide and



tractor mounted, with a trailed rear roller and the ability to ballast the large diameter tine rotor. It is a large and particularly robust implement, and the Simkins use it with a 72hp Zetor tractor on turf tyres – Lodgeway Tractors being agents for both. With water ballast and extra weight on the top tray the tractor requires front weights, but penetration is then to the full tine 10 in. (250mm) depth. It is important to drain the ballast water to prevent freezing – David said they forgot one year and as a result burst a seal.

McConnel Outfield Slitter at Minchinhampton GC on the Cotswold

Originally bought for fairways the McConnel Outfield slitter at Minchinhampton is now also used for greens and tees. The club has two courses, one just two years old, plus a third in the same ownership only a couple of miles away on the common and 108 years old. The second course is 25 years old but with drainage carpets under the greens. Minchinhampton is on the edge of the Cotswolds with typical brash type soil. The McConnel slitter is a fully trailed machine.

Paul Worster is Course Manager and he made the proviso that it was essential that the greens are open to allow room for the tractor and slitter to get off the green to turn as being a trailed machine it was not very manoeuvrable.

Routine slitting is carried out every two weeks between September and January in normal years and the programme is worked in conjunction with a Ryan GA30 corer on the greens.

Used on greens the slitter is followed by a Toro 3100 greens triple with tri-roller attachments so completely repairing the surface and allowing immediate play.

In the two years that the club has had the McConnel slitter they have had no problems with tines working loose or with the frame of the machine, and very few problems with blades bending. The blades have been removed and sent to a blacksmith to resharpen, perhaps because they had contacted too much Cotswold stone. Keeping them sharp ensures that they give a good clean slit and require the minimum of effort to tow. Paul laid some stress on this, and it seemed strange that no other club has taken the same course of action. It was suggested that tines could be sharpened in-situ with an angle grinder.

Minchinhampton tow the slitter behind a 22hp MF1020 compact tractor and operate the lift from the tractor spool valve which operates the loader bucket tip – saving any need to remove the loader or fit additional valves or plumbing. No extra ballast weight is added to tractor or implement.

Paul said that they bought that particular machine because it was in the right place at the right time and at the right price, but he added that the possibility of quickly interchanging rotors, available with this slitter, was considered. In fact this option has not been exercised. He also liked the robustness and strength of the McConnel.

Amazone Slitter SL80 at Knowle Golf Club in Bristol
Knowle is a long established

course around 80 years old close to the centre of Bristol, it has 18 holes in a parkland setting and on heavy clay soil, thus making aeration being as much about drainage as about getting air into the turf. The club uses a McConnel two leg moleplough regularly each autumn on the fairways and uses the slitter to assist water to flow to these mole runs.

Head Greenkeeper, Chris Light, said that although the Amazone has the ability to increase penetration by using a hydraulic ram between implement and tractor top link hitch point this ability to transfer weight has not been used since the club has had the machine – just over a season. Normally it is easy to get penetration of five or six inches.

A Toro Hydroject has also been hired on three occasions to supplement the effect of the other equipment and this has been achieving hole depths of about 10in.

Routine slitting treatment is done fortnightly fairways slitting from early October until January or February, however, this routine is flexible and depends on circumstances and the weather.

No problems have been experienced with loose tines and the few which have bent – after hitting a stone – have been easy to straighten.

The slitter is used behind a 4WD MF 250 – on turf tyres. Manoeuvrability has never been a problem.

Chris said that he looked at several makes and models at Saltex last year and decided that he liked the Amazone and bought through T H White, from whom the club has received excellent service.

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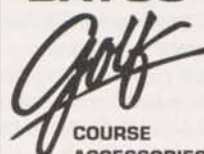
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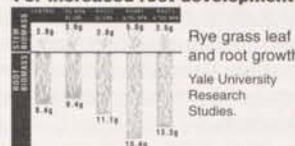


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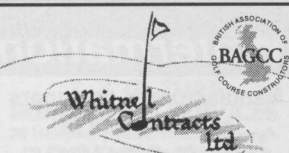
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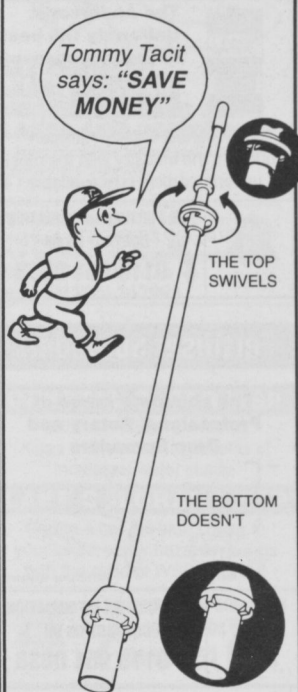
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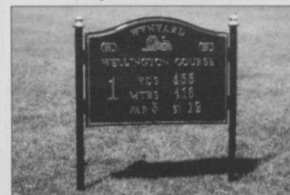
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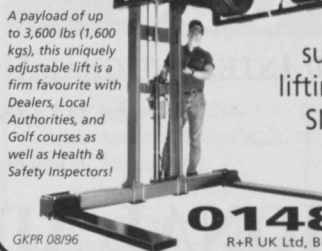
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Previous experience and qualifications essential.

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BRITISH AND INTERNATIONAL GOLF GREENKEEPERS ASSOCIATION SCOTTISH REGION

is looking to appoint a

REGIONAL ADMINISTRATOR (Part-time)

The successful candidate will cover the Scottish Region with responsibilities for the Ayrshire, Central, East, North and West Sections where there are currently 813 members.

Applicants should possess sound administration and communication skills whilst computer literacy would be an advantage. In addition to serving the needs of the Regional Board, a positive contribution to promoting the Association and the welfare of greenkeepers will be required.

The post holder will be expected to display initiative and enthusiasm particularly in a drive to introduce new members. Regular contact with golf clubs and greenkeeping staff will be an essential element of the post. Ideally applicants should be able to display an affinity with the greenkeeping profession and the game of golf.

It is envisaged that the average working week will be 27.5 hours and the post will be home based.

A job description and further details are available from the Executive Director, BIGGA,
Aldwark Manor, Aldwark, Alne, York YO6 2NF.
Telephone 01347 838581 Fax: 01347 838864



Oundle Golf Club

Set in rural Northamptonshire, this Members' Club was formed in 1893 and is now looking for a

HEAD GREENKEEPER

to lead a team of hardworking staff.

Suitable applicants should have a good all-round experience in the methods and techniques required to maintain and present a golf course and ancillary areas to the highest standard.

They should possess a recognised greenkeeping qualification and be conversant with the use of up to date methods and use of resources.

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**Mr G Brooks, General Manager, Oundle Golf Club,
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Apply in writing with CV and salary expectation to:
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Wonder of Westurf

by **PAULA HUMPHRIES**
South West and South Wales
Regional Administrator

What a great success this show was for Gordon and Marion Child who were organising it for their ninth and last time. Gordon, who relinquished the position of South West and South Wales Regional Administrator at this event, was the instigator of the Westurf Show which, for the area, is the first opportunity in the year for suppliers to demonstrate their new machinery and greenkeeping products and for the greenkeepers, grounds-men and club officials to see what is available to them in every conceivable department.

Early on the 29th, the day before the show, we arrived in a force 8 gale to find the show site looking a bit of a disaster area. The tent poles were up but the marquee covers were fluttering overhead like butterflies with hefty men trying desperately to anchor them down. The M5 and



Thanks very much: Gordon and Marion Child receive tokens of appreciation from Richard Whyman. Above: basking in sunshine on the big day itself

the M25 were partially closed due to IRA threats and therefore lots of major exhibitors were held up. We sat there for some hours praying that the wind would die down and that the motorways would reopen and that the exhibitors

and their products would arrive. On Wednesday morning the sun shone and the wind disappeared – the exhibitors appeared and all was well. In fact it was such a lovely day that two or three faces were changed from white to a delicate pale scarlet by evening!

One exhibitor, who shall remain nameless, was coming from Ireland. With a strong Irish brogue and a lot of "suspect" equipment, he was stranded at Liverpool docks and not allowed off the boat for some long time. However, he made it during the night and was there in place on the Wednesday! There were some 75 exhibitors in all and around a thousand visitors attended.

This event is a wonderful showcase for clubs seeking to purchase machinery and major equipment during their next budget. They can not only see the full range of the latest equipment available but also see power driven machinery working and examine and compare performances and prices (and sometimes get themselves a very attractive show deal as well!) All the major suppliers exhibited. There were on-going demonstrations throughout the show. Long Ashton provided two very well kept practice greens

and a sizable area of fairway for these demonstrations. For any golf club considering a major purchase, this show is a must. There were also exhibitors of every other course requirement such as furniture, irrigation, signs, turf, pesticides, chemicals, accessories, sharpening equipment and seeds. Here you could compare seeds and fertilisers etc and talk in depth to the people who produce them. The people who manufacture these products are experts in their own right and many problems were resolved or at least under deep discussion at this show.

Representatives and information stands were present from the major training colleges in the region, Cannington, Sparsholt, Hartpury and Pencoed, as were the STRI and the IOG. The BIGGA pagoda was honoured with the presence of the Chairman, Patrick Murphy and Executive Director, Neil Thomas. The Captain of Long Ashton, Mr Bill Rowsell, together with Jim Fry, President of the South Coast Section and Patrick Murphy, Chairman of BIGGA, judged the stands for the best covered and best uncovered presentations. Rosettes and rose bowls were presented to OCMIS for the best uncovered and Hartpury College for the best covered stands.

The draw for holiday vouchers worth £200 was won by Andrew Mortimer of Caerphilly.

Richard Whyman, Chairman of the South West and South Wales Region, made a presentation from the region to Gordon and Marion Child in recognition of all the work they had put in over the years and in particular for promoting Westurf and making it such a successful event both for the exhibitors and the visitors.

■ Westurf '98 date for your diary: Wednesday, 29 April 1998.

(mis)adventures of Gordon the Greenkeeper



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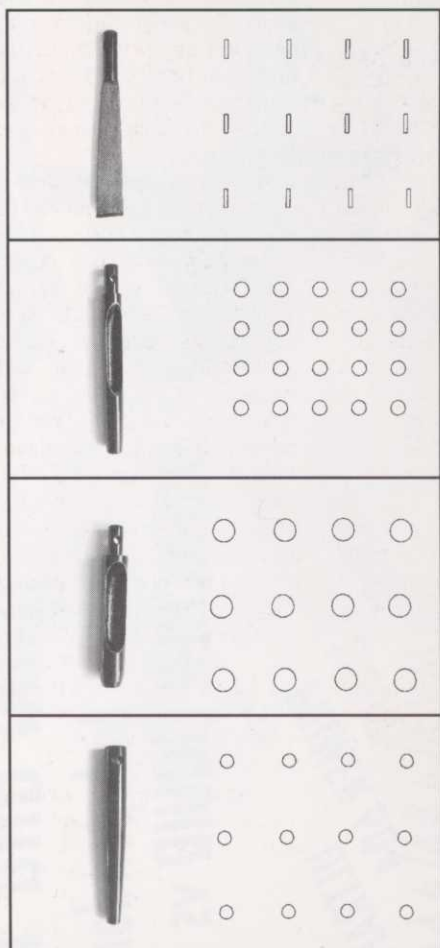
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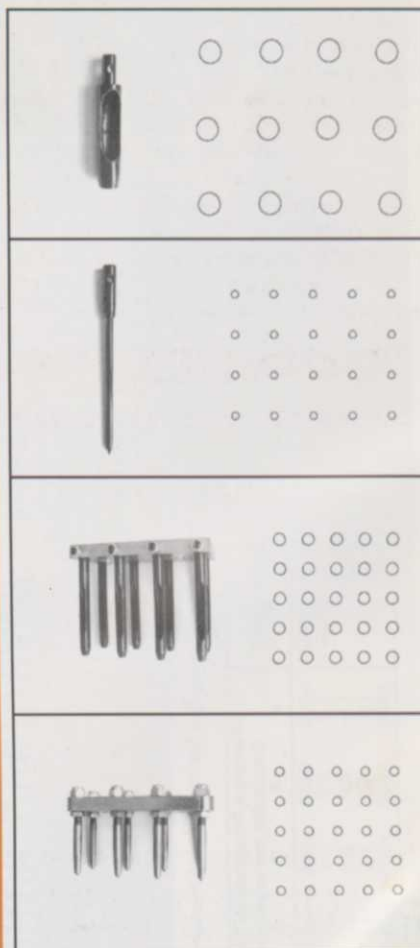
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ULTRAFLO
PERMEATE

PIC 1
TIME 0.0 sec
SURFACE
HYDROPHOBIC
SOIL



PIC 2
TIME 0.9 sec
Both Drencher & Primer 604 have penetrated the soil



PIC 3
TIME 2.8 sec
Ultraflo enters soil



PIC 4

TIME 600 sec
(10 minutes)
After 10 minutes, neither the Control or Permeate have entered the soil
visible



RESULTS TABLE

TREATMENT	Average Penetration Times (seconds) per replicate:					Treatment means (seconds)
	1	2	3	4	5	
UNTREATED CONTROL	>600	>600	>600	>600	>600	>600 ^c
DRENCHER LIQUID	1.0	0.9	0.9	1.0	0.9	0.9 ^a
PRIMER 604	1.6	0.9	0.4	1.0	0.5	0.9 ^a
ULTRAFLO	1.6	4.3	2.5	4.0	1.8	2.8 ^b
PERMEATE	>600	>600	>600	>600	>600	>600 ^c

Average penetration time (seconds) of each treatment tested on hydrophobic soil.