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...of all the mowing jobs on a golf course, mowing the greens requires the most delicate touch of all. The new GREENSMASTER 300 ensures a uniform cutting height, appearance and playing characteristic while manoeuvring in a tightly defined area. Why not see this exceptional mower in action... the GREENSMASTER 300 has so much more to offer!

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COMMUNICATION IS A TWO-WAY OPERATION

The regular readers of this magazine will notice certain changes to the type faces and sizes in this month's issue as well as a widening of the column widths with the inclusion of a centre rule. All designed to make the journal more attractive to the eye and easier to read. It is the publisher's constant aim to produce a informative, well produced publication for the members of the BGGA, with a balanced content of news about your own section activities, current products and services obtainable from manufacturers and dealers, news about people, particularly those who come into direct contact with our readers and articles about greenkeeping, both the practical aspects and the theory. In this respect we are fortunate to have two of the best informed writers on greenkeeping matters in Martyn Jones and F. W. Hawtree, contributing on a regular basis.

The turf care trade also supply regular information on product development, appointments and promotions of their staff, as well as the technical and economic reasons why their equipment is better than those of their competitors.

Section secretaries also make their regular contribution of news and events in their areas, mostly typed in double spacing, we are pleased to say! But if there is a part of the monthly journal that can be said to be missing it is the constant stream of 'Letters to the Editor'.

Whenever the editor meets members at golf tournaments, shows or seminars he is asked to lend an ear to an important issue. Why not put these issues in writing? If you have some important points which require airing then your magazine is the place to do it. There is bound to be someone who will agree and certain to be someone who doesn't.

As long as letters contain a name and address the editor will respect the writer's wish for it not to be printed or given to anyone else. So come on you shy and bashful greenkeepers - Let's be hearing from you about the current topics of the month.

Our most sincere congratulations must be extended to Derek Ganning and his greenkeeping team at the Belfry. All who visited the course have commented on its superb definition, the immaculate greens and fairways and above all the transformation that has been achieved in such a short time.

The only touch of sadness was the death of George Herrington on the Tuesday prior to the start of the Ryder Cup. George prepared the course at Lindrick when the British Team last won the cup in 1957 and many said he would agree and certain to be someone who doesn't.

Derek Ganning prepared an American style course to equal anything they say! But if there is a part of the monthly journal that can be said to be missing it is the constant stream of 'Letters to the Editor'.

Who will ever forget that eagle putt from Sam Torrance on the 18th to clinch victory? Never has the atmosphere been so electric on a golf course.

NEXT MONTH:

F. W. Hawtree visits the Pau

Martyn Jones explores more on American Greenkeeping Methods

The International Tournament Report

P.G.A. Proposals
NEW CASTAWAY ELIMINATES THE PROBLEM!

CASTAWAY KILLS CASTING WORMS AND SETS NEW STANDARDS FOR:

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WINDSOR SHOW REVIEW

The International Groundsman's Exhibition on Windsor Race Course was blessed by the best three days of weather for many years, attracting large crowds on both the opening and second days.

Improvements both by the laying down of a number of new roads through the site, the opening of a covered pavilion and an extension of the demonstration areas added a new dimension to what has become the best organised turfgrass exhibition in Europe. Attendance of 33,800 was 7% up on last year's record breaking figure.

This year the show was humming with news of amalgamations take-overs and dealer appointments, firstly by Ransomes acquisition of the garden machinery business of G. D. Mountfield for a reported £4.25 million, when the joint owners Dennis Selby and Don Hamilton decided to retire.

On the opening day, Morrisons and Jacobsens announced a 'marriage of convenience' between Morrison Industries and Jacobsen Textron for the sole distribution of the turfgrass machinery of both companies' products in the UK. Ron Higgins, the Managing Director of the New Zealand based Morrison Industries, joined Tom Carter, Jacobsen's Vice President of the Marketing Services to announce the new venture from Morrison's UK base at Kings Lynn in Norfolk. Chris Smith General Manager of Morrison's UK operations will direct the operation through a network of service agents.

Earlier this year it was announced that Marshall Concessionaires, the Romsey based distributor had been appointed the Wisconsin company's sole representative for Jacobsen Turfgrass machinery, but the contract was not renewed at the end of August, although sales of the Jacobsen Greensking were running at one a day over the past two months.

As this edition goes to press Ron Higgins told Golf Greenkeeping as a result of discussions at the Windsor Show a number of dealers who had previously handled Jacobsen equipment had been appointed service agents and three regions would be handled through distributors.

A. Church will supply Lincolnshire, Leicestershire, Nottinghamshire, South Humberside and part of Northamptonshire, Bristol Garden Machinery have been appointed distributors for all of the South West, Avon, Wilts and Gloucestershire and Auto Garden of Glasgow become the sole distributors for Scotland.

The remainder of the country will be supplied with Morrison and Jacobsen equipment direct from the newly opened premises at Kings Lynn, with a back up service of spares from mobile workshops.

Machinery is presently shipped into this country through Felixstowe, but as the new depot has its own port it is expected Morrison Mowers will be delivered direct to Kings Lynn, from New Zealand.

According to Ron Higgins it is highly likely there will be a UK assembly operation in 1986.

Tom Carter assured Golf Greenkeeping at Windsor the Jacobsen Tournament started by Marshall Concessionaires will continue and this has now been confirmed by Chris Smith, but because of the difficulty of arranging the final by the due date, regional winners will now contest for the trip to the United States at a Spring Tournament at a date to be arranged. All those who have qualified in sectional competitions will be notified of the rearranged venue later this year.

BASF who have recently entered the fine turf market with Floranid a slow release fertiliser range containing isodor a synthetic organic slow release nitrogen, are distributing the product through George A. Palmer Ltd. of Peterborough and a network of regional dealers including Supaturf Products, Maxwell Hart, and T. Parker & Sons. The German based company are marketing the range of turf feeds through their own UK company, COMPO.

Supaturf Products have strengthened their operation recently with the acquisition of Turf Maintenance Supplies at Iver Heath and Don Hunt's business at Newton Abbott, though Don remains with the company.

Watch the grass grow under your feet!

See what new, slow release Floranid can do for your grass. It means better growth, fewer applications, less mowing.

To see the quick results of slow release Floranid contact your distributor or send off the coupon and we'll send you all the details.

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Position
Organisation
Address

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Fisons have also marketed a new range of turf nutrition entitled the Greensmaster range using a new process which incorporates vermiculite as a density adjuster. The granules are of a size and colour that makes mechanical spreading easier and can be seen on the turf before absorption begins. Fisons made their announcement at Wentworth where the greens have been fertilised to reach peak production plant to be centred at Howden in Yorkshire. This Edinburgh company have set their sights on a significant share of the England and Wales turf fertiliser market with their range of Longlife products. Five fertilisers contain a new ingredient - Didin, developed to regulate the availability of nitrogen to the turf. There is no flush of growth as nitrogen is taken up by the grasses, but the improved colour and growth response is achieved over several months.

Ransomes stand was again one of the most spectacular and a central meeting place for greenkeepers. New equipment included the seven unit hydraulic 465TG for golf courses with a cutting width of over 15ft. Designed for the club with large fairways there are many greenkeepers who would have liked this machine on the course this summer. The company also exhibited a new Verticut 214 suitable for a use with a 40hp tractor and above. The machine has a working width of 7ft. which by cutting the lateral surface growth and controlling the build up of thatch, the younger grasses can become more vigorous.

The tractor stands created considerable interest particularly the compacts of Lely Iseki, Kubota, Ford, Massey Ferguson, Yamaha and Hinimoto.

Two items that caught the editor's eye as simple but very practical were a swivel for attaching the green's flag to the pole so that the flag did not wrap itself around the pin in windy weather or tear when constantly handled by golfers as they removed the stick for putting. The bright idea came from Pattisons and is likely to be on sale later in an improved form.

A great idea for protecting young seedling trees was seen on the Union Hall Nursery stand. The tree is planted inside a 4ft corrugated polypropylene square tube with the base just below the soil surface. The tree is forced towards the light and branches as it emerges. Damage from rabbits and golfers is avoided and in tests conducted by the Forestry Commission growth rates increased six fold, stems thickened considerably and trees of eight inches high at planting were established quickly avoiding the additional costs of whips.

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**MOORTOWN TO BUILD NEW HOLES**

Moortown Golf Club, the course which has staged the first tournament of the season - The Car Care - for the past two years, has been granted planning permission to construct two new fairways, tees and greens, in scrub type woodland within the boundaries of the course.

Because of the growth of housing surrounding the course, mishit shots have become a potential danger to residents, particularly at the par three, 12th hole, where a serious accident was averted by inches when a ball off the tee went through the open window of a parked car. As a result the club moved the tee forward shortening the hole by 40 yards to a mere pitch and putt.

Earlier plans to lay out two new holes at the Championship Moortown Golf Club, venue of the Car Care Tournament, were deferred by the Planning Committee of Leeds City Council, because the scheme would involve clearing a number of trees bordering the course.

A report from the City Council Planning Committee said the ecological advisory unit had been consulted on the value of the woodland and their report stated the basin peat deposit at Alwoodley Moss was the only known example in West Yorkshire. The woodland was said to be of moderate value but was important in aesthetic and landscape terms and provided a local wildlife habitat.

The Committee Chairman Councillor Nanette Sloan said she could not see any circumstances in which anyone would be allowed to clear a large number of trees without first having some idea of a replanting scheme.

Moortown hosted the Ryder Cup in 1929 when Britain won by six matches to four under the captaincy of George Duncan. The pictures of that event on the walls of the nineteenth show Moortown as a golf course almost without trees - in fact a moorland course. The trees, mainly self-seeded birch and hawthorn have grown because of the shelter given by the encroaching houses.

Moortown adjoined two other famous courses, Moor Allerton and Sandmoor.

Moor Allerton sold their entire course some fifteen years ago for housing, and Sandmoor their opening holes. Because of the danger of stray balls near to the adjacent houses the club have decided to develop the two new holes, to maintain Moortown as one of the leading Championship courses in the north.

Work will start immediately to plans drawn up by Donald Steel of Cotton, Pennink, Steel and Partners and it is hoped to have the new holes playable in 1987.
WATERMATION MARKET A
NEW BRITISH SPRINKLER

Over the last 25 years there has been a steady increase in the use of automated pop-up sprinkler systems for golf courses dominated by American made equipment. Now a British Company has designed and manufactured a complete range of sprinklers and controls to do the job. That company is Watermation Limited of Woking, Surrey, who have extensive experience in the design and installation of golf course systems. At this year's I.O.G. show they exhibited the GN range of high quality, heavy duty, impact drive, pop-up sprinklers. These are all of bronze and stainless steel construction with heavy cast cases and green reinforced rubber tops.

The range starts with the GN1 model which can be operated as full or part circle and is useful for smaller areas, through the GN2, a part circle sprinkler for golf greens, to the GN3, a full circle for approaches and fairways.

A unique feature of the range is that the internal mechanism has a multi fit guide plate so that it can be used to refurbish the Rainbird 2147 range or the Weathermatic K range.

Coupled with the sprinkler range is Watermation's unique TW1 controller. This controller works on a 2 wire principle, thus simplifying installation and providing great flexibility. The simplicity of programming the controller is outstanding and for a modest extra a multi programme facility can be provided. Over 150 of these TW1 systems have now been installed, the majority in the U.K., but some in Europe and the Middle East.

DIRECTORY OF AMENITY CHEMICALS
JOHN ALBUTT
Reviews a New Edition

Professional gardeners, groundsman and greenkeepers are regularly faced with the problem of deciding what chemical they should order to deal with a wide range of pests, diseases and weeds. Calls by representatives, reading catalogues and sorting through that jumble of leaflets picked up at last year's show, have been the usual methods; but very often pressure of work prevents too much time being spent on the problem and this can result in a wrong decision being made in terms of cost and effectiveness. Good decision-making in selecting the correct chemical to suit the budget and also deal effectively with the problem is a much neglected, vital first step in the preparing of an efficient maintenance schedule. The continuing use of the same chemical each year may not be justifiable on grounds of cost-in-use or effectiveness, particularly as there may be problems with resistance where a chemical is used over a period of time.

Reference books are very useful in dealing with a problem in general terms but usually stop short of naming actual branded products; development work in chemical control is such that most books become out of date very quickly. The answer to this problem can now be found in the British Agrochemical Association's Directory of Amenity Chemicals. Introduced in 1983, this small, compact booklet, produced by the BAA in conjunction with the Sports Turf Research Institute, has now been revised and reprinted to include details of the latest products, and also a new chapter on CDA Spraying.

The directory contains chapters which give valuable information on Pesticides Registration, Handling and Storage, Application Equipment and Techniques for Using Liquids and Solids, Calibration and Use of Equipment; probably the most useful section is the directory itself, which lists chemicals by brand names and active ingredient, grouped in categories of usage, eg: Fungicides, Selective Herbicides, etc. At the back of the book there is a list of company names, addresses and telephone numbers and also the names of key personnel who may be contacted for further help and advice.

There is a useful glossary of terms used in the booklet which is very helpful to those who may not be familiar with the jargon used in relation to pesticides. There are also small booklets available which supply valuable information on various aspects of pesticides usage and they are listed, together with addresses on the back page of the booklet.

This directory has something to offer everyone, from the aspiring student to the experienced manager. It can be obtained from British Agrochemicals Associations, Alembic House, 93 Albert Embankment, London SE1 7TU, and costs £1.50 per copy inclusive of postage and packing.

NICKERSON SHOCK!!

Just as the magazine was going to press a report appeared in the financial news columns of the national press that Marshall & Sons the Gainsborough based agriculture tractor company had called in the Receivers. Nickerson Turfmaster Ltd. are part of the Marshall organisation, which in turn are owned by the Nickerson Group of Companies, with interests in oil, seed, transport and frozen poultry among a diverse product range.

Nickerson Turfmaster recently won a design award for their 70 inch mower the 360, presented to the Commercial Director, Graham Templeton by the Duke of Edinburgh at Beaulieu.

It is understood Mr. Templeton was on holiday when the Receivership announcement was made.

© GOLF GREENKEEPING October 1985 7
The Belfry was the venue for the 1985 Ryder Cup, so the course had to be in perfect condition. Fairway mowing at the Belfry is handled by a large 4WD tractor weighing over 3 tonnes, but it leaves no marks thanks to the new 'GOLF' tyres developed specially by Undergear.

Derek Ganning, Head Green Keeper - Superintendent, is delighted with the performance of these tyres; he says "They roll and comb the grass back up for cutting, leaving a perfect finish with no marking".

If you would like to know more about the 'GOLF' and other turf tyres in the Undergear range, call John Edwards or Ken Baker.

The GOLF Turf Tyre
With the champagne still flowing, the vast ecstatic gallery reluctant to leave the arena where history was made, a depressed, but magnificent Lee Trevino called the Belfry's Head Greenkeeper, Derek Ganning into his private suite and introduced him as 'the thirteenth member of the European Ryder Cup Team'.

Last month, Derek and his team showed the world what a magnificent golf course the Brabazon has now become. Not only as a test of golf, requiring thought, skill, determination and courage but as a spectacle both for the galleries and the millions who stayed at home to savour the increasing excitement on television.

The Belfry's two courses, the Brabazon and the Derby were constructed around the existing 59 bedroomed hotel, ten years ago, to a design conceived by the Alliss and Thomas partnership. Since the courses were opened in 1975, there has been constant and voluble criticism of the design, construction and maintenance. A comment on the Brabazon — 'A featureless soggy farmland' could be included among the more charitable remarks. Hardly a recommendation for the heart of England's Championship course. When Greenall Whitley, the Warrington brewery, finally acquired control of the Belfry two years ago, the problems were at last nailed firmly to the table and a planned programme devised to make the Belfry's courses what they are today.

The first task was to reorganise the management under the Belfry's Director, Brian Cash. In came Jack Broady, the horticultural manager responsible for all forty of the famous Greenall Whitley bowling greens. Put in charge of the golf courses was Derek Ganning, the Head Greenkeeper under the previous regime. He was confirmed as Head Greenkeeper - Superintendent, a most suitable job title in view of his responsibility for the American type Penncross sand greens.

With a good management team four further ingredients were essential, a great deal of money, the identification and sound solutions for the problem areas, unbounded enthusiasm coupled with the ability to motivate the greenstaff into a well coordinated team. — And all this within the short period of about eighteen months!

Martyn Jones was brought in to the act as the consultant agronomist contributing his expertise to the very defined programme of maintenance. It has been under his guidance the Brabazon greens have shown such a marked improvement using a different type of sand in the top dressing followed by a programme of overseeding and top dressing along the lines recommended by the United States Golf Association Greens Section.

Derek Ganning says his secret formula of fertiliser is mixed for him at Steetley by that well known cuddly bear Welshman, Colin Murphy, though not necessarily personally, and supplied by E. J. Breakwell at Solihull.

Early this year the Belfry signed a contract with Ransomes, said to be worth around £180,000, to supply a complete range of turf equipment for course maintenance. These machines have been used to cut, verticut, vibro-spark and scarify the greens over an intensive four month period.

Out on the fairways, an area of major criticism over the years, the stones have been twosed out and hand picked, some sixty to seventy tons of peat spread on every fairway, they have been overseeded with a fescue/bent mixture and verti-cut with a prototype version of the new Ransomes 3350D with sports cutting units. 'What a brilliant job it did!', said Derek Ganning. 'They were absolutely magnificent and cut beautifully'.

From the spectators point of view there would be few who would disagree. The Brabazon fairways were a picture of perfection both in colour, texture and shape. As far as colour is concerned Jonathan Harmer would say that was down to Farmura which has been used at the Belfry for some years. This season Farmura Green was included in another of Derek Ganning's 'secret cocktails' the contents of which he is not disclosing though he says the highest proportion of nitrogen he every used was 6%.

Another Belfry criticism that had to be overcome was the 'barren waste...land' tag. A tree planting programme commenced three years ago was accelerated and upwards of 10,000 whips and saplings of Pine, Birch, Alder, Ash and White Beam have now become established. To give the course a more mature look almost a hundred semi-mature trees have been planted costing around £150 each.

As an American style course, lakes and streams provide the backdrop to all the spectacular holes and this has meant the construction of eleven new bridges to allow the easy flow of spectators around the course. These are Derek Ganning's pride and joy, as a number of people witnessed on Day One of the Ryder Cup. When the telephone rang in the Greenkeeper's sheds with a message that the spectators were piled high on the bridges to get a better view of the way out on the course in his Yamaha buggy resplendent in an official blazer - to see if there was any damage to the structures.

The fact that the European Team have won the Ryder Cup, for the first time since it was played for at Lindrick twenty-eight years ago has added the icing to the Belfry's cake, but even if the Cup had returned to the United States nothing but praise could have been heaped on the people responsible for producing such a majestic stage for an enthralling contest.

We all feel great pride in Derek Ganning's recognition for a job well done. He appeared on BBC Breakfast Television to explain in two minutes how he maintains the course! He was certainly congratulated by several executive members of the American PGA one of whom told him in all the years of visiting courses throughout the world he had never seen a golf course with better definition. Another said he had done a magnificent job and produced a golf course as good, if not better than any they have in the United States.

He will also remember the comment by Dave Thomas 'Derek, you have made a dream come true'!

But when the euphoria has ceased, Derek will still be able to reach into his bookcase and pull out his copy of Tony Jacklin's book and read the inscription 'Thank you Derek Ganning for a magnificent effort, for all your hard work and for making the Ryder Cup a complete success'.

With the other hand he can pick out Lee Trevino's book Super Mex also suitably autographed. A little touch of thanks and recognition for one man by another much involved in the emergence of the Brabazon as one of the world's finest golf courses — Martyn Jones.
RYAN POWER RAKES

When it comes to turf maintenance, one name is universally associated with the highest quality equipment – RYAN.

Look at the versatile range of RYAN Power Rakes. Three basic models are available. Standard with 5hp and 8hp engines. And heavy duty with a powerful 10hp engine. Fitted with a choice of easily changed blades and optional spacings, they’re versatile performers for breaking up cores, dethatching or slicing fine turf areas.

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B.G.G.A.
6th TURFGRASS SYMPOSIUM

The organising Secretary, Mr. Walter Heeles is now accepting applications to attend the 6th Turfgrass Symposium sponsored by the British Golf Greenkeepers’ Association at the Belfry Hotel on Wednesday 13th October.

Among the speakers are Mr. J. Hamilton Stutt, the well-known golf course architect, Mr. Martyn Jones, the consultant agronomist, Mr. Derek Ganning the Head Greenkeeper -Superintendent of the Brabazon and Derby Courses and Mr. Nicholas Bissett, Secretary of the Greenkeepers Training Scheme.

An application form appeared in the September issue of Golf Greenkeeping.

The registration fee of £25.00 per person includes Morning Coffee, Lunch and Afternoon Tea.

The Symposium will commence at 9.30 a.m. prompt. A tour of the golf course will take place prior to the luncheon interval.

This informative day at the Belfry will be of particular interest to all those connected with the management of golf courses. Applications must be received by Friday 1st November 1985.

Write to Walter Heeles, 7 Tentergate Close, Knaresborough, N. Yorks. HG5 9BJ, naming those persons wishing to attend and enclosing a cheque for £25.00 for each Symposium delegate.

RANSOMES GROWTH CONTINUES

The Ransomes Group continued its overall growth during the first half of 1985 with sales up by 20% and profit before tax up by 38% compared with the same period in 1984.

The Chairman, Mr. H. Astley Whittall said:

“It has been a good year for sales of grass cutting machinery by the parent company with increased sales in the UK and a particularly strong export performance. Our subsidiary companies have also performed well. Re-organisation of the Ipswich factory has continued and the benefits continue to come through”.

The recent acquisition of G. D. Mountfield Ltd. has brought into the Group a first class company, manufacturing and selling a range of grass cutting machinery that is complementary to the Group’s existing products.

Looking ahead, the Board anticipates the continuance of the strong performance on grass machinery.

The directors have declared an interim dividend of 1.5p, up .3p on 1984.

LETTERS

The Northern Section offers hearty congratulations to Tony Jacklin and the Ryder Cup Team for their great victory and superb display of golf at the Belfry last month.

But the person we would single out as worthy of the greatest praise is the Belfry’s Head Greenkeeper Superintendent, Derek Ganning for the immaculate presentation of the course.

Golf now receives worldwide coverage, courtesy of the television networks, showing a variety of course designs in brilliant colour and emphasising the differing approaches to their upkeep. The shape and form of the green and fairways so well seen on television, showed the application of thought and imagination at the Belfry, a quality which still seems lacking on the majority of golf courses.

All too often are our fairways seen mown in boring straight lines, without movement or deviation. The same applying to cutting methods on the greens.

The introduction of creative shape, stimulates interest both on the job and the game.

Well done the Belfry greenkeeping team! You proved conclusively that British greenkeepers can provide the finest stage for what must be one of the world’s most exciting golf events.

DAVID HANNAM, Secretary, Northern Section BGGA
Mr. George Herrington, twice National Chairman of the BGGA and much respected for his life long skills as a greenkeeper died peacefully on September 11th at Woodsets aged eighty-one.

Since his retirement as Head Greenkeeper at Lindrick in 1974, George has maintained his active life doing the job that started him on the road to greenkeeping - gardening. He was in almost as much demand in the Worksop area as a gardener as he was as a greenkeeper.

Horticulture was his first job on leaving school where he won all the gardening prizes and only left because greenkeepers at the Sheffield & District Golf Clubs, as Lindrick was known at that time, were given Saturday afternoons off, whereas gardeners were not. As George wanted to join the local football team he became a greenkeeper.

Lindrick was where he commenced and ended a long and distinguished career. After eleven years at Rotherham G.C. as Head greenkeeper he returned to Lindrick in 1945 to take charge.

Under his guidance Lindrick was regarded as one of the finest inland golf courses in the country, staging the Ryder Cup in 1957, the last time it was won by the home side until the triumph at the Belfry. Lindrick also staged the Curtis Cup, the Dunlop Masters and a host of other prestigious events whilst George Herrington maintained the course. He also helped Ransomes design the now world famous Auto Certes machine.

Always a staunch supporter of the BGGA he was one of six founder members of the Sheffield Section, where he held the position of Chairman for many years and was elected National Chairman in 1958 and 1968. Only a month ago he attended the past Chairman's Dinner during the Hayling Island Tournament and was one of the first to respond to the invitation.

In his heyday he played off a handicap of six, became captain of the Woodsets Artisands, later to be renamed the Lindrick Artisands, though at Rotherham the members made him play off three.

George Herrington was a fine man with admirable principles. A regular supporter of his local church he was church warden for over thirty years. He will be greatly missed by his many friends in golf and greenkeeping, but all who knew him, know he had a full and active life, doing well a job he thoroughly enjoyed. What more can a man ask for in life?

He leaves a widow, three sons and eight grand-daughters.

The Executive Committee extend their sympathy to his family.

fifunia

The Liquid Organic Fertiliser

Congratulate the Ryder Cup Team and the Greenkeeping Staff on their success at the Belfry

We are pleased that was successfully used as part of the management programme on the much acclaimed fairways

fifunia green

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Tel: Egerton (023376) 241
SECRETARY’S ANNUAL REPORT

Administration:
Once again we have reached the end of another year, and as in the past we have to say farewell to our Chairman of 1984/5. We thank Jim for carrying out his duties with great enthusiasm, he is a credit to the BGGA and his own North East Section, and has worked hard on our behalf. Although he does not have any transport of his own, he has attended meetings from one end of the country to the other, and when I hear some members ask what do we get for our money, I only wish they would take a more active part as all our past chairmen and Executive members do, and for a change ask what can I put into the Association.

I would like to add my personal thanks to Jim for his enthusiastic support during the year.

To follow Jimmy, we have Mr. E. R. James of the South Coast Section, a past chairman of the Association, equally as versatile and energetic as Jimmy, and I am sure will carry out his duties with great zest. We wish him well in his year of Office.

During the past year one of our Members (Mr. T. Jones) of the Welsh Section, was awarded the first prize of a trip to the USA, sponsored once again by Marshall Concessionaires, and as in the past previous two years 5 members won places to play against the Secretaries, and Club Stewards Associations, again sponsored by Kubota Tractors.

Our computer continued to be used by section secretaries to assist in their mailing. It is also in constant use for the monthly magazine, and has been used by various trades people for mailing purposes, which of course is a form of income, albeit further work for the Hon. Sec.

The greenkeeper training scheme is still making progress, and meetings are regularly attended by Mr. A. Gamble, and the Hon. Secretary.

Our membership continues to grow and we finished the year (April 1985) with 1,379 and it would seem that this upward trend is continuing.

Once again thanks are due to all Section Committees and members for their continued support of the BGGA. This I am sure is still the Greatest Greenkeeper Association in the land.

Minutes of the 68th ANNUAL GENERAL MEETING held at the Hayling Golf Club, Hampshire on Monday, 12th August 1985, at approx. 3.00 p.m.

APOLOGIES:
Apologies for absence were received from Mr. P. Alliss (President), Mr. P. McCarron, and Mr. G. Malcolm.

CHAIRMAN:
The Chairman opened the Meeting, at which there were approx. 86 members present. He requested that members stand and observe a minutes silence in tribute to those who had passed away during the year.

MINUTES OF THE LAST A.G.M.:
The Chairman asked that as the Minutes of the last A.G.M. had been circularised to all members in the magazine they be taken as read, on the Proposition of Mr. R. Willars and Seconded by Mr. S. Wood they were accepted.

FINANCIAL REPORT:
I am pleased to report that once again we have a surplus for the year. We are in the happy position of receiving over £1,500 from the Building Society in interest and the Co-sponsorship and Machinery display at the annual tournament added considerably to the funds.

As shown on the balance sheet you will see that the main expenditure of the Association was for the Magazine, the STRI Journal and postage of these two items.

On the Proposition of Mr. E. R. James and Seconded by Mr. R. Gates, the balance sheet was Adopted.

EXECUTIVE COMMITTEE REPORT:
Nomination for Vice Chairman. It was proposed by the Cleveland Section that Mr. G. Malcolm be nominated as Vice Chairman for the ensuing year.

Tournament Committee. Elected for 1985 were, Messrs. E. R. James, A. T. Kite, C. Geddes, The Chairman, and the Hon. Sec.

The Tournament would be played from the white Tees.

ANNUAL TOURNAMENT:
The 67th Annual Tournament was held at the Northumberland Golf Club, Newcastle with approx. 72 members taking part. Once again a very enjoyable occasion. Many thanks to all participants and those who donated to the prize table and gave their time to assist.

S.T.R.I.
Again our thanks are due to the Team at the S.T.R.I. for their continued assistance.

ELECTION OF OFFICERS:
Election of Officers were accepted as follows:-
President: P. Alliss
Chairman: E. R. James
V. Chairman: G. Malcolm
Sec./Treas: W. Heeles
Executive: H. Herrington, M. Hughes, J. Richardson, J. Donaldson
Solicitors: M. Holmes
Auditors: L. Phillips

NOMINATIONS:
It was proposed by the South Coast Section that Mr. J. Hamilton Stutt be accepted by the Association as a Vice-President. The Proposition was carried.

Questions were raised from the floor concerning the proposals to the BGGA from the PGA. After a lengthy discussion the matter was left for the Executive Committee to consider further at their next meeting.
HEAD OFFICE
General & Benevolent Fund
BALANCE SHEET as at 30th APRIL, 1985

<table>
<thead>
<tr>
<th></th>
<th>1985</th>
<th>1984</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FIXED ASSETS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Office Equipment at cost</td>
<td>1,080</td>
<td>1,343</td>
</tr>
<tr>
<td>Additions during year, at cost</td>
<td>95</td>
<td></td>
</tr>
<tr>
<td><strong>Less: Depreciation</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1,175</td>
<td>1,343</td>
</tr>
<tr>
<td></td>
<td>235</td>
<td>263</td>
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<tr>
<td><strong>CURRENT ASSETS</strong></td>
<td>940</td>
<td>1,080</td>
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<tr>
<td>Stock of Ties, Badges, etc.</td>
<td>603</td>
<td>613</td>
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<tr>
<td>Balance at Britannia B. Soc.</td>
<td>22,796</td>
<td>18,282</td>
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<td>Balance at Bank</td>
<td>602</td>
<td>493</td>
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<tr>
<td>Benevolent Fund</td>
<td>711</td>
<td>664</td>
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<tr>
<td>Sundry Debtors</td>
<td>158</td>
<td></td>
</tr>
<tr>
<td><strong>Less: CURRENT LIABILITIES</strong></td>
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<td></td>
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<tr>
<td>Sundry Creditors</td>
<td>899</td>
<td>138</td>
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<tr>
<td>Provisions for Taxation</td>
<td>60</td>
<td>79</td>
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<tr>
<td>Monies Received in Advance</td>
<td>100</td>
<td>536</td>
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<tr>
<td><strong>NET CURRENT ASSETS</strong></td>
<td>24,870</td>
<td>20,052</td>
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<tr>
<td><strong>TOTAL NET ASSETS</strong></td>
<td>23,811</td>
<td>19,299</td>
</tr>
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</table>

**REPRESENTING:**
Balance as at 1st May, 1984 | 20,379 | 19,200|
Add: Profit for Year | 4,372  | 1,179 |
**TOTAL NET ASSETS** | 24,751 | 20,379 |

**SECTIONS**
General & Benevolent Fund
BALANCE SHEET as at 30th APRIL, 1985

<table>
<thead>
<tr>
<th></th>
<th>1985</th>
<th>1984</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FIXED ASSETS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Office Furniture, etc.</td>
<td>240</td>
<td>135</td>
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<tr>
<td>Additions During Year</td>
<td>34</td>
<td>105</td>
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<tr>
<td><strong>Less: Depreciation</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>274</td>
<td>240</td>
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<td>54</td>
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<tr>
<td><strong>CURRENT ASSETS</strong></td>
<td>220</td>
<td>240</td>
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<tr>
<td>Sundry Debtors</td>
<td>10</td>
<td>-</td>
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<tr>
<td>Stocks of Ties &amp; Badges</td>
<td>288</td>
<td>130</td>
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<tr>
<td>Balances at Bank, Cash</td>
<td>9,528</td>
<td>8,065</td>
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<tr>
<td>Benevolent Fund</td>
<td>8,926</td>
<td>8,195</td>
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<tr>
<td><strong>Less: CURRENT LIABILITIES</strong></td>
<td></td>
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</tr>
<tr>
<td>Sundry Creditors</td>
<td>35</td>
<td>25</td>
</tr>
<tr>
<td><strong>NET CURRENT ASSETS</strong></td>
<td>9,791</td>
<td>8,170</td>
</tr>
<tr>
<td><strong>TOTAL NET ASSETS</strong></td>
<td>10,011</td>
<td>8,410</td>
</tr>
</tbody>
</table>

**REPRESENTING:**
Balance at 1st May, 1984 | 8,410  | 8,031  |
Add: Surplus for Year | 1,601  | 379    |
**TOTAL NET ASSETS** | 10,011 | 8,410  |
MIDLANDS

Hon. Sec: S. Wood,
153 Dickinson Drive, Bescot, Walsall,
West Midlands WS2 9DR
Telephone: (0922) 640291

On Wednesday, 21st August our Section played against our old friends the Secretaries at Blackwell G.C. with the Greencutters defending the Cup which we won last year; but it was not to be this year; with the Sec’s running out winners by 4 matches to two, never mind - We can’t win them all.

The Christmas Tournament & Dinner over 18 holes is at Otton G.C. on Dec. 2nd; this is a Bring & Win Competition, so bring a prize to the value of £4 or over.

Entries please with £8 and S.A.E. to A. Phipps-Jones, no later than 11th November; entries after this date WILL NOT BE ACCEPTED.

The Rigby Taylor Foursomes Tournament is near completion with A. Phipps-Jones and T. Ryder in the Final against the winners of S. Wood & T. Jesson v. I. Toon & B. Moland.

E. T. Breakwell will be holding their Bi-Annual Open Day on 19/20 Feb. 86 to which all greenkeepers of the Midland Section will receive invitations.

Further details regarding lectures and visits will be available soon.

CLEVELAND

Hon. Sec: Roger Shaw,
37 West End, Sedgefield,
Stockton-on-Tees TS21 2BM

On August 22nd the Greencutters Team visited Mount Oswald Golf Club for our Annual Match.

We were made very welcome by Mr. David Todd, the Captain and Club Members. We managed to go one better this year going halving the match.

Thanks to Sid Reeve and Staff for a fine course, Manager Gordon Clark and Clubhouse Staff.

On August 27th the team visited Darlington Golf Club. Mr. Terry Werge Captain of the Club produced a strong team which came the victors by 4 games to 2 games.

The course was in great shape and the courtesy of the Club facilities and the stewardess made a fine meal to round off a pleasant evening.

Congratulations to Mr. Danny Godfrey who has been a valuable member of our Section on taking up a new position as Grounds Manager at Carnislegh School in Surrey.

He helped to start an evening course for Greencutters which started in September and leads to a very good certificate.

All The Very Best Danny
From the Cleveland Greencutters.

Forthcoming Events:
OCTOBER 29th
Catterick 12.00
(Highspeed Trophy)

WELSH

Hon. Sec: Phillip Swain,
6 Locke Street, Newport,
Gwent NP1 5HJ

On Wednesday 4th September we held our Autumn Meeting at Clyne G.C. near Swansea, but unfortunately the turnout was poor.

Apologies were received from Ted Thompson, who was on holiday and David Williams, pressure of work.

The weather could also have been kinder but the course was in much better condition. The greens being the best played on all year.

Our thanks to the members and committee at Clyne G.C. for the courtesy of the course and the club facilities.

Our thanks also to Henry and the boys for preparing the course in such good condition and the stewardess for her culinary offerings.

RESULTS:
1st DENNIS JONES 74 President's Shield
2nd HENRY FRY 74 Stuart Crystal Vase
3rd PHILIP SWAIN 76 Crystal Glass
4th JOHN HOPKINS 76 Bottle of Sherry
5th JOHN WALSH 79 Bottle of Wine

The Rose Bowl and the Tray for the gross and net aggregates were won by John Hopkins. He also won a set of glasses donated by Walter Jones and Wine donated by Clyne G.C.

The next date to remember is the Christmas Competition which will be held at Pyle and Kentig G.C. on the 12th December, starting at 11.30 a.m. with a Christmas Dinner at 6.30 p.m., please make every effort to attend and make this event successful.

N.B. Can we all make a bit more effort in entering for our competitions. The clubs are good enough to give us the courtesy of the club facilities and the course, the least we can do is to make a determined effort to attend.

SOUTHWEST

Hon. Sec: J. R. Dennis,
Hampshire College of Agriculture,
Sparkswood, Winchester,
Hampshire S021 2NF
Telephone: (096) 366411

The Section’s Winter Programme has been confirmed, and our meetings will again be held at Alresford Golf Club, commencing at 7.00 p.m.

Our thanks to Malcolm Scott and the Committee for their kind generosity in allowing the Section to meet at their Clubhouse.

6th November 1985
PETER MAUNDER,
Municipal Golf Courses

4th December 1985
SYNCHRONALYS LIMITED

5th February 1986
STEPHEN JAMES
Allman Spraying Equipment

5th March 1986
GANG MOWING EQUIPMENT
and the A.G.M.

I hope that as many members as possible will support our speakers, and I look forward to seeing you during the Winter months at our meetings.

MID ANGLIA

Hon. Sec: L. Wakeel,
26 Loxley Road, Berkhamsted,
Herts. HP4 3PS

The Christmas Four-Ball will be held over 18 holes at South Bedfordshire Golf Club on Wednesday, 11th December at 9.45 a.m.

Members may bring along a guest as their partner, and all entries, together with Handicaps and £22.00 per couple should be sent to Ken Bunting by 25th November.

Christmas Dinner will be served at 5.30 p.m. and as last year each competitor is asked to bring a small prize, gift wrapped please.

Congratulations to Paul Fitzjohn and Roland Hughes on their fine achievements in winning at the Annual at Hayling Island and to the Mid Anglia Team for winning the Jubilee Cup for the second year running.

Workington Golf Club
ASSISTANT HEAD GREENKEEPER

Applications are invited from suitably qualified persons with experience in all aspects of golf course management including the operation and maintenance of modern machinery.

The course is of parkland type, 18 holes, in the Lake District

Salary by negotiation

Applications in writing giving full details of age and experience to:

The Secretary,
WORKINGTON GOLF CLUB,
Branthwaite Road, Workington Cumbria
DEVON & CORNWALL
Hon. Sec: Bill Pile, 33 Knowle Drive, Exeter, EX4 2DF
Telephone: 214053

At our October meeting we will be paying tribute to Cyril Fowler who is retiring as head greenkeeper from St Austell Golf Club.

Cyril a Lancashire lad, who travelled many parts of the world courtesy of H.M. forces during the war, including the Middle East, South Africa, Iceland, all over Britain and Northern Ireland finishing service with the R.A.F. as an instrument fitter and settled in Cornwall.

Cyril, having married a Cornish girl and working as a farmer fell in love with the area, as a young man and moved to Cornwall. Cyril has always been a supporter of the B.G.G.A. and I would like to wish him on behalf of our association a long and happy retirement.

CONGRATULATIONS
Mike Goodhind (Cavendish Golf Club), has recently been signed up a stuntman for Burt Reynolds in his new film 'Hooper Rolls a Land Rover'. Coming soon to a cinema near you, (Sorry Mike!)

NORTH WEST
Hon. Sec: David F. Golding, 38 The Green, Handsworth, Manchester M31 3JH
Telephone: (061) 748 8592

OBITUARY
It is with sadness that I inform the members of the death of a Life Member, MR. TOM BRENNAN.

For many years, Tom had been Head Greenkeeper at Wilmawstar Golf Club and had full Ad, many young greenkeepers to further their careers within the profession.

LECTURE DATES:
All lectures will be at the Old Cock Hotel, Street Lane, Preston 100yds from Junction 7 of the M63 towards Old Trafford.

The following dates are confirmed: -
October 9th 1985
November 13th 1985
December 11th 1985

TREES ON GOLF COURSES
January 8th 1986

I.C.I. / MAXWELL HART
February 12th 1986
March 12th 1986

Speakers still subject to confirmation

We hope to have sandwiches and perhaps the odd drink available on the evenings, so come along for a prompt start at 8.00 p.m.

BATTLE OF THE ROSES
On a normal August day, our trusty band set out for Baidon Golf Club, high on the moors above Bradford.

Ready equipped with bats, maps, sheep repellent and Kendal Mint Cake, we proceeded to capture the much coveted 'Battle of the Roses' Shield from an impressive Yorkshire side.

This is the first time in five years we have done this, but not the last!

Thanks to David Hannam and his staff, the committee of Baidon Golf Club, and the catering staff for making the day one which will certainly be recorded in the history books.

Notable wins from Peter (crisis) Shaw and the still undefeated Bert Scott, Meresyside lads Bert Cross, Bill Merritt, Derek Hutchinson, Norman Langley, Cameron Kerr and not forgetting Howard 'Daddy' McCabey! Well done men!

AUTUMN TOURNAMENT
Our Chairman Mike Sheehan's big day is almost upon us - October 22nd.

I know members will join me in wishing Mike a very successful day at Mere. We have two years, Mike and his staff have worked hard to bring Mere back to its former glory.

This has been rewarded by Mere being chosen to host the 1986 PGA Senior Tournament. Hopefully, by next year the new 18th green will be in play.

This will be a spectacular finish with the green built actually in the Mere! Trusting Mike has anchored it well down! All the best Mike, from the committee.

FOR YOUR DIARY:
An Evening with the British Association of Landscape Industries
A presentation of Landscaping, at its best and all that goes with it.

Current Thoughts on Turf Nutrition and Related Aspects
The Sports Turf Research Institute
All the above at Moor Allerton Golf Club at 7.30 p.m. The objective is to bring out all available information on courses in turf culture being offered by colleges in North and West Yorkshire. To achieve this lecturers from Askham Bryan and Shepley Colleges will speak on greenkeeper education, courses, Y.T.S., and also answer your queries and grumbles: Bring along your chairman and secretary.

NORTHERN
Hon. Sec: D. C. Hannam, 12 Moorfield Avenue, Menston, W. Yorks.
Telephone: (0943) 72008

Apart from a 'summer' of excessive pluvial precipitation our Sectional golfers have been busy defending their honour and swelling the coffers for pleasurable pursuits. Northern Section Committee man, Martin Dignam played his way to victory at Starbeck in the Paul Sward Special, taking him into the National Final of the Jacobsen Competition. Our thanks to Sowards Grass Machinery Ltd.

The following week the lads from the North West played their matches to take the Pattisson Shield away from us at the Battle of the Roses, held at Baidon on August 21st. Our thanks to Pattisson's of Stanmore Ltd for their continued support of this event.

In September our colleagues from the Sheffield Section travelled to Heworth G.C. to meet us in further combat. Needless to say they returned empty handed, though not before having a good few holes on Mick Bryant's track.

Invitation Day at Moortown Golf Club and Mr. Roger Hunt the club Captain for presenting the prizes.

We offer congratulations to all those who have been successful with their City and Guilds exams, but do not think because you now have a certificate you are fully qualified! It really only means that you have acquired sufficient knowledge to do and understand your job more fully.

On the point of education a meeting has been arranged to take place on October 24th at Moor Allerton Golf Club at 7.30 p.m. The objective is to bring out all available information on courses in turf culture being offered by colleges in North and West Yorkshire. To achieve this lecturers from Askham Bryan and Shepley Colleges will speak on greenkeeper education, courses, Y.T.S., and also answer your queries and grumbles: Bring along your chairman and secretary.

© GOLF GREENKEEPING October 1985 15
A BREAKTHROUGH IN IRRIGATION AT THE BERKSHIRE

One of Britain’s finest heathland courses, the Berkshire, has invested a staggering £113,000 in a completely new watering system covering all 36 greens and part of the fairways.

The irrigation scheme installed by Golf Landscapes Ltd. using the most up-to-date equipment available on any golf course in Northern Europe was supplied by Toro.

An Open Day for the golfing press and all those involved in supplying services and equipment was held in August and Golf Greenkeeping visited the Berkshire to hear the technical details.

According to the club Secretary, Major Peter Clark, the club realised they needed a far more sophisticated irrigation system after the dry hot summers of 1983 and 1984 exposed the short-comings of trying to maintain a championship course without adequate water.

The head greenkeeper, Bob Morton, had moved down from the Midlands to take charge a few years ago and he was experiencing thatch on the greens like coconut matting in places, and erosion of the greenside banks where the existing water could not reach. He was not able to slit and aerate because during those two scorching summers the staff were spending most of their time watering manually and even then they could not put sufficient water in the places they needed it in the quantities required at the right time.

The club faced the facts and agreed they needed the best system available and set up a sub-committee of three to explore all the options.

After thorough surveys, particularly on the availability of water supplies the proposals were put out to tender and the contract given to Golf Landscapes with Howard Swan in charge of the project, after assurances had been received that the character of the course would not be changed, only improved.
Among the guests at the Berkshire to view the £100,000 irrigation system was Henry Cotton, who told those at his luncheon table he was spending a few months in England to attend the Open Championship, the Seniors Tournament and the Oval Test among his many engagements.

Henry recounted the tale of his encounters with an interviewer from one of the radio station when at St. Georges, who thrust a microphone under his nose and demanded an interview. 'What’s the fee,' asked Henry. 'There is no fee, was the reply. 'No fee - no interview', said our most famous golfer. 'But think of the publicity," replied the intrepid interviewer. "But I don’t need any publicity", retorted Henry.

With that the man with the tape recorder left, but returned shortly with £25.00 in grubby notes, which were gratefully accepted.

'Now Mr. Cotton, when you had your record breaking round at Sandwich in 1934, how do you think the rough compared to how it is today'.

Henry thought for a moment and said 'I really haven’t the faintest idea, I was never in the rough in 1934'.

We were not told how the rest of the interview went.

HOWARD SWAN, Director of Golf Landscapes · Reports

The majority of golf courses in our country are of block design for greens irrigation; that is, where four pop-up sprinklers are set around a putting surface and operate all at once, controlled by an electrical solenoid valve at the rear. More advanced systems are two by two, but most are block. This means that when the controller activates a particular solenoid valve on a green all pop-ups water for the same length of time, and if they all have the same side nozzles (as they should) they all put the same amount of water wherever they go. However, they are set for the same time but all have different arcs because of the shape of the green, some portions of the putting surface will have more water than others should one arc be smaller than the next. By having a block system it is not possible to differentiate between various parts of the green.

If one part of the green is shaded it retains more moisture than another. If the green is highly contoured with high and low spots then the turf in any one portion does not necessarily need the same amount of water as another to sustain healthy growth.

The only way of achieving such differential watering within a green is by the use of single head control with each sprinkler with its own control valve "in head". TORO equipment features this in their electric valve in head 650 series pop-up sprinklers, and it was this unit which formed the basis of Golf Landscapes design proposal at the Berkshire.

Having established this principle with the Club, each green, tee and approach on all 36 holes was surveyed, scale plans drawn and copies sent to the Head Greenkeeper, Robert Morton, to assist him with his routine turf management programme. Joint meetings were held at the Club with TORO, Golf Landscapes and the Sub-Committee to establish the schedule of sprinkler types required on each green, tee and approach.

Besides the advantage in flexibility of turf irrigation management possible with single head control, it is possible to vary the arcs on each sprinkler on each green.

The staff of Toro and Golf Landscapes, together with the Head Greenkeeper examined each green and selected the sprinklers, four on each green, at each location. Each position was determined with some accuracy, some close to the edge of each putting surface, some distinctly away on the collar. Once each position was established head to head with the opposing pop-up, nozzle sizes were determined. Most importantly by this individual assessment, the required arc for each sprinkler was selected. In some cases the Head Greenkeeper wanted to irrigate the surrounds on a certain part of the green, so a full circle or two speed full circle sprinkler was chosen. On others, where there was a greenside bunker, a part circle sprinkler (45° - 225°) fully adjustable, was more appropriate.

In this way a custom made sprinkler schedule was compiled for each green on the courses, with a flexibility not previously known in golf course irrigation.

Similar exercises were undertaken for the sprinklers on the tees and approaches, under control in pairs, or three dependant upon flow constraints, so that each was tailored to its own particular requirements.

A comprehensive design and installation proposal was put before the Club in September ‘84, accepted in October to the value of some £113,000, and materials began to be delivered in December. Early January saw installation begin in earnest, with two teams of mains pipework, put into the ground by open trenching for the larger sizes, and by moleplough for the smaller ones. In all nearly ten miles of pipe was installed, together with the electrical wiring necessary for the various types of control to greens, tees and approaches.

This extent of pipework and cable installation took some five weeks to complete, out of a total programme of 14 weeks, but because of the frost, snow and impossible ground conditions encountered last winter, it was not brought to a conclusion until the middle of March, some five weeks behind schedule.

A 45,000 gallon tank, 3.2 metres high and 8.0 metres in diameter was erected on a reinforced concrete base at the control centre in the middle of the golf course. A new pumping station was built by the Club not only to house the packaged pumping set of 3 pumps and pressure gear, but also to act as the nerve centre for the new system where the head greenkeeper would locate a new office where the electronic controller would be installed.

When the snow cleared installation work recommenced on the main courses. Horseshoe pipe mains were moleploughed on the greens and approaches with a smaller pipe for the sprinklers on the tees. Hundreds of pipe connections were made, even more electrical connections, suitably insulated with resin for underground location. Great care was taken by the team to minimise disruption to the mature turf on the courses. Trench lines were seeded in, heather replanted where pipework had gone through the rough. All in all, everything was done to maintain the courses in their prime condition and golf was played without interruption throughout.

The ASL 800 station computerised controller arrived in May and was duly installed, the electricity was connected, the system was powered, pipes flushed, sprinklers set, and by early June a number of successful pilot runs resulted in a commissioning and handing over to the Club.

It had taken five months to put in what was a highly sophisticated and modern automatic system to the 36 greens, tees and approaches. In all, 150, 650 sprinklers went into the greens under single head control, sixty-three, 650 sprinklers on the approaches and practice areas, with one hundred and ten, 640 and super 600 sprinklers on the tees. Additionally, manual coupling points were located on the away, so that watering could be affected by TOORS Micro 44 travelling sprinkler, to provide a massive head of water when necessary.

Once the Berkshire system is established, it is hoped the single head control concept can be seen to be a significant advantage over more conventional block systems, providing flexibility and accuracy in irrigation management, and in consequence better turf maintenance.

It will be the template upon which, future systems are built.

© GOLF GREENKEEPING October 1985 17
Crowds come, Crowds go, We remain!

When the excitement, the cut and thrust between winner and loser is over, when crowds have drifted away, Toro sprinklers remain - watering the sacred turf in their own quiet, efficient way. Toro, helping Green-keepers prepare for sporting battles yet to come...

Last year, Toro sprinklers watered the turf which staged 'The Open', the Ryder Cup, the Henessey, the U.S. Open, U.S. Masters - five good reasons why your club should consider Toro Golf Course Irrigation. Other major Toro sporting occasions included 'Wimbledon', the F.A. Cup, Royal Ascot and the E.B.A. Championships...

For more information, speak to Peter Roberts, personally.

TORO IRRIGATION LIMITED
UNIT 7, MILLESTREAM TRADING ESTATE, RINGWOOD, HANTS BH24 3SD
TEL: 04254 6262

THE CRYSTAL COMPETITION

Five more questions in the Rigby Taylor Crystal Competition before the entry form will be published in the November issue.

By then you will have a total of thirty questions to test your knowledge of golf and greenkeeping. You will be asked to cut out the numbered token at the bottom of each month’s issue and stick them to the November entry form.

If any readers have missed an issue for any reason, numbered tokens can be obtained from the editor at the address shown on page 3.

We have been told the questions have been too hard. Not for such well informed sons of the sporting soil, surely! Most of the answers can be obtained from the usual golf reference books or publications on turf maintenance.

1. What is the sign used on the container of a Toxic chemical.

2. How many species of earthworm are there in the U.K. Nine.... Fifteen.... Twenty-five?

3. Which British tree is facing extinction through the activities of a beetle.

4. What year was the BGGA in its original form, started.

5. Which architect is associated with the two tier green?
UNDERSTANDING AMERICAN GREENKEEPING

Is there an ‘American’ Golf Course?

Martyn T. Jones
Consultant Agronomist in Landscape & Leisure

During recent months, much has been written, and no doubt much discussion has taken place, concerning ‘American’ golf course maintenance systems, budgets, manning levels and turfgrass quality.

The arguments are familiar and, usually, have been voiced as a condemnation of ‘American’ techniques and as an indication that they are not relevant to the British climate and economic situation. Rarely are the criticisms supported by explanations of turfgrass maintenance techniques currently in use in various parts of the United States.

How do ‘American’ turfgrass maintenance systems differ from their ‘British’ counterparts?

The first consideration in discussing ‘American’ golf is the vastness of the country. With an area of 3,615,123 square miles, it is approximately twice the size of the whole of Europe and Scandinavia combined, or almost forty times larger than the United Kingdom and Northern Ireland. Obviously, there is bound to be enormous diversity in climates, soils, vegetation cover, and economic constraints.

Here, even with our general climate, we feel the necessity to distinguish between links, parkland, and moorland courses, with further considerations given to North, South, East and West locations. The diversity in climate, topography and vegetation within the United States makes it preposterous to embrace all the different types of golf courses in the general terms ‘American’. We should never refer to an ‘average’ American course or generalise about any aspect of American greenkeeping. Generalisations of this kind are inaccurate and misleading.

If you were to stand with one foot in boiling water and the other in freezing water, would you, in general, be comfortably warm?

There is no ‘American’ golf green; nor is there an ‘American’ maintenance method. There are many types of greens and there is a wide diversity in maintenance practices. After all, there are about 13,000 golf courses in the States and each golf course superintendent is an individual.

Simplifying the variety of environments and maintenance systems encountered in the U.S.A., some broad groupings can be distinguished. Turfgrasses can be classified according to their season of most active growth. Species which produce most growth during Spring and the cooler months of Autumn, remaining semidormant during the hot summer and cold Winter months, are described as cool-season grasses. All the turfgrass species grown in Britain fall into this category and include such species as the Fescues, Bents, Smooth-stalked Meadowgrass (known as Kentucky Bluegrass in America), Rough-stalked Meadowgrass (known as Rough Bluegrass), Annual Meadowgrass (Annual Bluegrass) and Perennial Ryegrass.

The other broad group of turfgrasses, making their maximum growth during the hot Summer season, are classed as warm-season grasses and are typified by such species as the Bermudagrasses (Cynodon spp.) St. Augustinegrass (Stenotaphrum secundatum), Zoysia-grasses (Zoysia spp.) and Centipedegrass (Eremochloa ophiuroides). The optimum temperature for these species is 80-95°F (26.5-35°C), making very little growth at temperatures below 55°F (12.7°C) and becoming completely dormant with a browning of the foliage at temperatures below 30°F (−1°C).

The United States can be divided into broad zones of adaptation for cool and warm season species. (See FIG. 1). Within these zones, climatic conditions can vary quite considerably according to latitude, elevation and maritime influences. Between the zones, transitional areas display intermediate characteristics of the bordering regions.

Man has long recognised the importance of climate in the development of a region's plant communities. It is climate that largely decides whether a species will survive in a given region, and it is soil characteristics and topography which determines the degree of adaptation and abundance of the plant species.

Although the cool humid regions of the States are classified as temperate climates with cold Winters and mild Summers, there are enormous differences between the north and the south, east, and west. For example, average mid-winter temperatures in the south of the region are 35 to 40°F (1.6 to 4.5°C), whereas in the Dakotas it is about 5°F (−15°C). Total annual precipitation ranges from 20 inches (500mm) or less in the West to 45 inches (1125mm) or more along the Atlantic coast.

The Pacific Coast area is generally less extreme and more similar to the British climate, displaying turfgrass species and maintenance problems more reminiscent of our own.

Most of the western half of the United States is classified arid or semi-arid and may be divided into two main sections, depending on average temperatures.

The hot, arid and semi-arid region covers an area from Texas to California, forming a narrow belt which extends between a series of mountain ranges in California, Arizona and New Mexico, and the Mexican border. Average summer temperatures are very high, with some areas such as the notorious Death Valley of California and the Arizona desert, experiencing
temperatures in excess of 100°F (37.5°C) in the shade day after day during the midsummer period. However, temperatures can drop sharply at night because of the dry air and clear skies. The growing season can vary from 200 days in the north to 365 in southern California and areas of Arizona. Annual rainfall is generally low with less than 5 inches (125mm) in the subtropical areas to about 20 inches (500mm) in Texas.

The cool, arid and semi-arid zone encompasses the vast mid-interior region of the U.S. and can be subdivided into the Northern Great Plain and the Inter-mountain Region.

The vast level expanse of the Great Plains produce the greatest diurnal variations in temperatures in the U.S. An advancing polar air mass can reduce the temperatures by as much as 60°F (15.5°C) in a matter of a few hours. Seasonal variations in temperature can also be extreme. Summer temperatures can be above 100°F (37.5°C) and winter temperatures can be below -30°F (-34°C). The cold winters with extended periods of heavy snow cover can produce a variety of problems. Winter desiccation of groomed turf can be horrendous and rodents such as prairie dogs and mice that burrow below the snow can also destroy large areas.

A problem associated with aridity is the phenomenon of wind erosion and subsequent dust deposits. Dust can be transported across many miles of the vast plains and it is not unknown for a dust layer of 1 1/2 inches (37.5mm) in thickness to have accumulated on a golf course in a matter of a few weeks.

Visitors to the hot zones of America will often comment on the seemingly relentless use of irrigation systems on golf courses. Throughout the day, it would seem, water is being indiscriminately pumped on the greens, tees and fairways. To the uninitiated, accustomed only to the irrigation procedures of our cool temperate climate, this practice may be construed as excessive watering. On the contrary, in such areas water is not only applied to turf to avoid drought damage but also a means of protecting the closely mown grasses from the intense heat.

Periodically, small quantities of water are applied to the turf to cool it and reduce its transpiration rate, rather in the manner that we would seek shade. Heat energy is utilized in evaporation of the applied water, rather than permitting it to overheat the grass plants. During very hot weather, the operation may be necessary on four or more occasions during the day. Failure to 'syringe' the turf in this way would soon result in death of the grasses.

The practice does not actually irrigate the soil; it merely cools the foliage and avoids heat stress. In fact, excessive wetting of the soil is diligently avoided. If the soil were saturated during the day, available soil oxygen would be depleted and the grass roots would fail to function efficiently. The result would be that the grasses were less capable of absorbing water and they would suffer from drought.

In areas of the States where high temperatures and drought are common, an irrigation system is a vital tool and breakages or other failures cannot be tolerated. Therefore, the system must be regularly checked.

Some Clubs designate Mondays as 'maintenance day' and the course is closed to play. 'Maintenance day' provides an ideal opportunity to systematically test and check all valves, sprinklers, control stations, etc., of the irrigation system. It is a long and tedious operation and can only be executed when the course is free of golfers. On occasions, the 'check' may coincide with rain and consequently, the irrigation system may be operating, even though there is heavy rain. To the uninitiated British visitor, unfamiliar to the golf course superintendent's programme, this may be misconstrued as excessive irrigation.
Therefore, when the casual visitor sees an irrigation system in use throughout the day, he should not assume that the golf course is heavily irrigated. It may be that the course is merely being syringed to combat high temperatures or that it is a routine check on ‘maintenance day’. All too often though, because he can only relate to his experiences in the cool British climate, he ignores the implications of the harsh weather and returns home to Britain, criticising the ‘American’ ways.

Whether a golf course is situated in an arid or semi-arid, warm-humid or cool-humid zone will govern the maintenance requirements, and, to some extent, determine the size of its maintenance budget. A severe climate will proportionately increase the cost of maintenance if general standards are to be achieved.

The United States of America is a country of extremes, both in climates and degrees of affluence. Standards of golf turf management vary considerably. Some golf courses are disappointingly poor whilst others display unbelievable excellence. Some struggle on very limited maintenance budgets, whilst others enjoy the luxury of an almost limitless one. This is not to say that it is only the wealthy Clubs that have good greens. Some low budget courses are excellent. Knowledgeable and dedicated superintendents can produce good greens, even on relatively low budgets. Understandably though, the cream of superintendents are normally offered a position at a wealthy Club.

The severity of some climates dictate a minimum maintenance budget required to achieve an acceptable standard. If the Membership is unwilling to pay the price, they are denied the privilege of a golf course as we know it. If they are willing to pay the price for excellence, they are justly rewarded.

There is no ‘typical’ American green, just as there is no typical American. It is a vast country with an incredible diversity of climates, soils, vegetation cover, and maintenance methods, and a vast array of golf courses.

To be continued.....

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