

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 Woodsetts 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 finests 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 Woodsetts 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.

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#### 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.

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,

Committee:

H. Fry, S. Hill, C. Geddes, A. Price, R. Willars.

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.

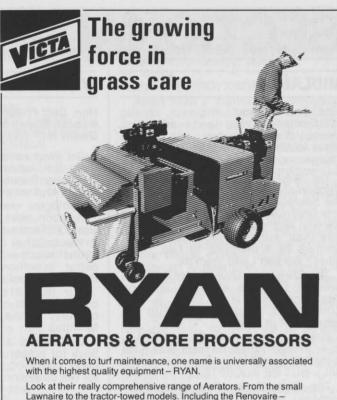
#### **HEAD OFFICE General & Benevolent Fund**

**BALANCE SHEET as at 30th APRIL, 1985** 

H COASTANTE STATE	Tuo	1985		1984
FIXED ASSETS OFFICE EQUIPMENT at cost Additions during year, at cost	t s	1,080 95		1,343
Less: Depreciation		1,175 235	talleanin George	1,343 263
		940		1,080
CURRENT ASSETS Stock of Ties, Badges, etc. Balance at Britannia B. Soc. Balance at Bank Benevolent Fund Sundry Debtors	603 22,796 602 711 158		613 18,282 493 664	
Contractivo decinquist	24,870	601	20,052	
Less: CURRENT LIABILITIES Sundry Creditors Provisions for Taxation Monies Received in Advance	899 60 100	0/15 6250 6250	138 79 536	
THEMSTON ON WORLD	1,059		753	
NET CURRENT ASSETS		23,811		19,299
TOTAL NET ASSETS		24,751		20,379
REPRESENTING: Balance as at 1st May, 1984 Add: Profit for Year		20,379 4,372		19,200 1,179
		24,751		20,379

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

FIVED ACCETO	1985		1984	
FIXED ASSETS Office Furniture, etc. Additions During Year		240 34		135 105
Less: Depreciation		274 54	Million Magnit	240
		220		240
CURRENT ASSETS Sundry Debtors Stocks of Ties & Badges Balances at Bank, Cash	10 288		130	
Benevolent Fund	9,528		8,065	
Less: CURRENT LIABILITIES Sundry Creditors	9,826	Marine To	8,195	
	35		25	
NET CURRENT ASSETS	elen-H	9,791	nabina.	8,170
TOTAL NET ASSETS	Mality To King	10,011	HELDER TO	8,410
REPRESENTING: Balance at 1st May, 1984 Add: Surplus for Year		8,410 1,601		8,031 379
	pmin	10,011	art live	8,410



Lawnaire to the tractor-towed models. Including the Renovaire – specially designed for contoured areas. Then there are the popular Greensaire models – acknowledged to have set the standards in golf course maintenance throughout the world. Look at the core processor attachment too.

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### SECTIONAL News

#### **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 Greenkeepers defending the Cup 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 Olton 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 Greenkeepers 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 by 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 who became the victors by 4 games to 2 games.

The course was in great shape thanks to lan Harrison and Staff. The new Steward and 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 Cranleigh School in Surrey.

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

All The Very Best Danny From the Cleveland Greenkeepers.

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

#### WELSH

Hon. Sec: Philip Swain, 6 Locke Street, Newport, Gwent NPT 5HL

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 of 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 cullinery offerings.

	RESI	JLTS:	
1st	DENNIS JONES	74	President's Shield Stuart Crystal Vase donated by Ken Chatwin
2nd	HENRY FRY	74	Sundae Dishes donated by Clyne G.C.
3rd	PHILIP SWAIN	76	Crystal Glass Vases donated by Clyne G.C.
4th	JOHN HOPKINS	76	Bottle of Sherry donated by Clyne G.C.
5th	JOHN WALSH		Bottle of Wine donated by Pyle & Kentig G.C.

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 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.

#### SOUTH COAST

Hon. Sec: J. R. Dennis, Hampshire College of Agriculture, Sparsholt, Winchester, Hampshire SO21 2NF. Telephone: (096) 272441 Ext. 288.

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 SYNCHEMICALS LIMITED

5th February 1986 STEPHEN JAMES Allman Spraying Equipment 5th March 1986 GANG MOWING EQUIPMENT

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.

and the A.G.M.

#### **MID ANGLIA**

Hon. Sec: L. Wakerell, 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, Exwick, 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 finished 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 Cornish people and their way of life, now regards himself if not of Cornish origin certainly a 'Man of Cornwall'.

Always being a keen sportsman, and actively enjoyed rugby, hockey, soccer, cricket, rifle and twelve bore shooting he eventually took up golf at St. Austell G.C., playing off nine handicap.

In 1970 the captain of the club asked Cyril if he would cut the greens as there was no one else to do them, because the two staff employed were both in their sixties and had both been taken ill. Cyril duly arrived at the club at 6.30 a.m. the following day, having milked his cows first of course! He found the club only had one eighteen inch certes and it took him until 6 p.m. that evening to finish all eighteen greens. Gradually he seemed to be helping out more and more and was doing less on his farm. Eventually in 1976 he was asked to take over as head greenkeeper and gave up farming.

His biggest project at St. Austell was extending the course, which included four new holes, to raise the

par from 65 to 69.

During his time at St. Austell Cyril well remembers one Saturday morning when he reversed the triple greens mower out of the shed, only to notice the solenoid had somehow caught fire and being directly under the petrol tank this was not a very happy situation. Turning off the ignition and with the solenoid now going like an incendiary Cyril ran to his sand heap and gathered a double handfull of sand with which he managed to smother the fire just in time as the petrol tank was now dangerously hot!

Cyril believes one of the problems today is a little knowledge is dangerous. Committee members read articles in magazines and want to know why you are not doing this on your course?
One person had read it was a good idea to put lime on fairways if they were a bit thin, he managed to talk his way out of this one, but admits to not

always being successful.

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.

Just a word of caution to our members in the South West, Cyril has told me he will be looking in on courses in the area from time to time, so you had better keep on your toes to keep up the standards set by Cyril at St. Austell during his time there!

#### NORTH WEST

Hon. Sec: David F. Golding, 38 The Grove, Flixton, 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 Wilmslow Golf Club and had helped many young green-keepers to further their careers within the profession.

LECTURE DATES:

All lectures will be at the Old Cock Hotel, Stretford, which is 100yds from Junction 7 of the M63 towards Old Trafford.

The following dates are confirmed:-October 9th 1985 November 13th 1985 **HEALTH & SAFETY** 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 dull August day, our trusty band set out for Baildon Golf Club, high on the moors above Bradford. Ready equipped with bats, sheep repellant 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 Baildon 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, Merseyside lads Bert Cross, Bill Merritt, Derek Hutchinson, Norman Langley, Cameron Kerr and not forgetting Howard 'Daddy' McAddey! Well done

AUTUMN TOURNAMENT

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

know members will join me in wishing Mike a very successful day at Mere. Over the last 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.

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

#### 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 swinging for pleasure. Northern Section Committee man, Martin Dignam played his way to victory at Starbeck in the Paul Seward Special, taking him into the National Final of the Jacobsen Competition. Our thanks to Sewards 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 Baildon 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 broke all previous records with 73 entrants. Some people finished in the dark but the Pontefract and District duo, David Collins and guest, Mr. Meek returned a better ball 62, 4 shots clear of Colin Geddes and partner and 5 in front of John Holt and guest.

What amounted to a great round of golf was rounded off by good food and good humour. A great pity Billy Fox did not join us to hear the complimentary remarks about his course, but thanks Bill anyway and to your gang.

Our most grateful thanks to 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 enable you 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 Shipley Colleges will speak on green-keeper education, courses, Y.T.S., and also answer your queries and grumbles: Bring along your chairman and secretary.

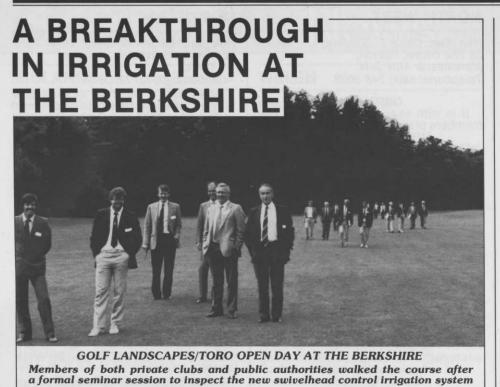
FOR YOUR DIARY: An Evening with the British Association of Landscape Industries

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 7.30 p.m. unless otherwise indicated

A local lad Peter Oldham is seeking greenkeeping work. Peter lives in the Bradford area and is contactable through David Hannam.



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.

# SILVER JUBILEE CELEBRATIONS AT SUPATURF delighted to be able to combine his own love of all sports with business—some of

1985 marks the Silver Jubilee of a company that just can't stop growing in more ways than one! Supaturf has proved itself a market leader in the supply and distribution of grass seed, fertilisers, chemicals and allied products and equipment for the turf, sports and amenity industries.

This year also marks the 20th anniversary of the union between Supaturf and the George A Palmer Group and its continual growth under the wing of Managing Director David Palmer. He is delighted to be able to combine his own love of all sports with business—some of the finest tennis courts, golf courses, cricket pitches and bowling greens in the country owe their excellence to the work of groundstaff, greenkeepers and Supaturf all working together.

The past 25 years have seen Supaturf grow from a small family business selling other company's products to a large, nationwide concern based in Peterborough. Its five distribution depots now market many of their own brands, offer a first class advisory and laboratory service, and constantly introduce new top quality products from other world leaders.



David Palmer, Managing Director, SUPATURF Products Limited

#### SLOWCOACH THAT BEATS THE REST IN THE FIELD

Supaturf have been appointed a distributor of a range of slow-release nitrogen fertilisers, COMPO FLORANID, from BASF which work by releasing a measured dose of organic nitrogen evenly and slowly over a long period—up to 16 weeks or even longer!

The release is triggered by warmth and moisture allowing grass to receive its feed requirements at the right rate at the right time. The result is a good, healthy root system and an even rate of sward growth, thus reducing mowing frequency and producing a better looking, healthier and more resilient turf.

Floranid is ideal for turf areas such as football pitches, golf courses and general amenity areas and, as it needs fewer applications than most other fertilisers, saves on time, labour and money.

#### RIGHT SAYS FRED

Fred Cox is second to none in his knowledge of all grass sports surfaces, so who better to consult with all your growing and turfcare problems? Based near Rugby, he has the full backing of Supaturf's well equipped laboratories to help him help you, so don't delay, phone Fred Cox on 0733 68384.



Supaturf Products Limited, Oxney Road, Peterborough PE1 5YZ. Tel: (0733) 68384. Telex: 32465

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 down. If 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 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 threes dependent 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 on 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 conclustion 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 centre 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 course. 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 fairways so that watering could be effected by Toro's new 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.

## 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 Greenkeepers prepare for sporting battles yet to come...

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For more information, speak to Peter Roberts, personally.



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# 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.

- 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.
- What year was the BGGA in its original form, started.
- 5. Which architect is associated with the two tier green?



# M

#### **UNDERSTANDING**

# 

**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.

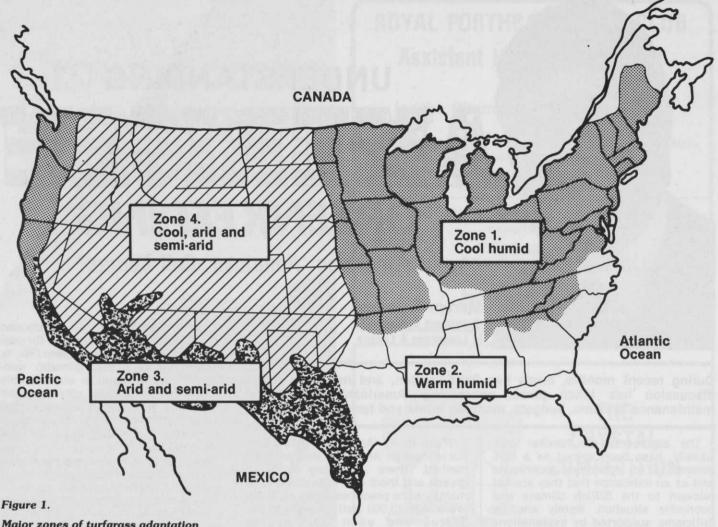
Man has long recognised the importance of climate in the development of a regions plant communities. It is climate that largely decides whether a species will survive in a given region, and it is soil characteristics and topography which determines the degree of adaptation and abundance of the plant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



Major zones of turfgrass adaptation in the U.S.A. (Musser, 1962)

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 (37.5°C) and winter temperatures can be below (-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 1½ 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 over-heat 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.