

# the Golf Course

FEBRUARY 1990



## Conference

European Greenkeepers meet at Penina to improve tournament courses for PGA European Tour Events

## Training

New syllabus for developing golf course architects

## Irrigation

Advice on handling irrigation systems to avoid dangers of overwatering

## Earthmoving

Up-date on equipment for course construction



EUROPEAN EDITION



# INSTITUTE OF EUROPEAN GOLF COURSE MANAGERS



## BECOME A MEMBER AND BENEFIT NOW!

### Aims of the Institute

- *To provide an effective voice* to represent the interests of its members and to bring the experience of the golf course manager to bear on the conduct of affairs for the improvement of golf courses throughout Europe.
- *To encourage and help its members* to improve their professional competence as managers of golf courses.

### Wider Links throughout Europe

Membership links golf course managers with their counterparts throughout Europe.

### ELIGIBILITY FOR MEMBERSHIP

Golf course managers of both private and public courses, head greenkeepers, golf course architects, contractors, consultants, golf club secretaries and members of the trade are eligible for membership. Owners, proprietors and golf course managers as well as head greenkeepers alike are encouraged to join the Institute of European Golf Course Managers and membership is individual, not corporate. The categories of membership are: Fellow, Ordinary, and Associate members.

To qualify as an Ordinary Member you must be over 21 and a golf course manager or head greenkeeper.

To be elected a Fellow, Ordinary Members must satisfy certain requirements laid down by the Council.

They must:

- be a golf course manager or head greenkeeper at the time of applying for Fellowship, and
- have been a golf course manager or head greenkeeper for a minimum period (or periods) of 5 years, and
- have 10 years' experience of working on golf courses.

To become an Associate Member you must be able to demonstrate your support for the Institute's aims.

*Full details of the Aims, Statutes and Benefits are available on request*

## APPLICATION FORM

RECRUITMENT  
**90**

I ..... Date of Birth .....

(NAME IN CAPITALS, WITH SURNAME UNDERLINED)

hereby apply to be elected a Fellow/Ordinary/Associate\* Member of the Institute of European Golf Course Managers and agree to be bound by the By-Laws and Council Regulations for the time being in force. I also agree to pay an Annual Subscription of £100. Further, I understand that, if elected, I will become eligible to receive The Golf Course magazine free of charge and the other privileges as a Member of the Institute.

*\*Delete as appropriate*

#### BUSINESS NAME AND ADDRESS

.....  
 .....  
 .....  
 ..... Postcode.....  
 Business Telephone.....

#### HOME ADDRESS

.....  
 .....  
 .....  
 ..... Postcode.....  
 Home Telephone.....

Please communicate with me at BUSINESS/HOME

I am employed as (please give occupation/business title).....

If you need further details please telephone me. I enclose a cheque to the value of £100.00.

SIGNATURE..... DATE .....

## INSTITUTE OF EUROPEAN GOLF COURSE MANAGERS

201/203 Kingston Road · Leatherhead · Surrey KT22 7PB · Telephone 0372 370177 · Fax 0372 362091

# CONTENTS

**Publisher**  
Michael Coffey

---

**Executive Editor**  
John Lelean

---

**Contributors**  
Jim Arthur BSc Agric.  
John Campbell

---

**Advertising Production**  
Linda Baker

---

**Advertisement Manager**  
Mark Pierson  
**0255 507526**  
**Fax: 0255 508483**

---

## the Golf Course

incorporating Golf  
Greenkeeping is published by  
Park View Publications Ltd.  
129a High Street, Dovercourt,  
Harwich, Essex. CO12 3AX  
Tel: 0255 507526  
Fax: 0255 508483

© Copyright 1990  
The Golf Course  
ISSN 0953 6043

Typesetting and artwork by  
Fore Golf Publications Ltd., Dovercourt, Essex.  
Printed by J.B. Offset, Marks Tey, Colchester, Essex.



Trusthouse Forte's  
Hotel and Golf  
Course Penina,  
Portugal, venue for  
the PGA European  
Tour's recent  
greenkeeping  
conference

---

## FEBRUARY 1990

---

14

### PGA European Tour Conference

Greenkeepers meet on the Algarve for a ten nations conference to prepare for the 1990 PGA Volvo Tour

20

### Developing the new generation of Architects

Steve Marnoch tells how his ambition to become a golf course architect can now be full-filled through a training plan devised by the British Association of Golf Course Architects

25

### Irrigation

Two leading irrigation specialists advise on installing and maintaining irrigation systems to obtain maximum value

32

### Earthmoving

Golf course construction can be made more viable by using the latest designs in earthmoving equipment

---

## Departments

---

5

### Greenside comment

Publisher Michael Coffey questions whether the golf authorities are acting quickly enough on specialist advice

6

### Resume

8

### Clippings by the Mower

10

### Out and about

A round-up of trade news

18

### New Developments

Latest constructions, including the South Course at Wentworth

30

### Company Profile

Blakedown expand into golf course building

36

### Buyers Guide

A product and service information guide to suppliers

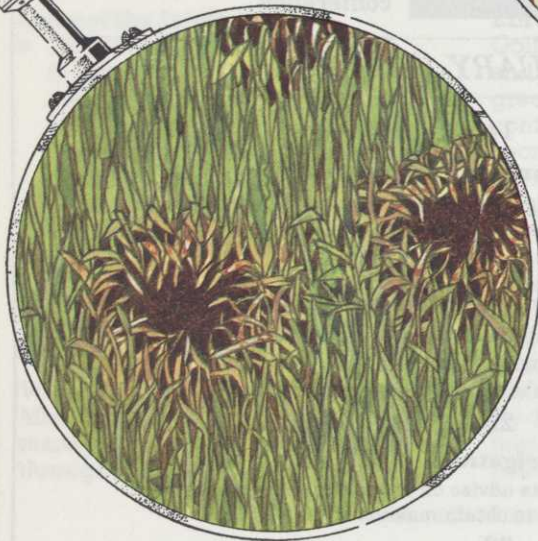
42

### Appointments





RED THREAD



DOLLAR SPOT



FUSARIUM PATCH

## THREE OF THE WORST

## ONE OF THE BEST

'Daconil' turf is a broad spectrum fungicide which controls a wide range of turf diseases, but is especially useful against those recurrent problems Fusarium Patch, Red Thread and Dollar Spot. And because it is a contact fungicide it can be used all year round.



# 'Daconil' turf

'Daconil' turf contains chlorothalonil.  
READ THE LABEL BEFORE YOU BUY; USE PESTICIDES SAFELY.  
'Daconil' is the registered trade mark of SDS Biotech UK Ltd.



**Professional Products**

TEL: (0252) 733919



# GREENSIDE COMMENT

**W**ith all the attention that "banning" has received through the Karsten Manufacturing case, not many people will have noticed that another ban also came into force on the 1st January. The small 1.62" golf ball is no longer legal in competitions. Those with only medium length memories will recall the huge fuss this issue caused in the late sixties, before the decision to adopt the "American 1.68" ball by first the playing professionals and ultimately in the mid seventies by the R & A for the Open Championship. It is of course, pure speculation as to what would have happened to European golf if the big ball had not been accepted. Striking would not have improved, our Champions would not have been able to compete on equal terms with their counterparts from across the Atlantic, and there would have been no Ryder Cup triumphs, let alone Curtis Cup and Walker Cup victories. What stimulus have these had on the present boom in European golf?

The decision to adopt the "1.68" ball could have been taken by the R & A immediately after the war, they had set up a small working group to look into the size of the ball, chaired by a distinguished former Amateur champion Roger Wethered. Wethered's group quickly came to the conclusion that the American ball should be adopted. What happened next is not absolutely clear, suffice to say that the British golf ball manufacturers exerted pressure and Wethered's recommendation was not accepted.

The R & A have made certain that future golf course development and course maintenance will not suffer a similar fate when they published "The Demand for Golf" and "The Way Forward". Already both documents have received considerable coverage in "the Golf Course" through the articles of Jim Arthur, "Golf World" and in more depth in "Golf Monthly". The author of

"The Demand for Golf", Graham Hurst has responded on page ... and Keith Wright, Secretary of the English Golf Union has also put an official viewpoint.

However the reaction of many private clubs has been, perhaps, somewhat different from that which the R & A might have envisaged. Both documents have brought to the attention of many committee men and club golfers just what a false position their clubs are in. They have suddenly recognised that the many societies and green fee visitors that play over their courses are using up the annual finite playing life of their course. There has to be a limit to the number of rounds that any course can cope with in a year if it is to be maintained at an acceptable standard. Coupled with the over-play produced by non-member golfers is the substantial income they generate not only in green fees but in keeping bar and catering staff fully employed. This outside income has now come under the scrutiny of the Inland Revenue who have in one or two cases assessed clubs for substantial tax demands.

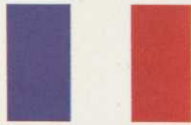
In effect many clubs have been using the boom in golf and the resultant increase in the numbers taking up the game to subsidise their own annual club subscription. Several clubs have now reacted to these trends and have acted to protect their greatest asset, the course, by severely restricting societies and visitors not introduced by a member. At the same time they are raising their subscriptions to a more realistic level to compensate for the loss of income and to avoid the possible attention of the Inland Revenue.

*Michael Coffey*

Publisher



# RÉSUMÉ



## FRENCH

La Conférence des Entreteneurs de Parcours qui s'est tenue au Portugal le mois dernier à l'intention des responsables de terrains de golf concernés par les activités du Tour Européen de la PGA, a démontré que la langue ne présente pas de barrière entre professionnels à la poursuite d'un même but: un terrain de golf parfait.

Bien que le Tour Européen de la PGA ait invité les entreteneurs de parcours à des réunions antérieures, cette conférence a été la première où sept nationalités se sont trouvées réunies pendant trois jours pour discuter des nombreux ingrédients qui entrent dans la 'confection' des parcours de golf au niveau tournoi.

Dire que cette réunion a été un succès est ne pas lui faire justice: en l'espace de quelques heures, des personnes qui ne se connaissaient ni d'Eve ni d'Adam se sont liés d'amitié, unies par le lien commun de leur profession.

Un compte-rendu complet de la conférence paraît dans ce numéro et, au cours des mois prochains, il sera publié un résumé des exposés les plus intéressants qui y ont été présentés.

Le PGA European Tour jouera cette année pour des prix dont le montant s'élève à quelque 16 millions de livres sterling - près du double de la somme disponible en 1986. Grâce à un sponsoring accru, les directeurs du Tour ont pu puiser dans des fonds supplémentaires pour financer la conférence tant pour le bien du golfeur professionnel que pour celui des entreteneurs de parcours et des directeurs de terrains dans toute l'Europe.

La mine d'informations communiqués aux délégués aura sans aucun doute un effet bénéfique sur la présentation du terrain de golf dans l'Europe entière au fur et à mesure que les résultats de ces importantes discussions seront connus.

Les golfeurs professionnels cherchent des greens fermes et rapides, des départs plats couverts de gazon dru coupé ras et des 'fairways' bien définis - pas une tâche facile avec la variété de conditions climatiques... couvrant la distance de l'Alaska au Golfe de Mexico!



## SPANISH

El Congreso de Encargados de Campos celebrado en Portugal el mes pasado para los gerentes de campos de golf que participan en las actividades del Tour Europeo de la PGA, mostró que no existe barrera lingüística entre aquellos profesionales dedicados que tienen como meta alcanzar la perfección en sus campos de golf.

Aunque el Tour Europeo de la PGA ha invitado a los encargados de campos a estar presentes en reuniones anteriores, este congreso fue el primero en el cual se reunieron representantes de siete países durante tres días, para discutir los muchos factores que intervienen en la preparación de campos de golf para alcanzar standards de competición.

Decir que el encuentro fue un éxito es poco decir. El término de unas cuantas horas, los extraños de un comienzo se convirtieron en amigos, mezclándose entre sí gracias al vínculo común de su profesión.

En este número aparece un informe completo del congreso, y en los meses venideros se publicará un resumen de las ponencias más interesantes que fueron presentadas.

El Tour Europeo de la PGA jugará por premios cuyo fondo se aproxima a los 16 millones de libras esterlinas este año, casi el doble de la cantidad disponible en 1986. Ahora, mayores auspicios han proporcionado fondos adicionales, los cuales permitieron a los gerentes del Tour financiar el congreso para beneficio no sólo del jugador de golf profesional, sino para los encargados de campos y gerentes de campos de golf por toda Europa.

El volumen de información ofrecido a los delegados, sin duda redundará en beneficio de la presentación de los campos de golf en toda Europa, a medida que se difundan más ampliamente los resultados de estas influyentes discusiones.

Los jugadores de golf profesional buscan un green firme y rápido, salidas planas cubiertas de césped denso cortado al rape, y fairways bien definidos. No precisamente una tarea fácil, dentro de una gama de condiciones climáticas que cubre la misma distancia que hay entre Alaska y el Golfo de México.



## GERMAN

Die im letzten Monat in Portugal abgehaltene Grünpfleger-Konferenz für Golfplatz-Manager, die an PGA Europatourenveranstaltungen teilnehmen, hat gezeigt, daß es kein Sprachenhindernis zwischen den Profis gibt, die mit Leib und Seele bei der Sache sind und ihre Golfplätze auf Perfektion bringen wollen.

Obgleich die PGA Europatour Grünpfleger zu früheren Zusammentreffen eingeladen hatte, war diese Konferenz die erste, bei der sieben Nationalitäten drei Tage lang zusammengebracht wurden, um die zahlreichen Zutaten zu diskutieren, die notwendig sind, um ihre Golfplätze auf Tournierniveau zu bringen.

Die Behauptung, daß diese Zusammenkunft ein Erfolg war, ist eine Untertreibung. Innerhalb von Stunden wurden vollkommene Fremde zu Freunden, die durch das gemeinsame Band ihres Berufs zusammengebracht wurden.

Ein ausführlicher Bericht über die Konferenz erscheint in dieser Ausgabe, und in den kommenden Monaten wird eine Zusammenfassung der interessantesten vorgetragenen Referate veröffentlicht werden.

Die PGA Europatour wird um eine Preissumme kämpfen, die dieses Jahr auf 16 Millionen Pfund zugeht, der doppelte Betrag, der 1986 zur Verfügung stand. Dank einer erweiterten Schirmherrschaft stehen jetzt zusätzliche Geldmittel zur Verfügung, so daß die Tourmanager in der Lage sind, die Konferenz nicht nur zum Nutzen des Berufsgolfer, sondern auch der Grünpfleger und Golfplatzmanager aus ganz Europa zu finanzieren.

Der den Delegierten gebotene Reichtum an Informationen wird zweifellos in dem Maße eine günstige Auswirkung auf die Ausstattung der Golfplätze überall in Europa haben, in dem die Ergebnisse dieser einflußreichen Diskussionen auf einer weiteren Ebene bekannt werden.

Die Berufsgolfer suchen feste, schnelle Grüns, flache, mit einem dichten, kurzgeschnittenen Grasrasen bedeckte Tee-Flächen und gut definierte Fairways. Keine leichte Aufgabe bei einem Spektrum klimatischer Bedingungen, das die Entfernung von Alaska bis zum Golf von Mexiko umfaßt.



# Machines for professionals (made by professionals)

Now  
in the UK



As the world leader in lawn and grounds care machinery JOHN DEERE offers you the technical knowhow needed to master the difficult tasks of golf and turf care. Every piece of JOHN DEERE golf and turf equipment comes with years of experience. Experience that shows. In the superior engineering, rugged design, reliable performance and easy operation. So choose quality. Choose JOHN DEERE. Our golf and turf equipment masters every task with utmost perfection.



**NOTHING RUNS  
LIKE A DEERE**



JOHN DEERE Ltd.,  
Harby Road, Langar,  
Nottingham NG13 9Ht  
Telephone (0949) 60491

ALGS 1991 E

# CLIPPINGS

## By The Mower

### **Ex-Minister appointed Director of golf course company**

Former Sports Minister Richard Tracey, has joined the Board of the Patrick Tallack Golf Course Design and Construction Company.

The Leatherhead based group is currently building the Paxhill Park Golf Course near Haywards Heath in Sussex, and conducting feasibility reports on several sites in the UK and Northern France.

### **Caught Short!**

A letter to the Scottish Daily Record from a golfer anxious to answer a call from nature at Ranfurly Castle Golf Club, Bridge of Weir, bemoans the fact that he could not find a toilet on the course and asked what the greenkeepers did. He was told that this one hundred year old club did not have any greenkeeper's facilities, they went in the bushes!

Our correspondent said it could only happen in Scotland - the home of golf. If he brought his clubs south, he would no doubt find a similar lack of "penny houses", both for golfers and greenkeepers.

### **New Head Greenkeeper at Wetherby**

Among the job changes announced for 1990 is the appointment of David Hannam as Head Greenkeeper at the parkland course at Wetherby, West Yorkshire.

David succeeds John Scott, who is taking early retirement after 22 years at the club.

John, is one of the generation of greenkeepers now fairly unique as he was previously the greenkeeper/professional at Doncaster Town Moor, the golf course in the centre of the famous northern race course. David Hannam, previously at Baildon Golf Club, is the current Northern Administrator for the Greenkeepers Association.

### **Woosh**

What do you do when gale force winds blow in from the Irish Sea and deposit a two foot depth of sand on your greens?

George Brown, Course Manager at Turnberry, faced with this problem had a novel and successful answer. He found someone with a helicopter to hover over the green and blow it all away!

### **Algarve Golf**

The Greenkeepers Tournament in Portugal was almost a wash-out, saved by Peter Wisbey, Truste House Forte's Course Manager. He organised the course at San Lourenco for a reduced holes match, won by St Andrews Links Superintendent Walter Woods with Derek Ganning from The Belfry in runner-up position. Talk is that Walter will have to play to scratch next time.

### **Caddy's Comments**

Dave Musgrove, Sandy Lyle's regular caddy since he stood at the side of the putting green at Fulford unemployed in 1980, now leads a jet setting life as bag carrier, confident and friend to his highly successful boss.

In a new book entitled "Life with Lyle", Musgrove, a one time draughtsman with Rolls Royce details a year of his life in diary form. It is a recommended read for greenkeepers. Not only does it give an indepth insight into the complex job of a top-flight caddy, detailing the methods of measurement to within inches, but drops little snippets such as Musgrove's acquaintance with Walter Woods at St Andrews.

It appears they played golf together during Walter's Hollinwell days. Only one guess who won!

### **Greenkeepers Rally to Charity Call**

Bearded David Webb, Golf Director at St Mellion let slip that the hairy face he was sporting in Portugal was grown to raise money for Meningitis Research.

A whip round in secret during the closing banquet at Penina, produced a mixture of escudos, pesetas and sterling totalling £120. David told "The Mower" he has now raised £1,500 through the generosity of his friends and the members and staff at St Mellion and he still has the beard!

### **President's warning**

Tony Hill the new President of the English Golf Union warned of two dangers to golf, in a speech at a lunch in London recently. The first is the threat posed by continental clubs who are poaching our best greenkeepers and the second is the over play to which our courses are being subjected. It is graefying to note that 'The Way Forward' has such a staunch supporter: No doubt a great deal more could be done if the EGU could persuade all golfers to part with £1 each instead of the miserly 60p they currently pay.



**THERE'S ONLY  
ONE AERATOR  
THAT REALLY  
CRACKS  
COMPACTION.**





# THE UNIQUE VERTI- DRAIN EFFECT IS SH

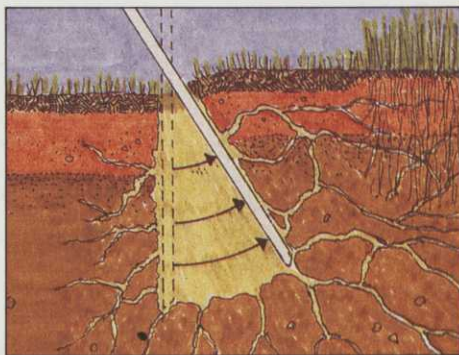


**It shatters compaction in the gentlest possible way.**

For really effective control of soil compaction you need the help of the world's most effective yet most gentle aerator.

The Verti-Drain.

Its unique action solves the problem by getting down deeper than any other machine



without damaging the playing surface.

The Verti-Drain has the power to drive its tines up to 16" into tough, compacted soil.

Then the unique 'lifting' action heaves the soil, much the same way as you'd apply a garden fork, shattering the compacted layers allowing air, water and



# VERTI-DRAIN. MATTERING.



fertilizer to penetrate deep into the soil.

You can vary the degree of 'lift' from ½" to 2½" to suit the seriousness of the conditions and the height is always uniform leaving the surface ready for immediate play.

Verti-Drain also leaves behind it vastly improved ground



Greens Verti-Drain.

conditions that will promote a stronger, more healthy root system, which in turn provides much healthier turf.

In fact, Verti-Drain has proved in practice to give shallow rooting grass 8" to 10" deep healthy roots in a matter of just 2 weeks, during the growing period.

**More sport, less work with Sports Ground Verti-Drain.**

The Sports Ground Verti-Drain (shown left) is available in



Popular Verti-Drain.

two widths, 2 metre or 2.5 metre, which make light work of wide open spaces.

Powered by the PTO of a tractor you can aerate up to 4 acres a day, and do it far more effectively than ever before.

A fact endorsed by greenkeepers and groundsmen all over the country who've had the benefit of experience of other systems and now swear by Verti-Draining.

In the words of Jack McMillan, Head Greenkeeper at Sunningdale.

"I can only describe the effect as staggering, never before have I seen such a dramatic and immediate effect from a new piece of equipment."

### **Tines for all times.**

To support the Verti-Drain as an all-round, all-season turf maintenance machine, we offer a wide range of tines to do the job.

From ½" to 1" diameter solid tines are available in 10" to 16" lengths and there's a range of 8" long hollow tines particularly useful when a soil exchange programme is the order of the day.

Changing tines we've also made a matter of the utmost simplicity, requiring no special tools beyond a spanner.



# THE RANGE THAT CRACKS COMPACTION.

No matter what the sport there's a Verti-Drain model to take on the toughest challenge.

First there's a brand new addition to our range.

The Pedestrian Verti-Drain.

As the name implies, it's a walk-behind, self-propelled unit that combines all the unique Verti-Drain benefits into an extremely compact machine.

It's the perfect machine for tackling smaller areas or where space or access is limited.

Next there's the Popular Verti-Drain which is designed to operate with most compact tractors of around 17 h.p. and is an ideal general purpose machine.

Following this there's the larger Greens Verti-Drain which, being heavier than the Popular,



requires a tractor of at least 27 h.p. and is suitable for a wide range of applications. Particularly on and around the golf course.

Lastly there's big brother.

The powerful Sports Ground Verti-Drain.

Available in either 2 metre or 2.5 metre widths, Sports Ground

Verti-Drain is the ultimate weapon against compaction on a larger scale.

Being heaviest in the range, the Sports Ground models require a tractor of 45 to 75 h.p. and are capable of covering the largest sports grounds or fairways with maximum speed and efficiency.

# THE BEST PRODUCTS AND THE BEST SERVICE.

At Charterhouse, quality is more than just a word.

It's a fundamental part of our company philosophy which, we hope, will become apparent to you in every sphere of our operation.

Our products for example, are the finest you can buy because of the quality of design, craftsmanship and construction that goes into them all.

Products that do far more than just 'do the job'.

They incorporate many

unique features that take turf management into a whole new dimension.

They are, we believe, the most advanced machines on the market today.

But even the best equipment would be of limited value without an after-sales and service back-up

that's every bit as good.

Here we believe we offer you the very, very best.

Not simply by having a first rate dealer network throughout the country.

Or by offering 24 hour parts availability.

It's by developing the kind of relationship with our customers, built on mutual trust and respect, that encourages a two-way dialogue, and enables us to build the machines we know you want.

**Charterhouse** <sup>TM</sup>

Charterhouse Turf Machinery Ltd., Pink's Yard, 34 Church Road, Milford, Surrey GU8 5JD. Tel: Godalming (04868) 24411 and 21040. Telex: Teknis G 859585. Fax: (0483) 860184.

Due to a policy of continuous improvement, specifications are subject to change without notification.

Please send me details of Verti-Drain  Other Charterhouse products  Type of application: Golf course  Playing field

Other (please state): \_\_\_\_\_ Name: \_\_\_\_\_ Position: \_\_\_\_\_

Establishment/Company/Authority: \_\_\_\_\_

Address: \_\_\_\_\_

Post Code: \_\_\_\_\_ Tel: \_\_\_\_\_

Post to: Charterhouse Turf Machinery Ltd., Pink's Yard, 34 Church Road, Milford, Surrey GU8 5JD.

GC2/90





Chairman of the Council - David Jones

Director General - Stanley Ellison

## **AN INSTITUTE POISED FOR THE 1990s**

**E**very organisation whether its an Institute, Association or Company, needs to analyse accurately its goals and long term development plans. Here at the Institute we are fortunate to begin with a clean slate as it were and be able to look forward at what the needs of an Institute are, its purpost, services to be provided and its potential membership needs. The following represent some of the key objections incorporated into a development plan. You will be hearing more about them as we accomplish these goals. We would like all golf course managers and head greenkeepers to feel they are part of the overall effort to have the golf community recognise their efforts.

Among the major objectives are the following set forth by programme and nature of responsibility:-

- 1) Membership. Increase membership of the I.E.G.C.M. by additional qualified members... to continue to increase membership equality to maximise the potential and to ensure a continued sound financial base for the Institute to develop new programmes and services... provide an insurance programme.
- 2) Communication. Expand 'the Golf Course' magazine... enhance the public relations role of the Institute and to broaden the base of 'the Golf Course' magazine and develop additional ways to serve the industry by the publication of leaflets and pamphlets describing the role and the work of the golf course manager.
- 3) Marketing. Examine the possibilities of generating revenue by developing a possible link with a road show and by providing a service to companies involved in the industry... provide a handbook for members giving names and addresses and valuable reference information.
- 4) Administration. Establish an office suitable for the Institute's headquarters... develop a long term plan to extend at least three years... study the possibility of setting up offices in other counties.

As you can sense even this partial list, represents an ambitious array of goals and objectives. If you've not yet begun to participate in the Institute, you won't find a better time than the present with the sport experiencing the early stages of what could be the greatest boom ever in golf.



## OUT AND ABOUT

### NEW DEVELOPMENTS WITHIN JACOBSEN UK

Jacobsen Textron have appointed Rene Orban as their UK Managing Director with the objective of developing the company to become Britain's top grass care machinery supplier.

Rene Orban believes a key element of his future work with Jacobsen will be to apply his marketing experience to significantly raise the level of the company's presence in Britain.

Jacobsen has been establishing itself in this country in recent years and Rene's strategy is to expand and strengthen the Jacobsen dealer network over the next few months.

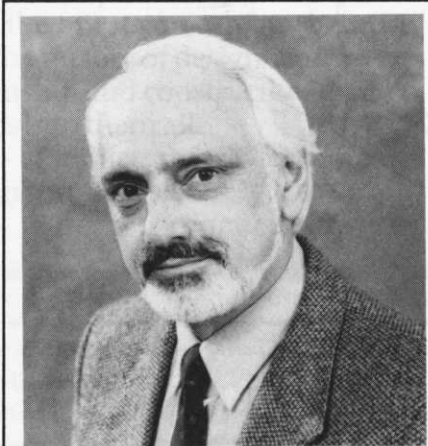
Other plans include expanding their range of products from two, three and four-wheel drive greens and fairway cutting machines to high quality hand mowers and E-Z-Go Trucks.

Jacobsen, have some of the best performance machines on the market, many with specialist features developed by their own experts.

They also have a proven track record in reliable after sales service, parts supply and customer care, from the King's Lynn headquarters.

Before his appointment, Rene Orban was the Managing Director of Compact Machinery Limited, a little known company, to one of the country's leading machinery suppliers, within only three and a half years.

By joining Jacobsen the challenge for Rene (pictured below) is to take a company with proven machines, after sales service and a reputation to market leadership.



### ROUND ONE TO PING IN BOX GROOVES BATTLE - AND TWO TO THE R & A

Karsten Solheim, the head of the Ping company has won the first part of his court battle to have the so called square or box grooves on the face of the Ping clubs declared legal.

As well as the £62m joint action against the USGA and the R & A who have said they intend banning the clubs for amateurs from 1st January 1996, Ping took out a separate action against the US PGA Tour, seeking an injunction against the professionals imposing their ban on the clubs. Solheim has won this action and a subsequent appeal against the professional body.

The ruling bodies claim that the grooves on the club face, used by Calcavecchia to win the Open Championship at Troon this

year, enable players to impart extra back spin to the ball.

The PGA European Tour intended adopting the R & A method of measuring grooves on club faces from the 1st January this year, but in the light of the court ruling in the United States, they have not implemented the move. In fact, although nothing has been put in writing, professionals competing in Africa have been told they can use the clubs on the Safaria Tour this year.

An Arizona Court has subsequently ruled that it has no jurisdiction over three named officials of the R & A, including Michael Bonallack, so the grooved clubs will be banned from this year's Open Championship.

Amateurs meanwhile, watch these columns with interest.

Their clubs are still facing a ban in Britain from 1996 unless agreement can be reached between Karsten Solheim and the R & A.

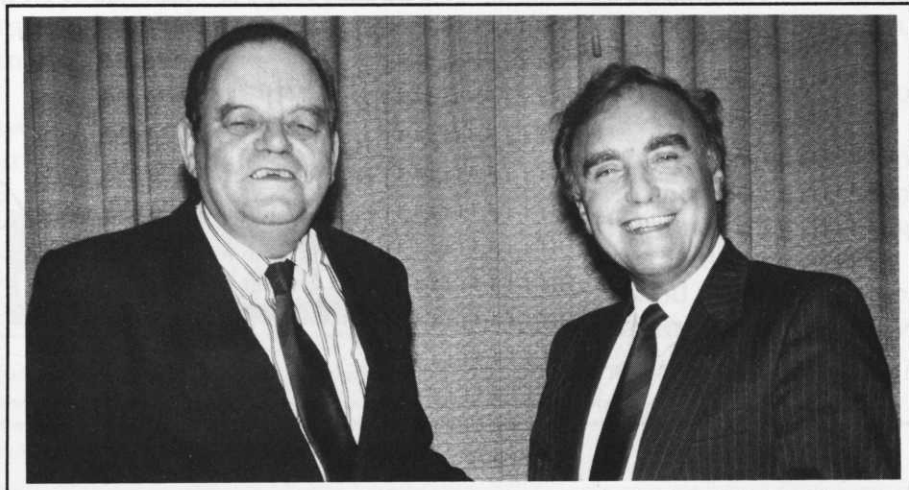
### RETIREMENT AFTER 43 YEARS

After almost 43 years with Ransomes Sims & Jefferies, Perry Crewdson has retired from the post of Public Relations Manager.

During his extensive career with Ransomes, Perry, having originally joined the company as a 'gentleman' apprentice, spent many years promoting the company's products in Africa, North America and Asia. He was the first representative to visit Japan selling grass and farm

machinery.

In later years he was in charge of the company's public relations department, a role which he admits he found 'stimulating, particularly in recent years with the acquisitions and expansion within the group.' Given a rousing send-off by his friends and colleagues, and pictured receiving a cheque from Bob Dodsworth, Group Chief Executive, Perry intends spending his retirement developing his country garden and enjoying golf. He lives at Otley with his wife Claire.



*Perry Crewdson, Public Relations Manager, Ransomes Sims & Jefferies, pictured with Bob Dodsworth, Group Chief Executive*

## OUT AND ABOUT

### JACOBSEN EXPANDS, IMPROVES TURF GROOMER LINE

Jacobsen Division of Textron recently introduced an improved Turf Groomer (R) greens conditioner and new model for fairway use.

The Turf Groomer has a larger front roller and larger, thicker six-point cutting blades for greater strength and durability. Two blade spacings are available.

The Turf Groomer has a tough 1" drive belt that's protected from debris by a sealed housing. The cover can be removed for inspections and adjustments. A double pin clutch is standard.

The quick up/down blade adjuster can raise or lower the reel up to 3/8" in 1/8" increments to raise the blades to skip grooming. A micro-depth adjustment dial fine tunes cutting heights without tools.

Anti-scalp gauge wheels help prevent the marking of turf.

The patented intersecting action of the Turf Groomer's roller and knives produces a fine quality cut. The roller's grooves have bevelled edges that help lift horizontal grasses on greens and fairways. The knives rotate through the slots in the roller, slicing the grass blades and surface runners before they lie down to the grass stands up for a smoother surface.

### GOLF COURSE CONSTRUCTORS APPOINT NEW OFFICERS

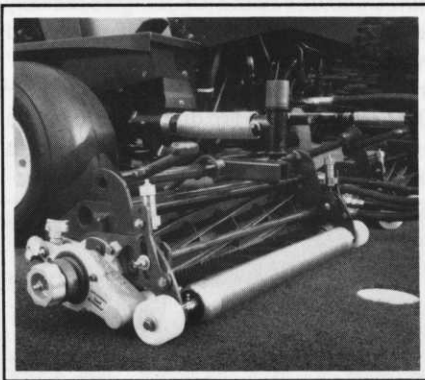
After the resignation of Howard Swan as Secretary and as a member of the British Association of Golf Course Constructors, a full meeting of the Association took place recently. Brian Pierson has been appointed Chairman, Jim Bull Treasurer, Tim Banks Secretary and David Clarke as meeting co-ordinator.

The Association viewed the 1990s as a period of sustained growth for the golf course construction industry and the Chairman was pleased to note the number of new Constructor members who will be in a position to professionally satisfy a sizable part of the expected demand.

To promote the Association's aims, a new handbook is in the process of production which will illustrate to developers and clubs contemplating altering their existing courses of the need to use experienced and reputable companies in the golf course construction field.

This cutting action promotes a more vertical growth with more leaf surface for better photosynthesis, encouraging deeper roots and improved stress tolerance.

Regular use of the Turf Groomer can increase green speed up to 25 percent and allow the reduction or elimination of certain stressful speed enhancing practices. On both fairways and greens, it helps eliminate grain, and control thatch.



*Jacobsen Turf Groomer (R) Greens/Fairway Conditioner*

### SHOW GROUND BATTLES IN 1990

As the IOG announce record bookings from exhibitors for the Sports and Leisure Exhibition at Peterborough from the 4th - 6th September, the Garden Machinery

Association say they now have 140 companies exhibiting at their show at Kempton Park between 2nd - 4th September.

The GMA promoting Britain's first "International Professional Lawn, Garden and Outdoor Power Equipment Exhibition" (only an ex-civil servant could have dreamed up a title like this) have for reasons best known to themselves, chosen clashing dates with the established IOG.

Although it could be argued that the two events do not necessarily compete, there must, in our broad based industry, be something of an overlap even if it is only in the matters of grass maintenance.

The Peterborough Exhibition, despite earlier mis-givings on moving the venue away from London, looks certain to be a winner. The earlier September date is more likely to provide a settled spell in the weather and the Midland location will attract a large number from the northern part of the country, who have spent more time in traffic jams than walking around the stands.

The GMA meanwhile are pushing ahead with their publicity campaign to make the Kempton Park show a viable proposition. With the possibility of companies wanting to be at both shows, there could well be queues on the A1 northbound, on the first Tuesday in September as exhibitors attempt to be in two places at once.

### NEW JOB FOR JACK

Jack McMillan has resigned as Head Greenkeeper at Sunningdale Golf Club to take up a post as an international golf course advisor. Jack and his wife Rita have been a part of the Sunningdale scene for most of the last decade and they have been heavily involved in all aspects of greenkeeping through their greenkeeping sons as well as Jack's Chairmanship of two greenkeeping Associations.

Jack has always been willing to exchange views with other head greenkeepers and with advisors such as Jim Arthur and his club's own Secretary, Keith Almond both of whom are members of the R & A's Greenkeeping Panel.

In joining the International Golfers Club, based in London, he will be bringing to golf course advisory work not only a great deal of first hand experience but an unequalled enthusiasm for golf courses, having visited courses in all parts of Europe and the USA and compared golf course mainte-

nance practices in a variety of climatic zones.



*Jack and Rita McMillan*

Perhaps his greatest greenkeeping achievement was the way Sunningdale Old Course was presented for the Walker Cup and it is to be hoped that he will be able to assist others in his capacity as an advisor to reach such standards of preparation and presentation.



## OUT AND ABOUT



*Paul Davis from Swindon, who complicated the proceedings by asking for a left-handed set.*

### CHARTERHOUSE WINNERS

One often wonders who were the winners prize draws run at the numerous trade shows around the country, or if (heaven forbid) the goodies were ever awarded. Charterhouse Machinery, who exhibited several variations of the verti-drain at Windsor, have now produced their list of winners for the three complete sets of golf clubs and confessed that none of the lucky participants played the game! That is until they won their clubs.

The prizewinners were drawn on each of the three days of the Windsor show.

Paul Davis, of Mordon Nurseries, Swindon, Wiltshire, is an area supervisor with Thamesdown Contractors, a local authority contractor; Mr T. H. Heath of Saunton Harold, Leicestershire, is a ground maintenance contractor; and Mr P Bloomfield of Ipswich, Suffolk, is groundsman for Ipswich School.

Second prizes, of a magnum of champagne, went to Mr D J Wood of Cowden, Kent; the Secretary of Parkstone Golf Club, Poole; and Mr T Huntley of Worcester Park, Surrey.

Third prizewinners, who received bottles of wine, were Mr C P West of Rickmansworth, Mr G Brooks or Horsell Common and Mr J S Potts of Newcastle.

### KUBOTA DEALER SALES PERSONNEL FLY EAST

A ten day trip to Japan and Thailand, was the prize Kubota (UK) Limited provided for 40 of its top dealer UK sales personnel for successful sales of Kubota tractors and ride-on mowers during the 1989.

The party, led by Brian Hurtley, Vice-President-Director, Kubota (UK) Limited recently returned from this trip of a lifetime and everyone agreed the 'Eastern Promise' was very definitely fulfilled.

The first part of the ten day adventure was a visit to the Kubota headquarters in Osaka followed by guided tours of the manufac-

turing plants at Sakai, Rinkai and Tsukuba, where everyone was shown the emphasis Japan's largest tractor manufacturer places on research, development and innovation. After the business was completed the party flew on to Thailand for sightseeing in Bangkok and then relaxation in the Thai 'riviera' resort of Pattaya Beach.

The 10 day trip certainly lived up to its 'Eastern Promise' and Brian Hurtley added, "The trip had been well and truly earned by our dealer sales personnel following a very successful year and an increase in our market share in the UK. Our major problem now is to find an even bigger incentive for next year!"



*Brian Hurtley (third right), Vice President-Director, Kubota (UK) with the Kubota dealer sales personnel party in Thailand during part of their ten day Eastern Promise trip*

### ALLEN POWER EQUIPMENT APPOINT PARKERS AS LONDON DISTRIBUTORS

T. Parker & Sons (Turf Management) Ltd of Worcester Park, Surrey, have been appointed the London Distributors of Allen Power Equipment of Didcot.

The Allen machines involved are the National 68" and 84" Triple Mowers; Brushcutters including the Reciprocator, a revolutionary multi-purpose trimmer/brushcutter, edger, branch clipper and pruner which is exclusive to Allen and incorporates a new safety cutter; and Professional Hover Mowers which have the unique Allen 'Safe-way' Mowing System, the first really safe blade. "We are delighted at our appointment," said Mr Peter Simpson, a Director of Parkers, "it further strengthens our position as one of the leading Turf Care Specialists in the South East of England."

### WEED CONTROL COMPANY JOIN RIGBY TAYLOR

Rigby Taylor have acquired a controlling interest in Complete Weed Control Limited, a specialist spray contracting service to the amenity industry. The Company operates via a network of seventeen regional offices throughout mainland Great Britain and will continue under the direction of Roger Turner and the Sales and Marketing Director, Nick Thain.

Mr. Turner is the Chairman Elect of the National Association of Agricultural Contractors and has been instrumental in formulating the contracting industry's Code of Practice. Bernard Hedley will act as Chairman of Complete Weed Control Limited with Bob Young, Manager of Rigby Taylor's Weed Control Division, joining the Board.



## OUT AND ABOUT

### JOINT SISIS/BRITISH SEED HOUSES/ ROLAWN FIELD DAYS

Around 330 groundsmen and greenkeepers turned out for three joint SISIS/BHS/ROLAWN field days in Birmingham, Stoke and Southampton at the end of October. In spite of hard ground conditions the SISIS Varicore pto operated aerator performed impressively and the new Hydro-main Twin 25 aroused much interest. Demonstrations of other new and established SISIS aerators, scarifiers, seeders, top dressers and sweepers provided a well-balanced programme of interest to Local Authorities, Golf Clubs, and all types of Sports Clubs.

All those who attended were interested to hear about the production and use of Rolawn cultivated turf from Technical Director, Robert Laycock.

Samples of turf on display attracted much favourable comment and all concerned were impressed by the professionalism of the Rolawn team.

Some of those present had no experience of using turf other than meadow turf and many did not realise there was now a ready supply of cultivated turf direct from Rolawn depots and that it could save them time and money and satisfy their committees and players at the same time.

The selection of grass seed species was the theme behind the British Seed House presenting, taking into account that the

wear tolerance of a grass sward is the main criteria for those engaged in the maintenance of outfields. Similarly tolerance of close mowing of certain grass species is equally important for the upkeep of fine turf areas.

Specific cultivars were later highlighted quoting examples of where they had been successfully sown: Penncross Creeping Bent had been chosen as a monoculture for seeding the greens at the new Johnny Miller Course at Collingtree and light play was possible 8 months after seeding; Hermes, Loretta and Gaton perennial Ryegrasses are consistently specified by Local Authorities for renovation of winter sports pitches and British Seed Houses confirmed that these cultivars are excellent choices with quick establishment and maximum wear tolerance guaranteed.

The possibility of holding similar seminar/demonstration days in 1990, in other parts of the country is being discussed and plans will be announced early next year.

### MOORE TO RECEIVE NEXT OLD TOM MORRIS AWARD

For the first time, the Golf Course Superintendants Association of America (GCSAA) will bestow its highest honour, the Old Tom Morris Award - upon a member superintendent.

Sherwood A. Moore, CGCS, 50-year GCSAA member and past president of the association, will receive the award during the closing banquet of the 61st GCSAA International Golf Course Conference and Show on Feb. 26 in Orlando, Fla.

Moore was the superintendent at Winged Foot Golf Course in Mamaroneck, N.Y., from 1957-1967. From there, he moved on to become superintendent at Woodway Country Club in Darien, Conn. When Winged Foot was selected to host the first Senior Open in 1980, Moore returned to help get the course in prime condition. In 1984, he left to join The Captains Golf Course in Brewster, Mass. Moore also served as acting agronomist for the USGA Green Section during 1987-88. Recently retired, Moore still continues to work as a consultant at The Captains.

GCSAA established the Old Tom Morris Award in 1982 to recognize individuals who have made outstanding lifetime contributions to the game. The award is named in memory of Old Tom Morris, greenkeeper and golf professional at the Royal and Ancient Golf Club of St. Andrews, four-times Open Champion, club-maker, ballmaker and golf course architect.

Moore joins the host of golf luminaries who are past Old Tom Morris Award winners: Arnold Palmer, Bob Hope, Gerald Ford, Patty Berg, Robert Trent Jones Sr., Gene Sarazen and Chi Chi Rodriguez.

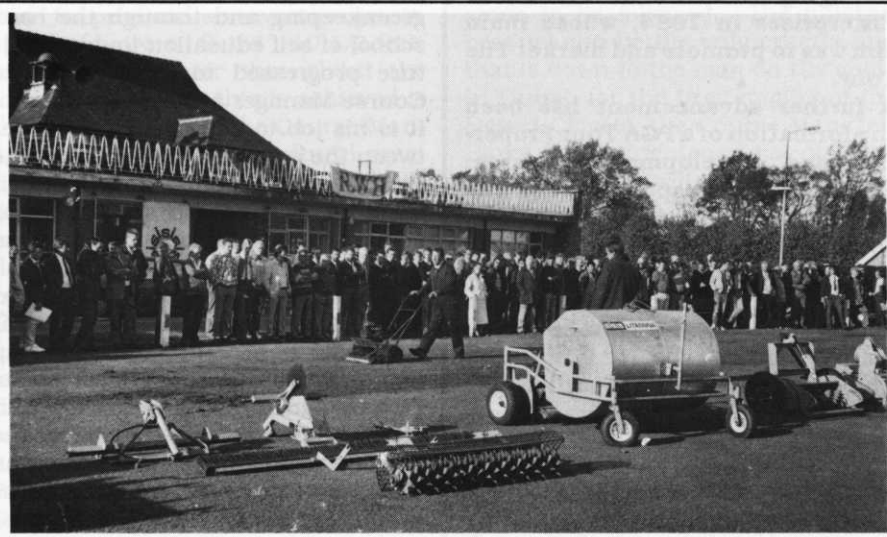
### SECOND SITE FOR STA-BRITE

Sta-Brite Supplies Ltd, the grounds maintenance company, moved into their new warehouse and office complex in Basingstoke during December.

The premises will be racked out for palletised goods, including an ample chemicals store built on a modular design and capable of being extended to contain up to 13 tons of herbicides and pesticides.

Innovative mechanical handling should make the warehousing operation extremely efficient and the excellent level of service provided to customers at present is set to improve still further.

The telephone number for sales is (0256) 811811



*The Sisis Varicore at the joint Sisis/Rolawn/British Seed House Field Day at the Mitchell & Butler Sports Ground, Birmingham*



# Europe's leading Greenkeepers meet in Portugal

*The PGA Europe Tour, sponsored by Volvo, will be playing for £16m in prize money in 1990, three times the sum on offer just five years ago.*

*Golf, both professional and amateur has moved from being a weekend pursuit in little more than a decade to become one of the fastest growing business ventures throughout the world, and now, not before time some might say, the contribution to the game by the professional greenkeeper is at last receiving recognition.*

*John Lelean, joined the PGA European Tour Greenkeepers at their first conference at the Penina Hotel in Portugal.*

The Volvo European tour now extends from the Highlands of Scotland to the Persian Gulf, played on golf courses as varied as the traditional links at St. Andrews, through the heathlands of Surrey, the parklands at Woburn, the semi-tropical scrub lands of Spain and Portugal to the latest addition, the Emirates Golf Club in Dubai. Ask any of the players what they re-

quire from a tour venue and they will say - "Firm fast greens, flat teeing areas, tight lies on the fairways, well defined differences between semi-rough and rough, uniform sand in the bunkers and consistency from one course to the next".

A very tall order in a climate where the temperatures can range from 100 degrees to little above freezing on one

of Britain's bad days.

In the week before the start of the festive season, the PGA European Tour Management brought together on the Algarve Europe's leading greenkeepers, and golf directors. The dedicated professionals, whose skills in golf course preparation and presentation are an essential element to the Tour's success.

Although there have been previous meetings between the PGA European Tour Management and Golf Course Managers, this was the first fully structured conference where uninhibited discussion was given unbridled rein, overcoming with apparent ease the barriers of nationality and language. It could be said, greenkeepers speak with the same tongue when discussing their favourite subject - growing grass and maintaining golf courses. The three day conference at the Penina Hotel, was an outstanding success, despite a spell of the most inclement Algarve weather.

Course preparation is high on the priority list of the PGA European Tour. In 1989, Bruce Jamieson, previously a Tournament Administrator was appointed the Director of Agronomy, a position he is well qualified to hold. The son of the club professional at Turnberry, he developed an interest in greenkeeping and through the hard school of self education in grass culture progressed to the position of Course Manager at Royal Porthcawl. It is his job to act as the liaison between the greenkeeping staff and the Tour Manager, offering advice when required, setting the standards for course preparation and on occasions offering a shoulder to cry on.

He works in cooperation with Tournament Directors and Tour Administrators, who handle the course set-up and two consultant greenkeepers. Richard and Roger Stillwell, who spend most of the season travelling the Continent, visiting courses months ahead of a Tour event. A course preparation document has been in existence for man years. It is part of Bruce Jamieson's role to revise it.

Those involved with a tour event used

## European Tour Director opens Penina conference

The growth of the European Tour, has now provided sufficient funds to bring greenkeepers together for the first of what is hoped to be a regular gathering of those responsible for preparing golf courses for tournament events, the Director of Tour Policy, Tony Gray, told delegates at Penina.

In 1936, the Daily Mail sponsored the first PGA event at Sunningdale with a prize fund of £2,000, which has now grown to £16m, the amount to be played for in 1990.

Overall sponsorship increased from £1.5m in 1979 to £30m last year, increasing still further for the coming year to £50m, which thanks to the involvement of Volvo, has been a significant breakthrough.

Outlining the development of the European Tour, Mr Gray told the forty delegates at the opening session at the conference, that in 1971

John Jacobs was appointed to the position of Tour Director General, whose main objective was to increase the sponsorship prize fund. He was succeeded in 1975 by Ken Schofield.

Although the PGA European Tour is now a separate organisation from the PGA, the charter remains almost unchanged. At one time their headquarters occupied cramped office space at the Oval Cricket Ground, now they are established in their own premises within the complex of the Wentworth Club at Virginia Water.

The European Tour organisation had become so complex that it was necessary to set up various divisions and George O'Grady became the Managing Director of PGA Tour Enterprises in 1984, whose main aim was to promote and market The Tour.

A further advancement has been the formation of a PGA Tour Properties and Development Division, which will be responsible for the construction of their own golf courses along similar lines to the USPGA Tour. These courses built to tournament specifications will also be available for the benefit of the golfing public.

The European Tour has still a long way to go, added Tony Gray. From the first tournament in France in 1970, the French Open, 25 of the tour events are now held on continental courses and last year they added Dubai to the list for the Desert Classic.



Tony Gray



## Setting up the course for a tour event

Mike Tate is one of the European Tour's Administrators responsible for setting up a course for a tournament. It is his job to ensure that everything will be right for the start, reducing complaints and rules queries to the absolute minimum.

Mike and the other nine members of the travelling staff will be out on the course with the larks at first light on a Monday morning armed with a spray gun to check for possible worn areas which could be deemed "ground under repair", though if the course has been prepared with meticulous efficiency these areas will be hard to find.

High on the priority list will be the out of bounds markers, ensuring the stakes are clearly visible, there is a clear line from one stake to the next and the adjacent area has been strimmed to avoid doubtful decisions.

Water hazards are checked and marker posts are sited well back from the edge.

Bunkers, often a source of complaint are checked for sand coverage, both for equality of depth and the consistency. No golfer, amateur or professional can control a bunker shot if the ball is plugged in the sand. The leading golfers can all manipulate the ball out of the bunker, but if it is below the level of their feet, no one has control on the fly to the pin.

Ideally the sand should be lightly hand watered to provide a stable surface.

Rakes are checked to ensure there is one for every bunker and instructions given that these are to be sited

in the bunker itself. A somewhat controversial point with the average club, who use a variety of methods from spiked heads to hollow pipes to keep the rakes out of the sand.

Tees are regarded as too small by most professionals, particularly on the short holes where a three day event can cause considerable wear from iron play.

To counter this the rule of thumb is to put the markers at the back of the tees for the practice rounds, or the now usual preliminary pro-am event and move them forward daily as the tournament proceeds. Greenstaff are often advised to cover a small tee area, prior to a tournament to keep the golfers off.

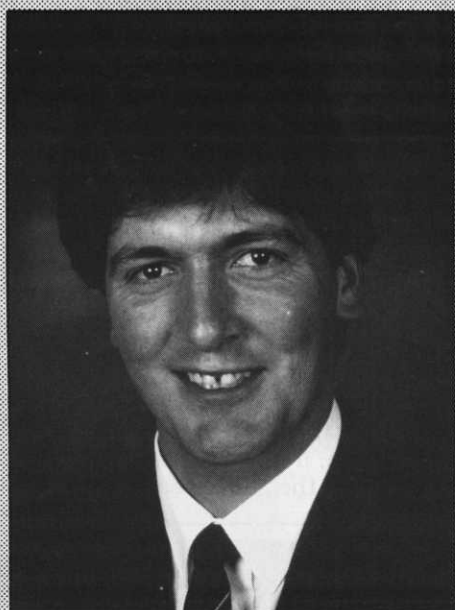
A beady eye is also kept on possible obstructions to the line of play, so surplus golf course furniture, seats, rubbish bins, signs and all other tee markers are removed, except when the pro-am is in progress and on these days the amateurs and professionals have separate tee positions. By the time the tournament commences, the officials will have toured the course several times. All are in direct radio communication throughout the set-up and through the event and this radio link also includes the course manager and the duty greenstaff.

Although the tour organisers direct the pin positions, this is done in liaison with the greenkeeper. They are not set in the impossible positions that some host clubs would like, accordingly to Mike Tate's colleague, David Garland. Understandably, the club, looking ahead

to the return of their course for member's play are anxious to preserve the best positions on the green. The set-up presentation raised some lively discussion and points for consideration came from Chris Kennedy at Wentworth, who suggested that the size of the hole can vary according to the weather conditions.

George Brown, course manager at Turnberry said he would like to see some standardisation of paint for the insides of the cup. Should it be gloss oil-bound paint, emulsion or perhaps there is something better that could be uniformly used.

Mr Jaime Ortiz-Patino, President of Valderrama said he has the cups painted weeks ahead of the tournament so the staff have adequate practice.



Mike Tate

to be advised to cut putting surfaces to 1/8". This is now recognized as sometimes impracticable. The aim is now to produce an average greenspeed of between 9 1/2 - 10 1/2 feet, on the stimpmeter throughout the tournament. How this is achieved is the responsibility of the Course Manager, whether it be by cultural practice, the latest technology such as groomer units, fine cutting or a combination of all these elements, is the decision of the man in charge of the course.

The European Tour, starts in Portugal, moves to the United Arab Emirates, then progresses northwards through the season, until in June they reach their most northerly event in Stockholm for the Scandinavian Open. Within a little over four months, the Tour have played courses as far apart as Alaska to Mexico!

The variation in climatic conditions is

vast, the techniques involved in bringing a course to its peak so different. No document can lay down a tablet of stone to be followed. The finished product can be the only criteria and that is down to the man on the spot. In Dubai, for the first staging of the Desert Classic, the Course Manager, Barry Carter frightened not only the players, but himself when he achieved a greenspeed of 13 feet, so fast that if the wind had blown in from the Gulf, the ball would not have held on the putting surface. These surfaces, faster even than Augusta, were only possible by putting the grass under extreme stress and cutting to 1.25mm.

A cut in cool season climates at this height would put such stress on the grass it could not recover.

Jean Pierre Leboucher, from the French Golf Federation, summed up course preparation admirably - "Grass is a living thing. It needs cossetting,

feeding, encouraging, nurturing. Preparation grass for a tournament is like training an Olympic athlete. It must be fit, healthy, well fed and strong. Brought to its peak before it is put under stress and cut to a competitive length".

A presentation of the building of the Emirates Club by Golf Director, Terry Duffy and its subsequent maintenance programme, fascinated all at the conference. A detailed report will be published in a future issue of The Golf Course, but it can be recorded that the course hosted a Tour Event in less than three years of the arrival of the first bull-dozer on the barren desert sands.

By harnessing surplus water from the nearby de-salination plant, which in turn was powered from energy created from an industrial smelting plant, grass was growing on greens and fairways within days of planting. Two huge fish



filled lakes act as reservoirs, to supply up to 2 million gallons a day through the irrigation system. All this for less than £2 and half million pounds, half the cost of the clubhouse!

Course management and maintenance on any course with a high through put of golfers, and this applies to all the courses used by the European Tour, requires a sound, well organised work programme over 12 months of the year.

Course Manager, Derek Ganning in charge of The Belfry, had two tournaments in 1989, the English Open in June, followed by the Ryder Cup in September. He told the conference how the greenstaff's work plan has to dovetail with the host of other supporting bodies from TV, Tented Village, Hospitality Units, Telephones and even the refuse and toilets.

His philosophy is to be firm yet friendly, knowing where structures are to be sited and who is responsible. Minimum course damage is the main consideration.

Bruce Jamieson sees the main aim is to provide a fair competitive arena for the player. Providing equal consistent conditions on the day, for those with a late tee off as far those who play earlier.

He is looking for commitment from the course managers, something he is certain to obtain from such a highly dedicated band of greensmen who are proud to put their hallowed acres under examination, if only for a few days at the height of the golf season.

## Are our greens approaching the end of a lifespan?

As the majority of golf courses in Britain approach their centenary, the greens could be reaching the end of their natural life, Jack McMillan told the Greenkeepers Conference at Penina.

Jack, the Course Manager at Sunningdale, host club to the European Open next September, suggested that increased play over many of Britain's courses built around the turn of the century has created so much compaction on impervious greens, it has created almost insurmountable maintenance problems. Only by continuing costly aeration programmes was it possible to keep greens in play.

He believed that the time was fast approaching when some courses

should give serious consideration to an 18-hole green re-building programme to the USGA specification, which proved to be the best method of green construction, which should guarantee, with correct upkeep a 100 year lifespan.

Popular courses now experience something in the region of 50,000 rounds of golf a year and the wear is further increased if every member of a four-ball has a caddy.

A bent/poa mix produced the best putting surface at his course, according to Jack McMillan. Talk of bent/fescue mixes were somewhat of a myth, he added, as fescues cannot stand up to heavy traffic and only at St Andrews or some links and downland courses had he seen the fescues in real abundance.

The creeping bent grasses produce the best putting surfaces, but he had some misgivings on how well they will withstand long term wear in a climate with a seven month long dormant period. Experience of creeping bent in Britain has so far not been good as it has quickly succumb to the incursion of annual meadow grass. Managing creeping bent is a technique still very much experimental.

At his course 700 tons of top dressing is used annually, spread lightly and often. To produce his green speeds the Sunningdale policy is to take the grass out not off, by verticutting and grooming.



Jack McMillan





# Power Force



All SISIS machines are designed, patented and manufactured in Great Britain.



SISIS now offer a range of p.t.o. driven implements for use with suitable compact tractors. The range includes top-dressers, Rotorake, sweeper, aerator, sprayer and spreader. Full details from your SISIS Area Representative or by contacting us at the addresses below.

**Ask for a Demonstration!**

- 12 Month Warranty
- Choice of Finance Arrangements
- National Spares & Service Network

## sisis

SISIS EQUIPMENT (Macclesfield) LTD., Hulley Road, Macclesfield, Cheshire. SK10 2LZ Tel: (0625) 26363 Fax: 27426 Telex: 669795  
SISIS Centre In Scotland, The Roundel, Middlefield Industrial Estate, Falkirk. FK2 9HG Tel: (0324) 29635

*Serving Groundsmen and Greenkeepers for nearly 60 Years*



## NEW DEVELOPMENTS

### ANOTHER PUBLIC 9 HOLE GOLF COURSE IN SUSSEX

Leatherhead based company, Golflines International Limited have taken over the defunct 9 hole Public Golf Course at Berni Inn's Gatwick Manor Motel/Restaurant/Bar complex. The complex near Gatwick Airport in Sussex, which is part of the Grand Metropolitan Group is to be revamped by PGA Professional Patrick Tallack for Golflines International Limited and is due to open for play on 1st May 1990.

### NEW DESERT GOLF COURSE FOR TUNISIA

The development of golf facilities in Tunisia has taken a jump forward with the news that agreement has been reached for the construction of an international, 18 hole course at Tozeur, in the south west corner of the country.

Agreement was reached last month with the Tunisian authorities for a French/Tunisian company, Compagnie des Golf Internationaux de Tunisie, to start construction of the new desert course in January 1990 to open within two years. Plans were also approved for the construction of an adjacent four star de luxe hotel to be constructed and opened concurrently.

The new course, overlooking the Sahara desert and the oasis of Tozeur, will be situated less than three miles from the international airport of Tozeur/Nefta and is served by domestic scheduled services operated by Tunis Air from Tunis & Djerba. The Director of the Tunisian National Tourist office in London, Kader Chelbi said: "This is an exciting addition to our already announced plans to construct new courses at Hammamet, Djerba, Taberka and North Tunis. Already the new course at Monastir is open and Hammamet will be ready for play by next spring.

"The opening of our first "desert" golf course will be a major construction to our objective to greatly expand our desert tourism which will, in turn, increase our winter business. Winter temperatures in Tozeur average 70 degrees, an ideal climate for golf," he said.

Meanwhile Tunisia's two current courses

at Port el Kantaoui and Monastir have announced their rates for the Winter season. Individual rates at Port el Kantaoui, where the Tunisian Open was staged in the PGA Tour for several years, will be £14 per round in December, January and February, rising to £15.50 in November and March. Groups of 15 or more get a reduction per round of £1.50. At the newly opened 18 hole course at Monastir, the individual price per day will be a standard £18 from November to April or £100 for unlimited play over six days. Both courses, the 27 holes at Port el Kantaoui and the 18 at Monastir, were designed by the Californian architect Ronald Fream.

### GOLF CLUB CONGLOMERATE BRANCHES OUT INTO COURSES

Amer Group's subsidiary Amer Golf Properties Inc. has signed a letter of intent to acquire an interest in the large Central European golf property corporation IGA (International Golf Associates SA).

Amer Golf Properties Inc. was established last summer after Amer Group had acquired Wilson Sporting Goods Co. Amer also holds the majority of the shares in McGregor Golf Company, USA.

Amer Golf Properties Inc. is a development corporation primarily involved in golf-related real estate development. The company is based in Chicago, USA.

IGA is a developer of golfing, leisure and

hotel centres, mainly in Central and Southern Europe where it is presently participating in seven projects at different stages of development. The first will be completed in Italy in 1992.

Mr Kari Sipila, Executive Vice President of Amer Golf Properties, will be appointed Executive Vice President of IGA from the date of signing the deal. The President of Amer Golf Properties Inc. is Mr Kai Luotenen, Amer Group's Group Vice President, Business Development.

### WAVENDON GOLF CENTRE OPENS

The new Wavendon Golf Centre at Lower End Road, Wavendon near Milton Keynes opened to the public on November 18.

After months of preparation the 35-acre golfing complex will comprise a 26-bay floodlit driving range and a 7,100 sq ft clubhouse, a well stocked golf shop, changing facilities, bar, lounge and restaurant. An exacting par three golf course is due to open at the site next summer. The Centre, including the clubhouse, will be open to the general public without restriction.

The development is the brainchild of three local businessmen, golf professional Nick Elmer, surveyor John Drake and farmer Philip Menday.

"It's a unique facility locally," explained Nick Elmer. "A lot of research went into the planning of the project and we are confident that it will be a popular venue with golfers and non-golfers alike."



An artists impression of the Wavendon Golf Centre. It features a multi-purpose clubhouse and driving range and will be followed next summer by an exacting 9-hole par 3 course



# **RFE** TURF MACHINERY

## **THE PROFESSIONALS CHOICE**

Units 3 & 4, Wedglen Industrial Estate, Midhurst, West Sussex GU29 9RE.  
Tel: 073081 5775/6/7

**Are you looking forward to the New Year?  
Help us to help YOU!**

**What are your machinery requirements for the coming season?**

**Tell us and we will endeavour to supply them from our large stock  
of new and fully reconditioned turf machinery  
where and when you want it**

**Main dealers for Agria - Iseki - Allen - Woods - Mountfield**

**WE ARE PLEASED TO ANNOUNCE THAT R.F.E. ARE NOW MAIN AGENTS  
FOR JACOBSEN IN WEST SUSSEX, SURREY  
AND THE SOUTH WEST LONDON BOROUGHS**



### **CDC GOLF & LEISURE DEVELOPMENTS Ltd.**

## *The Golf Course Constructors*

CDC Golf and Leisure Developments Limited are one of the few Companies in the Country to offer the complete service in the field of golf course design and construction using skilled personnel to full completion.

- Detailed greens complex and contours
- Drainage calculations and layout
- Initial land survey, planning application submission
- Specification and Bill of quantities
- Budget costings and construction programme
- Turf establishment and management. Advice after completion

**WE ARE ABLE TO UNDERTAKE  
ANY DEVELOPMENT THROUGHOUT THE WORLD**

CHAPEL WORKS WALDRINGFIELD WOODBRIDGE SUFFOLK IP12 4PT FAX 0473 36 370

A Member of The C.D.C. GROUP OF COMPANIES plc

**Telephone Waldringfield 0473 36 791**



# "The chances of becoming a golf course architect were about equal to that of being struck by lightning"

Michael John Hurdzan President A.S.G.C.A. 1984

*With very few professional golf course architects and no formal training to become one, the new two year course planned by the British Association of Golf Course Architects may well alter 'the State of the Art'. Steve Marnoch illustrates the problems of embarking upon a career as a golf course architect.*

## **Opportunities in golf course architecture at present are nil".**

**F. W. Hawtree, B.A.G.C.A. March 1982**

As a young man who had his heart set on becoming a golf course architect, this reply from an eminent member of the B.A.G.C.A. was not an easy one to receive although it served to give an accurate illustration of the work opportunities at that time.

I had developed an interest in art and design and had played golf for my club for a number of years. My father Peter Marnoch was, and still is incidentally, head greenkeeper at Coventry Hear-sall Golf Club so it would appear I had as good a grounding as any for a future career in golf course architecture.

For guidance, I contacted B.A.G.C.A. and U.S.G.C.A. and was informed that the number of enquiries for the development of golf courses far outweighed the number actually being designed and constructed. I was advised to pursue a career which was closely related. A career as a landscape architect seemed suitable and one which could lead me nearer to my goal.

Following the completion of my degree, I again pursued opportunities to specialise or move solely into golf course architecture. Unfortunately, despite having the qualifications and experience to match, there were still no openings into the profession.

## **"It is doubtful if there are any vacancies in golf course architecture at present".**

**J. Hamilton Stutt B.A.G.C.A. 1982**

Nothing had changed!

Suddenly, the opportunity arose to work with the construction team on the re-development of the Jubilee

Course at St Andrews designed by Donald Steel. Considering the past years of struggling, I decided that if I was to succeed as a golf course architect, it would be essential that I gained some 'on-site' experience in the techniques of course construction.

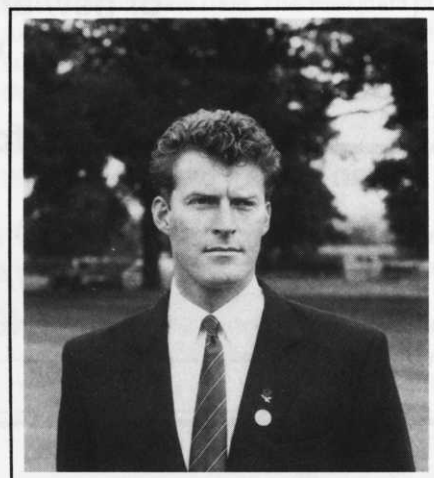
It was a great privilege to work at the 'Home of Golf'. During my time there I felt I was in a strong position to be noticed by an architect and perhaps secure an appointment. This, unfortunately, was not to be and sadly, after six months I decided that to continue in this line of work on the construction team may prove detrimental to my long term career, therefore I decided to progress into architecture or perhaps getting a chance to join with a full member of B.A.G.C.A.

What followed was more experience in the specialist field of construction where I was directly involved in the implementation of designs produced by members of the Association and even produce some of my own work which did receive acclaim from both greenstaffs and committees concerned. However, I was still attempting to become involved in golf course *architecture* rather than 'design' but there were no formal paths of training to achieve recognition, this was impossible.

It is with some relief that this position has now changed following a recent statement of B.A.G.C.A.

**"At the B.A.G.C.A. Committee meeting held on the 4th July 1989 it was decided that the Association had an obligation to educate its future members and a syllabus and reading list covering a two-year programme was formulated".**

**M. G. Hawtree, Hon. Secretary and Treasurer, B.A.G.C.A.**



The course has been planned to include a series of study essays, a wide reading list and finally the production of a full 18-hole course design with working drawings, specification and bill of quants. It is a part-time course with attendance at residential workshops twice yearly. Primarily it consists of the participant producing a number of assignments which are accessed by a personal tutor who is a full member of B.A.G.C.A. and assigned to each course member at the beginning of the course.

The content of the course includes discussions ranging from golf course layout in Europe and America since 1900 and evaluations of terms including 'penal', strategic and heroic when considering hole design. A number of study modules have been set which cover subjects varying from planning for Sports and Leisure through Grass and Botany to History of Landscape. This is the first course of its kind in this country and began, suitably, at the Sports Turf Research Institute at Bingley in October 1989. I have been sponsored to attend the course by my present employers, the Casey Group



of Companies based in Rochdale.

The fact that they are backing me in my career as a golf course architect suggests that the Group is concerned with producing an excellent standard of work in golf course design and construction which would be supported by a qualification from the B.A.G.C.A.

The course syllabus appears to offer a balanced coverage of the wide variety of the expertise that a golf course architect requires. The success of the teaching and running of the course over the next two years will be of interest. It was made clear at the first meeting that the tutors and organisers are specialists in their respective fields of architecture but are not trained as lecturers and for that reason should be allowed some licence to develop that role. I have no doubt that the course will experience some teething problems due to its infancy, but that all concerned, students and staff, will pull together to develop this course for the future and help maintain its development.

Organised by B.A.G.C.A. with support from the R & A and EGU this course is a response to the amount of interest shown by individuals in becoming golf course architects and as a concerted effort by the Association to provide a structure and foundation whereby young architects can be properly trained. Successful completion will give a certificate in golf course architecture and provisional membership. Full membership still requires the design and supervision of six 18 hole courses within a six year period.

This response is encouraging and commendable from the Associations' members who are bound by a moral code of ethics, as are any other members of a professional body. The course hopes to continue the high standards set by past and present members by instilling the same ideals into the new students. This comes at a time when tight control is required to maintain this high quality when there is such an interest in golf.

During a recent discussion, I was asked what the difference was between an 'Architect' and a 'Designer'. My reply was that an Architect would do the job properly.

I hope that having completed this course, there will be a number of good golf course architects who are not led by the mystical attraction of designing courses and can see no further than 'green is good', but who can provide working projects which are successful, aesthetic and testing to all and prove to be creditworthy of the Asso-

ciation.

A current concern is with the amount of so called 'designers' who appear to be playing at the real role with perhaps some knowledge of maybe one of the many facets required by a golf course architect. I am sure that this is of great concern also to the Association and one of the reasons behind structuring the formal course and training. This worry is endorsed by many professionals in the business.

***"All too many golfers or developers imagine that the overriding qualification for an architect or designer is that he should be or have been a very good player".***

***Jim Arthur in his article 'The Way Forward'***

It is essential to differentiate between the titles 'architect' and 'designer'. The former must be restricted to members of B.A.G.C.A. and their American counterparts. They are governed by specific conditions, terms of engagement and scale of fees. Currently, virtually all members are qualified in a relevant science and have passed a probationary period.

In contrast, the 'designers' have no formal qualifications and are quite often golf professionals seeking to widen their interests in the game and provide a new source of income, once their playing career has ended.

***"It is perhaps unrealistic to expect any change of attitude among the many unqualified persons who dabble in so called course architecture. Therefore, in the future, sensible golfers and golf course developers should look to the more responsible elements to be found in the course construction industry".***  
***"The Golf Course" October 1989***

Surely the production of something akin to green deserts with flat playing surfaces or mounds too steep, impossible carries over ill-constructed water bodies, which the greenkeeper will have to maintain for the future with his normally meager budget for maintenance, will reflect badly on golf course architects as a whole if we are not careful.

I imagine the famous names of the past like Colt, Fowler or MacKenzie (whom we shall be studying) would be turning in their graves if they could see the 'howlers' being produced today which, in the long run, can only cost the client a fortune to rectify in capital outlay and lost revenue during repair works.

The problem must lie with the client sector who seem to lash out millions on courses with no assurances as to the quality of the end product.

It is essential that the client employs someone who is bound by professional ethics and liabilities to ensure that quality and integrity through experience is maintained.

### **Conclusions**

In conclusion, it can be seen that trying to break into a new profession can be fraught with danger, especially when the supply of finance to the leisure sector can fall off dramatically, as has been experience in the past. With a limited amount of work, there can only be a small group of people to handle that, as was with the original Association where even they relied upon other careers which they could fall back on in times of hardship.

With the current massive interest in golf, it is human nature that certain individuals will want a 'ride' on that wave. If the true ethics of golf and interest in the game for **all** are to be maintained, it is important that the 'new architects' must have the grounding and indeed be steeped in the historical development of the game in order that the original ideas and styles are not lost in the flood of 'Americanisms' and 'spectator friendly golf'.

That is not to say that there is no case for different styles of courses and indeed not a place for 'designers'. There are good and bad in all things. Hopefully the latter content of the article did not antagonise the 'good designers' who have attempted to find out about the background, different styles and techniques of what they are attempting.

If there are no openings to become a golf course architect, then it is perhaps difficult not to fall into the "designer" classification.

With the development of a formal path of training by B.A.G.C.A., this unfortunate situation can now change and by learning from the experience of past professionals the future looks promising. We live in a country with a wealth of excellent golf courses. Let's take steps to protect our heritage in maintaining these high standards for all new developments through good design, good specifications and construction techniques.

The development of this course syllabus is encouraging and shows the responsibility that the B.A.G.C.A. has to golf as a whole. I am please to be part of that and am grateful for the support given to me by the Casey Group of Companies.





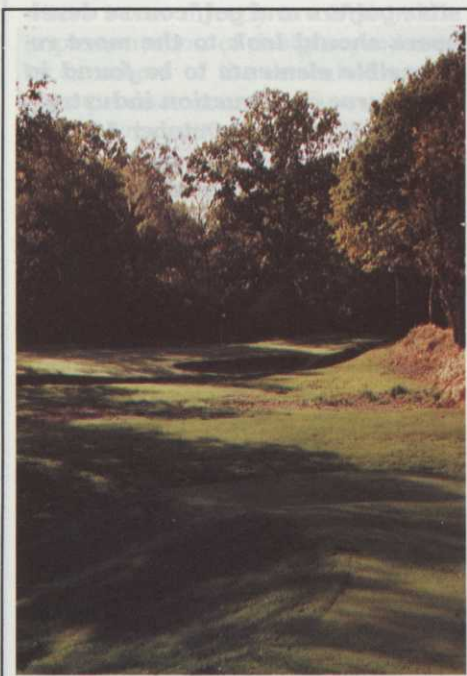
## The South Course at Wentworth

As previewed in the 1988 April issue of "the Golf Course" the construction of the South Course at Wentworth has been completed. The course was planned, not as an overflow from the existing East and West courses but as a tournament venue in its own right. Meticulous planning by Wentworth's managing director Richard Doyle-Davidson, in obtaining permission to build the course, by taking all the interested parties along with him resulted, not only in the prospect of an exciting golfing facility, but as an object lesson in how to deal with red tape and pressure groups in these environmentally sensitive days. This has meant an ongoing interest by the Surrey Wildlife Trust in the management of Wentworth's wet wood which has been a significant factor in the course's progress.

It is interesting to note now, that back in April '88 the owners of the Wentworth estate, AMEC, expected a return on the capital employed in the construction of the new course over a six to seven year period. How must they feel now after having sold the entire Wentworth operation for just under £17 million to see the new owners Chelsfield PLC recoup nearly £54 million by selling off only 40% of the shares.

However, when the contractors Golf Landscapes actually arrived on the

site in the Spring of 1988, they found a very different situation from that for which they had tendered. Tree clearance had indeed taken place and the resulting open space had been de-rooted and rotavated. This work had been carried out according to the original site survey, which was apparently drawn up incorrectly. It meant that some holes, as envisaged by the



*The well guarded short 2nd*

architects, John Jacobs in consultation with Gary Player and Bernard Gallacher, would just not fit in. Furthermore, with the difficulties experienced in obtaining planning permission in the first place (see "the Golf Course" April 1988) there was no possibility that the owners could take on the conservationists and cut down more trees.

A complete reappraisal of the project had to take place under the direction of the then project manager, the highly experienced Michael Hunter.

Peter Dunning, Golf Landscapes managing director, had to re-negotiate the contract which was reduced in value in accordance with the reduction in the size of the site. The contractors next problem occurred when it was discovered that there were no drawings for the greens, due to the revised area of site clearance. The contract greens and tee drawings were not compatible with the area that had been cleared. To maintain progress, setting out greens and tees was achieved by day to day approval of the architect. Work on shaping fairways, green and tee construction proceeded satisfactorily, despite the wet winter of 88/89, with sowing taking place in the Autumn of 1988. All the greens and tees were turfed with Inturf SS1 which has taken well, having been grown on a nearly pure sand base to the STRI's

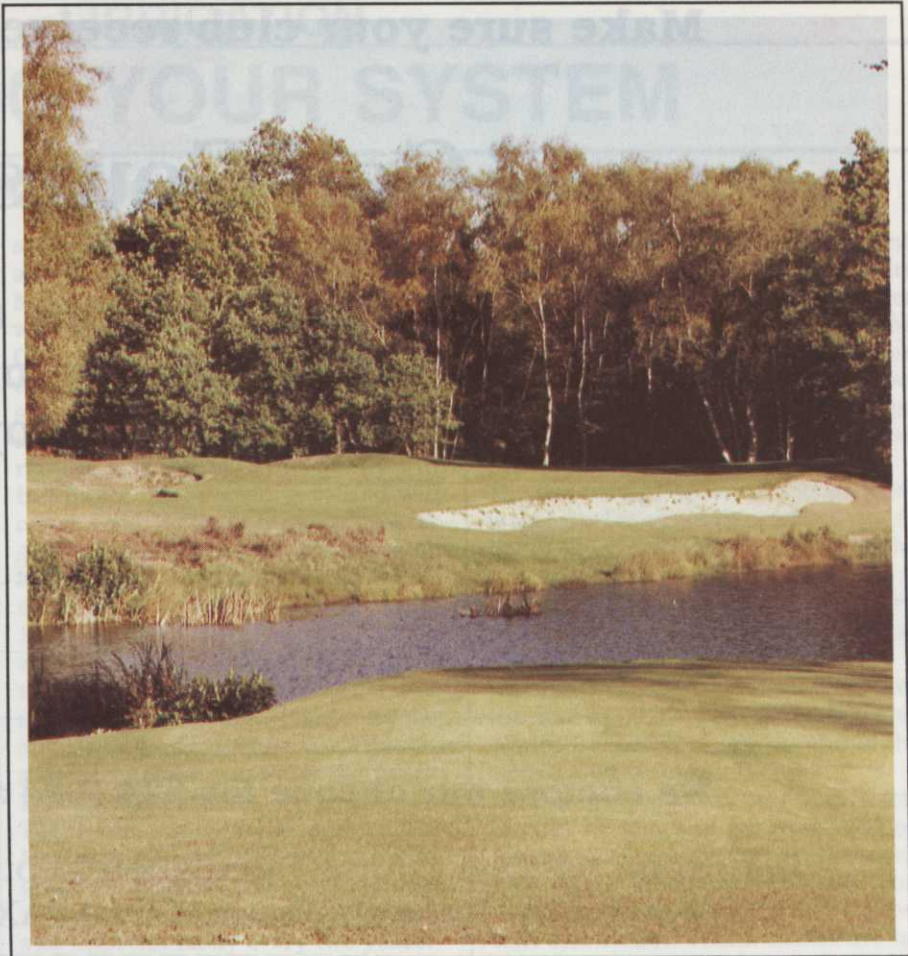


specifications. Hollow tining during the summer, having removed the small amount of soil that was left. One or two greens, particularly the short 4th, which are in shade, have not come on so quickly but a programme of clearance to let in more light is due to be carried out this Winter.

The resulting course that Golf Landscapes has built has smaller greens and little or no space for spectator viewing alongside the fairways and it is questionable whether the PGA European Tour would now view this as a suitable tournament venue. The South course is however, going to provide an enjoyable test for members and visitors alike as there are some spectacular holes, the short 2nd and 17th will undoubtedly become the subject of much discussion in the 19th. But it would have been a poor architect who could have produced anything but a good course from such an exceptional site.

The South Course project has been overseen by the STRI's Dewar Wishart with Dr. Peter Hayes making regular visits. Wentworth's insistence on the construction of sand only greens to a specification drawn up by the STRI will be a point for long discussion in the future, although the head greenkeeper for the South course Graham Mathieson has managed the greens exceptionally well so far.

Golf Landscapes are very pleased with the South Course and they are already working on alterations to the East Course as well as finalizing the par 3 course and driving range. They undertook several additional contracts at Wentworth, with their expertise in drainage being fully utilized in dealing with the problems that they found on the 18th fairway. The 18th fairway and green location, set in a woodland marsh area, was supposed to have been drained prior to commencement of construction work, by the AMEC Group, however, their efforts were not



The short 16th

effective.

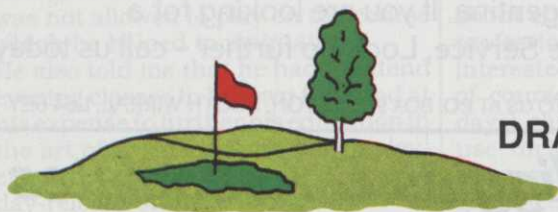
Golf Landscapes Ltd, were given instructions to drain the area, this was achieved by installing a 200mm diameter twin walled PVC pipe, surrounded by 200mm diameter gravel, at depths of 2m to act as a cut-off drain. By the time 150m length had been installed a full bore discharge of water was being obtained.

Within 2 weeks there was a band 20m wide dry enough to be walked on. The above was repeated along the middle and lower side of the fairway, following a reduction in level by major earthworks, 80mm diameter lateral drains

were installed followed by sand banding at 1m centres once the grass sward was established.

The Company has successfully completed two 18 hole courses during 1989, one at Graveley near Stevenage, Herts which was designed and constructed by the company, the other for Hawtree and Son at Brampton, Huntingdon, as well as alterations at Kirby Muxdoe Golf Club, Chesterfield, Kent, Moor Park, Walton Heath, and Camberley Heath. The company has a very healthy order book for golf course work, contract maintenance and drainage work during 1990.

# GOLF LANDSCAPES LTD.



**DRAINAGE PROBLEMS?**

**We have the experience  
Phone Peter Dunning NOW!**

ASHWELLS ROAD  
BENTLEY, BRENTWOOD  
ESSEX. CM15 9SR

Telephone: (0277) 373720

Telex: 995215 GOLF LG



**Make sure your club receives a copy of**

# **the Golf Course**

**get them to subscribe today**  
**Europe's leading publication on golf course**  
**management and development.**

**Name:** \_\_\_\_\_ **Golf Club:** \_\_\_\_\_

**Address:** \_\_\_\_\_

\_\_\_\_\_ **Postcode** \_\_\_\_\_

**We enclose our cheque for £24 (UK) £35 (overseas)**

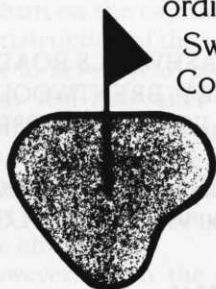
Return to: the Golf Course Circulation Dept., 129a High Street,  
Dovercourt, Harwich, Essex. CO12 3AX 0255 507526

## **FOR A COMPREHENSIVE AND PERSONAL SERVICE . . .**

ALAN E. HIGGINS & ASSOCIATES is a Company of Consultant Golf Architects which undertakes not only the COMPLETE design of golf courses but also when required, can arrange the MANAGEMENT of the CONSTRUCTION. The type of service we are able to offer in this situation covers

- ★ Initial consultations with the client
- ★ Full Course design, with necessary documentation
- ★ Oversee the Contractors work during construction
- ★ Arranging a Construction Management Contract
- ★ Representing the client during Construction

With our experience we have the capability of taking a project or for course alterations, from the initial site visit, through to the actual 'handing over' of the completed works to the Client. It is this range of experience which enables ALAN E. HIGGINS & ASSOCIATES to produce courses of the highest quality, which can be of Championship standard or suitable for the ordinary club golfer. Our experience extends from the U.K. to Spain, France, Switzerland, Morocco, Ivory Coast and Argentina. If you are looking for a Comprehensive, Personal and Competitive Service, Look no further - call us today.



FOR FURTHER INFORMATION 051-336-5108 OR WRITE TO US AT P.O. BOX 9, NESTON, SOUTH WIRRAL, L64 6EY.

***Alan E. Higgins & Associates***

Golf Course Architects & Course Construction Management



# MAINTAINING YOUR SYSTEM

## Watermation's guide to keeping their irrigation system trouble free

**Y**ear round maintenance of irrigation system will pay huge dividends at the time when water is needed most. During dry or hot spells, to keep the turf live, healthy and growing. Around the sprinkler heads, keep the grass close trimmed.

Ensure that the turf is level and slightly above the edge of the sprinkler so that the mower will not foul. Build up ground settlement around the sprinkler area.

Avoid running over the sprinkler with tractor wheels, particularly during the first two or three years after installation.

Keep the sprinkler bucket clear of sand, which might tend to accumulate on sprinklers mounted near bunkers and ensure drainage from the sprinkler bucket is maintained.

No maintenance is necessary with the controllers apart from ensuring that the outside of the case and the panel is kept clean. Normally leave the unit running 365 days per year so there will be some heat within the case, avoiding condensation problems.

During severe electrical storms to avoid possible lightning damage, switch off the main supply and put Rain switch to omit. In winter set controller to all

stations one minute and set it to operate during the day once per week. Make sure pump is turned off. This will keep the solenoid valves free.

Clear the Rainstat cup of dead leaves, twigs and other debris. To clean Rainstat, carefully lift out the ceramic wick in the centre of the plastic cup and remove any pieces of dirt gently with the finger. If the wick is coated with algae, wash it carefully in warm detergent and scrub with a small nail brush. Making sure the wick is dry before replacing it in the cup.

Systems fitted with Grundfos - Godwin - British Guinard pumps, no maintenance of the pump unit itself is required. Those with grease nipples should be greased with two shots from a normal grease gun every two years - NOT MORE OFTEN.

The horizontal spindle end suction Monglide type is fitted with a packed gland. This gland will need replacing with new cotton packing of the correct size approximately every two years.

The correct setting of the gland tension allows a slow drip of water into the gland bowl. When adjusting the gland tension nuts, only tighten one flat of the nut on each side at a time and then run the pump to test the

setting. If the gland gets hot, the gland nuts are too tight. The motors require two shots on the grease nipples, once every two years. Check also that all the holding down bolts on the pump and motor feet are tight. If these have become loose then the coupling must be checked for wear and the motor and pump carefully realigned.

The low voltage control cable network is installed at approximately 12" to 15" below the ground along the line of the pipe run. No maintenance of this is necessary but great care must be taken when carrying out any digging operations along the pipe run.

On many up-date systems two wires are laid by mole plough on different routes to the pipes. Be careful of the use of a verti-drain machine.

Once a year the motor starter contacts should be checked for wear and replaced if necessary and all rewirable type fuses should be rewired. This work should be entrusted to a competent electrician. Trunk mains are installed at a depth of approximately 2ft, to minimise frost damage. Where this has not been possible, then suitable drain off points will have been provided. The main point to protect from frost is the pump-house. >>

### "The Way Forward" - TORO COMMENT

The recently published R & A document entitled "The Way Forward" is both evocative and timely. Concentrating as it does on the deteriorating condition of many of this country's golf courses, the report slams club green's committee attitudes to the vital area of greenkeeping.

"Disorganised, penny-pinching and arrogant" are stong words indeed but as experience has shown, the playing conditions at many courses are dictated by the whim of Green Committee who, I understand, often make far reaching decisions without even having their club's head greenkeeper present at such deliberations...

I recently met an enthusiastic assistant greenkeeper who told me that he was not allowed to play on the course which he helped to maintain! He also told me that he had to attend evening classes in his own time and at his expense to further his education in the art of greenkeeping - his employers would not allow him the facility for day-release studies.

Accepting that these examples may not be typical, it nevertheless indicates the level of indifference which

can be achieved by club officials in their approach to the all important aspects of greenkeeping.

The R & A document was more to the point. The average club committee's technical knowledge is "non-existent or at best woefully primitive!" it says. In contrast, I doff my hat to the many clubs who paid the travelling expenses of young assistants competing in the finals of the 'Toro Young Greenkeeper of the Year' competition or those who not only allowed their senior greenkeeping staff time to attend one of the pre-Christmas four 5-day, residential training courses run by the Greenkeepers Association, at Aldwark Manor, but actually paid fees involved. In essence "The Way Forward" is all about education - from the megastar professionals who, it is alleged, are not interested in the long term condition of courses, (apart from tournament days) club officials - many of whom use their authority to influence the preparation of greens - to the poor greenkeeper who is caught between using his experience to maintain the course or having his proposals countermanded or ignored!

The report was, interestingly, more critical about the 2p club member levy paid towards greenkeeping training. "Totally inadequate" was how the document described it. It is recommended that the sum be increased to 50p and ultimately, one pound.

Equally important is the recommendation that 'green committees' should be pruned drastically and comprise of just three members; the chairman of the management committee, club secretary and head greenkeeper. That would be progress!

All in all, 'The Way Forward' has I hear, caused much comment in greenkeeping circles. If nothing else, it offers individual greenkeepers a platform and the opportunity to make their personal views known publicly - and collectively, lobby for more technical education, enhanced professional status - and the financial rewards which should follow.

The last words are left to those contained within the document. "If the game is to survive in the form we know and cherish, failure to tackle greenkeeping problems cannot be contemplated."

**Peter Roberts, General Manager, Toro Irrigation Ltd.**



## IRRIGATION

<< 1. Close the stop cock on the incoming water main.

2. Open the small drain valve at the bottom of the galvanised steel riser pipe on to which is mounted the ball valve.

3. Discharge water from the storage tank, through a hydrant on the course or on to the greens as required. Pump at least 1ft level down in the tank so that the ball valve is in the open position. Some clients prefer to completely drain the storage tank.

4. Close the suction sluice valve on the pump.

5. Remove the drain plug at the bottom of the pump and leave it out.

6. Open all drain taps visible in the pump house. Leave the delivery sluice valve open.

7. Cover over the pump gate valve and its pipework down to floor level with some sacking.

### Spring Commissioning

1. Close all drain valves

2. Open up incoming main and allow tank to fill.

3. Close the pump suction valve

4. Open the pump suction valve.

5. Prime the pump and start up. Open delivery valve one turn only. Allow the pump to run from about fifteen minutes and then gently open the delivery valve and let the pump run until the

delivery pressure gauge indicates the normal closed valve pressure.

7. Set the controller to a short watering period, and check the complete course. There will probably be quite a lot of air expelled through the sprinklers, particularly if the main has been drained.

### Troubleshooting

Sprinklers will sometimes not turn because of over pressure. The answer is either to adjust the regulator or to slightly increase the spring tension by pulling approximately 1/8" of spring through the retaining hole and bend with a pair of narrow pliers or adjust the spring tension by the device fitted to GN2/3/4. NEVER oil sprinklers.

### Quick Coupler Valves

If the valve leaks it is usually because dirt has entered into the body and jammed under the seat. Try clearing by rotating the coupler key two or three times quickly.

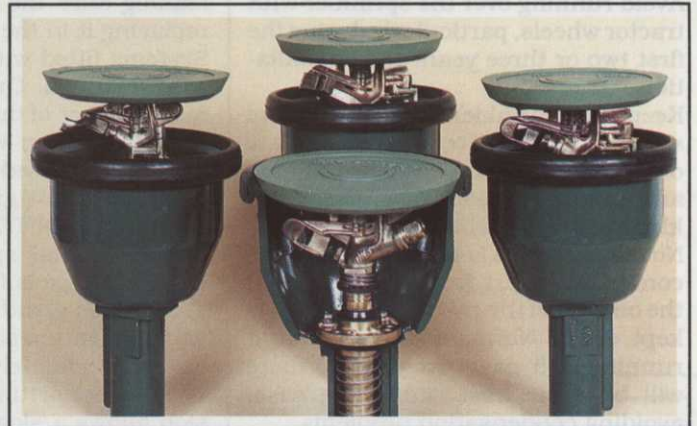
### Pumps

If the pump is turning but not delivering water, this

will be due to the loss of prime. Make sure that there is enough water in the tank and that the suction sluice valve is open. Sometimes vertical pumps become air locked. Switch off, then clear the air by removing the top plug. If pumps will not start electrically, check that the isolating switch is closed, check that the selector switch is correctly positioned, check that the fuses are not blown. If the pressure is low, check for correct rotation and/or leaks on the system.

A full maintenance advice guide can be obtained from Watermation, Monument Way East, Woking, Surrey or any of their European offices.

*Below: Watermation's GN series sprinklers*



# Watermation

See us at SIMA SPECIAL PRO  
6 - 9 March, Paris

The finest places

need the finest IRRIGATION

Gleneagles Golf Club

Watermation Ltd., Monument Way E., Woking, Surrey, GU21 5LY. Tel: (0483) 770303 Fax: (0483) 755082  
Offices also at Stirling: (0786) 70252, Dublin (0001) 789501, Paris (1) 47 06 04 19, Germany (2853) 5202



# OVERWATERING

If you have read the 'small print' contained within the pages of the R & A's new publication, 'The Way Forward', you will doubtless have noted the comment - nay, criticism that "Over watering has been a major cause - greater perhaps than that of increased play - of the deterioration of British greens over the last two decades".

Obviously linked to the high increase in the use of automatic watering systems which we have witnessed on our golf courses, this critical view needs to be qualified. Far from being an attack on the principles of automatic watering systems, it is, in my opinion, a telling comment about the manner in which systems are designed and used. The truth is this. Any automatic watering system should be looked at as a management tool. Assuming the design is right and it is used intelligently, it will provide all the 'instant' benefits which greenkeepers seek to assist their task of course maintenance.

Used without thought, (or poorly designed) an automatic watering system will put on too much (or too little) water - with the obvious long term consequences...

Having said that, we then enter the murky waters of comparing competitive irrigation systems. Without doubt, the quality of a system's design, its component parts, standard of installation, operation and equally important, regular maintenance all contribute to the system's (and operator's) ability to control the amounts of moisture used relative to the weather and local conditions.

For years, Toro Technical Sales Engineers have been trying to get this vital message across to club's only interested in buying an irrigation system - at the lowest possible price. Entitled "The Thinking Man's Guide to Golf Course Watering", Toro even produced a booklet on the subject, aimed primarily at educating green commit-

tees. It stressed the long term sense of purchasing a system designed not just to supplement average rainfall, (as many do) but to be capable of not only providing maximum coverage but stepping-up its performance overnight to meet the sudden demands of long, dry periods - such as last summer. Such a system usually costs more money up-front but, unlike systems designed down to a price - and only capable of providing supplemental watering - the more expensive system provides ultimate flexibility of performance as and when the need arises.

**Cedric Johns says systems are designed as a management tool. Used correctly overwatering problems can be eliminated.**

Such a system also substantially reduces the risk of over watering and because it is properly 'balanced', its ability to provide consistent coverage all around the golf course is enhanced. Add the sophistication of 'Single head control' - which enables the selective use of groups or single sprinklers to be switched 'on' or 'off' around the course and greenkeeping staff can really 'play tunes' on the system! These refinements not only save water and energy costs, they demand a higher premium at the point of purchase. In the longer term however, additional money is not subsequently wasted by clubs pushed into improving the inferior performance of a system purchased on the lower price principle.

An irrigation system should be regarded as an efficient management tool - providing clubs are prepared to invest in a good quality design plus high standards of installation - and maintenance. Get that right and then put the system in the hands of greenkeeping staff who know how to use it correctly then the danger of over watering is virtually eliminated.

Remember, like most other "systems" in daily use in business or industry, the effective end product is in the hands of the people who design, install and operate it. So apart from insisting that your club's system meet your course's requirements (not someone else's) make sure that all the other vitally important factors are fulfilled. If you or your greens staff are not totally certain how to obtain optimum results ask your nearest Distributor to arrange further training.

No doubt many of you are aware that a rain gauge - electronically linked to an irrigation system's controller, will, if the amount of rainfall detected exceeds the column of water already planned for distribution via sprinklers, cancel the set programme.

That's one way of safeguarding against over watering - especially if the heavens open up during the night...

Now, Toro are introducing an even more sophisticated method of preventing soil moisture levels rising above (or falling below) optimum levels during the summer months.

The 'Moist-o-Matic Soil Sensor Kit', it comprises an adjustable sensor unit which is electrically wired up to the irrigation system's main controller. Set to pre-determined 'wet' or 'dry' moisture levels, the sensor is buried under a green (usually that nearest to the controller) where it will automatically read the sub-soil moisture content. In other words, it 'thinks' for you!

The benefits are these:- **1.** Overwatering is eliminated. **2.** Infestation of annual meadow grass will be reduced.. **3.** Greens will be firmer, more resilient and less prone to disease.. **4.** Water wastage is controlled, reducing costs. **5.** It reduces pumping requirements - and the cost of running the pumps.. **6.** The Soil Sensor Kit provides even tighter control of watering programmes.

The sensor can be wired up to any existing electro-mechanical or solid state controller. Cost? Around £425 plus VAT plus installation charge.

## Prime Watermen Ltd

Wangford

Beccles

Suffolk

NR34 8AX

Tel: (0502 78) 481

Tlx: 975731 PRIME G

### IRRIGATION SYSTEMS - DESIGN - SUPPLY - INSTALLATION

Dependable custom designed irrigation systems that will work for you day and night unsupervised, and keep working year after year.

A PRIME system using WEATHER-MATIC integrated components represents a value for money investment allowing for future expansion together with economy of use.

Let us undertake a study to answer your questions or give a free estimate on the system that really works.

**Weather**  **matic**  
LAWN AND TURF IRRIGATION

THE AUTOMATIC CHOICE FOR IRRIGATION



# Q A

GOLF COURSE OR LANDSCAPE  
**Irrigation?**

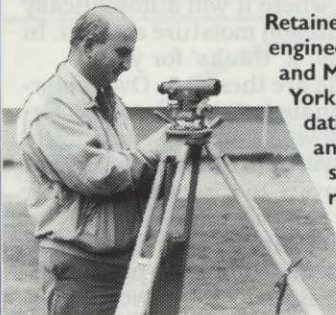
## YORK, PARKER & MARTIN

York, Parker and Martin form what is probably Europe's most knowledgeable and experienced team of independent and objective irrigation design engineers.

Their business is that of helping intending golf course and landscape irrigation system purchasers to obtain the most cost effective and efficient system to a budget, a system which is installed professionally – under supervision – and one which provides the most satisfying long term service...

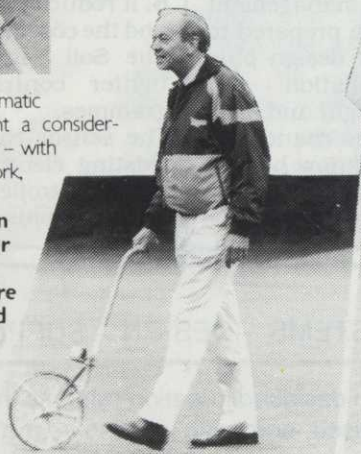


Retained as design consultant engineers by U.K., U.S.A., European and Middle Eastern customers, York, Parker & Martin have, to date, ensured that the feasibility and capital cost of purchasing such irrigation system has resulted in a wise investment – not an expensive mistake!



Tailored to your needs, an automatic irrigation system can represent a considerable purchase so choose wisely – with the professional assistance of York, Parker & Martin.

**Remember, they are not in business to sell you or your organisation an irrigation system but simply to ensure the design, installation and long term results are the best you can possibly achieve for your money...**



For further details, talk to York, Parker & Martin today. Phone, fax or write for an appointment.

**Philip  
York**  
AND PARTNERS  
IRRIGATION CONSULTANTS

4, PEDLARS WALK, RINGWOOD,  
HAMPSHIRE BH24 1YW (U.K.)  
TEL: 0425-472900  
FAX: 0425-471213



## THE 'TUFTURF' TEE MAT



### FOR TEE SHOTS AND FAIRWAY SHOTS

*'Like a piece of firm well-sprung fairway'*

A British-made, porous, hardwearing all weather tee 1.5m×1m and 2m×1m. Synthetic grass, bonded to reconstituted rubber underlay shock pad with 60 tee holes, combine to give a superb playing surface. Highly satisfactory as a WINTER TEE or when re-turfing tees in the playing season. Also ideal for DRIVING RANGES and PRACTICE GROUNDS, both indoor and outdoor.

Further details from:

# CARPETITION

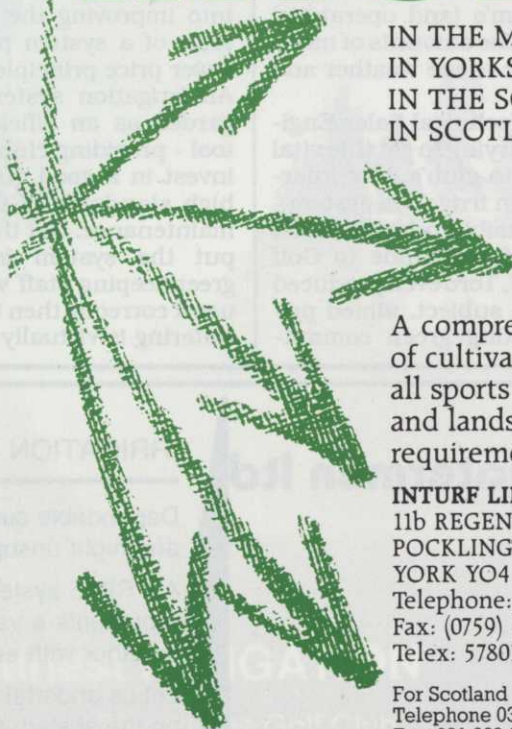
LTD.

14 Kaffir Road, Edgerton, Huddersfield,  
West Yorkshire HD2 2AN  
Telephone (0484) 28777

W.E.F. 19/3/89 Telephone No. Becomes (0484) 428777

# INTURF

IN THE MIDLANDS  
IN YORKSHIRE  
IN THE SOUTH  
IN SCOTLAND



A comprehensive range of cultivated turf for all sports ground and landscaping requirements.

**INTURF LIMITED**  
11b REGENT STREET  
POCKLINGTON  
YORK YO4 2KN  
Telephone: (0759) 304101  
Fax: (0759) 305229  
Telex: 57801 TOWER G

For Scotland  
Telephone 031 663 6617  
Fax: 031 663 0651

IN TOUCH WITH

**"THE BEST TURF ON EARTH"**



Professional  
**DESIGNS**  
 Professional Installation  
**STANDARDS**  
 Professional after sales  
**SERVICE**

Whatever your automatic watering plans or needs might be, a word with the professionals at Turf Irrigation will help you achieve your objectives. Telephone or write now for a professional opinion...

**TURF IRRIGATION SERVICES LIMITED,**  
 BETCHTON, SANDBACH, CHESHIRE CW11 0TS  
 TEL: 0477-500255/6 FAX: 0477-500633

**TURF**  
 irrigation



Toro Distributors for the South East, Midlands, North of England, Wales, Scotland & Northern Ireland.



**Golf course**  
**irrigation?**



**CHOOSE THE SOUTH'S SPECIALISTS...**

Yes, if your club is considering up-dating or extending its present irrigation system or you are thinking of investing in this important "Greenkeeper's Aid", have a word with ISS.

Established for over a decade, ISS have years of experience of golfcourse irrigation systems design, installation and maintenance -this experience is yours for the asking. ISS will gladly visit your course for a chat -phone or write to them now!



TORO IRRIGATION AREA DISTRIBUTORS



**IRRIGATION & SLURRY SERVICES**

Unit 6, The Bourne Centre, Salisbury Business Park  
 Southampton Road, Salisbury, Wiltshire  
 Telephone: (0722) 412510





## Blakedown... Great Oaks from... Little Acorns

...Blakedown began life in 1968 as an offshoot of a successful wholesale nursery stock producer. Twenty-one years later, with a turnover approaching ten million pounds the company has a wide range of sportsground and golf course contracts throughout the United Kingdom.

Based in Hartlebury, Worcestershire, Blakedown Landscapes, the parent company, has specifically sited offices throughout the country and over 300 employees. The management team have years of experience in landscaping and leisure industries and are able to bring a high degree of expertise and efficient management to every contract.

Blakedown Landscapes was a founder member of the British Association of Landscape Industries and is a member of the British Association of Golf



*18th green and lake constructed at Botley Golf and Country Club*

the existing course and the work was carried out during the summer months with a minimum of disturbance to play. The club appreciated the lack of

acres of land to improve the layout of the course and practice ground facilities. Blakedown constructed three new greens and tee complexes and fairways to a design and specification agreed between the company and the club. The club then had further alterations to tees made during the contract.

Blakedown have recently completed the construction of an 18 hole course at Botley, near Southampton to a design by Cedric Lisney and Partners of Bath for Mecca leisure. The work involved all the usual aspects of construction greens tees, fairways, bunkers, tree planting and also included the formation of lakes, bridges and stream re-alignment, as well as the installation of an irrigation system. The course is due to open for play in June 1990.

Peter Jenkins confirms that Blakedown Sports is uniquely placed with its spread of regional offices and considerable experience, to play its full part in satisfying the boom in golf course construction that is foreseen for the 1990s.



*One of the new greens at Vicars Cross*

Course Constructors.

Blakedown undertakes the construction of all types of sports facilities from Tennis Courts to complete golf courses, including the drainage and earthworks and the finished surfaces either natural or artificial. Blakedown Sports was founded in 1988 in response to the demand for all-weather playing surfaces, and as the focus for all the sports orientated activities of the group has become one of the fastest growing areas of the business. Based in Middlewich, Cheshire and headed by Peter Jenkins the company designs and builds natural and synthetic pitches for a variety of sporting needs.

They are very active in golf course construction and recent contracts have included the building of an additional six greens, tee, and fairways to a design by Hawtree & Sons at Bedale Golf Club, North Yorkshire. 2 of the new greens and tees were within

inconvenience and extended the contract to include further alterations and additional tee work within the contract period.

Vicars Cross Golf Club, near Chester, an established 18 hole parkland course, purchased an additional 15



*Tee and fairway construction at Botley Golf and Country Club*



# HUXLEY **THREE** 58

"A great British Greensmower"

TEST ONE ON YOUR TURF



- Water-cooled diesel engine
- Power steering
- Fully interchangeable precision cutting reels
- Optional Turf Combs, 3rd wheel drive and utility units



HUXLEYS GRASS MACHINERY  
THE DEAN, NEW ALRESFORD,  
HANTS SO24 9BL, ENGLAND  
Tel: 0962 733222 Fax: 0962 734702  
Telex: 894426

SPECIALISTS IN —  
**CIVIL ENGINEERING  
EARTH MOVING  
SITE CLEARANCE &  
DEMOLITION**



**Raymond L. Brown**  
(Construction) Ltd.

**160 CHRISTCHURCH ROAD  
RINGWOOD  
BH24 3AR  
TELEPHONE:  
(0425) 472241**

'TOPTÉE'



'FIRSTÉE'

'MASTERTEE'

With a strong reputation among club secretaries, greenkeepers and golfers.

\*\*\*\*\*

Leisure K, Ingleside, Church Road, Mannings Heath,  
Horsham, RH13 6JE Tel: 0403 68500

Your Chemical Storage Problems.....

**SOLVED**

with a practical, secure workbase from  
**CLEVELAND SITESAFE LTD**



For further information on our wide range of units

PLEASE CONTACT

Cleveland Sitesafe Ltd.,  
High Farm, Old Lackenby,  
Eston, Middlesborough,  
Cleveland. TS6 8DN.

Telephone:  
(0642)  
453629

## GREENSWARD ENGINEERING CO.

HIGH QUALITY RECONDITIONED AND GUARANTEED TURF MACHINERY

FORD 3610 Tractor, Q cab and loader	£4,950
RANSOMES 213D Triple Mower	£5,950
KUBOTA B7100 HST 4 w/d c/w Mid Mower	£3,250
KUBOTA B8200 4 w/d	£3,850
KUBOTA L345 4 w/d 34hp	£3,850
KUBOTA B8200 HST Loader and back actor	£6,95
KUBOTA L245 24 hp with cab	£3,450
Power loader for above	P.O.A.
MASSEY FERGUSON 20E 45hp c/w cab	£3,850
TORO Greenmaster triple	£5,850
RYAN Turf-cutter auto cut off new engine	£3,750
RANSOMES 3 trailed gang mowers	£1,850
RANSOMES 3 hydraulic gang mowers	£2,250
LLOYDS 5 gang mowers on Parkover frame	£3,850



Ring NOW for full machinery list.  
National delivery arranged.



**LEEDS (0532) 751627**  
Harold Terrace, Headingley,  
Leeds LS6 1PG





# EARTHMOVING EQUIPMENT IN GOLF COURSE CONSTRUCTION

**G**olf Course Construction, since the turn of the century, has seen numerous changes.

Where once the natural terrain dictated the flow through the course, the bringing into use of land for golf courses where there was no visible layout has forced its creation.

The use of an increasing range of heavy earth moving equipment has now made that possible, turning flat waste or poor farmland into attractive parkland sites where many imitations of the original home of golf can be produced.

Not only imitations, but through the skills of the designer and architect, rolling fairways, elevated tees and greens as well as attractive water course and hewn from the land to produce new courses stamped with their own unique style.

None of this would have been possible without the earth moving equipment, bulldozers, graders, stone rakers, mechanical shovels and diggers at the disposal of the constructor.

The new course at West Hove is a case in point. Because the family owners of the club sold out to Wimpey, it seemed the members would not have a course to play but through the energetic activities of Frank Shannon and Bernard Barker, the chairman of the new course committee, land was bought alongside the old course and plans were passed for a construction.

The new West Hove 18 hole course will open next year, but not before many associated with the club will play a last nostalgic round prior to the tearing up of the fairways.

West Hove's lease from Wimpeys runs out in January next year and a month



*New Squier 40 Land Clearer/Beach Cleaner*

later the clubhouse should be completed. It will cost around £400,000. Thanks to the marvellous summer, the new course was laid out two months ahead of schedule. It measures 6,200 yards compared with the 6,130 of the old course and the architects are Hawtree and Sons.

Chris Collins, the Burgess Hill-based contractor is to be congratulated on his firm shifting 70,000 cubic metres of chalk between June 1 and the end of last October.

Collins employed about a dozen men and they worked with a will to give West Hove their new 18 holes.

Tree planting and landscaping has still to be completed and that won't take long. Most fairways were seeded and existing grassland was good enough for others.

Trickiest time will be the actual change-over when the earth-movers arrive to eradicate all traces of the old course and the golfers change over to the new. Before that happens there will be more than the odd auld lang syne event. The Sussex PGA, who regard West Hove as their home, have said they will have one or two more meetings there.

**T**he Squier 40 has been developed for automatic, one-man clearance of stones, rocks and trash in the preparation of golf courses, site clearance and general landscaping.

Driven by a 60hp (45kw) tractor equipped with one hydraulic circuit and P.T.O. the Squier 40 takes up about six inches of cultivated soil over a cleaning trace which returns the fine soil to the ground and retains stones, clods, rocks and trash in a one cubic metre hopper. Various sizes of trace are available to determine the size of stones to be retained. Once the hopper is full, the operator can off-load at the side of the site or into a depression simply by operating one hydraulic lever. This tilts the box upwards and backwards to a height of 1.25m. Depth of work is controlled by two pneumatic tyred front wheels. Length of the Squier 40 is 4m, working width 1.5m and weight, unladen, 1800kgs.

The Squier 40 is manufactured by Key Agricultural Ltd, Peterborough and incorporates several components common to their KeyAg Squier range of stone and clod separating equipment. Basic price is around £12,500.

## CLEAR STONES, ROCKS *and* BEACHES - one man operation...

Cost-effective landscaping of playing fields, golf courses, beach cleaning and many year round applications. Ideal for contractors, plant hirers and farm diversification.

Wide range of agricultural operations.

UNIQUE FEATURES INCLUDE:

- Choice of pick-up sizes: 18-52mm gaps
- Large 1 cu.m. hopper with easy unloading
- Simple, robust construction

**SQUIER 40 LAND CLEARER**



Further information today from:  
SQUIER ENGINEERING Tel: (0787) 72233 Fax: (0787) 76946



**R**aymond L Brown (Construction) Ltd, are based at Ringwood in Hampshire and undertake a variety of contracts involving bulk earthmoving throughout Southern England.

The large plant fleet includes specialised equipment designed to work on extremely soft ground, and all items of plant can be hired or contracted.

Among recent or current contracts is the construction of lakes and hills for a new golf course at Wisley in Surrey, and extension of the golf course at Moors Valley Country Park in Dorset and earthworks and preparation work for an all weather horse racing track at Lingfield Park, Sussex.

**I**n recent years the compact tractor has been a popular answer to many problems on the golf course. These light weight tractors, which normally have 4wd, have revolutionized ideas for greens and fairways maintenance. However, tractors on their own are of little use and so a range of equipment has been designed to suit. One part of this range is made by Lewis Equipment who have spent the last 10 years manufacturing diggers and loaders to suit all makes and sizes of compact tractors. The reason for their popularity has been the design, enabling equipment to be taken off the tractor and replaced with, for example, a mower, in less than 5 minutes.

For larger tractors a 3 point linkage

digger is available, enabling maintenance to be done on ditches of up to 9' deep. This machine is half the weight of most conventional diggers, an advantage on any course.

**M**anor Excavators also produce a range of quality, British mini excavators for a golf course looking for a highly mobile and efficient digger at low cost.

Twelve models complete the Micron, (below) Gopher and 5 Star ranges.

New in 1989 are the power drive Micron 680 and more powerful Micron 720, plus the 5 Star 4x4 all of which have added a degree of mobility not

previously achieved with this type of machine.

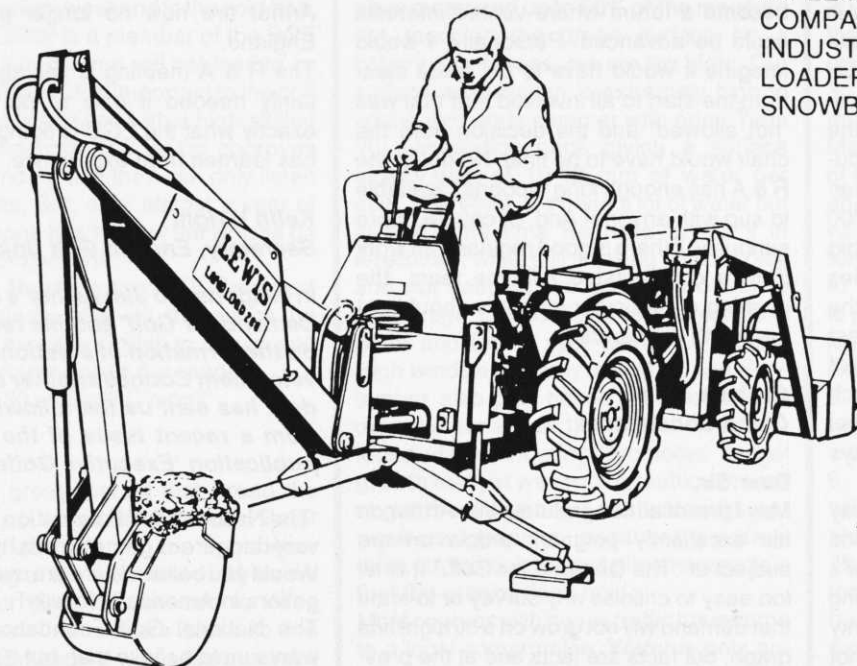
Operation of all excavators in the Manor range is through twin 'joystick' levers which control all boom and dipper functions. Speed and direction on power drive models are governed by separate levers acting on hydrostatic drive motors.

All models are available with either petrol or diesel and an extensive selection of buckets and ancillaries.

Manor mini diggers are ruggedly designed for working in arduous conditions and on any ground. They are ideal for working on tight sites where large machines just cannot be used.



## LEWIS EQUIPMENT LTD



IMPLEMENT MANUFACTURERS FOR  
COMPACT TRACTORS FOR MUNICIPAL,  
INDUSTRIAL AND PRIVATE USE.  
LOADERS, BACKHOES, TRAILERS,  
SNOWBLADES.

STANDARD OR  
4-in-1 BUCKETS

ANY MAKE OR SIZE 16-35 HP

STANDARD OR  
EJECTING BUCKET

IF YOU'RE THINKING COMPACT CALL LEWIS AND ASK FOR MORE  
DETAILS OR A DEMONSTRATION

LEWIS EQUIPMENT LTD, WATERLOO ROAD, BIDFORD-ON-AVON, WARWICKSHIRE B50 4JH  
TELEPHONE: 0789 773044 TELEX: 312651



## FROM THE FAIRWAY

Dear Sir,

I have read with interest Jim Arthur's article in your November/December issue commenting on the R & A's recent publication "The Demand for Golf". Having been closely involved with the production of that document I would like, if I may, to make a few points in the hope of clarifying some of the issues as I see them.

I must emphasise to any readers who do not already know, that information on the usage or potential through-put of existing golf courses is extremely difficult to come by, and in many cases impossible in the short term, since most members' clubs do not keep or calculate such figures. As members' clubs still account for three out of four courses, the traditional way of relating supply and demand - i.e., how does "production capacity" compare with "market demand" - was not open to us and we therefore decided on an alternative yardstick, relating the number of holes available in each main statistical region to the population of each. Although this is a very rough and ready guide, it does at least give a first indication, region by region, of the differing degrees to which people have the opportunity (or more relevantly don't have the opportunity) to play golf. Mr Arthur is quite right to point out that some regions have large seasonal demands from tourists and holidaymakers, which is not reflected in such figures, and of course, the counties round big conurbations, particularly London, have to provide more than the average number of courses per 100,000 population if the inhabitants of the big cities are to have adequate opportunities to play. Nevertheless, I believe that the great amount of discussion and interest which has already surfaced as a result of these rough figures will encourage much more accurate examination at local level of the state of affairs and of practical ways in which shortfalls can be alleviated.

I would be less than honest if I did not say that I expect some of the local solutions which result will not meet with Mr Arthur's unfettered endorsement! For if one is dying of thirst even a sip of somewhat murky water may be irresistible. Indeed, it is not necessarily for those of us who are lucky enough to enjoy excellent established courses to condemn others if they settle for something less. After all the condition of the "browns" in some tropical countries used to be almost as much a matter for

discussion as *poa annua* now is in the Northern Countries. But they had golf instead of no golf and developed their social facilities round the course and got handicaps and won tournaments and so on. If you have to settle for half a loaf instead of no bread surely it is up to the master chefs to show how the best pitta can be made with the ingredients available, at a picnic which the natives can afford. If the best minds concentrate on the problem and come up with a value-for-money recipe for simple courses - not perfect courses - surely there could then be the possibility of training more of the designers of new proprietary courses in the basic fundamentals, so that they do indeed get things right first time. If we wait for the day when all courses will have been designed by qualified architects, may we not be overtaken by events?

There are so many issues raised in Mr Arthur's interesting and provocative article that I obviously cannot respond to them here but I would just like to make a final point about the proposed National Development Council which I believe is the nub of the whole report. I well understand Mr Arthur's concern that such a body could become a forum where vested interests could be advanced. Personally, I would imagine it would have to be made clear from the start to all involved that that was "not allowed" and the decision from the chair would have to be final. No doubt the R & A has enough long "spoons" available to sup with anyone! And, of course, more seriously, if there is good regular staff work from a disinterested full-time team, the pushing of particular interests should not be "worth the candle".

**Graham Hurst**  
*Glebe Consultants*

Dear Sir,

May I first of all congratulate Jim Arthur on his excellently poignant article on the subject of "The Demand for Golf." It is all too easy to criticise any survey or to state that demand will not grow on a straight line graph, but facts are facts and at the present time demand for golf exceeds the supply of adequate facilities. Some three years ago the EGU Secretariat concluded that 500 courses were needed. At the time the telephones were ringing on a regular basis and callers were

obviously in need of help.

As a direct result the EGU Golf Development Committee was formed with the specific intention of providing advice in connection with the wide range of enquiries. At all times it was the intention to make sure that any development was supervised by the real professionals. The members of the Committee have considerable experience in the field of development and if they don't know something they know a man who does.

To be brief, since the early days we have invested money to ensure that the service we offer is a "professional" service, although fees are not charged. We called a meeting of all interested parties, including the architects, constructors, nature conservation personnel and at the meeting it was agreed that golf development should be coordinated by the EGU.

Mr Hurst's point that Golf Development should be in the hands of a full time group of professionals, is in our view wrong. We do not feel there is a need to create yet another body, for our organisation was in the field early and as a result has gained valuable experience and expertise. In fact some of the problems mentioned by Mr Arthur are now no longer problems in England.

The R & A meeting is valuable and certainly needed if only to put on record exactly what the EGU is doing and how it has learned from experience.

**Keith Wright**  
*Secretary, English Golf Union*

*In response to Jim Arthur's article 'The Demand for Golf' and his reservations on the formation of a National Golf Development Council another correspondent has sent us the following extract from a recent issue of the American publication 'Executive Golfer'*

"The National Golf Foundation is playing a very dangerous game with its hype on golf! Would you believe there are over 23 million golfers in America? No way!

The National Golf Foundation not only wants us to believe that, but it projects 30 million golfers by 1999, a net gain of one million golfers each year for the next 10 years. Even Barnum and Bailey would be impressed with the magnitude of this kind of hype.

The NGF is well-intentioned, but it is play-



## FROM THE FAIRWAY

ing a very dangerous game and could seriously wound the golf industry. I wonder if they thought about that.

Major firms such as Mercedes-Benz, the National Multiple Sclerosis Society, some leading golf manufacturers, golf resorts and golf communities are beginning to believe it. The danger is in the fact that they are making huge capital investments to meet the demands of those projections. What happens if there is no such growth? Take the extravagant claim of 23 million golfers in America today. Where does the NGF get these figures? Simple arithmetic will show you it's impossible!

To illustrate my point, let's use the NGF figures of 23 million (using round numbers) and 13,000 golf courses in America. By dividing 13,000 into 23 million each course would have an average membership of 1,770. When you consider the fact that almost 50% of America's golf courses are nine-holers, and that the average membership of a fine private country club is approximately 400, then simple arithmetic makes a figure of 23 million golfers in America hard to digest.

A key factor is the definition of a golfer. To me, a golfer is someone who plays at least 16 rounds per year. That would be one round each warm weekend in the cold belt. Executive Golfer is a member of the BGF and I hope this column will not lead to its expulsion. The NGF is important to the golf industry and is blessed with a high-skilled Board of Directors. The Board approves research funding and then can only listen to the results. But, after almost a year of hype, someone has to blow the whistle on those wild projections.

Dr. Joseph Beditz is the NGF President and we'll gladly offer all the space he needs in Executive Golfer to clarify and justify his projections to our readers. 23 million? 30 million? C'mon!"

**Dear Sir,**

It was with great interest that I read the exchange on irrigation between Peter Wisbey and Jim Arthur in the September issue. Being at the back end of Africa we only get our 'Golf Course' two to three months later. As we are close to the equator in Zimbabwe with seasonal rainfall (Nov/March) and high average temperatures (28°C Summer/21°C Winter) with our relative humidity depending on rainfall varying from 18% to 98%, this means that the 'Rolls-Royce' mixtures of Fescues/Bents etc we read about don't do

well and we have to rely on Bermuda grass (*Cynodon* sp) for our greens. With only 5 months of rainfall we must irrigate to keep any sort of green going. Therefore, irrigation management is critical if a decent green is required for the whole year. Bermuda grass greens grow well but can give a very hard surface under dry conditions. They putt true but hold like polished concrete. Unlike the greens mentioned in the Wisbey/Arthur exchange, drainage is seldom if ever a problem, water deficit rather than water excess characterizes our situation. Even though our situation is diametrically opposite to that experienced by the majority of your readers, often lessons can be learnt from basic principles that apply to all. I therefore offer my comments from the standpoint. We have the whole range of sprinklers for irrigation over greens, from the most up to date state of the art 'pop-ups' to hand held hose with rose. In general we have found that most sprinkler systems tend to apply water at a faster rate than the green surface can absorb them.

With low humidities and high winds, if our pumping pressures are too high and nozzles too small we get excessive atomization and 'perfect' evaporation. We have measured up to 50% of the moisture not reaching the green surface on a hot dry day if pressures are too high. Our surface evaporation is extremely high in spring and early summer with open Type 'A' evaporation pans giving a surface evaporation of 10-12 mm of water per day. Therefore, we need a lot of water but at the same time we have to put it in effectively, while still allowing time for play and not keeping the surface too wet to encourage fungus diseases (*Drechslera poae* and Dollar spot being the worst). High winds especially in August and September also play havoc with distribution over the surface of the green. We have found daily watering promotes fungal growth and yet we require sufficient time to get the water on. Less waterings per week are unpopular because the surface dries out too quickly and players complain that the greens don't hold.

Most courses with heavy traffic have come to a local compromise. Water is only applied at night, early morning or late evening at a maximum of 3 times per week with a 5mm spurt on the morning of major competitions to keep the players happy. On new greens we've had excellent results, even in our hottest months, with two

irrigations per week, but the players complain about hard greens on non-irrigation days. With the large amount of water required in the hot months 84-90mm/week to offset the very dry conditions it has therefore, been essential to develop a scheduling system especially where water supply is limited, bearing in mind that both over and under watering causes problems).

Scheduling is based on calculations of the evapotranspiration rate against the evaporation from an open surface of water ( $E_t/E_o$ ) and the relation of this to the moisture extraction depth of the roots and the stage of growth of the grass. Added to this is a conversion factor for the efficiency of the watering system. This net amount is then measured during watering by using strategically placed rain gauges, especially on windy days. We have found that in our 'dry' regime as opposed to the 'wet' regime most of your readers experience, efficient water application makes the difference between a very good green and a poorly grown hard green. The principles we adhere to rigorously are:-

1. A weekly determination of the amount of water required based on an irrigation schedule related to growing conditions.
2. Adequate supervision to make sure that the irrigation systems are being used under optimum conditions.
3. Constant measuring of exactly how much water is actually put on each green. Manufacturers specifications or the rating of the equipment is used only as a guide and not relied on particularly because of variations in Relative Humidity, Temperature and Windspeed.
4. Continual checking of application rate to prevent run off. A useful guide we have found is that as soon as a green starts to shed water it is time for a verticut.
5. With fixed sprinkler positions under very adverse conditions supplementation with hand watering is also practised.
6. Not relying on programmed irrigations willy-nilly despite all the fancy computer programmes etc. that comes with them. The criteria on which these are based are too generalized and nothing makes up for basic good 'on the ground' management especially if problems occur.

I would certainly be interested in other people's comments as you can always learn from others.

**Dr. D.S. McClymont**  
**Royal Harare Golf Club**



# BUYERS GUIDE - BUYERS GUIDE - BUYERS GUIDE

## BARK AND BARK BASED PRODUCTS

### CAMLAND PRODUCTS LTD

Fordham House,  
Fordham, Cambs. CB7 5LN  
Tel: 0638 721100  
Telex: 81254

### MELCOURT INDUSTRIES LIMITED

Three Cups House, 5 Church  
Street, Tetbury, Gloucester-  
shire. GL8 8JG Tel: (0666)  
502711 Telex: 43144  
Fax: (0666) 504398

## BRITISH ASSOCIATION OF GOLF COURSE ARCHITECTS

Full members

### J. HAMILTON STUTT - HAMILTON STUTT & CO.

Bergen 12, Bingham Ave,  
Poole, Dorset. BH14 8NE  
Tel: 0202 708406

### DONALD HARRADINE PETER HARRADINE

CH6987, Caslano,  
Switzerland.  
Tel: 091 711561

FRED HAWTREE,  
MARTIN HAWTREE,  
SIMON GIDMAN  
HAWTREE & SON  
5 Oxford Street, Woodstock,  
Oxford. OX7 1TQ  
Tel: 0993 811976

### DONALD STEEL

The Forum, Stirling Road,  
Chichester, West Sussex.  
PO19 2EN  
Tel: 0243 531901

### TOM MCAULEY

38 Moira Drive, Bangor, Co.  
Down, N. Ireland. BT20 4RW  
Tel: 0247 465953

Provisional

PETER BELLCHAMBERS,  
STEVEN McFARLANE,  
HAWTREE & SON  
5 Oxford Street,  
Woodstock, Oxon. OX7 1TQ  
Tel: 0993 811976

### ALISTAIR RAE

26 Tannoch Road,  
Uplawmoor, Glasgow,  
G78 4AD  
Tel: 050 585 371

### STEFEN QUENOUILLE c/o TOM MCAULEY

38 Moira Drive, Bangor, Co.  
Down, N. Ireland BT20 4RW  
Tel: 0247 465953

### CAMERON SINCLAIR

Marsh Watson PTY Ltd.,  
P.O.Box 136,  
Nerang. Q.4211, Australia.  
Tel: 075 58 4733

### JEREMY PERN

13 Lotissement des Chenes,  
Aussonne 31700,  
Blagnac (Toulouse)  
France  
Tel: 61 85 09 02

Overseas full

### EDDIE HACKETT

28 Ailesbury Drive,  
Dublin 4,  
Eire.  
Tel: Dublin 691592

### JOAN DUDOK VAN HEEL

Beukenlaan 4,  
B-1640, St Genesius-Rode,  
Nr. Brussels,  
Belgium.  
Tel: 02-3583387

### PIER MANCINELLI

21 Via Achille Papa  
00195, Rome,  
Italy.  
Tel: 06-36036-35

### JAN SEDERHOLM

S 252 34 Helsingborg  
K. Krisoffersweg 3A Sweden.  
Tel: 042-371-84

Overseas provisional

### KURT ROBKNIGHT

Dennenmoos 5a,  
8990 Lindau-Bad,  
Schachen, Germany.  
Tel: 08382-230-05

### R. BERTHET

Chateau du Tremblay  
S/Mauldre 78490 Montfort  
L'Amaury France  
Tel: (1) 34879200

### TJASA GREGORIC

Kobilarna Lipica, 66 210  
Sezania  
Yugoslavia

### GERARD JOL

Landschapsarchitekt bnt,  
Middenduinerweg 75,  
2082 LC Santpoort  
The Netherlands  
Tel: 023 376449

## COMPOSTS

### RUFFORD TOP DRESS SUPPLIES LTD

Nucks Wood Quarry, Wiggins  
Lane, Rufford. Nr Southport.  
L40 1UJ  
Tel: 0704 821900  
Fax: 0704 822583

## FERTILISER & TURF DRESSINGS

### BOUGHTON LOAM LTD

Telford Way, Telford Way Ind.  
Estate, Kettering, Northants  
NN6 8UN Tel: 0536 510515  
Suppliers of Loams, Sports  
and Horticultural Dressings

## GOLF COURSE ACCESSORIES

### WOODBLAST T-SIGNS

Quality signage in carved cedar  
wood or green slate.  
Colour brochure and details from:  
Woodblast Signs, Lower Standen  
Hay, Whalley Road, Clitheroe,  
Lancs. BB7 1PP  
Tel: 0200 - 22156 Telex: 635562  
griffin G Fax: 0200 - 28576



H. PATTISSON & CO. LTD.  
342 Selbourne Road, Luton, Beds.  
LU4 8NU Tel: 0582 - 597262  
Fax: 0582 - 505241

### TACIT

Unit 3, 3 Millers Lane, Monks  
Kirby, Rugby, CV23 0RJ  
Tel: 0788 832166  
*The very best for less in golf  
course equipment*

## GOLF COURSE CONTRACTORS

### BRIAN D. PIERSON (CONTRACTORS LTD)

Homestead Farm, Ringwood  
Road, Three Legged Cross,  
Wimbourne, Dorset. BH12 6QR  
Tel: 0202 822372/824906

### LANDSCAPE MAINTENANCE LTD

167 Station Road,  
West Moors, Dorset.  
Tel: 0202 872549

### GOLF LANDSCAPES LTD

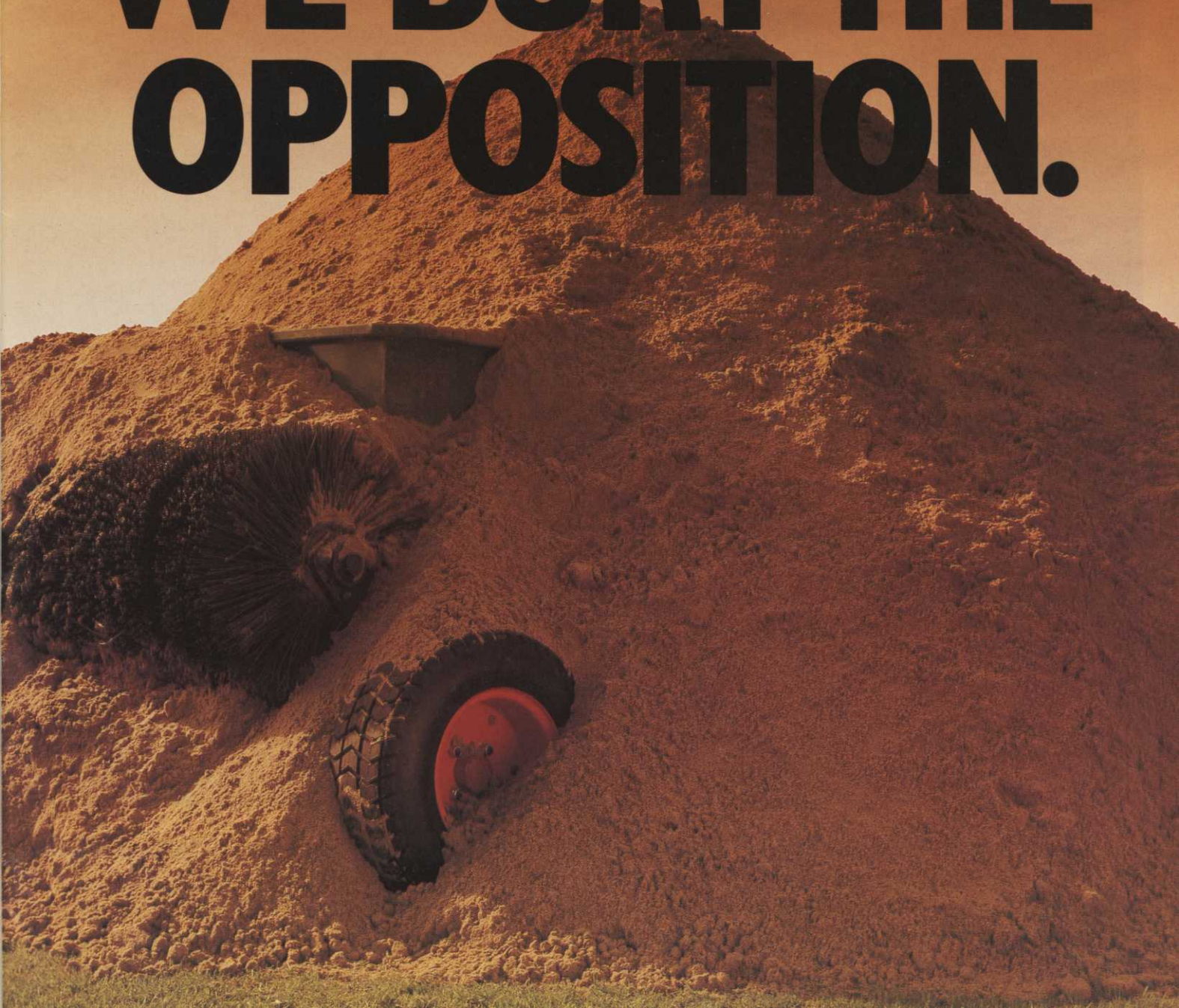
Ashwells Road, Bentley,  
Brentwood, Essex.  
CM15 9SR  
Tel: 0277 373720

### LAND UNIT CONSTRUCTION LTD

Folly Farm, Hanslope, Milton  
Keynes, Bucks. MK19 7BX  
Tel: 0908510414



**WHEN IT  
COMES TO TOP  
DRESSING,  
WE BURY THE  
OPPOSITION.**





# AT OVER 400 TONS ITS FAME IS SPREAD



The Charterhouse Bulk Dresser is the only purpose-designed machine on the market today to offer you such incredible capability.

With a spreading width of up to 12 yards it can top dress to an infinitely variable depth, from just a fine dusting to a layer over  $\frac{3}{4}$ " thick.

And it can apply well over 400 tonnes a day.

Just the job to make short work of the largest playing fields and sports pitches.



# WINES A DAY, LOADING FAST.



Following closely on its heels in the Charterhouse line-up is the Greens Dress.

As its name suggests, it's designed more for the golf

course than the concourse. It can easily top-dress over 36 greens per day and is the ideal machine for working in conjunction with compact tractors.

It'll take wet materials in its stride and its simplicity itself to adjust the depth of spread, whilst its double wheels minimise compaction.



Not surprising Greens Dress is regarded by greenkeepers everywhere as the top favourite top dresser.

To round off the top dresser range there's the unique Easy Spread.



It's unique in that it loads itself.

Easy, because it's a simple one-man operation to spread up to 80 tonnes a day with an adjustable thickness from dusting to 1/2" without the operator so much as leaving the cab.

Without doubt, Easy Spread is the perfect low-cost solution to what was a most back-breaking task.



# TOP DRESSERS THAT BURY THE REST.

With three models in the Charterhouse line-up we're confident you'll find the right machine to suit your requirements.

Just to prove the point your local Charterhouse dealer will be delighted to demonstrate the machine of your choice on your own ground.

All you have to do is ask.



## THE BEST PRODUCTS AND THE BEST SERVICE.

At Charterhouse, quality is more than just a word.

It's a fundamental part of our company philosophy which, we hope, will become apparent to you in every sphere of our operation.

Our products for example, are the finest you can buy because of the quality of design, craftsmanship and construction that goes into them all.

Products that do far more than just 'do the job'.

They incorporate many unique features that take turf management into a whole new dimension.

They are, we believe, the most advanced machines on the market today.

But even the best equipment would be of limited value without an after-sales

and service back-up to match.

Here we believe we offer you the very, very best.

Not simply by having a first rate dealer network throughout the country.

Or by offering 24 hour parts availability.

It's by developing the kind of relationship with our customers, built on mutual trust and respect, that encourages a two-way dialogue, and enables us to build the machines we know you want.



Charterhouse Turf Machinery Ltd., Pink's Yard, 34 Church Road, Milford, Surrey GU8 5JD. Tel: Godalming (04868) 24411 and 21040. Telex: Teknis G 859585. Fax: (0483) 860184.

Due to a policy of continuous improvement, specifications are subject to change without notification.

Please send me details of Charterhouse Top Dressers  Other Charterhouse products  Type of application: Golf course  Playing field

Other (please state) \_\_\_\_\_

Name: \_\_\_\_\_

Position: \_\_\_\_\_

Establishment/Company/Authority: \_\_\_\_\_

Address: \_\_\_\_\_

Post Code: \_\_\_\_\_

Tel: \_\_\_\_\_

Post to: Charterhouse Turf Machinery Ltd., Pink's Yard, 34 Church Road, Milford, Surrey GU8 5JD.

GC2/90



# BUYERS GUIDE - BUYERS GUIDE - BUYERS GUIDE

## SPORTWORKS LTD

Wardhouse Road,  
Montrose, DD10 9ES  
Tel: 0674 73900

## CAMERON IRRIGATION (A DIVISION OF WRIGHT RAIN LTD)

Hardwood Ind. Est.,  
Littlehampton, West Sussex.  
BN17 7BA  
Tel: (0903) 713985

## Watermation

GOLF COURSE IRRIGATION  
Monument Way East, Woking,  
Surrey. GU21 5LY  
Woking 70303/21009

## PEST CONTROL

### A & R FAIRWAY PEST CONTROL

Trawstmawr, Llanegryn,  
Tgwyn, Gwynedd. LL36 9LN  
Andrew Venables  
0654 710128 (24hrs)

## GRASS CUTTING EQUIPMENT

### RANSOMES, SIMS & JEFFERIES PLC

Ransomes Way, Ipswich,  
Suffolk. IP3 9QG  
Tel: 0473 270000 Fax: 0473  
270032 Telex: 98174  
Cables: Ransomes, Ipswich.

## FLANDERBLADE LTD

20 Whiteacre, Littlehampton,  
West Sussex.  
BN17 7JA  
Tel: (0903) 724545

## PHILIP YORK AND ASSOCIATES

P.O. Box 294,  
Christchurch, Dorset.  
BH23 8EY  
Tel: 0425 472900

## QUALITY TURF

### TILLER TURF CO LTD

Park House, Worlaby,  
Brigg, S. Humberside.  
DN20 ONF  
Contact: Tim Fell 065 261 451

## VOTEX HEREFORD LTD

Friar Street, Hereford.  
Tel: Hereford 0432 274361  
Telex: 35302  
W. Naylor or contact your  
dealer.

## IRRIGATION AND SLURRY SERVICES

Unit 6, The Bourne Centre,  
Southampton Road, Salisbury,  
Wilts. Tel: 0722 412510  
S.W. office 0271 830800  
Full member BTIA. Southern  
area Toro distributor

## LIQUID ORGANIC FERTILISER

FARMURA  
ENVIRONMENTAL  
PRODUCTS LTD  
Stone Hill, Egerton,  
Nr. Ashford, Kent.  
Tel: 023376 241

## RECONDITIONED GRASS CUTTING EQUIPMENT

### GREENSWARD ENGINEERING CO.

Harold Terrace,  
Off Cardigan Road,  
Headingley, Leeds.  
LS6 1PG  
0532 751627



## GRASS SEED

### BRITISH SEED HOUSES LTD

Bewsey Ind. Est. Pitt Street, Warrington,  
Cheshire. Tel: 0925 54411  
Contact: Roger Saunders.  
Portview Road, Avonmouth, Bristol.  
BS11 9JH Tel: 0272 823691  
Contact: Michael Warne  
Camp Road, Swinderby, Lincoln.  
Tel: 0522 86714 Contact: Philip Adams,  
Eastfield Ind. Est., Penicuik, Midlothian.  
Tel: 0968 78480 Contact: Michael Shannon

## PRIME WATERMEN LTD

Wangford, Beccles,  
Suffolk.  
NR34 8AX  
Tel: 050278 481

## LOAM

### C. H. BINDER LTD

Embleys Farm, Moreton,  
Ongar, Essex.  
CM5 OHY  
Tel: Moreton 246-320

## SPORTS TURF SERVICES

Newbridge Ind. Est.,  
Newbridge, Midlothian,  
EH28 8LE  
Tel: 031333 2345

## NAMEPLATES & PLAQUES

### THOS. A. INGRAM & CO. LTD.

P O Box 305, 68 Soho Hill,  
Birmingham B19 1BB Tel: 021  
554 4576.  
*Full colour brochure available  
(Commemorative Plaques,  
Seat Plates, etc)*

## MOMMERSTEEG INTERNATIONAL

Station Road, Finedon,  
Wellingborough, Northants.  
NN9 5NT Tel: 0933 680891  
Telex: 311234  
Contact: Michael Perkins

## TORO IRRIGATION LTD

Unit 7, Millstream Trading  
Estate, Christchurch Road,  
Ringwood, Hampshire. BH24  
3SD Tel: (0425) 476261  
*also Toro International Sales  
Co - address as above*

## PEAT

### BORD NA MONA

36 King Street, Bristol.  
BS1 4DP  
Tel: 0272 211666

## BUCKLAND SAND & SILICA CO. LTD.

Reigate Heath,  
Reigate, Surrey.  
Tel: 07372 40151

## WETTERN BROTHERS LIMITED

RMC House, Canning Street,  
Maidstone, Kent. ME14 2RX  
Tel: 0622 762361  
Contact: Chris Perkins

## IRRIGATION

### BELL TURF AND IRRIGATION SERVICES

Milners Holt, Everton,  
Doncaster. DN10 5DR  
Tel: 0777 817410  
TORO AGENTS for the E.Midlands  
FULL MEMBERS OF THE BTIA

## TURF IRRIGATION SERVICES LTD

Betchton, Sandbach,  
Cheshire. CW11 OTS  
Tel: (04775) 255/6

## PEAT IN BULK

### BORD NA MONA

36 King Street, Bristol.  
BS1 4DP  
Tel: 0272 211666

## SCREENED TOP SOIL

### RUFFORD TOP DRESS SUPPLIES LTD

Nucks Wood Quarry,  
Wiggins Lane, Rufford,  
Nr. Southport. L40 1UJ  
Tel: 0704 821900  
Fax: 0704 822583

IRRIGATION IS OUR BUSINESS  
WE MANUFACTURE D DESIGN, INSTALL  
SYSTEMS FOR SPORTS LANDSCAPE,  
AMENITY AREAS  
ADVICE AND QUOTATIONS FREE OF  
CHARGE

### BRITISH OVERHEAD IRRIGATION LIMITED

The Green, Upper Hallford, Shepperton,  
Middlesex. TW17 8RY Tel: 09327 88301/4  
IRRIGATION SPECIALISTS SINCE 1923





# Jupiter

The new heart  
of the  
sports and amenity  
turf universe.

Jupiter — a new slender creeping Red Fescue. Swift to establish, bright emerald green and suited to both close mowing and no mowing policies. Jupiter has good disease resistance, drought tolerance and maintains good summer and winter colour.

And now Jupiter is universal throughout the J-Range mixtures — a superb range for all sports and amenity purposes. Alongside varieties like Waldorf, Epsom, Banner, Dawson, Arno and Ranger, Jupiter puts the J-Range light years ahead.

**JOHNSONS**  
**J Range**

**SPORTS AND AMENITY GRASSES**

W. W. Johnson & Son Ltd., London Road, Boston, Lincs PE21 8AD Tel: Boston (0205) 65051  
Branches at Haydock, Merseyside and Woodley, Berks



# Brian D. Pierson (Contractors) Limited

## THE SPECIALIST GOLF COURSE CONSTRUCTORS

ARE  
READY  
FOR



**NEW COURSES**

**ALTERATIONS**

**BUNKER CONSTRUCTION**

**VERTI-DRAINING**

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



# BUYERS GUIDE - BUYERS GUIDE - BUYERS GUIDE

## SEATS

### BARLOW TYRIE LTD

Braintree, Essex. CM7 7RN  
Tel: Braintree 0376 22505  
Telex: 98173 Fax: Braintree  
0376 47052  
(brochure available)

## SEAWEED FERTILISER

### SEAMAC

Foundry Lane,  
Chippenham,  
Wilts.  
Tel: 0249 652811

## SEMI MATURE TREES

### EASTCOTE NURSERIES (SOLIHULL) LTD

Wood Lane, Barston, Solihull,  
West Midlands. B92 OJL  
Tel: 06755 2033/4  
Fax: 06755 2324

## SEMI MATURE TREE PLANTING EQUIPMENT

### EASTCOTE NURSERIES (SOLIHULL) LTD

Wood Lane, Barston, Solihull,  
West Midlands. B92 OJL  
Tel: 06755 2033/4  
Fax: 06755 2324

## TEE MATS

### CARPETITION LTD

14 Kaffir Road, Edgerton,  
Huddersfield.  
HD2 2AN  
Tel: (0484) 428777

### PSA THRESHOLD LTD

Vorda Works, Highworth,  
Swindon, Wilts. SN6 7AJ  
Tel: 0793 764301  
Fax: 0793 765319

### PSA THRESHOLD LTD

Vorda Works, Highworth,  
Swindon, Wilts. SN6 7AJ  
Tel: 0793 764301  
Fax: 0793 765319

## TOP DRESSINGS

### MELCOURT INDUSTRIES LIMITED

Three Cups House, 5 Church  
Street, Tetbury, Gloucester-  
shire. GL8 8JG Tel: (0666)  
502711 Telex: 43144  
Fax: (0666) 504398

### RUFFORD TOP-DRESS SUPPLIES LTD

Nucks Wood Quarry, Wiggins  
Lane, Rufford, Nr. Southport.  
L40 1UJ Tel: 0704 821900  
Fax: 0704 822583

## GRADED TOPSOIL AND STERILISED LOAM

### REMBRAND LTD

Suitable for the construction of  
bowling/golf greens and fine  
turf areas.  
Deliveries throughout central  
Scotland.  
Rembrand Ltd., Longtown St.,  
Dundee. Tel: 0382 504088

## TORO & ISEKI SALES & SERVICE

### D & J NEEDHAM LTD

*Toro & Iseki, Sales, Service &  
Parts (24hr Datapost service).*  
Darlington Road, Middleton-St-  
George, Darlington, Co. Durham  
DL2 1LH Tel: 0325 332991  
Contact: Needham or M. Grange

## TREE GUARDS

### LENVALE PRODUCTS LTD

5 Wheeler Street  
HEADCORN, ASHFORD, KENT.  
STEEL & PLASTIC GUARDS  
(Incl Spiral Guards)  
For all round TREE PROTECTION  
Tel: 0622 890909  
Fax: 0622 890783

## TREES AND SHRUBS

### EASTCOTE NURSERIES (SOLIHULL) LTD

Wood Lane, Barston, Solihull,  
West Midlands. B92 OJL  
Tel: 06755 2033/4  
Fax: 06755 2324

## T. HILLING & CO. LIMITED

Upperfold Farm Nursery,  
Fernhurst, Nr. Haslemere,  
Surrey. GU27 3JH  
Tel: 0428 53505



NOTCUTTS NURSERIES LTD  
Woodbridge, Suffolk. IP12 4AF  
Tel: 03943 3344  
Fax: 03943 85460

## TAYLOR TREES

Cliffe House, Cliffe Lane,  
Great Harwood, Lancs.  
BB6 7PG  
Tel: 0254 884563  
Tlx: 635384

## TREE TIES

### TOMS TREE TIES

MOULDED RUBBER PADS  
with reinforced or expandable  
RUBBER BELT  
Illustrated brochure from  
J. TOMS LTD, Wheeler Street, Headcorn,  
Ashford, Kent. TN27 9SH  
Tel: 0622 891111 Fax: 0622 890783

## TRENCHERS

### A. F. TRENCHERS LTD

Gosbecks Road,  
Colchester, Essex.  
CO2 9JS Tel: 0206 44411  
Fax: 0206 44414  
Contact: W.D. Baker



L. D. BOURGEIN OXFORD LTD  
Freeport, South Hinksey, Oxford. OX15BR  
Tel: 0865 735420 Telex: 83147 Sales,  
parts, mobile trenching service.

## VERTI DRAIN HIRE

### AERATION & DRAINAGE SERVICES

28 Westminster Close,  
Eastbourne, East Sussex.  
Tel: 0323 506725

### BRIAN D. PIERSON (CONTRACTORS) LTD

Homestead Farm, Ringwood  
Road, Three Legged Cross,  
Wimbourne, Dorset. BH12 6QY  
Tel: 0202 822372/824906

### E & S SPORTSGROUND CONTRACTORS

23 Knox Green,  
Binfield, Bracknell, Berks.  
RG12 5NZ  
Tel: 0344 860690  
(Richard Veitch)

### HERONFIELD HIRE (SOLIHULL)

Tel: 05645 2597  
Moore Sportsfield  
over-seeder, Toro and  
Greensaire aerators

### S.C.C LANDS MAINTENANCE

37 Roman Way,  
Turpins Ride, Haverhill,  
Suffolk. CB9 ONG  
Tel: 0440 62369

**ADVERTISE IN THE  
'EUROPEAN'  
BUYERS GUIDE  
0255 507527**



# There's nothing to beat a **TORO** Reelmaster 216



Lightweight and extremely agile, the Reelmaster 216 guarantees a truly superb quality of cut ... fast and efficiently. Compare this triplex mower with any 'so-called' competitive model and it's easy to see why the Reelmaster leads the field.

Large grass baskets are simple to attach and remove. Controls are a 'joy' to operate and with TORO's exclusive single knob (no tools required) adjustment, the operator can quickly achieve precision bedknife to reel contact. With the addition of the new three wheel drive model there's no stopping the best in the business.

For added performance and versatility, the Reelmaster 216 features 3-wheel drive. And a 3-wheel drive kit is available for earlier models, too.



For all the facts and demo details, have a word with your nearest TORO dealer or contact

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



*in a class  
of their own*

Literature  Please send details as ticked  
 Name  Nearest Dealer  Trial/Demo   
 Address \_\_\_\_\_  
 Post Code \_\_\_\_\_  
 Tel \_\_\_\_\_  
 Student   
 GC/2/90



# APPOINTMENTS

## THORNHILL GOLF CLUB

ESTABLISHED 1893

### HEAD GREENKEEPER

Thornhill Golf Club is situated in picturesque Mid-Nithsdale, Dumfriesshire, Scotland

The above is an 18 hole course, with a management committee, committed to the development and improvement of the playing qualities and potential of the course.

This post is an excellent opportunity for a person with qualification and or experience in all aspects of turf care. A good working knowledge of machinery and the ability to direct, motivate and control greenkeeping staff is also necessary. The successful person must be willing and able to undertake his full post in the day to day work programme.

For an informal discussion please contact:  
Mr A. D. Pelling, Manager 0848 30570 or Mr R. G. Weir, Green Convener 0848 30406 any evening Monday to Friday between 7pm and 9pm.

Written applications, together with a C.V. and two referees should be addressed to:- The Secretary,  
Thornhill Golf Club, Blacknest,  
Thornhill, Dumfriesshire.  
Closing date 24th February 1990.

## GLEN GORSE GOLF CLUB

invite applications for the position of  
**GOLF COURSE  
SUPERINTENDENT**

Applicants must be fully experienced in all aspects of greenkeeping and modern course management techniques.

He will have a practical knowledge of modern machinery and the ability to lead and motivate staff. Salary is negotiable.

Applications with full C. V. to:-

The Secretary,  
Glen Gorse Golf Club,  
Glen Road,  
Oadby,  
Leicester.  
LE2 4RF

## One of the premier clubs in Wales the ABERGELE & PENSARN GOLF CLUB

require a

### HEAD GREENKEEPER

for their parkland course. This position is for a person of proven ability with suitable qualification and experience in all aspects of course management and machinery maintenance.

\* First class private club  
with over 1000 members

\* Salary negotiable

Applicants and C.V. to:-

The Secretary,  
Abergele & Pensarn Golf Club,  
Tan-y-Goppa Road,  
Abergele,  
Clwyd,  
LL22 8DS

## SUNNINGDALE GOLF CLUB

*Applications are invited in connection with the  
appointment of*

### HEAD GREENKEEPER/ COURSE MANAGER

The present incumbent Jack McMillan, is leaving after 9 successful years to become a management consultant.

Responsibility will cover the management of two championship golf courses and applicants should be aware that the highest standards of maintenance and presentation are required.

Applicants should be fully qualified in all aspects of modern course management. The ability to lead and motivate staff is essential.

An excellent package will be offered to the successful applicant. Accommodation available.

Applications and CV's to:-  
The Secretary, Sunningdale Golf Club,  
Ridgemount Road, Sunningdale,  
Ascot, Berks. SL5 9RR



# APPOINTMENTS



1887 - 1987

## NOTTS GOLF CLUB

HOLLINWELL

require

### ASSISTANT GREENKEEPER

For this Championship Heathland Course Applicants should be knowledgeable in the use and maintenance of a wide range of machinery, course equipment, and modern greenkeeping methods. Competitive salary offered which is negotiable in accordance with qualifications and proven experience.

No accommodation available.

Apply in writing please to:-

**Notts Golf Club Ltd.,**

**Hollinwell,**

**Kirkby-in-Ashfield,**

**Nottingham.**

**NG17 7QR**

## HUNSTANTON GOLF CLUB

require an

### ASSISTANT HEAD GREENKEEPER

Applicants must be experienced in all aspects of greenkeeping, knowledgeable of course machinery and fully capable of deputising for the head greenkeeper. Salary negotiable, no accommodation.

Applications with full C.V. to:-

**The Secretary,  
Hunstanton Golf Club,  
Golf Course Road,  
Hunstanton,  
PE36 6JQ**

## LYTHAM GREEN DRIVE GOLF CLUB

### WE OFFER:

very competitive salary  
18 beautiful parkland holes  
Open Championship qualifying course  
trained and motivated staff,  
modern, well-maintained machinery,  
3 bedroomed house in 'leafy Lytham' re-location expenses.

### HEAD GREENKEEPER

#### WE ARE LOOKING FOR:

commitment to the highest standards,  
management skills, proven track record on  
parkland course(s) drive and determination,  
relevant qualifications  
If you want to develop your career with us, write  
with a full CV to:-The Secretary, Lytham Green  
Drive Golf Club, Ballam Road, Lytham, Lancs.  
Closing date for application is 21st February.

## WORTHING GOLF CLUB

require a

### FIRST ASSISTANT GREENKEEPER

For this well known 36 hole downland course. The position offers an excellent opportunity to advance your career in greenkeeping.

Applicants should be qualified in all greenkeeping practices including the use of modern machinery.

Salary £9,000 plus bonuses.

Accommodation maybe given.

For application forms contact:-

The Secretary,

Worthing Golf Club, Links Road,

Worthing, W. Sussex.

BN14 9QZ

Or telephone:

Course Managers office 0903 830019

or 0903 60801



# A WINNING COMBINATION!

Toro automatic irrigation systems and Toro mowers maximise the quality of turf at some of the World's finest golf courses. Talk to Toro, discover how you too, can utilise this experience to form a winning combination - for the benefit of your club...



**TORO**

## The Toro Company

Irrigation Division,  
5825 Jasmine Street,  
Riverside,  
California 92504 (U.S.A.)  
Tel: 714 688 9221  
Fax: 714 687 3979

Headquarters  
(Mower Division),  
8111 Lyndale Avenue South,  
Minneapolis,  
Minnesota 55420 (U.S.A.)  
Tel: 612 888 8801  
Fax: 612 887 8258

European Office,  
Christchurch Rd,  
Ringwood,  
Hampshire BH24 3SA (UK)  
Tel: 0425 471156  
Fax: 0425 472380

*Toro turf products are backed by an international sales & service network.*