

JUN 19 1985

JUNE 1985

Greenkeeper



The Official Magazine of S.I.G.G.A. & E.I.G.G.A.



sisis

FOR ALL YOUR GROUNDS MAINTENANCE, TURF MANAGEMENT AND MACHINERY PROBLEMS *CONTRACT OUT TO US.*

Specialist equipment for hire or sale.
Ransomes 5/3, 350's, Triples, 213,
214 machines, mostly available.
All types hand machines, verge
cutters, Mastiff, Marquis etc.

All machines are reconditioned in
our own workshops etc.



Have your Rideon 61's fitted with
CDC's own conversion units, Ford
Escort 1.1 and 1.3 engines, proved
and tested on our own contracts.

Redundent modern equipment
purchased. Annual overhauls carried
out, loan machines available in
case of breakdowns. All commercial
users please contact us at the
address below.

golf course construction and design, maintenance a speciality.



CDC Landscapes Limited

Chapel Works,
Waldringfield,
Woodbridge,
Suffolk.

Telephone: 0473-36 733/734

EIGGA goes to Royal St George's

THE English And International Golf Greenkeepers' Association will have its own hospitality marquee at the Open Championship next month, continuing the R & A's courtesy SIGGA initiated so successfully at St Andrews last year. EIGGA's marquee, in the tented village at Royal St George's, will be opposite the R & A members' pavilion and will be open from Monday July 15 to Sunday July 21. The marquee itself, sponsored by *Greenkeeper*, will be open to all greenkeepers and those connected with the golf course maintenance industry. It will offer a bar, light refreshments and closed-circuit television. The main feature will be a display of EIGGA activities, covering educational opportunities, the annual conference and other aspects of association membership. Two members of the EIGGA board of management will be in attendance to answer visitors' questions and act as hosts to guests.



• The Open tented village at Sandwich during the 1981 championship.

This issue

JUNE 1985

Front cover: The SISIS Hydromain System is a complete system with about 30 attachments for the maintenance of turf and hard porous surfaces. Two tractor units are available: The Hydromain Fourteen has a 14hp engine and a unique patented weight transfer system to apply pressure to the implements when necessary, increasing their effect without the addition of weights. Extra wide tyres reduce marking on fine turf. One man can change the various attachments in minutes, without tools. The Hydromain Seventeen has a 17hp petrol engine or can be supplied with a diesel engine. The Seventeen retains all the features of the Fourteen, but also offers a safety cab, conventional steering wheel with powered steering and full braking system. Lights enable it to be taxed for use on public roads. Among the attachments are an aerator with interchangeable tines, deep slitter, rakes, brushes, rollers, sprayer, mole plough, turf cutter, scarifier, grass cutter, top dresser, tipping trailer, drag mat, sweeper and seeder, making the Hydromain System the most versatile on the market.



MY PATIENCE IS EXHAUSTED 7

Jim Arthur says the 'silly season' is upon us!

THE RECLAMATION OF INDIGENOUS TURF 10

Eddie Park discusses the watering of golf courses

SIGGA NEWS & VIEWS	14
EIGGA NEWS & VIEWS	17
EIGGA'S WARWICK WEEKEND REVISITED	18
TRAINEE RECRUITMENT	20
By Raymond Hunt, assistant greenkeeper at Heswall GC, Merseyside	
NOTEBOOK	21
SITUATIONS VACANT	30
BUYERS' GUIDE	31

Publisher: A. Quick & Co Ltd
Managing Director: Michael Coffey
Editor: Robin Stewart
Contributors: Jim Arthur, John Campbell, David Jones, Jack McMillan, Eddie Park, Donald Steel, Peter Wisbey and Walter Woods

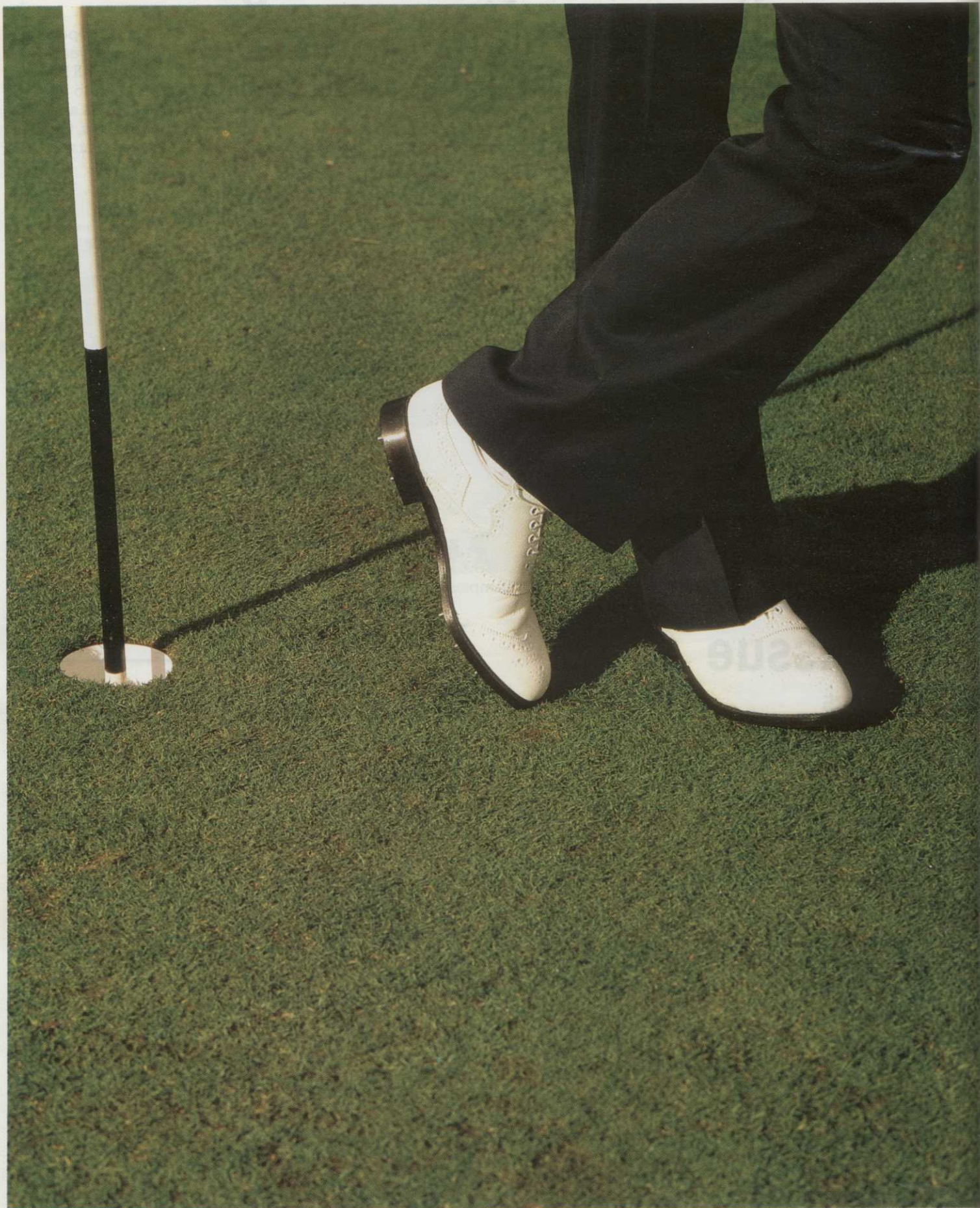
All advertising matter, editorial copy and correspondence should be sent to: *Greenkeeper*, 121-123 High Street, Dovercourt, Harwich, Essex CO12 3AP. ☎ 0255 507526

Subscription rates:
 UK—£14 Continent and USA—£25 Eire—IR £19

Greenkeeper is published ten times a year. Printed in England by J.B. Offset, Marks Tey, Colchester, Essex.
 Copyright: A. Quick & Co Ltd 1985

Opinions expressed within are not necessarily those of the publisher or the editor.

EDGEA goes to Royal St George's



ICI Professional Products, Woolmead House East, Woolmead Walk, Farnham, Surrey. Tel: Farnham (0252) 724525.

GREENKEEPER JOHN PARS

The 18th hole of an international tournament course is the least appropriate place on earth for a weed. Any kind of weed.

Which is why so many international tournament course groundsmen use a cunning cocktail of weedkillers known as Super Verdone: it kills *all* common turf weeds.

What would Sevvie say if he found a dandelion on the 18th?

It does this by combining two systemic hormone weedkillers that see off most of the weeds you're ever likely to find on an English green with a third contact weedkiller that deals with the odd ones the first two miss.

Even the toughest weeds like Speedwell and Yellow Suckling Clover are on the way out a couple of weeks after a dose of Super Verdone.

And of course, it does all this without harming established turf in any way whatsoever.

If you don't happen to be overrun by quite such a wide and tenacious range of weeds, then ordinary Verdone will probably do the trick. (It's cheaper as well.)

To find out more about how you can prepare yourself and your course for the day Sevvie turns up to play a round get in touch with ICI to find out your nearest Super Verdone distributor.



Professional Products



Royal treatment

Give your greens a regal look
with Jacobsen

Do you want your greens fit for tournament play? The Jacobsen Greens King and Greens Mower give them the royal treatment.

The Greens King IV (foreground) follows the greens' contours. Fully articulated, individually controlled reels let you manoeuvre around the edges. Reels steer independently in the direction turned — so there's no drag, scuffing or streaking. Power

backlapping, without disassembly, saves sharpening time and ensures a quality cut. Convenient foot pedal delivers smooth, variable speed control.

The Jacobsen Greens Mower (background) — first on the green for over 60 years! It offers you a rugged frame for durability and precision. Yet the Greens Mower is lightweight, perfectly balanced and

easy to handle. It delivers the smooth tournament quality cut demanded by pro golfers.

So get the Jacobsen Greens King or Greens Mower. And give your greens the royal treatment.

Lease and finance plans available.
MARSHALL CONCESSIONAIRES
LIMITED
Romsey Road
LOCKERLEY
Hampshire

(0794) 41144.

JACOBSEN
TEXTRON

Jacobsen Division of Textron Inc.

Engineered from the ground up.

© Jacobsen Division of Textron Inc. 1984

My patience is exhausted—

says Jim Arthur

THE silly season is upon us! It always seems to coincide with the US Masters at Augusta and with adverse comments by club members at the end of a very long winter on the state of their greens, upon which they have played almost continuously (barring times when snow closed the course), making invidious comparisons with neighbouring clubs where the greens have been out of play continuously all winter and where members played to temporaries until Easter.

It is an example of the old greenkeeper's comment: "If we could only keep the dratted golfers off the course altogether, we could always have it in perfect condition!"

"Why can't we have the greens as good as Augusta's?" I was asked by one man who had just returned from Georgia. But you can, I replied, if your winter temperatures rarely fall below 50°, the course is shut for far more than half the year and, in the words of a regular visitor to Augusta, "It is probably the most underplayed major course in the world—a rich man's plaything."

Oh, of course, in addition you need money. Maintenance budgets well in excess of a million dollars a year are not exceptional.

We cannot even get many of our clubs to pay modest fees for their greenkeepers to attend seminars, such as the excellent EIGGA one at Warwick recently—culprits, please note that the weekend is to be repeated next year, so no excuses then. Many of these same clubs also begrudge the cost of residential courses at £80 for three weeks, including board, for greenkeeper-training courses. Words fail me! All other industries gladly pay vastly greater sums to keep executives up to date.

Attacks

I am getting increasingly tired of the thinly veiled attacks in talks and articles by Mr Jones on my advice. I have refrained from criticising him because the job has been done for me so much better by experienced greenkeepers.

I must, however, specifically refute some of the contentions made recently in a magazine in which he decries traditional greenkeeping and basic principles, dismissing them as:

"Mere theories by extreme protagonists."

We are asked to consider how many of the practices, claimed as traditional, have been continuously practised for 30 years. Such comments are particularly unhelpful at the very time when the majority of advisory work is becoming more and more unanimous. It is confusing to less-informed greenkeepers and even less well-informed committees and secretaries to listen to a minority view, however plausibly expounded, when it criticises basics that should be above argument. No one disagrees with the fact that details and even methods are a matter for personal choice and debate.

Let us look at these basics, which he decries as individual theories. I have preached and practised them for nigh on 40 years, as can be proved from my reports to golf clubs in the 1940s. I was taught them by, among others, old greenkeepers as well as botanists who had, in their turn, been taught them by their elders. There was, therefore, nothing new about them then and they were established practice by the better greenkeepers.

One basic principle, which I have consistently advised, is the elimination of phosphates (and, generally, potash) from fertiliser mixtures. The link between phosphates and annual meadow grass invasion and dominance was first published as a research paper by Dr C.M. Murray in 1903. Surely, this makes it traditional? Even Mr Jones must approve, I hope, of that, especially as the research was confirmed in America by the Washington State University trials of 1966-74.

We can discuss how to aerate greens, etc, forever—specific problems demanding specific methods. But the need for aeration, while never greater than it is today, was still urgent 40 years ago. I have reports from that same period stressing that: 'Aeration is the most important routine treatment for all golf greens and it must be intensified. Once a year is not enough!'

SISIS, the pioneers of turf aeration machinery, with which I have worked in harmony and without personal reward, for 40 years, started in the slump of the 1930s and would never

have succeeded if the company had not been filling a need to replace a man with a fork by a machine to enable more aeration to be carried out. SISIS was criticised before the war for not making a machine that would go as deep as a man could pierce (thus stressing that depth was even then regarded as vital), but the fault again lay with parsimonious committees refusing to pay the cost of heavier motorised machines which, today, we all take for granted.

Even the Verti-Drain—in danger of becoming the latest fad, invaluable in the right conditions, but capable of causing problems in the wrong ones—is nothing new. It merely mechanises the old-fashioned traditional break forking, commonly practised long before the war.

Of course, we need to aerate more, since we play much more golf and especially on wet soils in winter with consequently greater resultant compaction problems.

I read in more than one article or report that, according to Mr Jones, soils should never be aerated unless they are absolutely dry as this damages them. Even fairway spiking is advised for the summer months only. When, in the name of heaven, are soils under British greens dry? Even in the worst drought we are irrigating them. In fact, we stop slitting greens in the early spring when slits may open in dry weather, but it is too soon to start watering—when, no doubt, Mr Jones would regard conditions as being ideal.

A moment's thought will show the fallacy of such theories. In summer, soils on fairways are often far too hard to penetrate; tractors and staff are tied-up with gang mowing, etc; disturbance and slits opening will inevitably be greater than in winter and healing is at a minimum just when play is at its greatest. If this were done, members would be in instant revolt against all aeration.

It has long been a fundamental basis of greenkeeping that we cannot live with casting earthworms. This dates back to the early 1920s. Yet, Mr Jones professes to love some earthworms, as if we can distinguish between casting and non-casting species. In his article, he condemns the use of mowrah meal as it

Continued on page 12...

Tractors for all seasons

LELY ISEKI TRACTORS

Please send comprehensive brochure
Nearest Dealer Demo details

Name

Address

Tel No.

GK/6/85



LELY ISEKI have the finest range of 16 to 72 hp 4 WD TRACTORS in the field, plus, an exceptional variety of all British Built attachments. Give Colin Gregory a call and arrange a demo, it costs you nothing but the financial rewards can be quite considerable. Sales and Service Distributors with fully trained personnel in your locality.

ISEKI

LELY ISEKI TRACTORS
STATION ROAD · ST. NEOTS · HUNTINGDON
CAMBS. PE19 1QH Tel (0480) 76971 Telex 32523



**if it really is
greener they're
using Cameron!**



Experts in turf irrigation, Cameron can help make your grass greener with a range of products to suit many and varied requirements.

If it is played on, picnicked on, or there just for its appearance, the use of Cameron equipment in a balanced programme of turf care and maintenance, will make it thick, lush and attractive.

Designed with the needs of the professional groundsman in mind, Cameron products are in use on bowling greens, tennis courts, sports pitches, racecourses, golf courses and landscape areas.

Planning and installation is available from specialists in each of the applications mentioned — write or telephone for full details.

POP-UP SYSTEMS

●
SELF-TRAVELLING IRRIGATORS

●
HOSE DRUM MACHINES

●
AUTOMATIC CONTROLS

●
PUMP UNITS

●
MULCHMASTERS

**THE LARGEST COMPANY NETWORK
SERVICING THE SPORTS TURF MARKET**

Cameron

Sports turf, Parks and Gardens Division
Harwood Industrial Estate, Littlehampton
W. Sussex BN17 7BA. Tel: (0903) 713985

Lawn Genie

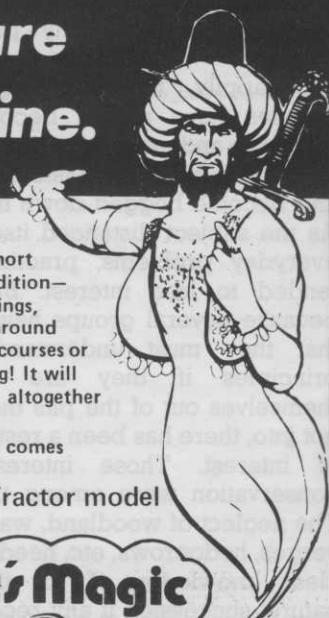


**The most in-Genie-ous
grass care
machine.**

The Lawn Genie makes large scale grass maintenance simple. Whatever the weather, it makes short work of mowing grass in any condition—long or short—and collecting cuttings, rubbish and leaves. It will speed around sports grounds, race courses, golf courses or large estates cutting and collecting! It will scarify and it will renovate altogether an ingenious machine!

Easy to handle and manoeuvre, it comes in three models:-

36" Compact (Garden) Tractor model
48" for Estate and
Contract work
72" for Parks and
Sports Grounds



it's Magic



LAWN GENIE



We will demonstrate Lawn Genie anywhere in Britain.
Full details of these and many other Professional machines from:

BOB ANDREWS LTD.

Pontiac Works, Fernbank Road, Ascot, Berks.
Tel: (0344) 885575

The reclamation of indigenous turf

Eddie Park turns his attention to the vexed subject of how and when our golf courses are watered.

I SUPPOSE that for most people of my age scientific instruction began with a broad bean. This had to be put in wet blotting paper for a few days to sprout, then we had to draw it and label the different parts. Indeed, botany was a bit of a bore but, already, some were seeing a much more interesting side to the plant world. Simple and interesting text books explained the environmental factors that determined which plants would come to dominate any particular habitat.

Unhappily, the knowledge and theories have almost become too extensive and many recent text books have lost sight of the basic principles and become bogged down in detail. As the subject distanced itself from everyday problems, practical men tended to lose interest. But now, because several groups have found that they must understand these principles if they are to dig themselves out of the pits they have got into, there has been a resurgence of interest. Those interested in conservation were among the first. The neglect of woodland, wasteland, verges, hedgerows, etc, needs a very clear knowledge of, for instance, natural succession if any recovery is to be made.

Forty years, in which any and every method of increasing agricultural productivity has been used, have given farmers enormous problems, which can only be solved with basic knowledge.

And what of golf courses?

If we think back to the primary environmental factors—climatic, edaphic (soil) and biotic (other organisms and man himself)—we know perfectly well that we have tried to bend conditions to suit our whims. The downhill slide in standards, especially to *Poa annua* domination and thatch, should tell us we have gone up some blind alleys.

I am going to take a close look at just one factor we have chosen to tinker with—moisture—not that I will pretend to know all the answers, but simply to point out what has happened. It may seem strange, in view of the enormous expenditure by clubs on irrigation equipment, that the requirements for watering golf courses in the British climate have never been scientifically established.

Water has been applied to golf greens for well over a century now, but for most of that time many have expressed doubts. Garden Smith was editor of *Golf Illustrated* and the author of *The World Of Golf*, published in 1898. He wrote: 'Many greens are now well supplied with water, which has been done by the sinking of artesian wells. This is a very costly arrangement and the results of artificial watering are doubtful.'

In fact, doubts were frequently expressed for the next 60 years, during which time many clubs with sufficient money installed some form of watering. It was usually of a pretty primitive nature, not more than a tap to which a hose could be attached.

Liming disasters

The considerable drought of 1921 gave events a push forward and the liming disasters of the 1920s, which converted many courses to *Poa annua* (this died off in a short drought), produced an even bigger incentive. But still many of the older and skilful greenkeepers remained doubtful.

A.J. McSelf in *Lawns And Sports Greens*, first published in 1930, said: 'Avoid watering—some warnings will be disregarded, no matter how frequently they are reiterated. Two such are: don't water and don't roll.'

By 1930, Bingley had been established and its prime aim was to undo the havoc of the previous decade by frequent top-dressing with sulphates of iron and ammonia. Excellent stuff, but dangerous, especially on links courses when a drought supervened. In fact, that is just what happened and, in his first book published in 1938, R.B. Dawson was recommending as much as four gallons per square yard two or three times a week.

The other great guru of that era Martin A.F. Sutton concurred, saying: 'Where intensive fertiliser treatment is practised, watering in dry weather is an absolute necessity.' Yet, I can remember in the early 1950s a greenkeeper/pro, who was over 70 and had marvellous fescue greens cut by hand-propelled mowers, telling me that it was necessary to dry out his greens every summer to kill off shallow-rooting meadow grass. The greens turned slick and brown, but

came quickly back to colour with the first rains of autumn.

To be fair to R.B. Dawson, who was a scientist, he, too, retained his doubts. In his Penguin handbook *Lawns*, published in 1960, he said: 'Watering should be regarded as a mixed blessing, for while it may keep the lawn green and flourishing in dry weather, it is apt to encourage certain types of weed and it undoubtedly keeps alive such grasses as annual meadow grass, which on the best lawns could be allowed to die out with advantage.'

We could sum up the first half of this century by saying that practical men were, on the whole, quite good at botanical analysis and that they had no doubts about the effect of watering on the composition of vegetation. Most of them recognised that *festuca/agrostis* turf was the only option for golf greens and after the fiasco of the '20s they were keen not to destroy it again.

The scientists had gone even further. In Leach's *Plant Ecology*, first published in 1933, it says: 'The experimental modification of existing edaphic conditions often produces striking corresponding changes in vegetation. For example, Farrow (1925) found that on grass heath with *Festuca ovina* and *Agrostis tenuis* as co-dominants, artificial increase in the soil water by irrigation caused the *Agrostis* to become completely dominant with the result that *Festuca* was crowded out.' Presumably, the converse happened if the soil was kept dry.

Let us break off from this historical survey and wonder how and why we have gone from the situation I have described to wall-to-wall green, lush, soft carpets.

Sandy Tatum is a highly respected ex-president of the United States Golf Association and in 1980 he said: 'Maintenance, generally, is deteriorating. The problem, simply put, is one of too much water! This has been endemic to this country for a long time. As the game here came more and more to be played in the air with bounce and roll negligible factors, heavily watered golf courses became easily justified. As a related factor, we seem to care more about how a golf course looks than about how it plays. The lush green look has

become more than the norm, it has become the standard. It is, moreover, much easier to maintain a lush green look."

I couldn't have put it better myself!

It was the combination of golfers demanding soft green greens and the fact that irrigation companies were in a position to meet that demand that pushed events along. Few realised there might be unfortunate side effects. Bobby Locke, an arch proponent of watering, wrote in 1953 of his ideal golf course: "that I would want facilities for the greens and some of the approaches to be well watered. I would also want British turf for all fairways and greens."

I am sure he would never have dreamed that the one might destroy the other. Again, to be fair, neither did anyone else or, at least, they didn't make themselves heard. We all plunged into an orgy of bigger and bigger sprinkler heads and, if possible, automatic watering systems.

I am not out to pursue a witch-hunt against the irrigation companies—they were good salesmen, but that isn't a crime. I am surprised they only sold the implements, fitting and maintenance and missed out on the much fuller service that was needed.

However, returning to the history of automatic watering, it derived from agricultural irrigation, which had been developed in the States during the '30s to combat the needs of hot, dry regions. At first, it was received with suspicion here but, sold with the main advantage of saving expensive labour, it appealed to the richer clubs and, eventually, the great majority.

It is surprising how quickly the whole saga has been enacted. The first proper rotary sprinklers appeared in the USA in 1935, but were not really in use until the 1950s. The first automatic pop-up sprinklers came to this country in 1961 at a cost of about £5,000.

By 1984, it was estimated that something like 70 per cent of clubs had automatic systems. Today, they are costing in the region of £40,000 to install. The machinery has increased in sophistication and convenience, but most of it still originates in California or Florida.

So the watering of greens has become accepted in this country as an absolute necessity in summer and golfers now demand it, not for the health of the grass, but to make the game easier in the drier months.

They justify these demands with some extraordinary reasoning. One man said to me last summer: "Eddie, let's go back to basics, you don't get grass in the Sahara." I won't bother to

explain the double fallacy contained in that gem. Instead, as always, let's go back to first principles—back to my broad bean in wet blotting paper, in fact.

Every plant requires water in every stage of its life cycle. Soil conditions and structures affect the availability of water. Water applied to the soil, either as rainfall or artificially, will either run off the surface, be retained in the pores, or be lost by evapotranspiration to the atmosphere or by percolation down through the soil.

If we want to know the amount of water available to the plant, we must study all these factors. I would suggest that present practice is to study none of them, but simply to concentrate on installing enough machinery to pump and spray out indeterminate (but considerable) amounts on the surface.

Indeed, with many installations there isn't even a suggestion that we measure the quantity we apply. Greenkeepers speak not of so many gallons per green, but of so many minutes per green. Can you imagine a doctor giving medicine and not saying: "drink two teaspoons every twelve hours," but saying: "have a good drink at the bottle for three minutes every twelve hours"?

Automatic watering

The next quotation appears in the leaflets of one company and also in an article about automatic watering. 'When installation is completed and the system is made operational, the soil is quickly brought to field capacity—i.e. moist from the surface down to sub-soil. Thereafter, the system is programmed to apply only enough water to make good daily moisture losses. This topping-up procedure only requires a short application of water at a slow rate every night. It is this type of irrigation which is of maximum benefit to growing turf.'

It sounds more like a car radiator than anything else and pretty crude at that.

Some agronomists—particularly our American friends—seem to be in a bit of a muddle about the situation as well. I recall a comment from the EIGGA conference at Cambridge last year: "At field capacity, plants will grow to their maximum." Which plants? Take the example of a sandy links green. The mind boggles at how much artificial water would be necessary to maintain this at field capacity (though, perhaps, many pop-up systems could manage it).

Even if that was achieved, I'll wager

the 'plant' growing there in the long term would be *Poa annua*, not *festuca rubra*. In fact, given sufficient fertility, doubtless you could grow crops of potatoes just as easily.

We know that water availability is a powerful management tool. Plant ecology tells us that different plants are adapted to exist on vastly different degrees of moisture and, by controlling these levels, we can greatly influence the botanical composition of the sward.

As I have said many times, botanical analysis is the only objective guide. If we are not getting at least *agrostis* turf (with, in many cases, *fescue* as well), our mix of the environmental factors is faulty. The commonest faults seem to be, first, too high fertility, second, poor soil structure from compaction and, finally, more moisture than is required by the grasses we want. The latter may be due to water retention by thatch or an impervious layer, but I suspect that the commonest cause is simply too much water being applied.

I am quite sure I will be accused of over simplification and I plead guilty. Of course, there is a multiplicity of other factors, but I want to focus attention on just this one that has not, I feel, received enough attention. I have listened to hours of theories about artificial watering, but I have yet to hear anyone tell me about the ecological effects. In the complete absence of definitive research in this field in British climatic conditions, I would offer a few simple observations from my own course.

For many years, we had to keep records of water abstracted from a bore hole and the monthly figures, set side by side with local monthly rainfall figures, make interesting reading.

If we actually know the amount of water used on the course, we can soon translate it into something meaningful. The equation is not difficult to work out. Take the figure for total gallonage used and divide it by total greens area (in sq yds) multiplied by a factor of 4.7—this gives the equivalent in inches of rain.

We do not possess pop-ups, but in the 1970s, to allow greens to be watered at night, we turned to large Perrott sprinklers with a time clock on the pump. We could then apply large quantities of water, almost without knowing it. From average figures of well over a million gallons per annum ten years ago, there has been a drop to less than 20 per cent of that figure under our present regime. We had been adding perhaps 25in to 30in of

Continued on page 27...

My patience is exhausted—

says Jim Arthur

continued...

encouraged the worms to return. Precisely! Bingley was making the point emphatically in the early 1930s, advocating instead the use of lead arsenate. Now we use chlordane and this proves that earthworm control has been continuous in one form or another for 60 and more years.

Misguided

Irrigation is another case of the advocacy of demonstrably misguided theories. Before the war, irrigation was limited by either the absence of any facilities or by restraints of men and time. Yet, I was advocating 40 years ago what was then old-fashioned, old-established practice—namely, that areas requiring water should be given individual treatment by hand-held open hose rather than leaving sprinklers on all night and flooding greens. This was long before pop-ups were being used, even in the States.

Mr Jones advocates, in my hearing, the use of pop-ups for long periods at widely spaced intervals, letting the greens dry out thoroughly before watering them again! Quite apart from the practical problem that if we apply once a week the total amount given in minimal daily irrigation then we shall be watering for 18 to 22 hours a day, when do we find time to play golf? Also, how do we get that amount of water to penetrate without flooding bunkers, how do we play a course with soggy bogs at the start of the week, drying out to rock-hard greens

at the end, and how do we get the water to penetrate such dry areas anyway?

All those who have given the matter thought will, I am sure, agree that we ought to aim at—even if we do not always succeed—producing fine-textured, wiry *Agrostis* and fine fescue turf if we are to play our traditional pitch and run-up game as opposed to target golf. Most, including many American superintendents, would agree that annual meadow grass is our main enemy, responsible for most greenkeeping problems. Mr Jones claims that, at one course he advises, while in response to gross sanding of greens, the grass is now 100 per cent annual meadow grass, which "does not matter."

I have never decried American greenkeeping—if it is kept to America. Equally, most of the traditional principles here would not transplant save for those few areas in the States where soil and climatic conditions are equivalent to those in Europe.

Pattern

There has always been a cyclic pattern, since greenkeeping began, of 'farmers', who know all about growing the wrong grass, destroying our courses and their being brought back, from the very brink, laboriously by 'greenkeepers', only to be thrown out by members who want to see more grass on the course and extolling the 'beautifully lush' turf of

other ruined courses. But remember that the initial impetus for the establishment of the Board of Greenkeeping Research (as Bingley was known) came from Norman Hackett, who was advising Yorkshire courses in the early 1920s on exactly the same basic lines as I do today!

With Bingley now preaching the same gospel, backed by the Royal and Ancient, we could be thinking seriously of the feasibility of establishing an advisory body based there, with the same power and influence as the USGA's Green Section wields in the States.

Naturally, course conditions were not perfect by today's standards 50 to 80 years ago. Neither was household plumbing! But, by the standard then accepted, conditions were as good as the equipment could make them and better golfers were turning in scores as low as any today, playing on fine perennial grasses, not annual meadow grass, and using less efficient clubs and golf balls.

Even that pioneer of agricultural grassland research, Professor W.B. Stapledon at Aberystwyth, said in the 1930s: "I would rather putt on poor fescue greens than on lush annual meadow grass ones."

No one pretends that every course was in good condition then, not that we would accept for one moment today what, by their standards, was good presentation, even for a championship, before the war.

Lindrick's detailed records show a cyclic repetition of traditionalists unseating the farmers—who were at the root of all their problems—only for the farmers, in turn, to win in response to ignorant golfers demanding more grass on the course.

The swings and roundabouts still operate, invariably triggered off by some half-thought-out theories on the grounds that to be noticed one has to be outrageously different!

ASSISTANT HEAD GREENKEEPER

required by

BONNYTON GOLF CLUB

Eaglesham, Glasgow

Experience and references essential. Apply in writing to:

**MR. G. L. DEE
GREENS CONVENOR
BONNYTON GOLF CLUB
EAGLESHAM
GLASGOW. G76 0QA**

GREENKEEPER

required by

TOWERLANDS GOLF CLUB

We require an experienced Greenkeeper for our new 9 hole golf course. Conversant with all maintenance practices and handling of equipment.

NO ACCOMMODATION AVAILABLE.

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

**D. J. COLLAR
TOWERLANDS LTD,
PANFIELD ROAD
BRAINTREE, ESSEX**

BEWARE of Imitations ‘FENDRESS’[®]

High Quality Golf Green Top Dressing (FENDRESS) available in bulk loads of 10, 15, 20 and 25 tonnes delivered anywhere U.K. Mainland, N. Ireland.

A Superior Top Dressing, using soils with a low clay & silt content, carefully blended with Fenland Peat and Lime Free Free Silica Sand, shredded and sieved. Ready for immediate application to golf/bowling greens.

Save purchasing expensive equipment which stands idle for much of the year, also high labour costs and problems of finding suitable ingredients of constant quality.

PLEASE REMEMBER THERE IS ONLY ONE TRUE FENDRESS REGISTERED TRADEMARK

Pre-Packed supplies also available.

SPECIAL MIXES TO YOUR SPECIFICATION ALSO PREPARED

ALSO Sedge Peat ('FENPEAT') in bulk.

Lime Free Sands, White or Yellow. Screened Loam etc.

Please telephone T. I. Banks for quotations. You will be surprised by our competitive prices.

Please Contact:



Fen Turf Dressings Ltd., 36 High Street, Market Harborough, Leics. LE16 7NL. Tel.: Market Harborough (0858) 64346.

ALL WEATHER TEE WITH 'TUFTURF'

A British made porous hardwearing all weather tee 1.5m. x 1m. A synthetic grass surface bonded to a reconstituted rubber underlay shock pad with tee inserts, combine to give a superb playing surface for tee shots and all the fairway shots. £24 (excl VAT) or Mail Order price £30 incl. p & p.

PLEASE SEND ME A 'TUFTURF' TEE

(Cheque enclosed for £30.00 payable to Carpetition Ltd.).

Block letters please.

Name

Address

.....

.....

.....

CARPETITION LTD., 6 KAFFIR ROAD,
EDGERTON, HUDDERSFIELD. HD2 2AN.

(Please allow 21 days for delivery).

GREEN

The putting surface should be, The players may be,
The greenkeeper cannot afford to be!

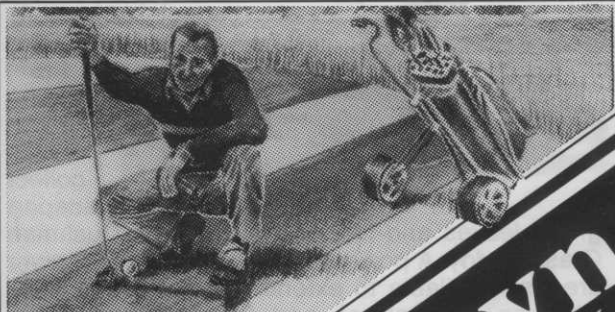
Rolawn turf is the easiest way to achieve a fine, hard wearing green sward for sports and amenity applications.

Available in various grades, all of superior consistent quality, supplied in square-yard rolls from nurseries throughout the country.

Like you, we know a thing or two about turf.

For our colour brochure contact . . .

Rolawn



Rolawn
Rolawn (Turf Growers) Ltd. Dept. GK
Elvington, York YO4 5AR
Telephone (0904) 85661
24 hour
Ansaphone
service

GET ON COURSE

WITH

KUBOTA

AT GIBSONS

There's a Kubota for every turf management situation at Gibson's, Lancashire's main dealer for the complete Kubota range of turf management machinery and implements. Make this the week you pay us a visit.

USED KUBOTA TRACTORS
WITH WARRANTY
FROM £1000.

GIBSONS GARDEN MACHINERY

Highgate Garage, Newton, Kirkham, Lancs

Telephone (0772) 682516

Part of

MOWER WORLD



President's Report

Since the last executive, I have visited Elmwood College to give a talk to 24 greenkeepers. I feel that we, as head greenkeepers, with the experience of management, should get more involved in the teaching of younger greenkeepers.

Mike Taylor, head of the horticultural department, welcomes comments from greenkeepers about alterations to the course's context and would be delighted to have more experienced head greenkeepers who are prepared to talk to students on these courses.

I recently attended the STRI seminar at Dunfermline Golf Club. The lecturers were of exceptional quality, the organisation was first-class and the wine one of my

favourites!

I went to a meeting of the International Golf Tournament and symposium committee at St Andrews and am pleased to report that good progress is being made. Walter Woods, as chairman of the committee, has to be congratulated, along with his committee members, for the way things are being organised.

This is a very important fixture in the SIGGA calendar this year. For the first time, it is to be held in Scotland and we, as an association, in conjunction with Ransomes, must make it a success.

Walter, my vice-chairman, will give a full report on the event's progress later on.

Jimmy Neilson, SIGGA President.

East

A total of 52 members, guests and trade entered the annual spring tournament at Peebles GC.

A circular has been prepared and given out to members. It asks for suggestions on how they would like to

see the section run and ideas on how to improve it. The committee would particularly like to know what kind of events and lectures are wanted.

The annual match against the North East of England, sponsored by Stewart & Co, will be played over Turnhouse GC in early October.

The committee has decided that the section AGM will revert back to the usual time and place—at the end of the autumn tournament, at Newbattle GC on Tuesday September 10.

George Dollichen, ex-head greenkeeper at Livingston, had a slight heart attack recently. He is now all right and back at work.

Central

The section held its fifth spring outing courtesy of the Crail Golfing Society at Balcomie when 50 members and guests had a most enjoyable day.

The weather was kind for a change, with sunshine and just a slight sea breeze. The course was in excellent condition, which reflected in the

*

EXPERIENCED GREENKEEPER OFFERS VERTI DRAIN FOR HIRE

*

£250 + VAT PER DAY
£1000 + VAT PER DAY

*

Cost includes travelling, tines etc., also Mole Drainage for fairways etc., and other greenkeeping services available.

*

PLEASE CONTACT:
PAUL WRIGHT
AERATION & DRAINAGE SERVICES
10 OXENDEAN GARDENS
LWR WILLINGDON
EASTBOURNE, SUSSEX
OR PHONE EASTBOURNE 506725

Forward Thinking

Take mowing, brushing, snow clearing and grass collection in your stride with the versatile Cushman Front Line. A choice of powerful petrol or diesel engines with hydrostatic transmission makes driving a pleasure while, up front, the hydraulic lift system gives fingertip control

over the forward mounted attachments. You can fit a 66in triple hydraulic reel mower and 60in or 72in rotary mowers.

Equipped with a special 60in rotary mower deck, the



Front Line can even collect

and transport

grass, leaves and litter using the new Cushman Grass Caddy. A powered brush and snow thrower are also available to extend the working season, while an optional cab and roll-over frame bring safety and comfort to the operator.

Demonstrations are readily available from specialist dealers nationwide. Call us today for full details of the versatile Cushman Front Line.



Hillside, Thorpe Lea Road,
Egham, Surrey, TW20 8JG.
Tel: 0784 38666
Telex: 894426

scores returned: best net—Ian Ritchie (75-10) 65; best scratch—Ron Christie 72; first-class, 1st handicap—Graeme Hampton (78-8) 70, on best inward half, 2nd handicap—Brian Inglis (75-5) 70; second-class, 1st handicap—Mike Hanlon (89-23) 66, 2nd handicap—Joe Oliver (84-14) 70; new members' prize—Craig Small (107-21) 86; visitors' prize—Joe Dalling (70-4) 66 and two-ball foursomes—W.Lyon and R.Taylor 30½ points net.

Our thanks go to Jim Donaldson and his staff for having the course in excellent condition, to the bar and catering staff for the service and meals provided and to the council and members of the Crail Golfing Society for their courtesy.

At present, we have 67 paid-up members as well as a number of enquiries about membership.

Ayrshire

The spring outing was held at Southernness Golf Club in dry, but windy, conditions. Because of the distance involved in travelling to the venue, the section hired a bus and 30 members took advantage of this

facility. A further ten members from the local area joined us.

Southernness is a great venue and a traditional links course, which everyone enjoyed thoroughly. Our thanks to Southernness GC, its clubhouse and greenstaff for their warm welcome.

The scoring was good on a difficult course and a special mention must be made of J.Robertson who, at the age of 81, had a net score of 69. He was pipped by S. Devlin for the best score of the day—a net 68. D.Gray (Lahinch) and J.Grainger (Largs) will compete in a play-off for the Scottish team place at St Andrews in October.

Results: Scratch—J. Grainger (Largs); 1st Class—D.Gray (Lahinch), runner-up R.Burke (Irvine, Bogside); 2nd Class—S.Devlin (St Cuthberts), runner-up J.Robertson (Troon); 3rd Class—G.Heron (Turnberry), runner-up T.Parker (West Kilbride) and Two-ball foursomes—D.Graham and I.Douglas (Kilmalcolm).

The section is now in a healthy position financially and with an ever-increasing membership. This year, we have gained 14 new members and the committee is working hard to see that this trend continues.

J.Grainger, Secretary.

West

Since the last report, the West section has held a committee meeting and formed new sub-committees. The chairman has asked the convenor of the committees to be more actively involved in the running of the section this year.

The SISIS pairs trophy for greenkeepers and convenors was held courtesy of West Kilbride GC. The golf was played in cold, but dry, conditions that seemed to help the general low scoring but, mostly, this must be put down to the excellent condition of the course, for which the West section thanked Jim Paton and staff.

Prize-winners were: 1st—A.Hastie and A.Meechan (Bellshill) 65; 2nd—D.Fleming and I.Ferguson (Hilton Park) 67 and 3rd—J.Paton and B.Gossman (West Kilbride) 69.

Fifteen teams from different clubs took part in the competition. This, added to the excellent attendance at the AGM, has given the West section an encouraging start to the year's activities which, hopefully, will continue throughout the season.



B.A.G.C.C.

British Association of Golf Course Constructors

Golf Landscapes Limited, Administrative Office:
 Ashwells Road,
 Bentley,
 Brentwood,
 Essex. CM15 9SR
 0277 73720

Brian D. Pierson (Contractors) Limited
 27 Vicarage Road,
 Verwood,
 Wimborne,
 Dorset. BH21 6DR
 0202 822372

Land Unit Construction Limited
 Folly Farm,
 Hanslope,
 Milton Keynes,
 Bucks.
 0908 510414

Southern Golf Limited
 36 West Street,
 Warwick,
 Warwickshire.
 0926 492898

Chipman Limited
 Horsham,
 Sussex. RH12 2NR
 0403 60341

Eccles Contracting Limited
 Brickfield Street,
 Hadfield,
 Hyde,
 Cheshire. SK14 7DZ
 04574 63425

PRESENTING THE PROFESSIONALS IN THE FIELD.

If you need

TYRES

to Mow, Cultivate, Spread,
Plough or Harvest ...



let **PAN**

rush them to you

in **48** hours.

For many years PAN have been supplying wheels and tyres for Britain's leading manufacturers of turf-care and soil machinery. And keeping quiet about it.

Now it's time you heard our tune!

In sizes from 3" to 38" for any wheeled turf or soil equipment, including mini-tractors, PAN will deliver faster and more reliably than anyone we know.

We have the warehousing facility, stocks and the expertise for the replacement as well as the O.E. market.

Next time give PAN the chance. *Ring Mike Lucraft now!*

IT'S TIME YOU HEARD OUR TUNE!



PAN
WHEELS & TYRES

FREEPOST
for details now!

NO STAMP
REQUIRED

Name _____
Title _____
Company _____
Address _____
Tel: _____

Simply complete and post in an envelope to: FREEPOST, PAN WHEELS & TYRES, HARROW

6 Neptune Road, Harrow, Middx. HA1 4YF. Telephone: 01-427 2242. Telex: 893539.



North West

The branch recently held a one-day seminar at Helsby Golf Club—the speaker for the day was Archie Pattison, contracts manager of Watermation. Mr Pattison brought with him an impressive array of some of the latest irrigation equipment which, combined with his vast knowledge and experience, gave us all a rewarding day.

Our thanks to him and Helsby GC for the use of its clubhouse and catering facilities.

Following the seminar, the AGM was held. Bill Lawson was elected branch chairman; Terry Adamson, administrator and Guy Cannings, treasurer.

The spring meeting was held at Caldycote GC on the Wirral. Our thanks go to sponsors J. Mealar (Grass Cutting Machinery) and Eurotec and also to the captain and secretary of the club for the use of its superb facilities. Ricky Fletcher and his staff are praised for the magnificent presentation of the golf course.

Terry Adamson received the Mealar's Shield for the best gross score. Cliff Lunt had the best nett score and Allun Roberts the best visitor's score.

We welcome Derek Green to the North West branch and wish him every success in his new post of links manager at The Royal Liverpool Golf Club.

As one of the North West members who attended the EIGGA conference at Warwick, I would like to congratulate the board of management and Danielle Jones in particular for an excellent educational conference.

Finally, congratulations go to North West chairman Bill Lawson who, as members are now probably aware, has been appointed national chairman of EIGGA. I am sure members would agree this is an honour not only for Bill, but also for the North West.

Raymond Hunt.

Surrey

The branch held its annual dinner-dance recently at the Drift Golf Club, East Horsley and although everyone had an enjoyable evening, it was noted with regret that the majority of those present were representing trade organisations or EIGGA members from other areas.

The spring meeting of the society was held at Home Park Golf Club. The results were: best am score—J.Jennings 66; best pm score—G.McNiven 67; best overall score—J.Jennings 134; second best overall score—A.Cale 140; third best overall score—G.McNiven 141; fourth best overall score—S.Gudge 141; best scratch (to 12 handicap) score—B.Pearse 147 and best scratch score—B.Turner 154.

The branch would like to express its thanks to the event's sponsors Dimex and to Home Park GC for its generosity in granting courtesy of the course.

M.Hale, Branch Administrator.

The 1985 Kubota Golf Challenge

This year's Kubota event takes place at The Belfry on October 17-18. It is now a four-cornered match with a team from The Association of Golf Writers entering the fray. Each association is responsible for selecting eight players. The timetable is:

Thursday October 17

Arrive at midday; practice round, 1pm; team photos, 5.30pm; cocktails, 7pm and dinner at 7.30pm.

Friday October 18

Breakfast at 7pm; semi-finals, 8am-9am; buffet lunch, midday-2pm; final and third-place play-off; 1pm-2pm; cocktails, 7pm and dinner/prize-giving at 7.30pm.

Departure is after breakfast on Saturday.

Now We Know

Members may be aware that, at a meeting towards the end of last year, certain matters, including EIGGA's membership and education at some colleges, were discussed by the Greenkeepers' Training Committee.

In order that the exact current position be known, *Greenkeeper* contacted Mr W.N.S. Bisset, administrator and secretary of the GTC. He replied:

'Thank you for your recent letter regarding the work of the Greenkeepers' Training Committee. At that meeting, EIGGA was admitted to full membership of the GTC.

Just before the meeting, the committee organised a conference to which all colleges offering greenkeeping courses were invited. The purpose of the conference was to discuss the problems that exist in England and Wales with the college/City and Guilds part of the training scheme. The colleges were made aware of the worries that exist, the mechanics of the training scheme and the situation in Scotland, where the college part of the scheme has been less troublesome.

Although the conference reached no firm conclusions (not unexpectedly), the committee reaffirmed its aim to reduce the number of colleges offering courses to those with suitable resources. How this is to be achieved is currently being examined and further discussion is to take place with the City and Guilds.

Financially, the GTC is now much sounder with donations of substantial sums having been given by the four home golf unions, the LGU and the R&A. A great deal of progress has been made with the training of greenkeepers over the past few years, despite a lack of support and the apparently inevitable apathy. Progress will continue to be made in an evolutionary, rather than a revolutionary sense, because the general feeling is that a sound foundation has been established on which to build.'

**EIGGA AT WARWICK—
PHOTOS OVERLEAF...**

EIGGA'S WARWICK WEEKEND REVISITED...



Peter Wisbey (right) made a presentation to outgoing EIGGA president Jack McMillan.



The University of Warwick and its campus grounds provided excellent and modern facilities.



A relaxing atmosphere for the educational sessions was created in the lecture theatre.

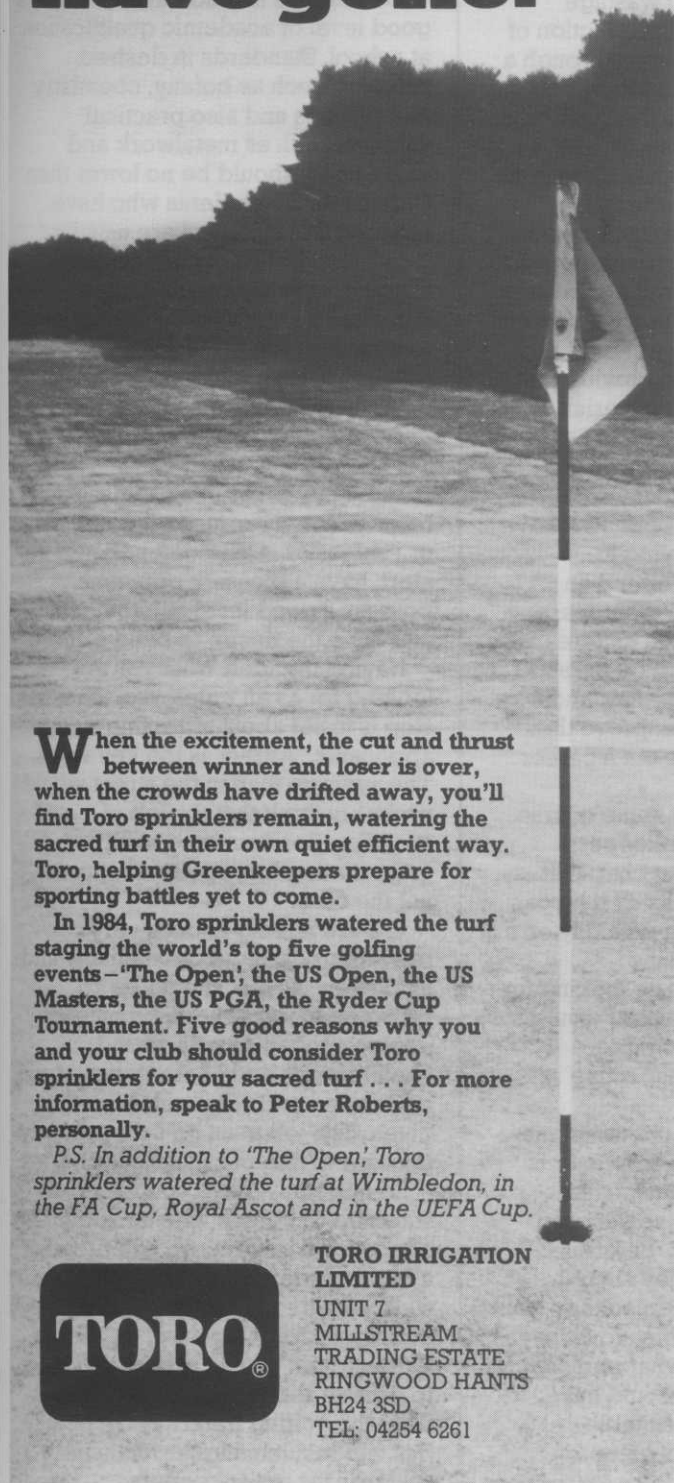


Association chairman Bill Lawson makes a point to colleagues from the North West and London board member David Lowe.



Effingham GC course manager Kenny McNiven (right) received a gold diploma from outgoing EIGGA chairman Peter Wisbey.

We remain after the crowds have gone!



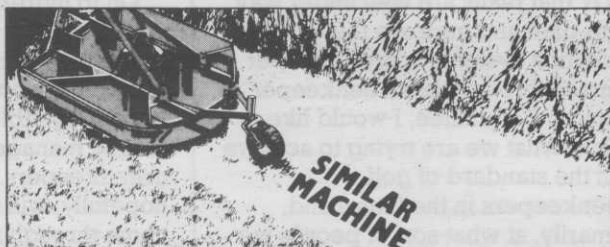
When the excitement, the cut and thrust between winner and loser is over, when the crowds have drifted away, you'll find Toro sprinklers remain, watering the sacred turf in their own quiet efficient way. Toro, helping Greenkeepers prepare for sporting battles yet to come.

In 1984, Toro sprinklers watered the turf staging the world's top five golfing events - 'The Open', the US Open, the US Masters, the US PGA, the Ryder Cup Tournament. Five good reasons why you and your club should consider Toro sprinklers for your sacred turf . . . For more information, speak to Peter Roberts, personally.

P.S. In addition to 'The Open', Toro sprinklers watered the turf at Wimbledon, in the FA Cup, Royal Ascot and in the UEFA Cup.

TORO

**TORO IRRIGATION
LIMITED**
UNIT 7
MILLSTREAM
TRADING ESTATE
RINGWOOD HANTS
BH24 3SD
TEL: 04254 6261



IF YOU WANT TO KNOW THE DIFFERENCE LOOK AT THE BOTTOM LINE

The Trident Tornado 5 foot rotary cutter, with all the strength engineered in, to make fast work of any cutting job no matter what the conditions.

With an all steel frame, spring steel free swing cutting blades, coupled to a rugged, reliable gearbox, it's a tough workhorse.

And with a price tag way below the opposition The Trident Tornado is scything down costs too.

trident

Trident Farm Machinery Ltd.
(Dept GK) Pelfintax, Westwoodside
Doncaster. Tel: 0427 752959

Similar Machine £1800

Trident Tornado £900

THE NAME EVERY GOLFER KNOWS



Pattisson for all your golf
course furniture.

H. PATTISSON & CO. LTD.
Stanmore Hill Works, Stanmore, Middlesex.
Tel.: 01-954 4171.

TRAINEE RECRUITMENT

*Raymond Hunt, 23, is a member of EIGGA's North-West branch.
He is the assistant greenkeeper at Heswall GC, Merseyside.*

NOW that plans are well under way to up-date and improve the education system for greenkeeper trainees through the Greenkeeper Training Committee, I would like to look at what we are trying to achieve with the standard of golf greenkeepers in the future and, primarily, at what sort of people we should now be looking to attract into the profession at trainee level in order to achieve our objectives.

Golf-course management is a highly skilled profession resulting in the need for a highly skilled greenkeeping staff, with a professional image and outlook from course management level down through the various grades of assistants.

In order to produce a golf-course manager, head greenkeeper, assistant greenkeeper, all highly skilled and with a professional image and manner at whatever level of responsibility, we need three basic ingredients.

First, we need a modern training scheme aimed specifically at golf greenkeeping and course management with a strong sense of continuity, adequately financed and incorporating fully competent lecturers with a sound and up-to-date knowledge of all aspects of golf-course management.

Second, we need a knowledgeable and enthusiastic course manager/head greenkeeper to motivate and encourage the young trainee and to supervise the implementation of all greenkeeping practices and policies actually on the golf course in a working environment. He should also point the young trainee in the right direction so far as public relations are concerned with golf club members and officials, placing great importance on tact and diplomacy.

Finally, and possibly most importantly, we need the raw material—the greenkeeper trainee himself, from which we will create the course managers and head greenkeepers of the future.

So, let's take ingredient number one. As I have said, plans are now moving in the right direction to achieve a first-class education system.

On to ingredient number two. I would say that about half the senior members of greenkeeping staffs in this country could be described as knowledgeable and enthusiastic course managers/head greenkeepers. This is a situation that, hopefully, will improve in years to come through natural wastage counteracted by the introduction of highly trained young men through a revitalised education system.

This leads me on to the third ingredient—the trainee himself. Now that all the hard work has been done to provide a suitable education system, I feel it is now up to course managers and head greenkeepers to do their bit when recruiting trainees and to look seriously at what sort of standard of intake they should be looking for in order to provide the colleges with suitable material.

The lack of interest some youngsters express towards their job is typified by the difficulty some regional committees of EIGGA have experienced when trying to encourage people to attend an educational lecture in their spare time. Surely, when such lectures are set up the room should be bursting at the seams with eager young men chewing at the bit to improve their knowledge and carve out a career for themselves?

Sadly, it seems that some course managers/head greenkeepers simply employ the first chap that comes along who looks as if he can wield a spade and spend a day on a ride-on mowing machine.

So, what should we be looking for when recruiting trainees? I would like to suggest some simple guidelines for the prospective employer.

Due to the present unemployment situation, as far as the employer is concerned, it's a buyer's market when recruiting staff, so they can afford to shop around. Before recruiting trainees, they should decide what sort of person they want to employ, what qualifications they should possess and what personal characteristics they should have. Then plans to attract suitable candidates can be drawn up.

Prospective candidates for trainee

positions should be as young as possible, hopefully straight from school, therefore enabling the employer to direct the young trainee in whatever direction he requires without having to get the new employee out of someone else's bad habits.

Candidates should have reached a good level of academic qualification at school. Standards in desired subjects, such as botany, chemistry and physics and also practical subjects such as metalwork and woodwork, should be no lower than CSE grade 3—students who have reached this standard are usually capable of better grades but, due to a lack of application through immaturity and other distractions, fail to fulfil their full potential at school.

Candidates should possess a natural ability to present themselves in a clean, tidy and smart manner. This is very important as we must present ourselves in a professional manner when representing our club or profession. Candidates should be alert, have a pleasant personality, possess a good level of intelligence and have the desire to build a career.

Having decided what you are looking for as an employer, the next step is to set about attracting suitable applicants. 'Attract' is the key word. The average man in the street would probably think that the job of a golf greenkeeper consisted solely of grass cutting but, obviously, this is not the case.

We are talking about a very rewarding career, both mentally and financially, so this should be reflected in job advertisements for trainees, together with what qualifications and characteristics will be needed and what training will be given. The job must be sold properly in order to attract suitable applicants.

So hopefully, if we couple a high standard of trainee with an adequate educational system, we can produce a high standard of greenkeeping staff, resulting in better playing conditions for the golfing public of Great Britain which, in turn, will lead to greater respect and appreciation from the golfing fraternity. Hopefully, this will result in higher financial rewards for greenkeepers.

Wider Application For The Verti-Drain

Over the last three years, a new dimension has been added to turf culture by the introduction of the Verti-Drain, which not only aerates to the previously unheard depth of 16in, but also heaves the ground in the process, thus smashing any pan and relieving compaction.

The original mounted Verti-Drain requires a power unit of approximately 80hp, limiting its use to contractors, a few golf clubs and local authorities, many of which have purchased tractors specifically for use with the machine.

However, Charterhouse Turf Machinery has announced a new towed Verti-Drain, which requires approximately half the previous hp without compromising on the standard or quality of job performed. This reduced hp requirement will enable the Verti-Drain to be used in conjunction with tractors in golf course and local authority fleets.

"Now, the benefits of Verti-Draining can be bought into the range of the average budget," David Jenkins,



Anyway you view it, the Verti-Drain is very effective...

managing director of Charterhouse Turf Machinery, said. David is pleased with sales to date and looks forward to increased awareness of the new towed machine, which costs about £10,500.

Greenkeeper contributing editor John Campbell said: "I think we will

eventually find more and more golf courses having a Verti-Drain as part of their range of equipment for use on a regular basis."

Full details from Charterhouse Turf Machinery, Pink's Yard, Church Road, Milford, Surrey, GU8 5JD. ☎ 048 68 24411 and 21040.

Show's Screen Success

The first showing of a video filmed at last year's IOG international exhibition at the Royal Windsor Racecourse took place at the British Academy of Film and Television Arts in Piccadilly, London recently. Such was the success of the presentation that it was screened 60 times.

Some 250 exhibitors have already booked stands for this year's exhibition (from September 17-19) and exhibition organiser Dai Rees warned: "Many regular exhibitors are extending their stand sizes. Those who have not yet booked, should do so quickly or they are going to be disappointed." So far, enquiries have been received from the Soviet Union, Malawi, France, Fiji and West Germany.

The video is available on payment of a returnable £10 deposit or it can be bought for £18.50 (plus VAT), including post and packing.

Write to the Exhibition Organiser, IOG, The Pavilion, Woughton-on-the-Green, Milton Keynes, Buckinghamshire MK6 3EA. Please state VHS or Beta.

Diesel Engine Option

Saxon Industries now offers a Robin 348cc direct injection diesel engine as an alternative to the Robin EY35B petrol engine.

It is claimed the diesel engine is more economical on fuel, giving a 50

per cent reduction in consumption over petrol. An automatic decompression ensures quick starting by means of a starting handle. Lubrication is by a mechanical pump, incorporating a filter system.

For further details, contact Saxon Industries, Lower Everlands Road, Hungerford, Berkshire. ☎ 0488 82655.



Choose your fuel for this Saxon machine.

IT'S ON THE GREEN ...WHERE IT COUNTS!

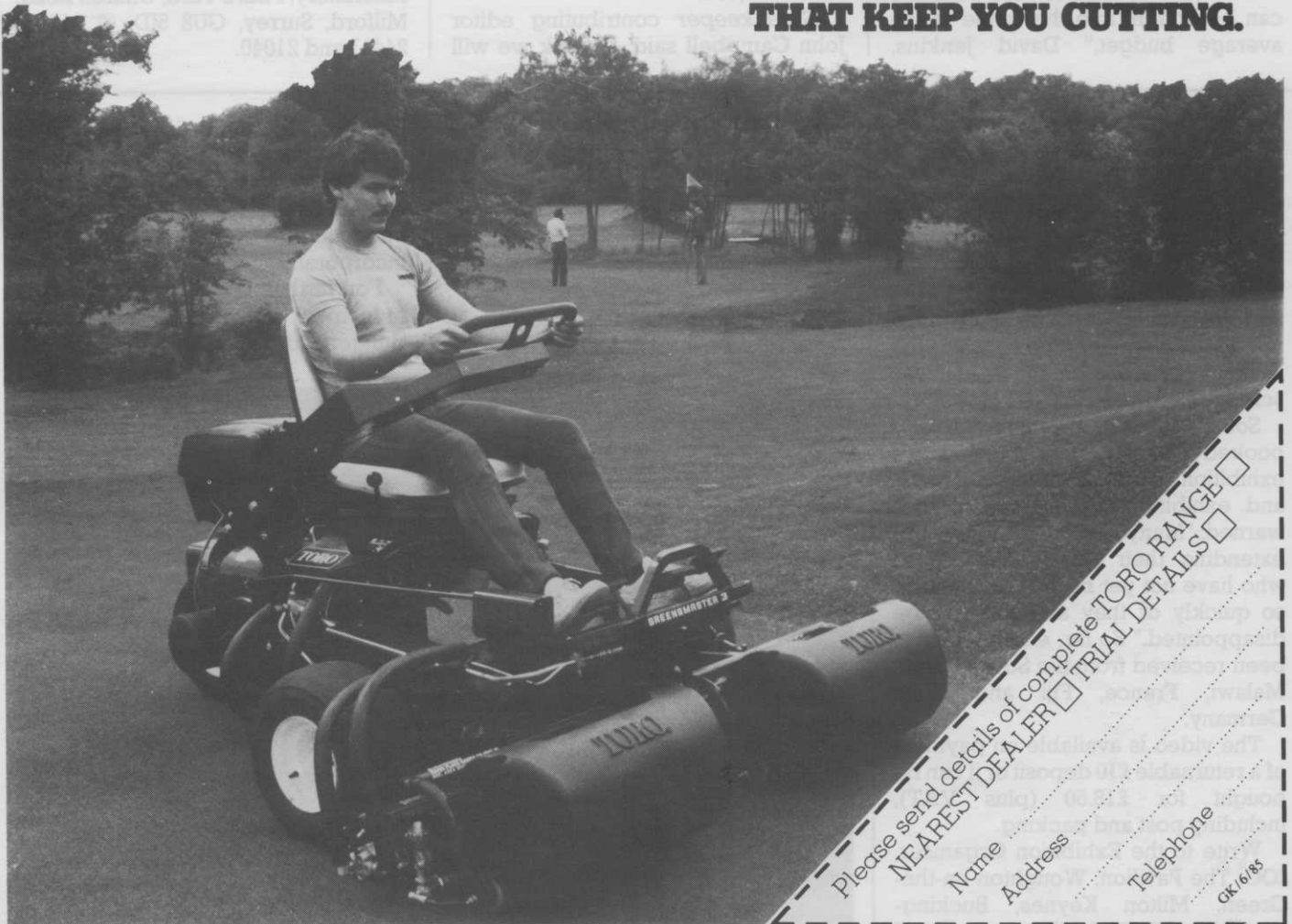


... of all the mowing jobs on a golf course, mowing the greens requires the most delicate touch of all. The new GREENSMaster 300 ensures a uniform cutting height, appearance and playing characteristic while manoeuvring in a tightly defined area. Why not see this exceptional mower in action... the GREENSMaster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

NEW GREENSMaster 300



**THE PROFESSIONALS
THAT KEEP YOU CUTTING.**



Please send details of complete TORO RANGE
 NEAREST DEALER TRIAL DETAILS
 Name
 Address
 Telephone

GK/6/85

UK DISTRIBUTORS: LELY IMPORT LIMITED STATION ROAD / ST NEOTS / CAMBRIDGESHIRE Tel (0480) 76971 Telex 32523

People, Places, Products

Maxwell Hart has added Edward Hadgkiss to its sales team. He will cover the Hereford, Worcester and Lincolnshire area, handling the company's full product range.

Eddie, 30, was previously head greenkeeper at Stoke Poges and Wrekin Golf Clubs and is a member of EIGGA and the BGGGA.

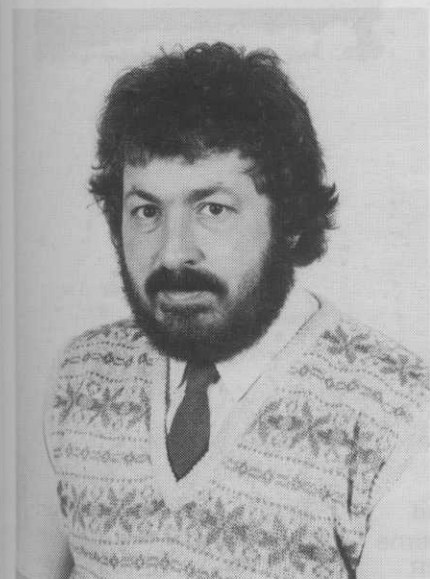
Married with two children, Eddie lives in Shipston-On-Stour, Warwickshire and he can be contacted on 0608 61300 or through Maxwell Hart's sales office in Wokingham on 0734 785655.

After moves initiated from Riverside, California and the recent resignation of Philip York, Toro has announced personnel changes within its sports turf irrigation division located at Ringwood, Hampshire.

Peter Roberts has been appointed manager of Toro Irrigation, the subsidiary company responsible for all irrigation product sales in the UK and Eire. He also becomes area manager for the Toro International sales company's interests in northern Europe.

Peter has been with Toro for nine years, operating mainly within the UK golf markets.

Based at Ringwood, Richard Parsons becomes specifier sales manager for Europe, the Middle East and Africa with special responsibilities for Scandinavia. Mark Gunter has been appointed service manager for Europe, the Middle East and Africa. The revised operation is headed-up by Carlos Ochoa, managing director of sales, Europe, the Middle East and Africa.



Peter Roberts.



Pictured seated on a Ransomes triple greens mower is Donald Steel, who was elected chairman of the projected European Association of Golf Course Architects at the 13th AGM of the British Association of Golf Course Architects held at Ransomes recently. The past chairman of the BAGCA Don Harradine (third from right) was elected president and Dr Martin Hawtree (far left) secretary and treasurer.

George Palmer, the Peterborough-based fertiliser and feed-stuffs manufacturer, after a year in which demand for its organic-based fertilisers and protein feeds increased by over 30 per cent, has announced the first part of a three-phase capital investment programme of £300,000 for additional plant and storage.

Fisons Horticulture will be sponsoring two bowling leagues this summer—the South West Bowls League in Bristol and the Birmingham Bowling Association League.

The South West Bowls League is one of the largest in the country, with 27 private and municipal clubs competing in the two divisions. The Birmingham Bowling Association comprises 13 clubs, again drawn from private and public authority greens.

A fundamental feature of sponsorship, which is being operated jointly with Fisons stockists Brown & Sons Seeds in Bristol and E.T. Breakwell in Solihull, is that the clubs involved will be able to benefit from Fisons professional advice on greens maintenance throughout the season.

Nigel Woodland, sales and marketing manager for Fisons Professional Horticulture, said: "We are delighted to give this support and feel that our association with these two leagues will make a positive

contribution to the sport in terms of green maintenance and improvement."

• *Fisons Horticulture has published five new product booklets—the first in a series the company aims to produce, ultimately covering the full professional horticultural range of composts, fertilisers and pesticides for the greenkeeper/groundsman, commercial grower and landscaper.*

The titles are: Turf Chemicals (covering selective weed control, systemic disease control and effective worm cast control), TPMC tree and shrub planting compost (specially formulated for the improved establishment of newly planted trees and shrubs and a selected blend of peats with a complete range of nutrients), Grower Pesticides (fungicides, herbicides and insecticides), Cudgel (the new microencapsulated insecticide for the effective control of vine weevil, sciarid fly and cabbage root fly) and, finally, Levington And Fenmere Composts.

Copies are available from Fisons Horticulture, Horticulture Division, Paper Mill Lane, Bramford, Ipswich, Suffolk IP8 4BZ. ☎ Ipswich (0473) 830492.

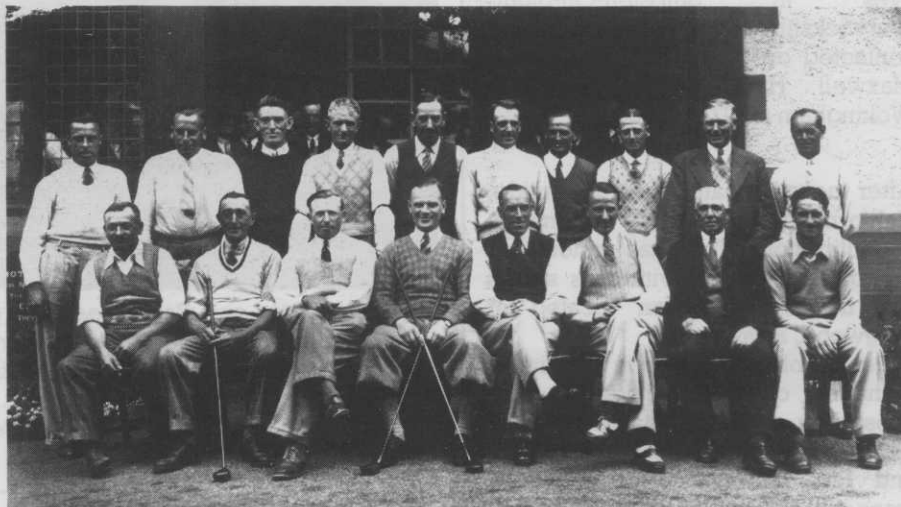
**Continued
overleaf...**

Compo, a subsidiary of BASF and a leader in the continental amenity turf market, is bringing its range of slow-release nitrogen products to the UK market. BASF United Kingdom has appointed George Palmer as its sole UK wholesale distributor and the range, which initially includes nitrogen, NPK and NK products sold under the Floranid name, will be handled by Palmer's horticultural and amenity division, which will be appointing retail distributors. Further details from John Hinton, BASF United Kingdom on 0473 822531 or Jim Green of George Palmer on 0733 61222.

Orag, the authorised European agency for the distribution of Ryan equipment, has appointed Victa (UK) as UK distributor. John Edmunds, managing director of Victa (UK), said: "The Ryan equipment is among the finest available for turf maintenance and, as such, requires a trade commitment and after-sales back-up in line with its quality. As these conditions are similar to those enjoyed by the Victa range, the Ryan programme will form a logical and exciting development for our UK operation." For further information, contact John Edmunds on 0256 50301.

Team Group Identified

On *Greenkeeper's Notebook* pages in March, this photo of greenkeepers, taken prior to an England-Scotland match at Barnton in the mid-1930s, was published. At the time, no details of the personnel were available. Well, now the picture is a little clearer, thanks to several readers contacting the editor. The known line-up, thus far, reads (back row, left to right): not known, Jack Glass (vice-chairman), Ben Ellis, not known, Charlie Prickett, not known, George Hart, Bert Dash, Alf Whitall (chairman) and Jimmy Ness. Front: Ted Dunn, Arthur Tydeman, Stan Morton, George Martin, Bill McKean, Jim Bridges, Charlie Saunders and not known.



VERTI-DRAIN FOR HIRE

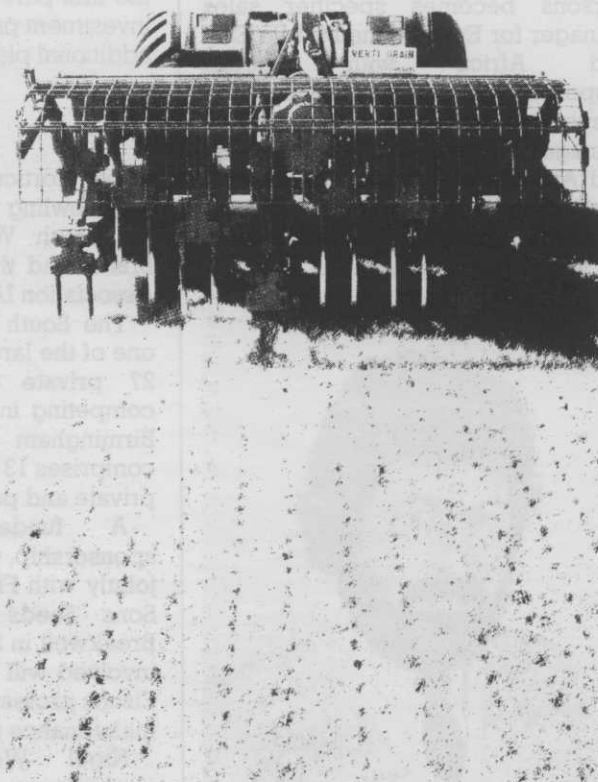
Clubs we have Verti-Drained:

Royal St. Georges
Wentworth
Meon Valley
Berkshire
Alresford
Broome Manor
Bramshaw
Broadstone
Bognor Regis
Beechlands
Burnham Beeches

Corhampton
Hankley
Hayling Island
Lyme Regis
Parkstone
Sherborne
Temple
Tilney Park
West Surrey
Woking
Knighton Heath

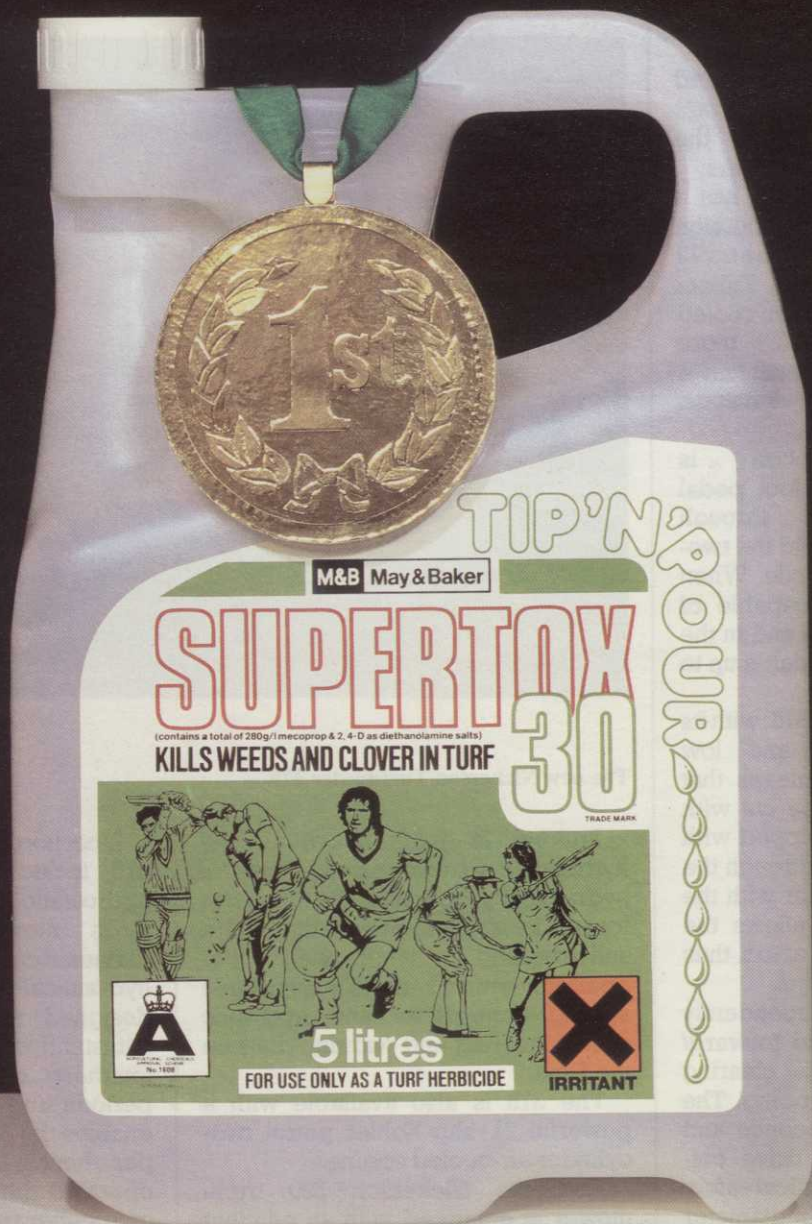
Brian D. Pierson
(Contractors) Limited

AERATE YOUR GREENS OR PITCH
THE DEEPEST PENETRATION



27 Vicarage Road
Verwood, Wimborne
Dorset BH21 6DR

Tel: Verwood
822372 & 824906
(STD 0202)



BEATS THE COMPETITION

Supertox 30 has all it takes to be a winner at weed control.

Broad-spectrum cover to beat weed competition, with over 22 species controlled including chickweed, yarrow, pearlwort, creeping buttercup, daisy, dandelion and clovers.

Economy of treatment that exactly matches the dose rate to the need.

Turf tolerance record excellent at all recommended dose rates.

Complete flexibility from routine jobs to really difficult control problems. Now in the unique 5 litre Tip 'n' Pour pack and 25 litre drums.

M&B May & Baker

New Pair From Nickerson

Nickerson Turfmaster has developed a new range of sophisticated grass cutting machinery to meet the requirements of professional users.

Nickerson Turfmaster's 375 has a full 7ft cut, hydrostatic transmission plus a host of other features. The triple mower is powered by a Kubota 21½hp, three-cylinder, water-cooled diesel engine, giving the 375 more than adequate power to maintain a high work rate and fast transport speed.

Forward/reverse motion is controlled by a rocking foot pedal giving variable speed through hydrostatic transmission and the two-speed, front-wheel drive axle. When cutting, the machine is capable of operating at up to 7½mph and in the transport gear speed is variable up to 14½mph.

The configuration of the 375, with its low centre of gravity and low pressure flotation tyres, means that slopes of up to 30° can be cut with ease. The machine is equipped with hydraulic power steering through the rear wheels which, together with the hydrostatic transmission, allows the 375 to be used in awkward areas, thus reducing hand-trimming time.

Each cutting unit is independently hydraulically operated and forward/reverse drive allows for the clearing of blockages and back-lapping. The units can be raised in seconds and have automatic cylinder drive cut-off—they also have mechanical safety locks for transport. The 8in diameter cylinders are available with three or five blades and can deal with grass up to 8in high—height of cut is easily adjusted from a ½in to 2½in.



The new Nickerson Turfmaster 375.

Braking is inherent within the hydrostatic transmission, but a hydraulically operated 8in diameter foot brake is also fitted together with a self-adjusting handbrake. For operator comfort, there's adjustable seating, controls to hand, hydraulic power steering and warning dials on the fascia.

The 375 is also available with a powerful 21½hp Kohler petrol two-cylinder air-cooled engine.

And the Nickerson 390 triple mower is equipped with an efficient Kubota 28½hp, four-cylinder, water-cooled diesel engine for fuel economy and trouble-free running over extended periods.

Incorporating all the features of the 375, including power steering and hydrostatic transmission, the 390's three mowing units have 10in diameter cutting cylinders, which are hydraulically powered. The specially designed robust cutting units will withstand constant hard work in the toughest of conditions for long periods and the 100in width of cut enables the 390 to cut up to 7½ acres per hour. Like the 375, a heel-operated differential lock is fitted to give better traction should wheel slip occur.

All Nickerson Turfmaster machines carry a two-year warranty. ☎ 0427 4776.

MELTON MOWBRAY GOLF CLUB

invite applications for the post of

HEAD GREENKEEPER

Accommodation provided. Salary negotiable.
Opportunity for wife to undertake some catering.

Please apply in writing giving age, course qualifications and experience to:

Secretary, Melton Mowbray Golf Club, Thorpe
Arnold, Melton Mowbray, Leics.

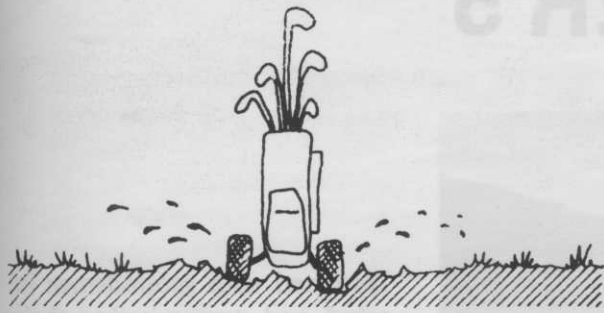
The professionals choice in Compact Tractor equipment

WESSEX

WESSEX FARM MACHINERY SALES CO.
NEWMAN LANE, ALTON, HAMPSHIRE.
TELEPHONE: ALTON 88848. TELEX: 858755.

Get On The Right Track

The problem of how to stabilise and keep clean muddy pathways in a cost-effective way has been tackled by Woodland Riding Surfaces, Warren Camp, Crowborough, East Sussex TN6 1UB. ☎ 034282 4612. On test, what was previously a bog remained a clean and



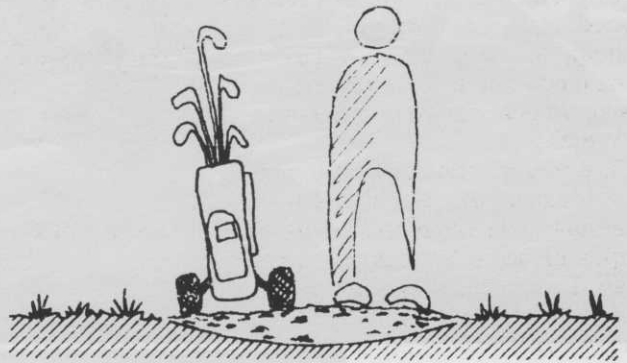
Muddy paths, dirty shoes, bogged wheels,' the members complain... Prepare a clean, hard sub-base by clearing the mud and draining puddles down to the firm subsoil.



walkable pathway throughout the winter thanks to a 3in-6in layer of the company's Woodland Pathway Surfacing. The only preparation required is the removal of excess mud and, as the material is delivered in bulk, it can be wheelbarrowed straight on to the path and takes spiked shoes and trolley wheels immediately. Decay resistant, the material will last for up to five years before topping up is necessary.



Delivery of the mixed hardwood chip/bark and twigs takes up to ten days. Rake until level a layer of Woodland Pathway Surfacing. The clean, light-coloured, natural, non-splashing, long-lasting and economical surface pleases golfers!



EDDIE PARK—CONTINUED FROM PAGE 11...

water to our natural rainfall. We now only add about 5in.

When you realise that the average rainfall for the area totals only 25in, you can see how easy it was to go over the top. We have now realised just what a skilful job watering should be. Hand watering, the use of small local sprinklers, wetting agents and moisture meters enable the skilled operative to apply just enough water to different areas of permeability at different rates and to achieve a positive effect in change of grasses. There are no more wet middles with lush meadow grass and no more dry peripheries or hard and bare slopes. As fescue and agrostis have reappeared, we can allow the top few inches to become drier and concentrate on the root growth, perhaps 6in down. Local weather forecasts and a rain gauge are other helpful aids.

I can illustrate the variations that exist in different parts of the green with some further simple observations.

Many greens on old courses were

constructed to retain water for periods of drought. An impervious layer was built in, sometimes in a saucer shape. Many of our greens had to be built up to clear the underlying rock and local clay was used. As most of the greens have returned to agrostis with fescue, we have seen two interesting features. One is the initial change back to agrostis followed by a further change in many areas to fescue. The second is the fact that we are left with a few small local areas that are different from the rest in that they have some *Poa annua* patches.

Fusarium

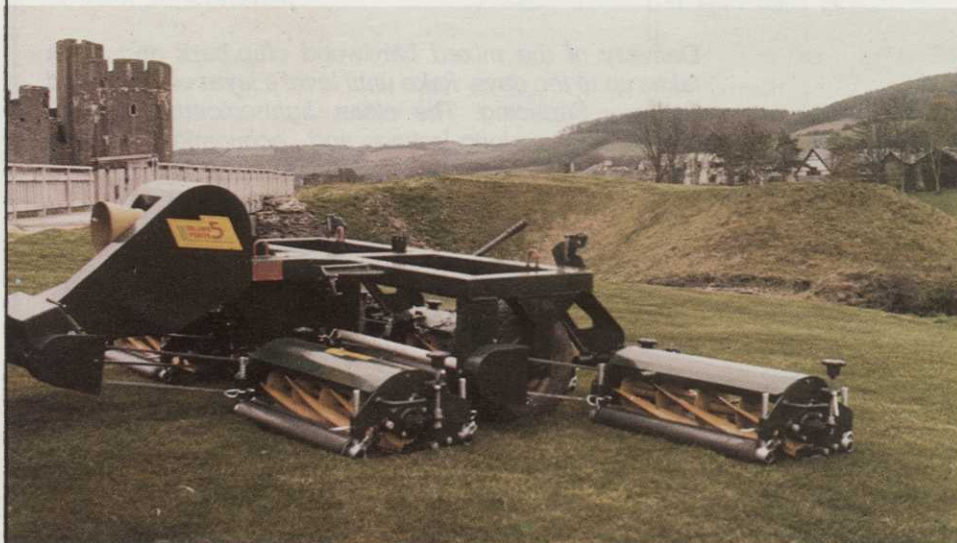
These are the only areas to be susceptible to fusarium. They are not really extensive enough to be significant, but they are irritating. There had to be some reason lying under the surface and so we tried the 'comparative cans' test. Tin cans minus tops and bottoms were inserted into a shallow slit in the turf and filled with water, with controls on the better areas. The soil should be generally

moist, but not saturated. The control cans emptied at a vastly greater rate than those in poor areas. Percolation in these difficult areas was clearly blocked. And, in fact, deep holes revealed a dense layer of impervious material.

I may have drawn the wrong conclusions from these observations. I hope someone is going to think it worth doing the research to prove me right or wrong. I would like to see irrigation companies thinking out what we require for our climate. It could be high volume, but well diffused, hand-watering devices, equipped with a flow meter so that if hand watering is required, it can be done in the shortest possible time. Quick coupling hoses are available.

There must be a commercial need for a full watering advisory service able to keep a check on our swards to tell us how much water is required, to test the permeability, compaction, moisture holding capacity and, no doubt, many other things. For some courses, its arrival cannot come soon enough.

CUT INTO YOUR WORKLOAD WITH THE VERSATILE POWER 5



Designed with groundsmen in mind and now winning their acclaim for its sharp, clean, close cutting ability.

Five fully floating heads follow the ground contours and cut without scalping.

The hydraulically raised '3/5' can be used either as a full '5 gang' machine or as a '3 gang' with the outer '2' raised and drive automatically disconnected.



Rocraft Limited

Energlyn, Caerphilly, Glam. CF8 3TE Tel: (0222) 885778

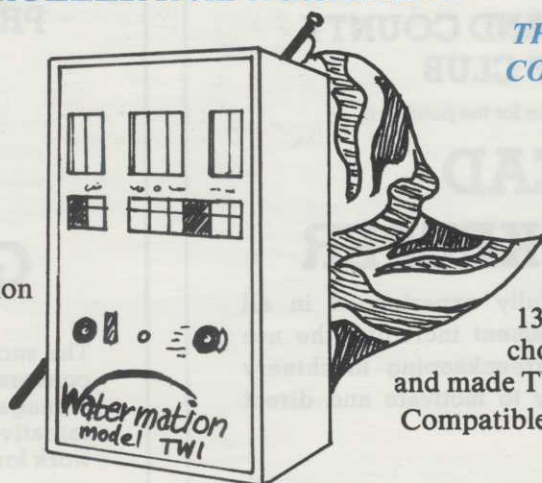
Are you still green with envy?

or are your greens under the control of the
TW1 COMPUTER CONTROLLER from **Watermation**

**THE MOST ADVANCED
CONTROL SYSTEM FOR
GOLF COURSE
IRRIGATION**

Developed by
Watermation over 5
years, the TW1 is now
available for you. Over
130 golf clubs have already
chosen this British designed
and made TW1 computer controller.
Compatible with existing equipment

- 1" high, easy to read display
- Large control buttons
- 3 alternative watering programmes
- Battery back up in case of power failure
- Simple rotary switch for easy selection of function
- Diagnostic switch allows greenkeeper to check system is working without applying water



REQUIRES TWO WIRES ONLY

Greens, tees, approaches and fairways can all be controlled by one TW1 and one pair of wires feeding up to 99 solenoid valves. In most cases, existing cabling can be used.

INSTALLATION STRAIGHTFORWARD

Installation can be carried out by your local irrigation contractor (who can also supply the unit) or by **Watermation**

FUTURE FLEXIBILITY

TW1 enables you to **ADD** areas of irrigation at any time, such as tees or approaches, without additional controllers or cables.

COMPLETELY ACCURATE TIMING

Modern computer technology gives accurate timing in 1 minute steps and allows Greenkeeper to set up to three alternative watering programmes.

Watermation Ltd., Monument Way E., Woking, Surrey. Tel.: Woking (04862) 70303

farmura

The Liquid Organic Fertiliser

Make it part of your turf management programme — from re-seeding to maintenance

farmura

benefits include

- ★ Thicker sward
- ★ Deeper roots
- ★ Improved germination
- ★ Greater resistance to stress

For detailed information, contact your distributor or

Farmura Ltd, Stone Hill, Egerton, Kent. Tel: Egerton (023376) 241

farmura

has been used on a wide variety of sites including

FOOTBALL GROUNDS — Wembley, Aston Villa, Arsenal, Coventry
GOLF COURSES — Birkdale, Lytham St. Annes, St. Andrews, Woburn
RACECOURSES — Ascot, Ayr, Chester, Uttoxeter
LAND RECLAMATION — Work in progress on NCB sites
ALSO on cricket pitches, bowling greens, tennis courts — in fact, wherever grass is sown, grown and mown

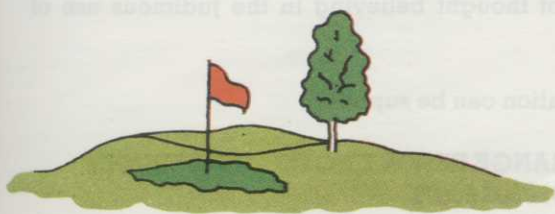


Whether it be construction, drainage or **TORO** irrigation

GOLF LANDSCAPES LTD.

ASHWELLS ROAD
BENTLEY, BRENTWOOD
ESSEX CM15 9SR.

Coxtie Green (0277) 73720



The proven experience in the field

Appointments

DUMFRIES AND COUNTY GOLF CLUB

invite applications for the position of

HEAD GREENKEEPER

Applicants must be fully experienced in all aspects of turf management including the use and maintenance of greenkeeping machinery and possess the ability to motivate and direct staff.

The salary is negotiable.

Apply in writing giving age, qualifications and full details of experience to:

**THE SECRETARY,
DUMFRIES AND COUNTY GOLF CLUB,
EDINBURGH ROAD,
DUMFRIES.**

PRESTWICK ST. CUTHBERT GOLF CLUB

invite applications for the post of

HEAD GREENKEEPER

The successful applicant will require to be fully conversant with all aspects of golf course management, be capable of working on his own initiative and have the ability to control a small work force, leading by example.

The salary is negotiable.

There is no accommodation.

Apply in the first instance to:

**THE SECRETARY
PRESTWICK ST. CUTHBERT G.C.
EAST ROAD
PRESTWICK
AYRSHIRE**



LETHAM GRANGE HOTEL

THE PREMIER RESORT CENTRE IN THE EAST OF SCOTLAND
20 BEDROOM DE LUXE HOTEL, WINTER CURLING RINK (OPENED IN 1985)

HEAD GREENKEEPER

required for

18 Hole Championship Golf Course, built in beautiful wooded parkland (to open for play during 1986), and incorporating other sports.

Applications are invited for the post of Head Greenkeeper, to take over at the completion of construction work, and maintain the golf course to a very high standard. It is important that applicants must have a desire to be an improver, and must belong to the school of thought believing in the judicious use of irrigation and fertilisers.

Salary negotiable. Family accommodation can be supplied.

Write with C. V. to:

**G. K. SMITH – MANAGING DIRECTOR, LETHAM GRANGE RESORT HOTEL, SUTTIESIDE,
FORFAR, ANGUS. TEL. NO. 0307 63671**

OR INITIALLY TELEPHONE FOR BROCHURE AND PLANS, GIVING NAME ADDRESS AND TEL. NO'S.

Buyers' Guide

BARK AND BARK BASED PRODUCTS

Camland Products Ltd.,
36 Regent Street,
Cambridge, CB2 1DB
Tel: (0223) 68780 Telex: 81254

BOWLING GREEN, GOLF GREEN/TEE CONSTRUCTION

Amenity Landscape Construction

1st Floor, 33 High Street,
Barnet, Hertfordshire.
Tel: 01441 0189

J. S. Bishop & Co. Ltd.,
Bishop House, Bath Road,
Taplow, Maidenhead, Berks.
SL6 0NY Tel: 06286 4444

BRITISH ASSOCIATION GOLF COURSE ARCHITECTS

Cotton (CK), Pennink Steel & Partners Ltd.,
5 Buckingham Place, London,
SW1E 6HR

Tel: 01 630 5252 Telex: 311210

Hamilton Stutt & Co. Ltd.,
12 Bingham Avenue, Poole,
Dorset, BH14 8NE

Tel: (0202) 708406

D. L. Harradine

CH 6987
Caslano, Switzerland

Hawtree & Son,
5 Oxford Street,
Woodstock, Oxford, OX7 1TQ

Tel: (0993) 811976

T. J. A. McAuley BSc FICE,
7 Donegal Square West,
Belfast, N. Ireland, BT1 6JF

Tel: (0232) 226981

BRITISH ASSOCIATION GOLF COURSE CONSTRUCTORS

Chipman Ltd.

Horsham, Sussex RH12 2NR
Tel: 0403 60341

Eccles Contracting Ltd.,
Brickfield Street,
Hadfield, Hyde, Cheshire,
SK14 7DZ Tel: (04574) 63425

Golf Landscapes Ltd.,
Ashwells Road, Bentley,
Brentwood, Essex. CM15 9SR
Tel: 0277 73720

Land Unit Construction Ltd.,
Folly Farm, Hanslope,
Milton Keynes, Bucks. MK19 7BX
Tel: 0908 510414

Brian D. Pierson (Contractors) Ltd.,
27 Vicarage Road,
Verwood, Wimbourne, Dorset,
BH12 6DR Tel: 0202 822372

Southern Golf & Landscapes Ltd.,
85 West Street, Warwick,
Warwickshire
Tel: 0926 492898

CHEMICALS

Trident of Compstall Ltd.

Compstall Mill,
Compstall, Stockport.
SK6 5HN Tel: 061 427 7171

FERTILISERS AND TOP DRESSING

D. O. Hunt Ltd.,
Orchard Nurseries, Forders Lane,
Bishopsteighnton, Devon, TQ14 9RZ
Tel: 062 67 2327

Distributors for May & Baker
Synchemicals Fertilisers, Manufacturers
of Top Dressings.

Trident of Compstall Ltd.

Compstall Mill,
Compstall,
Stockport, SK6 5HN
Tel: 061 427 7171

GOLF COURSE ACCESSORIES

Bridges Pennants,
68 Southchurch Avenue,
Southend-on-Sea, Essex. SS1 2RR
Tel: 0702 612344

Contact: Mr Elvin
H. Pattison & Co. Ltd.,
Stanmore Hill Works, Stanmore,
Middlesex, HA7 3HD
Tel: 01954 4171

GOLF COURSE AND BOWLING GREEN CONSULTANT

John Campbell,
121-123 High Street,
Dovercourt, Harwich, Essex. CO12 3AP

GOLF COURSE CONSTRUCTION

J. S. Bishop & Co. Ltd.,
Bishop House, Bath Road,
Taplow, Maidenhead, Berks.
SL6 0NY Tel: 06286 4444

GRASS CUTTING EQUIPMENT

Ransomes, Simms & Jefferies PLC,
Nacton Works, Nacton Road,
Ipswich, Suffolk. IP3 9QG
Tel: (0473) 71222

Contact: J.F.R. Wilson/R. Bishop

Watkins Naylor & Co. Ltd.,
Friar Street, Hereford,
Tel: Hereford (0432) 274361
Telex: 35302 W. Naylor or contact your dealer

GRASS SEED

British Seed Houses Ltd.,
Bewsey Industrial Estate,
Pitt Street, Warrington, Cheshire,
Tel: (0925) 54411

Contact: Rodger Saunders
Portview Road, Avonmouth, Bristol,
Tel: (0272) 823691

Camp Road, Swinderby, Lincs,
Tel: (0522) 86714

Mommersteeg International,
Station Road, Finedon,
Wellingborough, Northamptonshire,
NN9 5NT Tel: (0933) 680674

Contact: Michael Perkins
GREENKEEPING ASSOCIATIONS

E.I.G.G.A.
2 Golf Cottage, Bucklesham Road,
Ipswich, Suffolk.
Tel: 0473 711810

S.I.G.G.A.

82 Drumbreck Road,
Glasgow, G41

Tel: 041 427 4242

IRRIGATION

CAMERON

a division of **Wright Rain Limited**,
Head Office, Harwood Industrial Estate,
Littlehampton, West Sussex.
BN17 7BA

Tel: Littlehampton (0903) 713985
Evesham, Worcs.
Tel: Evesham (0386) 49348

Ringwood, Hants,
Tel: Ringwood (04254) 2251
Spalding, Lincs,
Tel: Spalding (0775) 3764

Norwich, Norfolk,
Tel: Swainsthorpe (0508) 470402
Ongar, Essex,
Tel: Ongar (0277) 362444

Whitchurch, Hants,
Tel: Whitchurch (025682) 2655
Bridgnorth, Shropshire,
Tel: Bridgnorth (07462) 61762

Wetherby, Yorks,
Tel: Boston Spa (0937) 845788

Perrot Irrigation Ltd.,
38 High Street, Rowhedge,
Colchester, Essex. CO5 7ET
Tel: (0206) 867624

Watkins Naylor & Co. Ltd.,
Friar Street, Hereford,
Tel: Hereford (0432) 274361
Telex: 35302 W. Naylor or contact your dealer

IRRIGATION EQUIPMENT
British Overhead Irrigation Ltd.,
The Green, Upper Halliford,
Shepperton, Middlesex, TW17 8RY
Tel: 09327 88301 Telex: 928767

Contact: Sales Department
Sports Ground Irrigation Co.,
Hereward Lodge,
Paget Road, Lubenham,
Market Harborough, Leics.
Tel: (0858) 63153

Toro Irrigation Ltd.,
Unit 7, Millstream Trading Estate,
Ringwood, Hampshire, BH24 3SD
Tel: Ringwood (04254) 6261

Watermation Ltd.,
Monument Way, E. Woking,
Surrey, GU21 5LY
Tel: Woking 70303 Telex: 859224

LANDSCAPE CONTRACTORS
J. S. Bishop & Co. Ltd.,
Bishop House, Bath Road,
Taplow, Maidenhead, Berks.
SL6 0NY Tel: 06286 4444

LIQUID ORGANIC FERTILISER
Famura Ltd.,
Stone Hill, Egerton, Nr. Ashford, Kent.
Tel: Egerton (023376) 241

JACOBSEN NATIONAL DEALERS
Marshall Concessionaires Ltd.,
Romsey Road, Lockerley, Romsey,
Hampshire. SO5 0GR
Tel: (0794) 41144 Telex: 477341

Achurch & Sons (Horncastle) Ltd.,
Lincolnshire,
Horncastle (06582) 3441

Anglia Grass Cutting Machinery Ltd.,
Suffolk & Norwich,
Lowestoft (0502) 65811/68668

Bristol Garden Machinery Ltd.,
Bristol, N. Wilts, Glos, Cornwall,
Bristol (0272) 719361

Club Mower Services,
Herts, Beds & N. London Borough,
Luton (0582) 841040

CNS Mowers,
Norfolk,
Hunstanton (048526) 234

Ellesmere AG,
Shrops, Mid. & N. Wales, Hereford,
Worcs, W. Midlands, N. Powys, Staffs.
Oswestry (0691) 657232

Fletcher - Stewart (Stockport) Ltd.,
Cheshire, Greater Manchester & Wirral,
Stockport (061 483) 5542

Fulborn Garden Machinery Ltd.,
Cambs,
Fulborn (0223) 880762

Ground Control Equipment,
Co. Durham, Teeside,
Darlington (0325) 55946

Henry Kelland Ltd.,
Somerset & Devon,
Bridgwater (0278) 58111

Id Forge Engineering Ltd.,
Essex & N. Kent,
Ingatstone (0277) 353611

Marshal Concessionaires (Retail) Ltd.,
Hants, Dorset, I.O.W.,
W. Sussex, S.W. Wilts,
Romsey (0794) 513185

Paul Stewart & Co. Ltd.,
N. Yorkshire & W. Yorkshire,
York (0904) 704121

Sandas Mower Services,
S. Yorkshire,
Sheffield (0904) 704121

Watcott Bros. Ltd.,
Gwent & Dyfed & S. Powys,
Newport (0633) 612072

John Wilder (Agricultural) Ltd.,
Oxon & Berks,
Wallingford (0491) 35595

Shanks Mowers Croyden,
Surrey, S. Kent & E. Sussex,
(01) 7714811

RANSOMES DISTRIBUTORS
Henton & Chattell Ltd.,
London Road, Nottingham.
Tel: Nottingham (0602) 862161

Contact: Christopher Bryden
D. Rowe & Co. Ltd.,
The Hornet, Chichester, West Sussex.
PO19 4JW Tel: (0243) 788100 Telex: 86110

Contact: Mr D. Strange/Mr J. E. Burfoot
Wilcocks
Walker Street, Preston, Lancs.
Tel: Preston 53068

SAND
Martin Bros.
1A Clifton Street,
Alderley Edge, Cheshire, SK9 7NN
Tel: Alderley Edge (0625) 854571

Contact: Nick Gray
Trident of Compstall Ltd.,
Compstall Mill, Compstall,
Stockport, SK6 5HN
Tel: 061 427 7171

SANDSLITTING
L.D. Bourgein Oxford Ltd.,
South Hinksey, Oxford, OX1 5AZ
Tel: (0865) 735420 Telex: 83147

Att. TRENCHERS, SALES, SERVICE, HIRE.
SEATS
Barlow Tyrie Ltd.,
Springwood Industrial Estate,
Rayne Road, Braintree, Essex. CM7 7RN
Tel: Braintree (0376) 22505 Telex: 98173
(Brochure available)

SEAWEED FERTILISERS
Seamac
Foundry Lane, Chippenham, Wilts.
Tel: (0249) 652811

SEMI MATURE TREES
Eastcote Nurseries (Solihull) Ltd.,
Wood Lane, Barsten, Solihull,
West Midlands, B92 0JL
Tel: 06755 2033/4

Contact: Stephen or Michael Fisher
SEMI MATURE TREE PLANTING
Eastcote Nurseries (Solihull) Ltd.,
Wood Lane, Barsten, Solihull,
West Midlands, B92 0JL
Tel: 06755 2033/4

Contact: Stephen or Michael Fisher
SEMI MATURE TREE PLANTING
(EQUIPMENT FOR HIRE)
Eastcote Nurseries (Solihull) Ltd.,
Wood Lane, Barsten, Solihull,
West Midlands, B92 0JL
Tel: 06755 2033/4

Contact: Stephen or Michael Fisher
SOIL CONDITIONERS
Soillife: Liquid Enzymes,
Romilt Marketing for your local supplier,
North Wyke Farm,
Guildford Road,
Normandy, Surrey, GU3 2AN.

Tel: Guildford (0483) 811933

SPRAYING EQUIPMENT

Evers & Wall Ltd.,
Hardi Division, St Georges Way,
Bermuda Industrial Estate,
Nuneaton, CV10 7QT
Tel: Nuneaton (0203) 372054 Telex: 312426

Contact: Mr W. Hayward
TEE MATS
Carpetation Ltd.,
6 Kaffir Road, Edgerton,
Huddersfield, HD2 2AN
Tel: 0484 28777

('Tufturf' — Synthetic Grass Backed
Rubber—Porous)

Charles Lawrence UK Ltd.,
153A Farndon Road,
Newark, Notts, NG24 4SP
Tel: 0636 76218 Telex: 37668

(Synthetic Grass Backed with Rubber)
Ned Johnson & Co. Ltd.,
163/7 Gibraltar Street,
Sheffield, S3 8AF
Tel: 0742 29508/9/0
(Link Matting)

TREES AND SHRUBS
Eastcote Nurseries (Solihull) Ltd.,
Wood Lane, Barsten, Solihull,
West Midlands, B92 0JL
Tel: 06755 2033/4

Contact: Stephen or Michael Fisher
Notcutts Nurseries Ltd.,
Woodbridge, Suffolk, IP12 4AF
Tel: 03943 3344

(Incorporating Waterers Nurseries, Bagshot,
Surrey.)
Taylor Trees,
Cliffe House, Cliffe Lane,
Gt. Harwood, Lancs, BB6 7PG
Tel: 0254 884563 Telex: 635384

TRENCHERS
L. D. Bourgein Oxford Ltd.,
South Hinksey, Oxford, OX1 5AZ
Tel: 0865 735420 Telex: 83147

Att. Trenchers, Sales, Service, Hire.
TRENCHING MACHINES
A. F. Trenchers Ltd.,
Gosbecks Road, Colchester,
Essex, CO2 9JS
Tel: 0206 44411

Contact: W. D. Baker
TURF (SPECIALITY)
Rolawn (Turf Growers) Ltd.,
Elvington, York, YO4 5AR
Tel: (0904) 85661

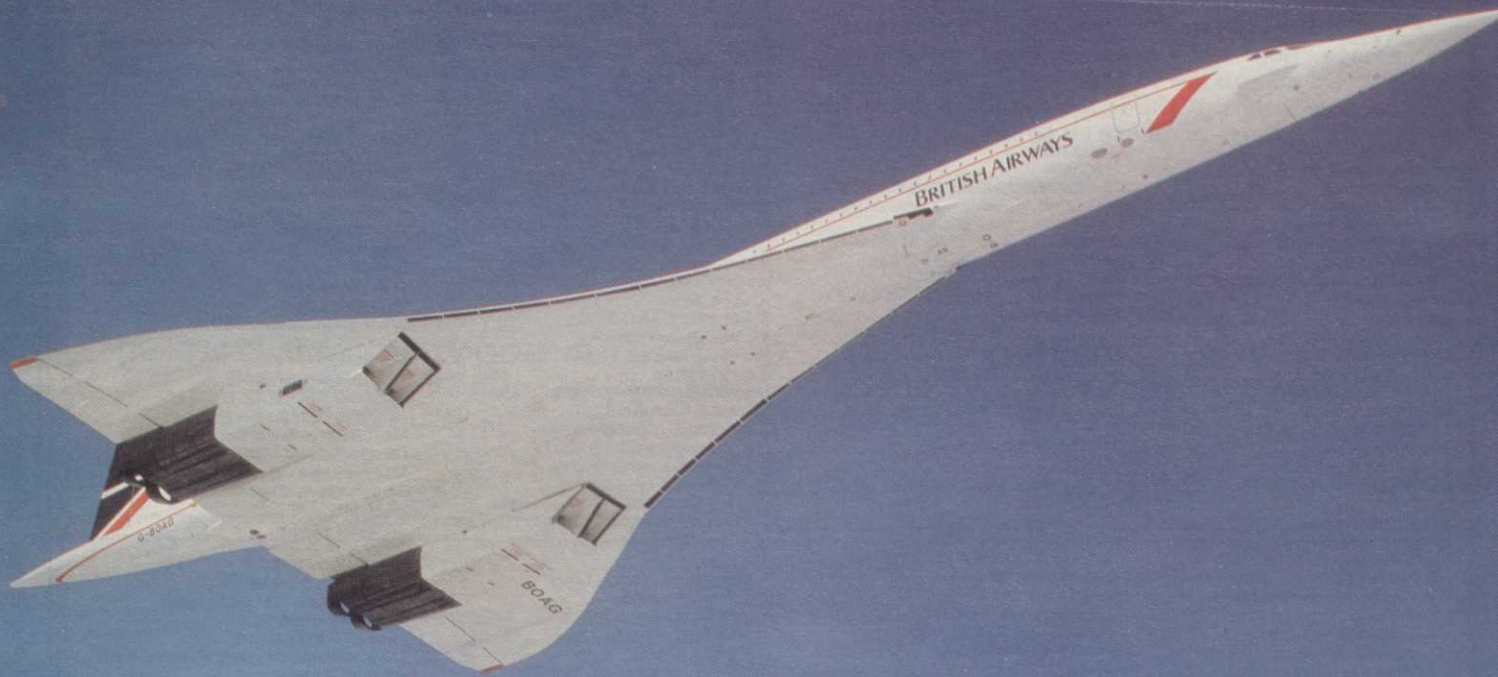
Telex: 57796 Rolawn G.
Fine purpose grown sports & amenity turf.
VERTI DRAIN HIRE
Aeration & Drainage Services,
10 Oxendean Gardens,
Lower Willingdon,
Eastbourne,
East Sussex.

Brian D. Pierson (Contractors) Ltd.,
27 Vicarage Road, Verwood,
Dorset, BH21 6DR
Tel: 0202 822372

SCC Lands Maintenance Ltd.,
12 Foxburrow Close,
Haverhill, Suffolk.
Tel: 0440 62369

Worth Draining,
Cornbecks, Irnham,
Grantham, Lincs. NG33 4JQ
Tel: 0476 84266

MASCOT[®]



SONIC*

Manufactured by MONSANTO.

Marketed in the UK by RIGBY TAYLOR LTD.