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Where were you?

AS A delegate to the EIGGA conference at Warwick University recently, I was both impressed and depressed. Impressed by the programme and organisation, depressed by the dismal attendance, writes *Greenkeeper* publisher Michael Coffey.

The organisation by the EIGGA board of management, and especially by general administrator Danielle Jones, was faultless. I have been involved in the organisation of such a conference and can appreciate what was achieved in putting together such a programme—Saturday was the best conference in my 'greenkeeping' experience.

Warwick is a purpose-built, modern campus in nearly 400 acres of open countryside with excellent accommodation and some of the best lecture theatres anywhere in the UK. The food was adequate and plentiful and while the cafeteria style catering may be economic, it certainly didn't appeal to me, but the formal dinner was excellent.

After lunch on the Friday, Dickie Jeeps, chairman of the Sports Council, opened the proceedings by commending all those who attended and ended by stating that he would return to his club and enquire why none of the greenstaff was there.

It is worthwhile to recap that this conference was open to all in the golf-greenkeeping industry at a basic all-in cost of £98 for three days, which is less, you would imagine, than one club member's annual subscription. So, why were so few greenkeepers and, indeed, members of EIGGA present? Perhaps it was not publicised enough although all *Greenkeeper* readers certainly received details.

There is, of course, the apathy that exists in greenkeeping, as much as in other professions, to outside-hours training and additional education. There is also the very real lack of support from clubs to pay for their staff to attend. No doubt all these will receive attention from the organising committee for next year's event at the same venue.

All this was of minor concern to those at Warwick, for

there was a noticeable atmosphere—a buzz as interesting paper after paper was presented. The variety of topics, excellent presentation and the detailed question and answer sessions impressed enormously.

As always, the discussion kept going well after dinner with many a clash or meeting of minds—very stimulating, even if you are not at your best the next morning! It quickly became obvious that delegates from a wide range of courses were concerned chiefly with similar problems—dealing with committees, chemicals, conservation and the like. There was full debate on all topics and a feeling that if anyone had any help to offer, it should be shared.

One of the definite plus points was the attendance (and subsequent editorial comment) by Malcolm Campbell, the editor of *Golf Monthly*. Malcolm holds the welfare of course and greenkeeper at heart and his news report on the conference was of great interest. I have no doubt that his points will be taken up before next year's conference.

On the down side, was the position of the tournament pros as put by Tony Gray of the PGA European Tour. The list of requirements for a tournament venue received less than total acclaim from a body of men who see precious little of the £4.5 million prize currently on offer to this elite band of professionals. Many delegates questioned the wisdom of allowing professional golfers to speak with such freedom and apparent authority without having a clue on how a course is actually prepared and what happens when 'the circus' leaves town.

A point put forward by one distinguished delegate who suggested that it is time for the PGA European Tour to sit down with the head greenkeepers and discuss what is practical for a venue—which has to be played for the rest of the year—met only with a lukewarm response.

The weekend was not all fierce debate, however. None of the diversions was more amusing or well-attended than the mastermind quiz on Friday night, won by a team of greenkeepers representing South Wales, but which contained two Scotsmen! They took away handsome decanters from the sponsor Rigby Taylor.

There was much to offer those at Warwick and a quality in depth, which has been lacking in the past. No doubt further progress will be made by next year and I trust you will be there.

This issue

MAY 1985

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The tractor mounted Verti-Drain, seen at Meon Valley Golf Club. The machine was hired from Brian D. Pierson (Contractors) now one of the countrys leading experts in the operation of this highly popular aeration machine. For further details contact Brian D. Pierson (0202) 822372.

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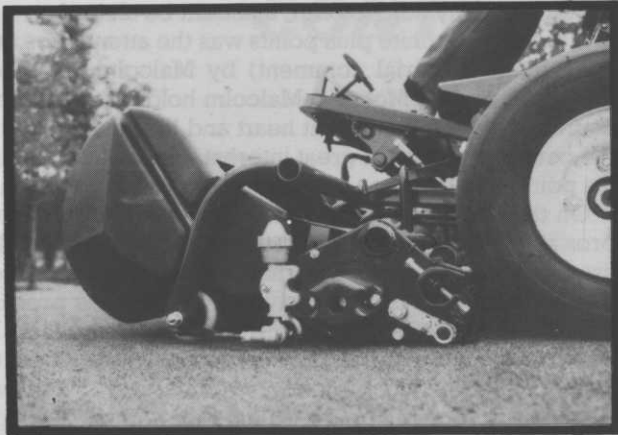
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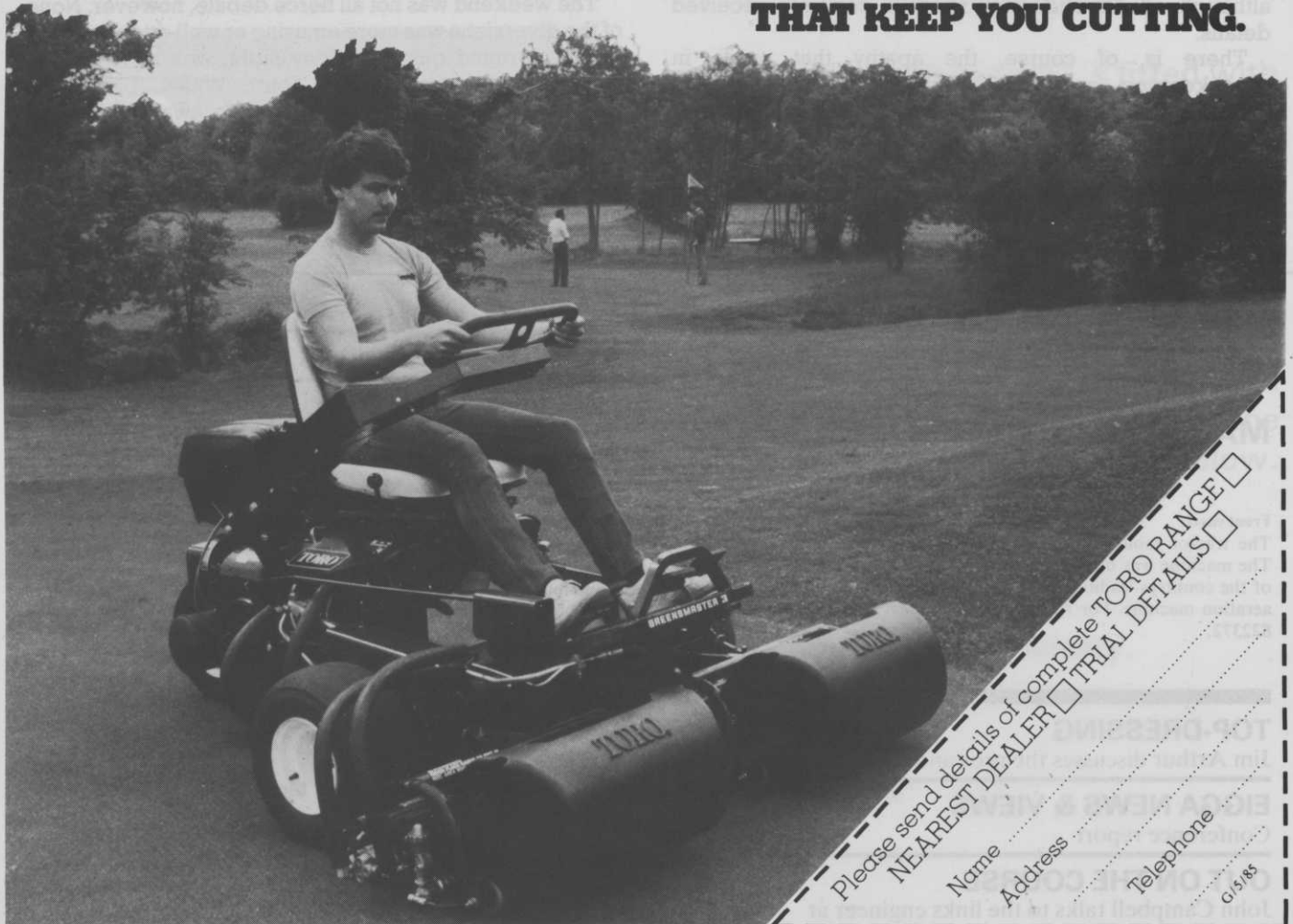


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TOP-DRESSING

By Jim Arthur

PERHAPS in no other area of greenkeeping is there so wide a division between theory and practice than in the question of what top-dressings to use and how to formulate and prepare them.

Few would debate the uncontested published evidence over the past 80 years of the link between phosphate fertilisers and annual meadow grass invasion. Perhaps more might feel inclined to argue as to whether annual meadow grass is such a deep-dyed villain as many of us have contended for many years, especially if they are only interested in course condition for summer tournaments and not all-year-round golf.

On one course, subject to unconventional treatment, it is admitted 'that the greens are 100 per cent annual meadow grass and it does not matter.' The fact that this is a symptom of serious problems below seems to have escaped notice.

Few fertiliser companies would try to dissuade golf clubs from buying nitrogen-only fertilisers, though they still sell NPK mixtures. I was, however, horrified on a recent advisory visit to see a written recommendation from one company advising the immediate application of 12oz per sq yd of lime to greens because their tests showed a pH of 4.7! They were good, 90 per cent *Agrostis* greens!

But with top-dressings, every facet of argument affects decisions. Whether to make your own or buy in is the chief point of discussion. My feeling is that unless you are lucky

enough to have consistent and freely available supplies of black, sandy, humus-rich topsoil virtually free from clay, either on the course or nearby, it then becomes too unpredictable a matter to try to make your own if you have to rely on variable sources of bought-in 'soil.'

With links courses, a more consistent supply is often achieved by stacking sand and seaweed and giving it time (with turning) to completely break down.

Some clubs are fortunate in being able to buy the large quantities they require of the eminently suitable black humus-rich soil from the fens—adding the correct sand as needed. Note that this is not a peat, but a neutral rather than acid source of humus, which is so difficult to provide from other sources.

Such clubs have existing generous shed accommodation, virtually compost factories, with sophisticated and expensive bulk shredding and screening and even in some cases sterilisation machinery.

The biggest arguments against home production are the huge cost of setting up such large soil sheds and handling equipment and the difficulties in getting suitable basic materials with which to produce good top-dressing.

If such shed and screening equipment is not available, my advice

is to buy in. I am unimpressed with the usual argument that 'it gives the men something to do in wet weather.' Some years, we could wait forever for wet weather, with an empty compost shed. Today, we are not, on busy courses, top-dressing in winter and so we want very finely screened *dry* material for spring and summer use. And with modern tractor cabs, many operations on the course can be carried out in wet weather. (If clubs provide their greenkeeping staff with decent accommodation and warm drying rooms, they will work outside more readily and efficiently in the wet.) In any case, no business can survive by employing staff unproductively just to keep them busy.

Cost is often raised as an objection to buying in, but even home production is not free. If you cost in labour, buying in sand and either extracting raw materials from the course or buying them in, not to mention subsequent handling and screening (but not making any allowance for capital investment in machinery or sheds), then the true cost of home mixing is about £12 to £15 per tonne and often more.

With good-quality imported dressing available at under £30 per tonne delivered, even if 100 tonnes are bought in each year—and most clubs, sadly, buy less—it is a relatively minor cost. The rub comes when we talk about what to buy!

It is essential to get a physical analysis carried out. A glance at the table of comparative results shown on

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Grade	Diam. mm.	Sample A %	Sample B %	Sample C %	Sample D %
Stones	> 8	Nil	Nil	Nil	2
Coarse gravel	8-4	Nil	Nil	Trace	1
Fine gravel	4-2	Trace	Trace	Trace	3
Very coarse sand	2-1	6	Trace	1	2
Coarse sand	1-0.5	29	1	1	8
Medium sand	0.5-0.25	55	69	5	11
Fine sand	0.25-0.125	6	27	19	18
Very fine sand	0.125-0.05	Trace)	1)	12)	22)
Silt	0.05-0.002	Trace) 4	2) 3	27) 74	20) 61
Clay	< 0.002	4)	Trace)	35)	19)
Loss on ignition (humus)		8	2-3	27	1
Calcium carbonate ('lime')		Nil	Nil	Nil	4

this page reveals how wide can be the variation and, indeed, many top-dressing mixes sold are appallingly bad and also very inconsistent from batch to batch, according to the source of 'soil' used.

Sample A is a nationally available, well-advertised dressing, which regularly and consistently shows equivalent analysis results. It has a satisfactorily narrow range of sand size particles (84 per cent between 1mm and 0.25mm), a satisfactory humus content and is acid. Above all, it has only four per cent fines—ie very fine sand, silt and clay combined.

Sample B was a locally made-up mix, now withdrawn, and it can be clearly seen that it was really only a very fine, dirty sand.

Sample C was a home mix, showing an appalling combination of 74 per cent fines with 27 per cent humus—in fact, a compost derived from heavy soil and farmyard manure. Even adding large quantities of sand would never reduce that awful clay content and clay and sand make bricks!

Sample D was also bought-in. It was literally a sand/soil mix with no humus

and 61 per cent of fines. No wonder it sealed the surface and caused ponding.

There must be many other comparisons that can be made and Dr Peter Hayes at Bingley and I are collaborating on a survey of available materials. Samples have been collected from bulk deliveries and, therefore, should not have been tarted up!

What we need, of course, is a very low fines content and a sand particle range that is not too spread out—as the small particles infiltrate into the spaces left by the large particles. The material must be lime-free (for inland courses anyway) and have a sensible humus content. In other words, what good practical men have known for years by just looking at it and rubbing it between finger and thumb, plus that essential other ingredient experience!

I do not have the space to get involved in controversies of sand-only versus compost top-dressings, except to say that changing policies in mid-stream is disastrous and your material should equate physically

with what is below the grass.

Equally, it is difficult always to condemn buying in top-dressing expensively bagged as opposed to bulk deliveries if there are no storage facilities and it is, of course, much easier to handle the material around the course.

The problem is that smaller amounts tend to be bought to compensate for the doubling of price.

The balance must favour using a quality controlled, bought in top-dressing with consistent analyses and quality, unless you are lucky enough to have suitable raw material available in quantity on the course or are a links course, making top-dressing from sand and seaweed alone.

Nothing changes in greenkeeping, in principle, only in detail to compensate for increasing pressures due to play, with higher standards being demanded, yet less time in which to carry out the work. These top-dressing problems have not altered at all since the start of the century and sand and seaweed is as sound a policy now on links courses as it was a hundred years ago.

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Conference Report

The third annual conference of the English And International Golf Greenkeepers' Association took place at the University of Warwick in March. Although the attendance figures were lower than expected, the conference was considered very successful, both in terms of content and the quality of papers.

The conference programme was opened by Dickie Jeeps and the days programme continued with talks by a representative of the Ministry of Agriculture and golf-course constructor Brian Pierson.

The following day was devoted almost entirely to papers given by EIGGA members. This was felt by many to be an innovative step on the part of the association and the exercise proved very worthwhile, prompting the comment that it was good to see golf greenkeepers representing themselves in such a professional manner.

On the third and final day, the morning session began with a paper by a representative from the Institute Of Groundsmanship, followed by Tony Gray of the PGA European Tour.

The final event of the morning was an open forum. In the afternoon, the association held its third AGM. Chairman Peter Wisbey opened the meeting and welcomed all present. The minutes of the 1984 AGM were read and approved as a true record of that meeting and the general administrator Danielle Jones reported that EIGGA membership, including those who had not yet renewed

subscriptions, stood at 847, with 57 of those being new members this year.

EIGGA branches are: Surrey, Sussex, Kent, London, East Anglia, the East of England, South Wales, the North-West and Berks, Bucks and Oxon and the association has ten company members—seven of which are national companies, three regional companies.

Danielle Jones said that all EIGGA members should have received a copy of the 1984 accounts in the March issue of *Greenkeeper*. The accounts for the previous year, as at December 31 1984, were:

Income—£13,103.94
Expenditure—£10,827.67
Stock of clothing—£1,544.13
Balance of income over
Expenditure—£732.14

A proposal that the 1984 accounts be adopted was made by T. Adamson. D. Harradine seconded the proposal.

The chairman reported that EIGGA's primary concern in 1984 had been to get greenkeeper training going in the right direction. He felt that the association was well on the way to achieving its aims, as it was now represented on the Greenkeeper Training Committee, together with the other greenkeeping associations, the national Golf Unions, the Secretaries' Association, the Sports Turf Research Institute and Jim Arthur.

Chairman Peter Wisbey added that to be represented on the GTC was a great step forward for EIGGA and that the association should do all in its power, together with the other organisations concerned, to establish the best facilities for greenkeeper training. It was imperative for all involved to unite in order to achieve this aim and it was very important to have the golf unions and the R & A on the side of the greenkeepers, as they stand more chance of influencing golf clubs to educate their greenstaff, he said.

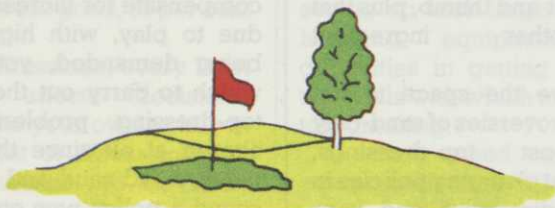
The chairman remarked that he was sorry to see so many empty seats at the conference, but felt that the conference had been extremely successful. He asked those present to raise support for the 1986 conference.

The chairman reported that, at the 1984 AGM, the board of management had been asked to consider raising the full subscription for 1986 to £50. This matter had been discussed thoroughly at board level and the conclusion had been that such a rise would be inappropriate at this time.

Steve Noye, branch administrator

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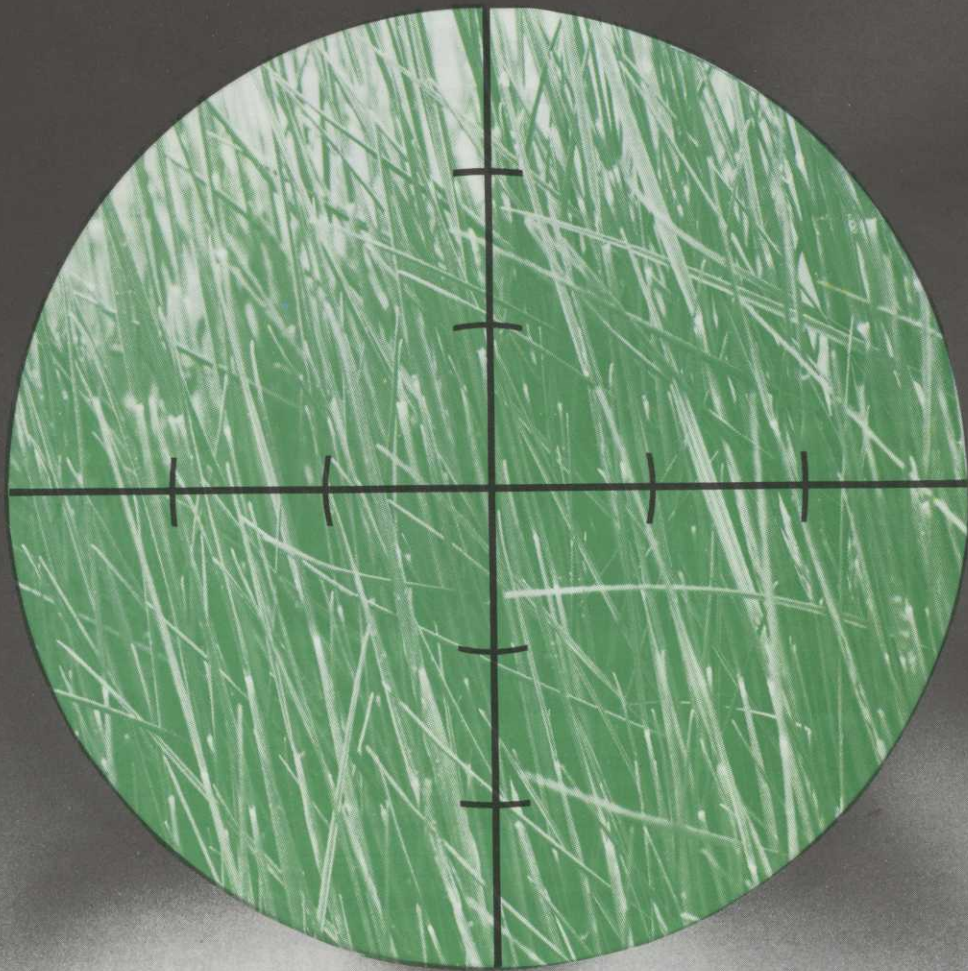


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Out·On·The·Course

THERE can be few more responsible jobs in golf course equipment engineering than that of looking after the vast range of machinery at St Andrews. And I know of no one better qualified than the man who has done the job in such a skilled and competent fashion over the past 15 years—George McLaren, 40, the Home of Golf's links mechanic.

I have known George since he first joined the staff and readily testify that he is an engineering genius, capable of completely overhauling tractors, triplex mowers and all the other items of specialist equipment so essential for the upkeep of a golf complex like St Andrews.

George and his wife both belong to St Andrews. The couple have three children and George is a devoted family man, an avid reader and knowledgeable on many subjects.

He loves discussing mowers and his views on the pros and cons of the different kinds of machinery reveal the character of a man who knows what he is talking about. So much so that some manufacturers like to pick his brains occasionally, but he often comes up with practical ideas for modifications.

"I was brought up in a farming community and am a countryman at heart," George said. "After leaving school, I started working for an agricultural and car repair specialist in St Andrews where I received my training in the overhaul of tractors and agricultural machinery. We also had to maintain a lot of the equipment used by the university for sports and recreation areas.

"When I first accepted the position as links mechanic, I really wanted a job with better prospects, more interest and variety and it was not long before I discovered that there was a lot more to keeping a golf course than just cutting the grass!

"I find the complex nature of fine turf management presents a constant challenge. I am not cooped up in the workshop all the time and there is always the opportunity to get outdoors to see how equipment is performing. Four 18 hole courses and a nine-hole layout require a whole range of sophisticated maintenance machinery.

"In my time, we have built up our workshop and are increasing the facilities as time goes on. Whenever we buy another machine, it may mean adding some new item to our range of tools, but apart from re-boring and re-

George McLaren



John Campbell talks to the links engineer at St Andrews.

grinding crankshafts, we don't have to use any engineering companies. We can do most of the overhauls and repairs ourselves.

"The basic workshop machinery that is essential to us is a cylinder grinding machine, oxy-acetylene and arc welding equipment, drills, jacks, hand grinders and a whole range of workshop implements, plus the special tools for doing certain jobs—some we make up ourselves, such as extractors, etc, for dismantling engines.

"When we get a new range of engines to deal with, we have to adapt some of our tools to suit them. Any tools we don't have, we can borrow from local garages where we have a good arrangement. We help them and they help us."

When asked to predict future trends in golf course machinery, George said, "I think we are going to see a greater use of diesel powered engines in a much wider range of mowing equipment. This will reduce running costs and, in some respects, would improve maintenance. Diesel engines give less trouble and they last longer than petrol ones. Running costs, too, could be halved.

"We use 100 gallons of petrol a week on average in summer. With diesel engines, much less fuel would be needed and substantial savings could be made by using agricultural diesel.

"The Japanese have shown it is possible to make powerful, compact

diesel engines with the introduction of mini-tractors, which are now being used widely. I am sure the design and size of these engines will become even smaller and they will be available in all sizes to fit any kind of mowing machine."

I asked what advice on machinery maintenance he would give greenkeepers. "The main thing is to keep machinery well-lubricated and if this is done regularly it will last much longer. There can be no doubt that proper care and maintenance pays dividends—machinery is easier to operate when kept clean and well-oiled and any adjustments that need to be done can be detected more easily.

"I have seen mowers coming in for overhauls at repair agents from local authorities in a deplorably filthy condition. They never get cleaned or washed down and are just put back into the sheds and started up the next day without any checking. Operators who do this never make good workmen. With no pride in their machines, they only abuse them and they are also a liability to their employers.

"The 'average' 18-hole course must keep a good tool kit. I would suggest a spanner and socket set, electric drill and selection of drills and a four or five inch grinder. If they want to do any simple overhauls, such as cleaning points, they will need extractors. A compressor is useful for inflating tyres and a sand blasting machine for cleaning plugs.

"With mowers, it is important to keep the blades sharp and accurately set if they are to do a good cutting job. Cylinder blades should be taken out every winter and ground down to obtain a satisfactory cutting edge and they should be back-lapped at regular intervals through the mowing season.

"Triplex mowers have revolutionised greenkeeping. They can produce a good finish akin to hand mowers on the greens. A great selling point with these machines when they first came on the market was that they did the work of two men and that should allow staff more time to concentrate on other jobs.

George had strong views on the subject of irrigation systems. "It is my job to look after the watering system at St Andrews and this can involve quite a lot of time in the dry summer months. Automatic installations have become extremely sophisticated—the ultimate systems now being offered with individual head control. I