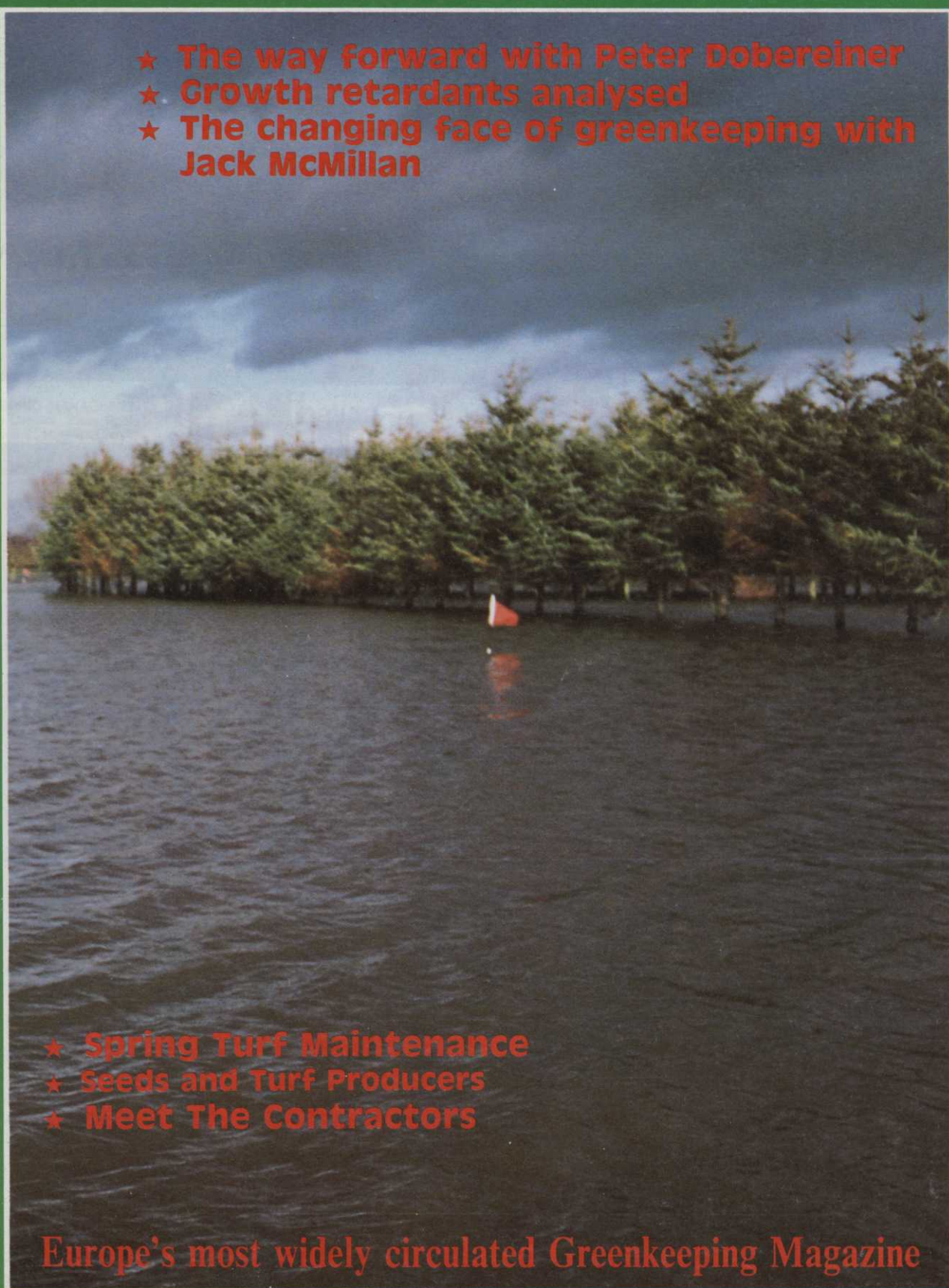


GREENKEEPING

M A N A G E M E N T

- ★ The way forward with Peter Dobereiner
- ★ Growth retardants analysed
- ★ The changing face of greenkeeping with Jack McMillan



- ★ Spring Turf Maintenance
- ★ Seeds and Turf Producers
- ★ Meet The Contractors

Europe's most widely circulated Greenkeeping Magazine



THE OFFICIAL PUBLICATION OF THE
BRITISH AND INTERNATIONAL
GOLF GREENKEEPERS ASSOCIATION

JACOBSEN. UP FRONT IN LIGHTWEIGHT FAIRWAY MOWING.

Introducing the all-new Jacobsen LF-100, the 5-gang designed to increase your lightweight mowing productivity.

The wing mowers are up front for better visibility. So the operator can hold a closer line—even at mowing speeds over 5 mph—to take full advantage of the 100" cutting width. This unique, up-front configuration also gives better access to all mowing units to quickly empty catchers and make mower adjustments easy.

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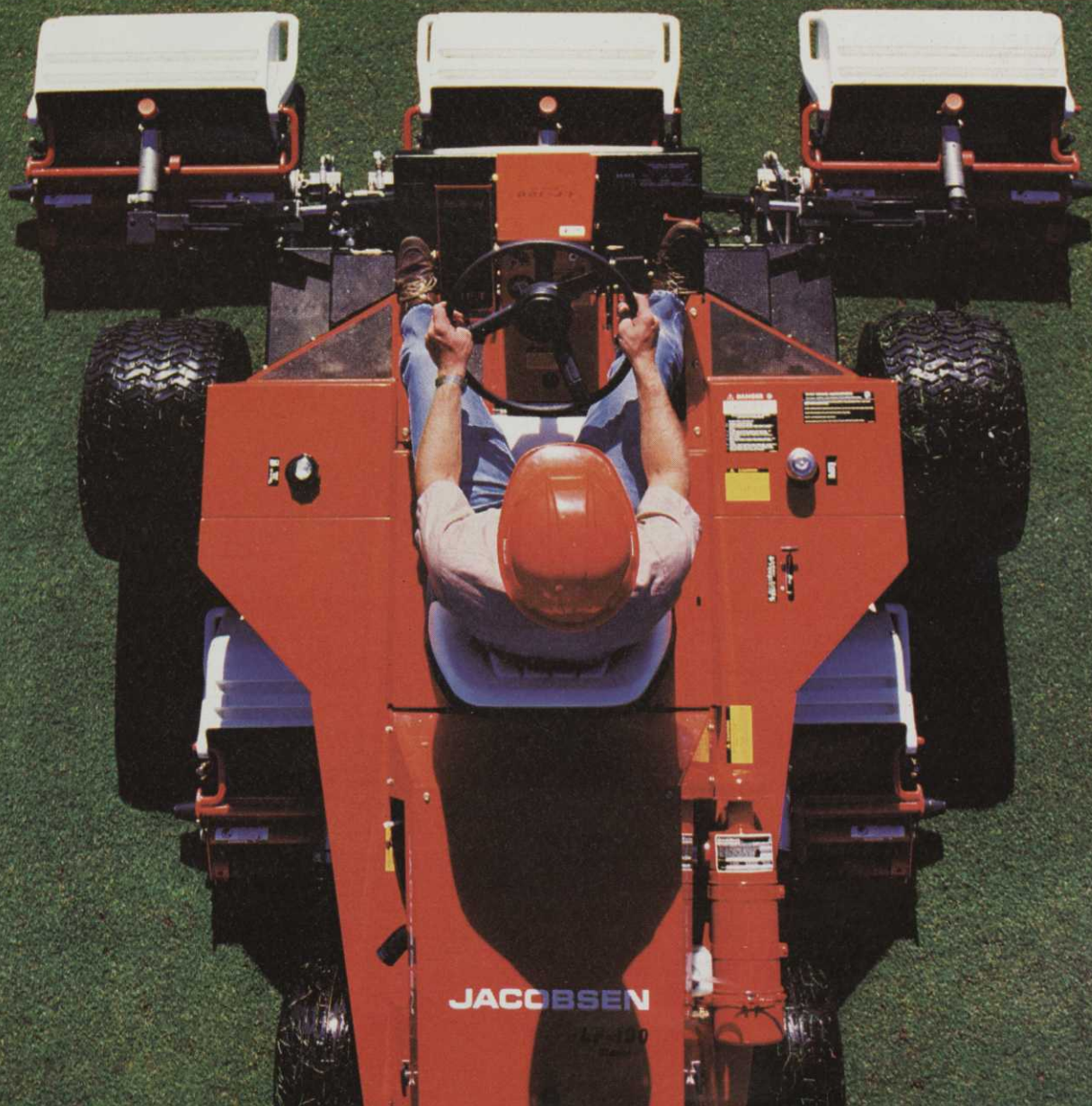
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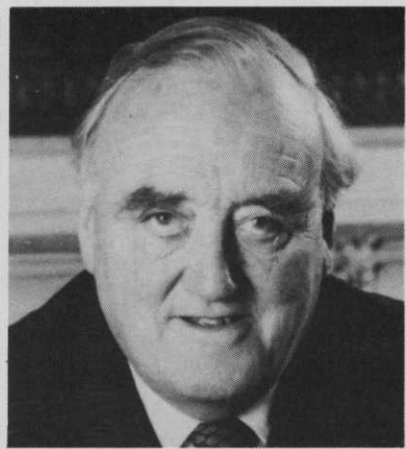
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ISSN 0956-4519



Front Cover: Unlucky for Some - the 13th hole at King James VI Golf Course, Perth - four days after the floods of the second week in February, the level had only dropped by about 18 inches.

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For the installation, maintenance and repair of irrigation systems on golf courses, bowling greens, tennis courts and any playing areas, farms and garden sites.



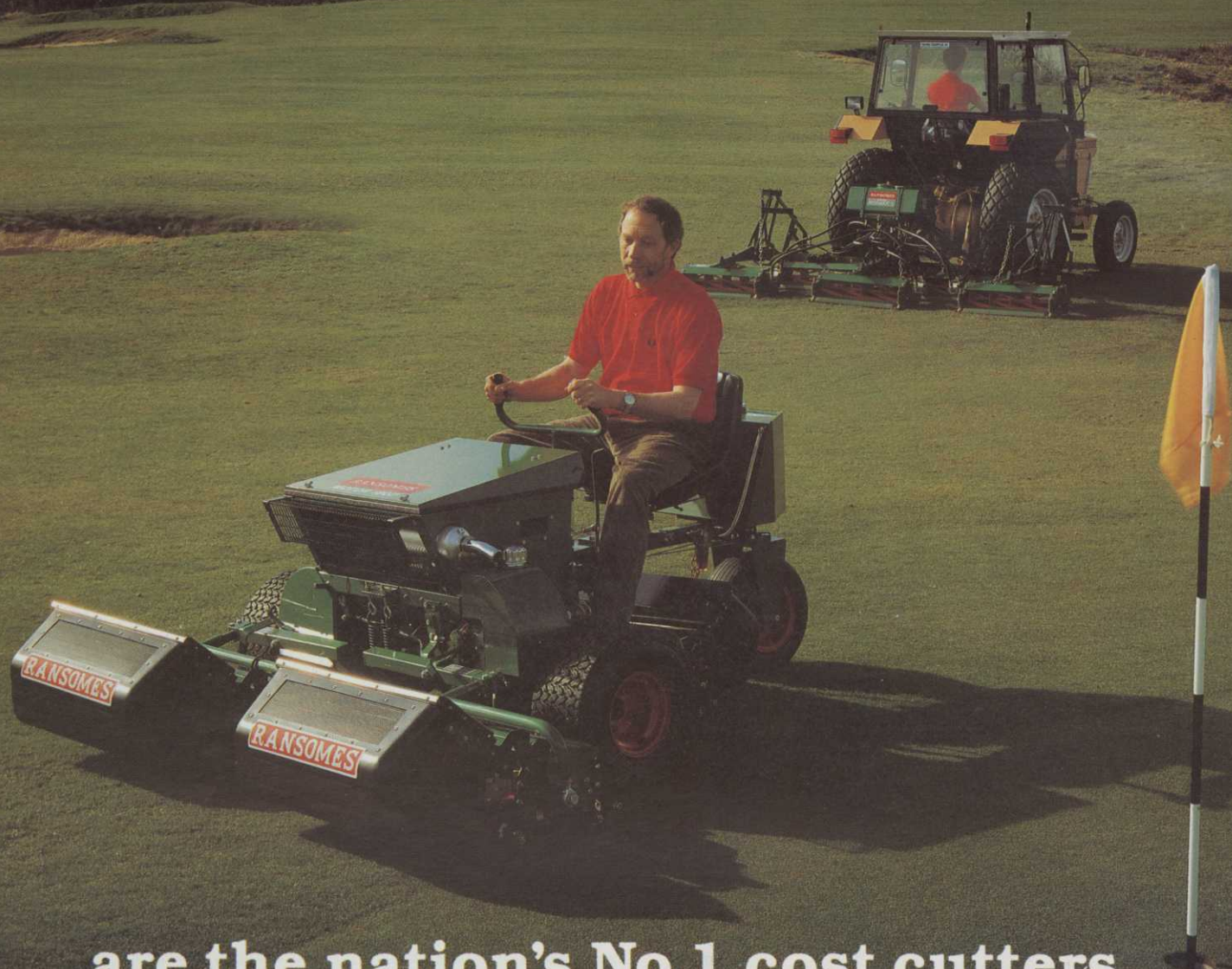
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HEAD OFFICE

IMPORTANT TAX BENEFITS FOR MEMBERS

THE Inland Revenue has confirmed that the Association is now recognised as an approved body under Section 201 Income and Corporation Taxes Act 1988. Members can therefore obtain tax relief on their membership subscriptions. The Association's name will appear in the next edition of the list of approved bodies, which is due for issue later this year. Inspectors of Taxes will not receive notification of the Association's approved status until then. Therefore, if members wish to obtain a deduction for their subscriptions for 1990/91 before the new list is issued, they should explain when contacting their local tax inspector that the body has only recently been approved and quote the Head Office reference show below.

SAPP/T1644/47/1989
NEIL THOMAS

THE 119TH OPEN CHAMPIONSHIP, ST ANDREWS 19th-22nd JULY

IF you wish to be considered for the Greenkeeping Support Team at St Andrews, please forward your name and address to BIGGA Headquarters as soon as possible.

Please note that preference will be given to members who will be available for the period Wednesday July 18th - Sunday 22nd inclusive.

1990 NATIONAL TOURNAMENT GANTON GOLF CLUB 6th-9th AUGUST

ENTRIES are invited for the above event to be played over three days at the majestic Ganton Golf Club in Yorkshire.

A banquet will take place at the Royal Hotel, Scarborough on the Tuesday evening and the prize presentation will be held on the Wednesday, following completion of the third round at Ganton Golf Club.

The event will be multisponsored and coach trips will be arranged on two of the days for companions.

Entries to BIGGA Headquarters enclosing a cheque for £30.00 to include one banquet ticket.

Extras: Banquet per ticket £14.00; Coach trip: Monday-Yorkshire Dales £7.50; Tuesday-Trip to York £5.00.

SISIS SPONSOR BIGGA REGIONAL FINALS

SISIS Equipment (Macclesfield) Limited have a longstanding and close relationship with the greenkeeping profession and are therefore pleased to announce their sponsorship of the 5 Regional Seminars scheduled for 1990.

Speakers will cover all aspects of Golf Course Management and SISIS will work closely with BIGGA Regional Administrators to organise and promote these interesting and worthwhile events. All BIGGA members will receive a personal invitation to attend the Seminar in their Region and full details of the programmes will be published in future



Neil Thomas.

issues of Greenkeeping Management.

Dates and venues known so far are:
March 20, BIGGA Scottish Region, Dunfermline Golf Club.

November 6, BIGGA South West & South Wales Region. Cannington College, Bridgewater.

November 21, BIGGA Midland Region, Warwickshire College.

November 14, BIGGA South East Region. East Sussex National Golf Club.

October 9th, BIGGA Northern Region. Askham Bryan College, Nr York.

JOINT INITIATIVE IN GREENKEEPING CONSULTANCY

INTERNATIONAL Golfers Club and British and International Golf Greenkeepers Association are pleased to announce their joint initiative to create a greenkeeping consultancy service for golf clubs and developments throughout Europe.

They will offer the services of highly experienced greenkeepers for: regular inspection visits; staff training and advice; trouble shooting for particular major problems, and employment of teams for new developments.

The service will commence from April 1st and can be booked by clubs who wish an initial day's report on their current requirements. The first greenkeeper consultant to be appointed by IGC/BIGGA is Jack McMillan, who will be relinquishing his position as head greenkeeper at Sunningdale Golf Club at the end of March.

The BIGGA national education conference at Royal Holloway and Bedford New College from March 30th to April 1st is also being totally sponsored by IGC as part of their overall commitment to improving the quality of greenkeeping throughout Europe by education and specialist advice.

Total membership of the association at 1 February 1990 is as follows:
Greenkeepers.....3324
Assoc/Trade.....297
3621

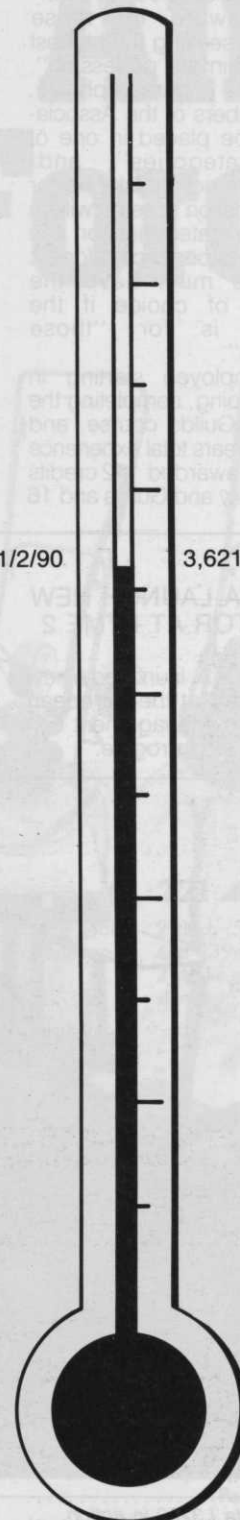
Total Membership at 1 October 1989:
Greenkeepers.....3040
Associate.....92
Trade.....230
3362

Total Membership at 1 June 1989:
Greenkeepers.....2700
Associate.....84
Trade.....215
2999

Total Membership at 1 March 1989:
Greenkeepers.....2100
Associate.....71
Trade.....202
2373

1/2/90

3,621 members



LETTERS TO THE EDITOR

Dear Sir,

I would like to congratulate BIGGA on the introduction of the Master Greenkeeper scheme outlined in the December issue of Greenkeeping Management. This must be a step forward for greenkeeping. Having said that I would like to make the following observations and suggestions.

I hope the Association will be democratic. As stated in paragraph one From Head Office. "The introduction of the Master Greenkeeper Certificate award for those members seeking the highest status within the profession". And not as in paragraph five. "All members of the Association will be placed in one of these categories", and: "Members not registering for the certification scheme will be placed in categories on the basis of experience alone". Members must have the freedom of choice if the scheme is for "those members".

An employee starting in greenkeeping, completing the City and Guilds course, and with four years total experience would be awarded 142 credits (136 for City and Guilds and 16

for four years experience). This would be equal to thirty five years for experience qualification. In some cases the head greenkeeper could have less credits than his assistants!

If the maximum experience allowed is thirty five years, it should be remembered at that time there were no colleges offering the qualifications we have today. I feel the credits for experience could be graduated, ie. four per year for the first ten years, five per year eleven to twenty, six per year twenty one to thirty, and seven per year from then on, this would make the scheme more attractive to the more experienced members and may encourage others to join the Association.

The recruitment pages of the December issue have thirteen adverts for course managers/head greenkeepers. Eleven of them have the word "experience" used to some degree in the advert. On this evidence alone experience is the main requirement for the job. The new scheme must reflect this to gain credibility from our employers.

The scheme does not differentiate between nine, eighteen or thirty-six hole courses,

but the Association already recognises this in the recommended wage scale.

Credits could be awarded for being in charge of a course hosting national and open championships and Euro/tour events. This must be worth extra.

No mention is made of why we are doing this job i.e. the playing of golf. More greenkeepers could be encouraged to play the game by having credits linked to handicap, i.e. one credit for twenty four and above, two for twenty three, three for twenty two and so on down the handicap scale.

The discipline of members is an important matter. For instance, the Association should reserve the right to withdraw credits from anyone that may be disciplined by section committees.

The scheme is a good idea but I feel it must be started from a broader base to encourage all members to join. There is little encouragement for the older men who have passed down their skills over the years. The colleges do a good job in their way but there is no substitute for experience, so "credits" where credit is due!

DAVID A. GALL

Dear Sir,

I regularly read your magazine with interest, especially the recruitment pages, which is why I am writing to you now.

For the past few months I have been looking for an opportunity to gain some experience of working on Continental golf courses but frankly have had no success whatsoever. In particular I was hoping to find temporary or seasonal work for the summer period and was wondering whether any of the larger golf clubs in Europe take such workers on and if they do whether a magazine such as yours hears of any vacancies.

Indeed I feel I need as much advice as I can find at the moment and would greatly appreciate any assistance you could give.

I enclose a s.a.e. for your convenience.

I.C. Butcher
15 Norfolk Street
Leamington Spa

● If you have any letters to the editor address them to: The Editor, Greenkeeping Manager, Spencer House, Swalwell, Tyne and Wear.

PRODUCT FOCUS

KUBOTA LAUNCH NEW TRACTOR AT ETME 2

KUBOTA, launched a new tractor at the European Turf Management Exhibition at Harrogate.

The Kubota L3250 is a 40 hp tractor with 32 PTO-hp and 4WD, has integral power steering as standard and is particularly suited to meet the turf maintenance needs in the

gold, sports grounds and local authority markets.

The L3250's additional horse-power, heavy duty dual clutch and gearbox provides the extra power needed for turf maintenance on banks and inclines using vertidrain or larger gang mower units. The improved linkage geometry also provides the operator with more than 100lb additional lift capacity.

The Kubota L3250 is a real workhorse but its lightweight means less ground pressure and for applications such as on golf courses special smooth profile turf tyres are available to provide complete turf protection.

The mechanical shuttle transmission offers 8 forward and 7 reverse gears and creep speed as standard for vertidrain operations. The partially synchronised transmission enables the operator to bring the tractor up to full speed quickly and easily for road travel.

With the operator in mind the main shift and shuttle shift levers are mounted on the steering column which provides more leg room and makes shifting quicker and easier.

HOVERDRY'S NEW PRODUCT DEVELOPMENT

THE adoption of the Hoverdry by the PGA European Tour, at St Andrews and Gleneagles testifies to the proven ability of the machine to cope with the severest of rainstorms while leaving the finest grass playing surfaces unscuffed and unscathed.

Operating on the hover principle, the one-man lightweight machine of only 80 lbs is able to combat the heaviest of downpours to remove standing water at a rate of 60 gallons per minute; its 1.5 inch hose, which can be supplied in whatever number of 50 foot lengths the customer requires, then pumps the water out of harm's way; and its simple trolley attachment makes it easy to transport when not in use.

At the specific request of golf course customers over the past year, Hoverdry have also developed a way of removing water from bunkers, which, with a conventional pump, has been hitherto impossible.

By attaching skids to the bottom of the machine, the Hoverdry is now able to pump out bunkers and with hardly any disturbance to the sand.



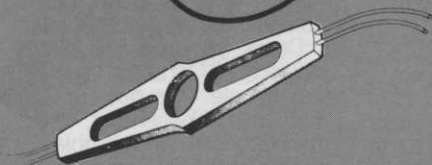
The Kubota L3250 in action.

Allen Air Cushion Mowers are tough, rugged, no-nonsense machines especially suited to the rigorous mowing role demanded by the professional user.

- Snorkel air filter – lets the engine breathe clean air
- Folds flat for easy storage
- Fast, fine finish with a choice of 18" or 21" cutting width
- Tecnamotor or JLO engine option on 18" model
- Optional transport wheels available

DON'T MOW A BANK AGAIN UNTIL YOU'VE SEEN

The **ALLEN**
Safeway
Ultimate Safety Blade



Already proven in professional use, the Allen Safeway Mowing System is the ultimate in safety blades. It uses the unique nylon line cutting principle first developed by Allen – putting safety first. **Grass cutting has never been this safe!**

218 JLO

18 inch (46cm) cutting width, JLO 2-stroke 98.5cc engine. Used throughout the contract and public authority market, this machine is powered by the 98cc RM100 JLO engine with a three bearing crankshaft for longer life and less vibration.

218

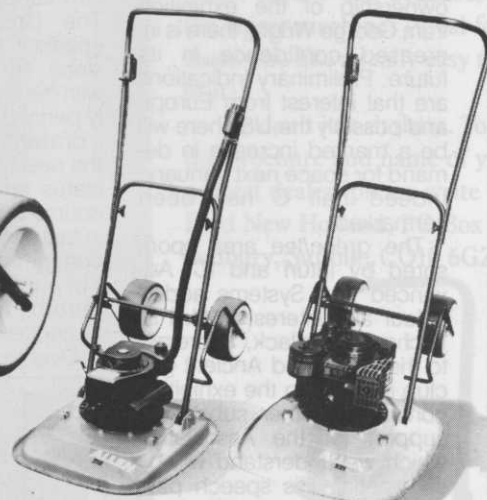
18 inch (46cm) cutting width, 3½hp 98.5cc Tecnamotor 2-stroke engine. Our most popular model – suits all requirements. Optional transport wheels are available – ideal for effortless transportation and use in long grass. The wheels can be removed in seconds without use of tools.

221

21 inch (53cm) cutting width, 4hp 139cc Tecnamotor 2-stroke engine with cast iron sleeve. Built to withstand prolonged mowing conditions on larger areas, the 221 is often purchased by local authorities and professional grasscutters. All the features of the Allen Air Cushion range are built into this model and transport wheels are optional.



The Allen Air Force



218 ▲

18 inch (46cm) cutting width, 3½hp 98.5cc Tecnamotor 2-stroke engine

221 ▲

21 inch (53cm) cutting width, 4hp 139cc Tecnamotor 2-stroke engine with cast iron sleeve

◀ 218 JLO

18 inch (46cm) cutting width, JLO 2-stroke 98.5cc engine

ALLEN

Allen Power Equipment Ltd, Dept GM,
The Broadway, Didcot, Oxon. OX11 8ES
Tel: 0235 813936

To:
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Equipment Ltd,
Dept GM, The Broadway,
Didcot, Oxon. OX11 8ES.

Please send Allen Air Cushion Mower details

☐ Tick if demonstration required

Name.....

Address.....

Postcode.....

If the success or failure of exhibitions and trade shows is based solely on attendance and their continuance based on their recognition as an essential market place, then ETME 2 was the former.

Official attendance was announced as 4,062 which proved to be a significant increase over the first show. Despite inclement weather with gales lashing the South and snow drifting into Northern areas, the trade were generally happy with the turnout.

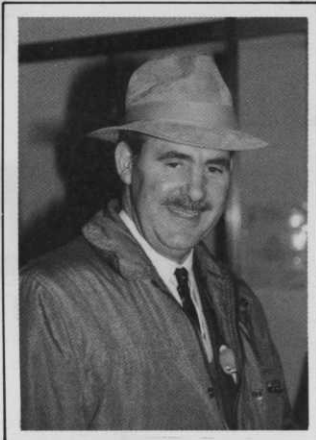
Many companies expressed satisfaction with the level of enquiries and the quality of audience. Indeed more than several also participated in the social programme including the magically cold mystery tour which preceded the medieval banquet within the fortified walls of old York City.

The standard of exhibit presentation was noticeably professional and consistently good. And, now that the Association has taken over ownership of the exhibition from George Wright, there is increased confidence in its future. Preliminary indications are that interest from Europe and possibly the US, there will be a marked increase in demand for space next January. Indeed hall C has been earmarked.

The green/tee area sponsored by Inturf and ICI Advanced Turf Systems added colour and interest to Hall B. Michael Bonallack, Secretary to the Royal and Ancient golf club in opening the exhibition confirmed further substantial support for the Association which we understand will be substantial. His speech paid generous tribute to the hard work of Neil Thomas, the Association's Executive Director, and the tremendous progress of the past 3 years. The exhibition also marked the occasion of the launch of the R & A and Nature Conservancy Council backed publication *On Course Conservation* provided by The Golf Course Wildlife Trust.

H.R. Fell and Son, known as Lindum Turf, also announced a major deal to sponsor the new *Greenkeeping Yearbook* to be launched at The Open in July as well as a major contract awarded to supply turf to the 1991 National Garden Festival at Swansea.

Many new products were on show and as many will confirm there were some very prominent and exciting buyers and visitors at the show including Mr "Metrocentre" John Hall. John, who has planning per-



Eric Hughes . . . on safari.

mission for at least three golf courses at Wynyard Hall and one overseas, was very impressed with the show. "I like to see and hear for myself" he said.

Michael Williams of The Daily Telegraph, who along with other major scribes, is now a firm supporter of BIGGA and The Greenkeepers, was a speaker at the seminar sessions. He too was impressed with the show and subsequently penned a superb article - DT - drawing further attention to the need for improved wages, status and standards of golf course management. Michael in fact has also contributed his comments about "The Way Forward" (published next month exclusively in *Greenkeeping Management*).

Over to you in 1991 Debbie!



Michael Bonallack and BIGGA Chairman Paddy McCarron on Golf Course Wildlife Trust Stand.

Enquiries about the 1991 show should be addressed to Debbie Savage, Exhibition Manager, BIGGA HQ, Aldwark Manor, Aldwark, Alne, York YO6 2NF. Tel. 03473 581/2.

UP PERISCOPE

PRIZE for joker of the show must surely go to Inturf's Derek Edwards.

Derek, who sponsored the putting green and tee areas in Hall B, spotted a golden opportunity for the installation of a retractable pin.

On the first day, John Shildrick of the National Turfgrass Council was observed scratching his head as the pin complete with flag disappeared down the cup. Next day Dr Peter Haynes was vic-



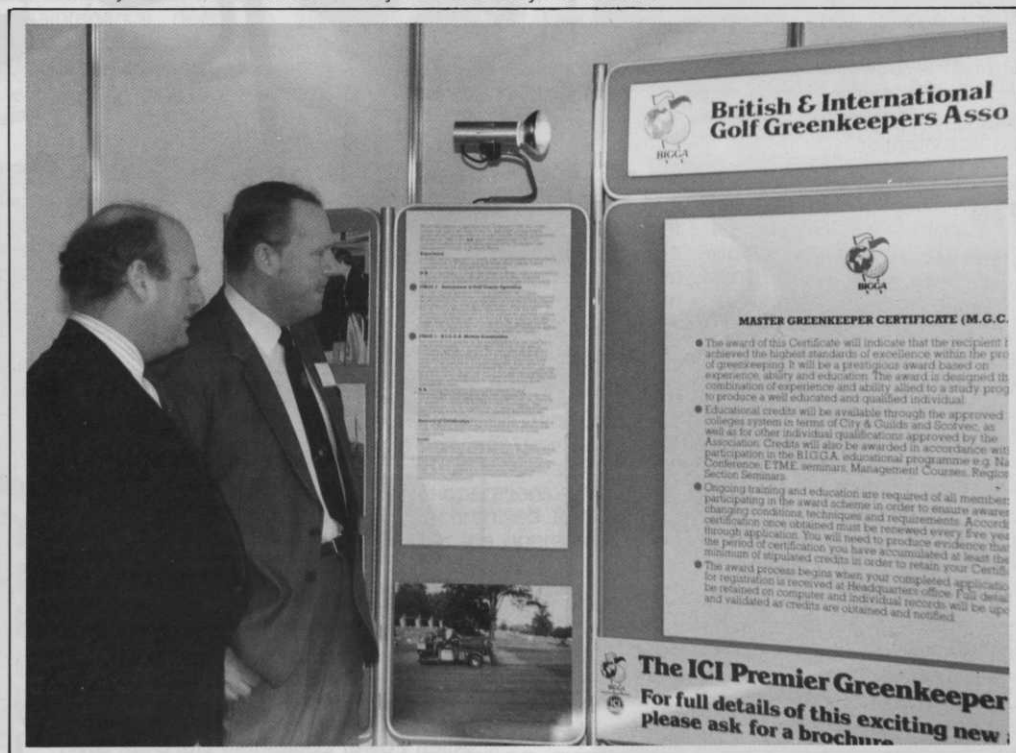
Derek Edwards and that retractable pin!

timised tool!

Some lesser mortals were complimenting Derek on marketing a new periscopic pneumatic pin while others were trying to purchase a potential terrific practical joke.

Derek, pictured above, explained to GM that the "secret" was simple. 'We put our little man in the basement, using the electrical conduit hole, to control all the fun', said Derek, barely unable to disguise yet another laugh.

Commenting on the show, Derek said, 'Inturf were very happy with the show and impressed with the presentation of the surrounding stands, including BIGGA, the International Golfers Club, Greenkeeping Management and The Golf Course Wildlife Trust.



Michael Bonallack and BIGGA Vice-Chairman Ivor Scoones study the Master Greenkeeper Certificate stand.

Hard work, and how to avoid it.

A quality company. A strong dealer

Most compact tractors demand that you make your body fit the way they are designed. With Ford Series 20, it is the other way around.

We shaped our new tractor to fit the requirements of their human operators. They are the only compact tractors that measure up to tough ISO standards for operator comfort and ease of operation.

You will find that Series 20 controls are not just "reachable". They are all within easy, natural reach. The main shift lever and

hand throttle are up on the dash, conveniently close to the steering wheel.

The high-backed contoured seat adjusts fore and aft on an inclined track. That puts you in just the right position to reach the pedals and controls, whether you are tall, short or in-between.

The deck is large and wide-bodied. It gives you room to stretch and contributes to the comfortable overall feel of these tractors.

Wide expanses of tinted safety glass ensure excellent visibility. A large door provides easy access and the swinging side and rear windows can be locked in open or closed position. Standard cab equipment includes a speedometer and odometer.

Quiet plus.

The Series 20 cab is an easily removable cab is available for all Series 20 tractors from 15.5 hp to 41.3 hp. This deluxe cab shields the operator from inclement weather, noise and vibration.

Wide expanses of tinted safety glass ensure excellent visibility. A large door provides easy access and the swinging side and rear windows can be locked in open or closed position. Standard cab equipment includes a speedometer and odometer.



The main shift lever and hand throttle are up on the dash, conveniently close to the steering wheel.

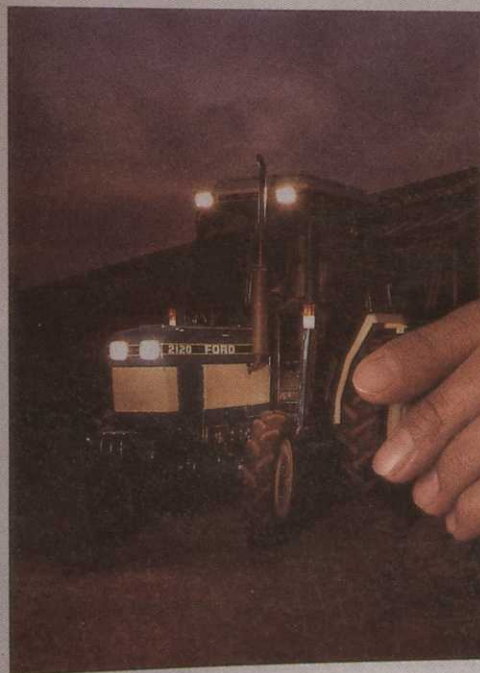


The high-backed contoured seat adjusts fore and aft on an inclined track. That puts you in just the right position to reach the pedals and controls, whether you are tall, short or in-between.

FORD

Series 20 Compact Tractors

Models 1120 1220 1520 1720 1920 and 2120



A little light reading of this booklet can actually help boost your work output, and save you from the heaviest of tasks.

It details the hard-working Series 20 Compact Tractors from Ford New Holland. Six superbly-styled and engineered tractors ranging from 14.5 to 41.3 hp.

All with class-leading hydraulic capacity. Quieter, more fuel-efficient engines. And most with 4 wheel drive either as standard or optional.

You'll learn how clever ergonomic design makes them easier, more comfortable machines to operate; and how Ford New Holland back-up will keep the Series 20 working hard for years to come.

You'll also read about the smart deluxe cab available on the larger machines (ideal for those who like a really easy time of it).

So don't just sit there. To get the brochure and name of your nearest dealer, please write to Ford New Holland, PO Box 193, Sudbury, Suffolk, CO10 6GZ.



— The Series 20 —
Compact Tractors



GROWTH RETARDANTS

GRASS GROWTH REGULATORS FOR THE GOLF COURSE

John Hacker
Msc., Dip. Hort. (Kew), C. Biol., Ml Biol., Ml Hort
Senior Lecturer in Sportsturf, Lancashire College of Agriculture and Horticulture, Myerscough Hall, Bilsborrow, Preston

TRADITIONALLY the growth of grass on golf courses was 'regulated' by grazing animals. Sheep were, and still are on several rural courses, commonly used to graze almost all the course with the exception of the greens.

On most courses, however, the mower now reigns supreme. The mower saves the golfer not only the inconvenience of having to jump over an electric fence to putt but also the less than pleasant task of carefully removing unmentionable objects between the ball and hole.

For some years now there has also been a third option for the greenkeeper although few, to my knowledge, have tried it and even less use it widely on their course. Chemical growth retardants have been tried and used in various parts of the world for some 40 years, although their success in reducing grass growth has been somewhat unpredictable for many of those years.

Over the last ten years, however, better rainfast formulations and new chemicals have come on to the market, which are much less variable in their results.

There are now three chemical grass growth retardants on the market in the UK: Maleic Hydrazide, which is sold under the names Mazide and Regulox; Mefluidide, sold under the names Mowchem and Echo - a new product soon to be released by ICI Professional Products; and Paclobutrazol, sold under the name Holdfast D.

The Options

So which should you use? Well, there are advantages and disadvantages for each chemical and they can be briefly summarised as follows.

Maleic Hydrazide (Mazide, Regulox) was, until the last few years the main grass growth retardant. In the late 70's Plymouth Parks Department saved some 60 per cent of their mowing costs by implementing a mowing and retardant spraying regime using Maleic Hydrazide.

The chemical is taken up by

the plant through the leaf and is more effective in reducing the growth of coarse leaved species. This means that the finer grasses are favoured by Maleic Hydrazide in a mixed species sward. It may, therefore, have little effect when sprayed onto a pure fescue area. One of its side effects is that it reduced seed head production.

This is important as the overall appearance of a sward can be badly affected if the leaves are retarded as the seed heads are then much more obvious. The rate of application is critical with some formulations causing discolouration of the leaf if over applied; accurate mixing and application is very important. Maleic Hydrazide is also available in mixtures with broad leaved herbicides to suppress broad-leaved weed growth (Mazide Selective).

Mefluidide (Mowchem, Echo) was used in Europe and the USA for many years under the name Embark before it became available in Britain. Like Maleic Hydrazide it is taken up through the leaf requiring rain-fast formulations to be used for best effect.

It also tends to be more effective on coarser species thereby encouraging the finer grasses. seed head suppression is better than either of the other two chemicals and its use tends to improve grass colour to a rich green after minor initial discolouration.

Paclobutrazol (Holdfast D) is the newest retardant on the market and, unlike the other two, is taken up by the plant through the roots. This means that the material is unaffected by rainfall immediately after application but is almost inactive in very dry conditions.

The latter effect is of no real concern because grass growth itself is reduced by drought conditions. Paclobutrazol does tend to dwarf the finer grasses such as the fescues more than the deeper rooted coarser species.

So a mixed sward, as is usually found in the UK would tend to become dominated by the coarser grasses with time. In addition, Paclobutrazol does not suppress seed heads at all although it does reduce the height of those produced. paclobutrazol causes some discolouration. This is more pronounced on the bents where its very good retardation effect on the leaves caused the stolons to be more obvious. Holdfast D contains 2.5% dicamba in addition to paclobutrazol so that the

growth of broad-leaved weeds is also suppressed.

MIXTURES

After reading the attributes of each retardant it can be seen that choosing the 'best' chemical is difficult. This is because each grass species, and indeed often different cultivars, react differently to each chemical. In Britain, where almost all grassed areas are sown as mixtures of different species this can cause problems.

Trials work undertaken by Tom Kavanagh in Ireland and others has shown that the best overall retardation effect is

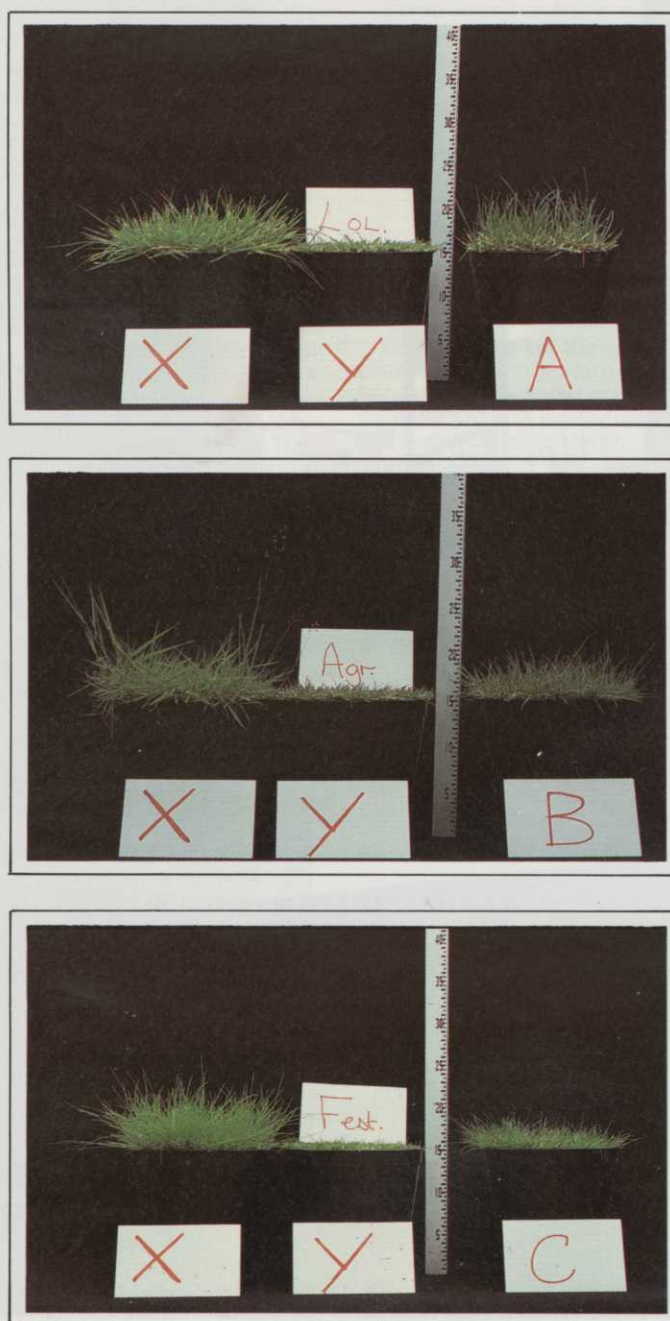
gained by applying a mixture of Paclobutrazol with either Maleic Hydrazide or Mefluidide. This is suggested on the paclobutrazol label and is therefore according to ICI Professional Products a safe mixture.

In fact, the production of Echo (Mefluidide) by ICI is a recognition that mixtures of the two chemicals mixed together produce better results on mixed swards. Such a mixture will retard both fine and coarse grass species and suppress seed head production.

WHAT ABOUT COST?

Retardants are costly both to buy and spray. However,

Three stages in the effective use of growth retardants.



GROWTH RETARDANTS



John Hacker

when compared to the cost of mowing the same area, keeping to the same standard, then retardants win hands down. Using retardants may enable improvement of the overall standard of the course without taking on more part-time staff.

They may also enable a reduction in the numbers of extra summer staff required or more importantly take the pressure off the Greenkeeping staff in the early summer when the work load is especially high.

The following prices are taken from a well known supplier.

COSTS OF CHEMICAL GROWTH RETARDANTS

Product	Cost per 5 litres £	Cost per hectare £
Mowchem	203-88	67-96
Mazide 25	25-94	51-88
Mazide Selective*	36-76	161-74
Holdfast		
D*	84-27	84-27

*Mazide Selective contains Maleic Hydrazide and two selective herbicides - MCPA and dicamba. Holdfast also contains dicamba to suppress weed growth.

These prices may seem high

but how many courses have one hectare (2½ acres) of banks and other awkward places? The cost of spraying is not included.

WHEN AND WHERE?

Chemical growth retardants are most useful and cost effective on areas which are difficult to mow. Steep banks, perhaps those around the tees and bunkers, where hover mowers normally have to be used are ideal sites for trying out retardants.

The rough and semi-rough in addition to areas which are difficult to mow - under signs and alongside walls - can also benefit. Last year a retardant was used on the grass banks of the ditch which runs through the golf course at the Lancastrian College.

We found this reduced the hover mowing at a time when the greenstaff were very busy keeping up with ganging on the fairways. Even when the bank was mown for appearances sake there was much less grass to cut which made the work much easier and quicker.

Although varying from year and from location to location,

perhaps the best time to apply growth retardants is in mid-April. This will catch the early summer growth flush of May and June as most retardants are effective for between eight and 14 weeks. Holdfast is recommended to be applied two weeks before the anticipated start of grass growth.

Grass growth retardants are not usually recommended for use on turf mown less than 25mm (2") and are not suitable for greens. Similarly, retardants are not recommended for use on areas which receive a lot of wear such as tees (except at the base of signs) and paths where the grasses are required to grow back rapidly after use.

It is also important to note that the retardants do not work as effectively on turf weeds and that, although the grass may be retarded, broad-leaved weeds if present will be much more obvious - hence the inclusion of selective herbicides in some retardants.

Using retardants with selectives may then be undesirable on areas which contain attractive and environmentally friendly natural flora which should be retained wherever possible.

Don't expect too much of growth retardants. They do not cut grass and will not give the finish that mowing does. It may then be worth having a combined spray and mow programme, the latter to give the finish that members expect.

A final consideration perhaps - with the general distrust of chemicals by the general public, there may be some resistance to more spraying on the Course by the members. However, as long as the areas are sprayed correctly by trained applicators (remember FEPA) they should be completely safe and give you another useful additional weapon for efficient course management. Don't forget, always read and strictly carry out the manufacturers instructions as printed on the label.

Thanks go to John Doyle of Maxwell Hart and Patrick Goldsworthy of ICI Professional Products for their help in providing information.

Lancashire College of Agriculture and Horticulture currently run the only BTEC National Diploma in Turf Science and Sportsground Management in the UK.

SPRING TURF MAINTENANCE

NOW that winter has passed! and most of the major construction work, such as enlargement of tees, drainage, the renovation of bunkers and walkways, are coming to an end, I look forward to spring.

March and April are still busy months with many other important jobs yet to be done, before we start mowing in earnest. The work will include patching fairways and general areas that have been damaged by normal compaction and last years drought.

I know, seaside links with their light sandy soils are a big advantage to work on through the wet winter months, compared to the heavy type soils on the inland courses, where one cannot take a tractor-trailer for perhaps the whole winter!

A lot of people tend to think links courses look after themselves, but I can assure you, maintenance can be quite high especially following a dry hot summer as we experienced last year, with top soil being less than 1/2" in depth in places, erosion takes place quite easily.

Rabbits for example seemed to thrive on dry conditions, and last year they were more active than usual. I suppose digging in the dry soft sand must have been sheer joy!!

Personally, I don't like to kill them in summer months when they are breeding and have young, but declare war during the winter period when the undergrowth has died off giving them less cover. I am lucky, because some of the greenkeepers are good shots and enjoy the odd night lamping. We will now step up the night shooting and thin them out before the pests start breeding in earnest.

Talking of pests, moles seem to be on the increase. These lovely creatures are rarely seen, and many greenkeepers just smooth over their earthmounds but do not bother to eliminate them, so they go quietly about their business and breed three to four young each year. Trapping and baiting are the normal methods of elimination, but stop their supply of food (mainly worms), and they will have to travel elsewhere, (maybe Safeways), or anywhere except on the golf course.

Once again in our area there shows signs of another bumper crop of Leatherjackets this year. During a quite mild spell of weather, just after the Christmas period, we sprayed and had a very good kill. I was quite surprised how many of the blighters there were, so if



George Brown is pictured, above right, with an assistant on his beloved Turnberry course with the lighthouse in the background.

you have not had a chance to spray yet, it is not too late to do so.

Almost a year ago, we purchased a new tractor mounted sprayer, but never really had the chance to use it. The text books will tell you the best time to spray for weeds would be in the spring or throughout the growing season. (I threw the rule book away several times last year). We normally spray end of April or May, but gale force winds or rain prevented us from doing this, and by the end of May it was too dry, but surely it must rain soon, we are on the west coast of Scotland!

Anyway, as we all know it was at least the end of August before the grasses had recovered enough to even think about it, September too busy with tournaments, October too windy, November too late! (Do you know the feeling?)

The rule book was also thrown away regarding watering, we don't overwater, but how much is too much, especially when we had the hottest summer since records began, 1909? However, many people enjoyed the hot summer, it made a change. I know the irrigation companies enjoyed it, I understand their order books are quite full.

During March and April we do considerable work on our pop-up sprinklers, many of the heads have sunk well below ground level (or is it the regular top dressing that raises the surface levels). I know we have a few hundred, and many of them are rarely used, and soon

become overgrown. They also stick down - especially on sandy soils. (I once thought 'pop-ups' were supposed to save labour!)

The irrigation system will be now primed and ready for testing. Pumps and motors have already been checked and serviced during the winter months (haven't they?). So now to check for broken pipes and cables. We have learnt in the past just how versatile the vertidrain can be, there is no better machine for finding shallow irrigation pipes, as well as doing its intended mission.

After repairing the damaged pipework and making good the turf, we will be hoping to get the drying easterly winds, which will allow us to verticut some low lying fairways that have more vigorous growth. Tees and greens will also have their first gentle verticut of the season, followed by a light top dressing of sandy soil (70-30 mix).

I know there is a difference of opinion when one should apply spring organic fertilisers, but that will depend upon the geographical location of the golf course, for example weather conditions can vary tremendously between the North, East, South and West of Britain, not just in temperature, the biggest difference being annual rainfall. (East coast courses may have an average between 19" to 23", compare that to the west coast where rainfall can be anything between 40" to 80" in the northwest, (they don't get the love-

ly green hills and lochs for nothing.)

Another sign of spring is when certain members who have been trying to tell you how to run your golf course all season, suddenly invite you to pop round and just have a look at their lawn, (because it is in a dreadful state!)

I was interested to read the document 'The Way Forward', prepared by a greenkeeping panel appointed by the Royal and Ancient Golf Club of St. Andrews. The document is critical and certainly does not pull any punches. So do find time to read it. One point is put over very clearly, and that is the need for golf courses to have mud free fairways and firm fast greens all year round!

Being a links man myself, I fully agree with the panel, although this will be achieved much more easily on the drier easterly courses than those on the damper west, that have double rainfall.

Anyway, enough of rainfall, spring is almost here, fertilisers are on and we start our cutting. We serviced our mowing machines (haven't we?), they have been rebladed and sharpened (haven't they?). We have painted our flagsticks (haven't we?). We have ordered our new flags (haven't we?).

Must go now, there appear to be a few things I have forgot! Happy mowing?

GEORGE BROWN
Golf Course Manager,
Turnberry Hotel and Golf
Courses

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GREENS



ROUGH



SAND



SOIL



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SPRING TURF MAINTENANCE

Q A YORK, PARKER & MARTIN

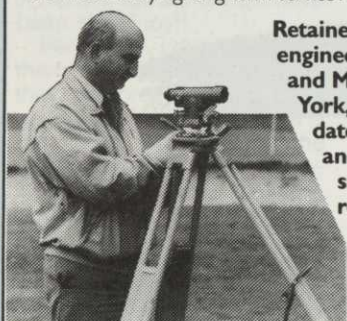
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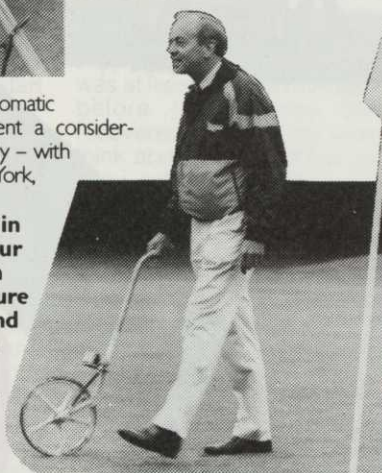


Retained as design consultant engineers by U.K., U.S.A., European and Middle Eastern customers, York, Parker & Martin have, to date, ensured that the feasibility and capital cost of purchasing such irrigation system has resulted in a wise investment – not an expensive mistake!



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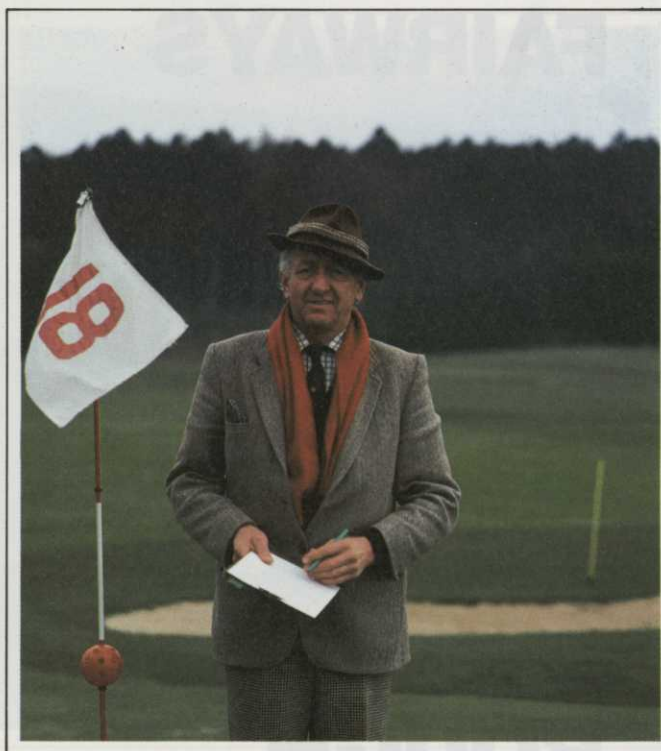
Remember, they are not in business to sell you or your organisation an irrigation system but simply to ensure the design, installation and long term results are the best you can possibly achieve for your money..



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

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C.W. Roupe, past captain, Stock Rockford Golf Club, Grantham.

VERTI-DRAINING A GOLFER'S VIEW

BRR-MM - Tchunk - Tchunk! "What crass stupidity are the greens People up to? We have enough greens problems. All we need is more watering and fertilizer." Such were the typical comments of most golfers when the Verti-DRAINER made its appearance some six years ago.

We watched with fascination to see a tractor and the huge Verti-DRAINER armed with umpteen 14" spikes trundling over our hallowed greens. It pierced deep holes every 4" and seemed to lift and shake the earth like a carpet. The effect was to leave an impossible putting surface like Duralay underlay for several weeks.

Our greens were laid some 65 years ago as lawns for a handful of golfers and managed by enthusiasts rather than skilled greenkeepers. As little as 10 years ago only 300-400 golfers each week trampled the surfaces. With the popularity of golf we now have over twice that number. The greens were wearing badly with all the problems of compaction. For the golfer this meant they had less hold and gave erratic putting. It also meant grumbles in the Club and Committee.

Dedicated Greens Staff, measured watering, suitable organic fertilizers, slitting and fork tining helped hold the

deterioration, but from the advice of the Agronomist it was evident more drastic action was required. It needed deeper tining to aerate the soil, break it up deep down to help with drainage, and to encourage the deep-rooted grasses which are the basis of good greens.

The Verti-DRAIN at the beginning or end of each season has proved to be an answer. The condition of the greens has improved in spite of increased traffic, and we have now started Verti-draining the fairways annually, too.

No longer do we complain but greatly welcome the improvement Verti-draining has given and cheerfully accept the disruption.

So - Carry on - Brmm, Tchunk, Tchunk.

WESSEX COCOPEAT THE ONLY GENUINE ALTERNATIVE TO PEAT

WESSEX Cocopeat is a 100% renewable resource, with all the characteristics of a high quality peat moss, thereby making it the perfect alternative for peat.

Not only is it a natural alternative to peat but it contains several of its own unique characteristics, such as:

Unlike traditional peat, Wessex Cocopeat has a unique sponge-like structure

THE LEADERS

Grinding to Perfection

No matter what size workshop you have Mower Machine Maintenance can offer you a modular concept grinder which will guarantee a perfect finish, with **5 superb models to choose from.**

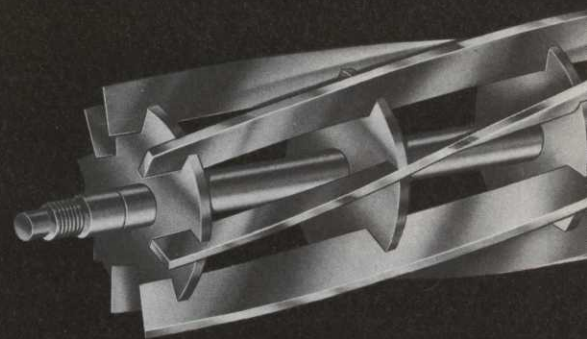
These incorporate advanced safety features such as totally enclosed canopy and water coolant to provide the operator with an excellent working environment.

The top of the range machine, the Supreme Auto Leader represents the ultimate in mower grinding technology with features unequalled in any other machine. This is the only machine currently on the market which can grind cylinders and bottom blades with equal efficiency, utilising variable speed spin and traverse drives.

The standard features on our machines are:

- Single blade relief grinding
- In frame grinding
- Variable speed spin and traverse drives
- Self contained coolant
- Automatic infeed
- Dual purpose wheelhead incorporating two grinding wheels enables cylinders and bottom blades to be ground with equal efficiency
- Bottom blade bracket and selected inframe mounting brackets
- Well proven technology and modern design

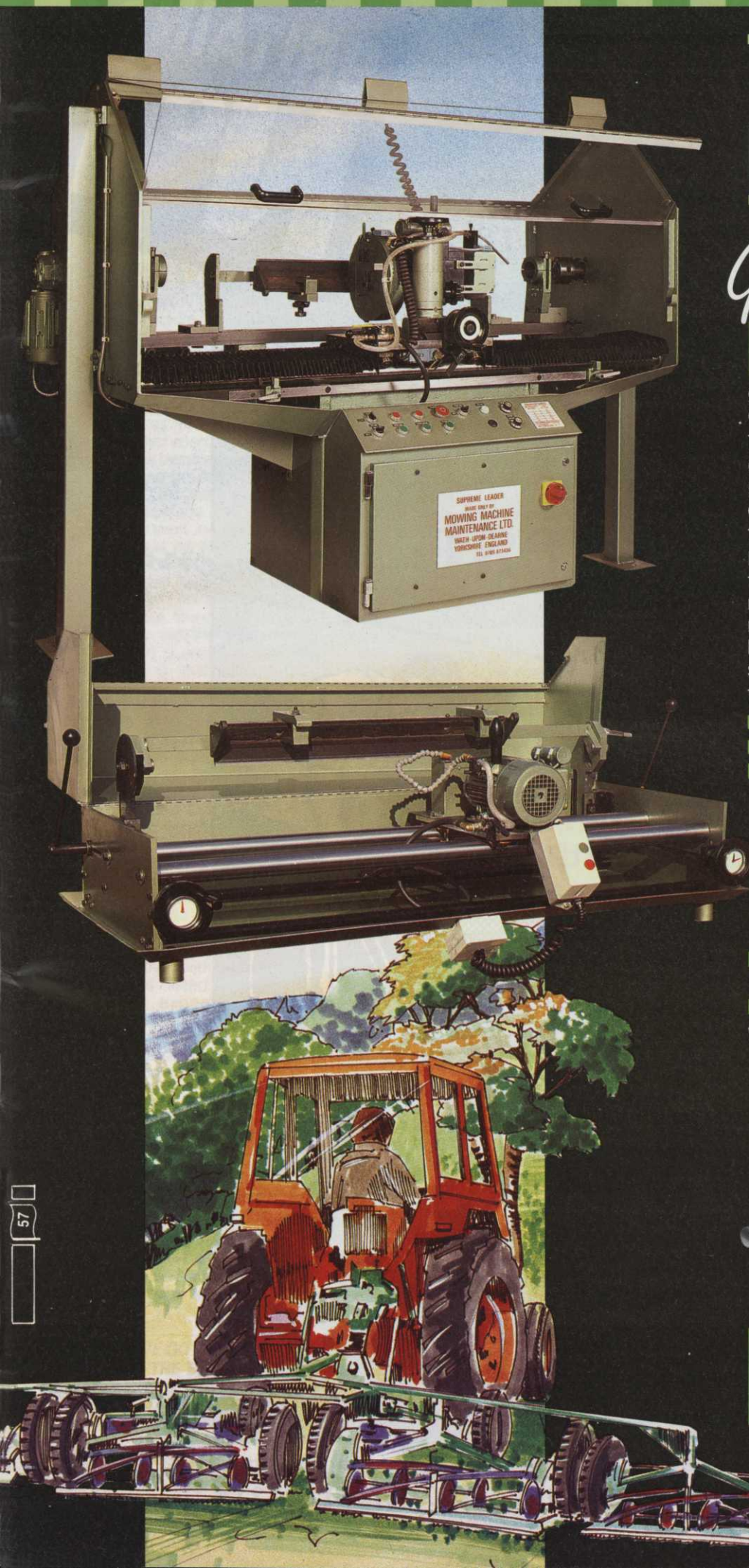
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SPRING TURF MAINTENANCE

which will retain larger quantities of water, nutrients and oxygen (AFP), resulting in less leaching, thereby reducing the amount of additional feeding and also has the advantage of being 100% weed free.

Wessex Cocopeat differs from traditional peat by containing small quantities of naturally derived NPK and trace elements and has an ideal pH of 5. It is virtually impossible to destroy the spongy cell-like structure of Cocopeat, making the same fine grade used for the growing of seeds, seedlings and bedding plants ideal for the growing of nursery stock and container growing as well as for tree planting or as a mushroom casing.

This is because, unlike traditional fine grades of peat, the fines in Cocopeat will not float to the surface and therefore will not result in capping. The hard peat particles, pieces of wood, cotton grass etc., usually found in medium to coarser grades of peat are not found in Cocopeat, therefore there is no problem with the all-too-familiar blocking of screens, jamming of potting machines etc and the obstruction of natural root growth. In fact, on trials undertaken at our nursery in Sri Lanka and on limited trials here in the UK, it has been found that up to 25% more root growth has been achieved using Wessex Cocopeat.

Due to its naturally high AFP, another major saving in both material and labour in using Wessex Cocopeat over traditional peat is that there is no need to add perlite and bark etc.

More than just being a peat alternative, with all the added benefits listed above, one would expect to pay a premium for Wessex Cocopeat but, in fact, it is competitively priced against a good quality sphagnum peat moss.

By using Wessex Cocopeat, you are helping to save the world's ever diminishing vital resources and also significantly contributing to the economy of the third world countries.

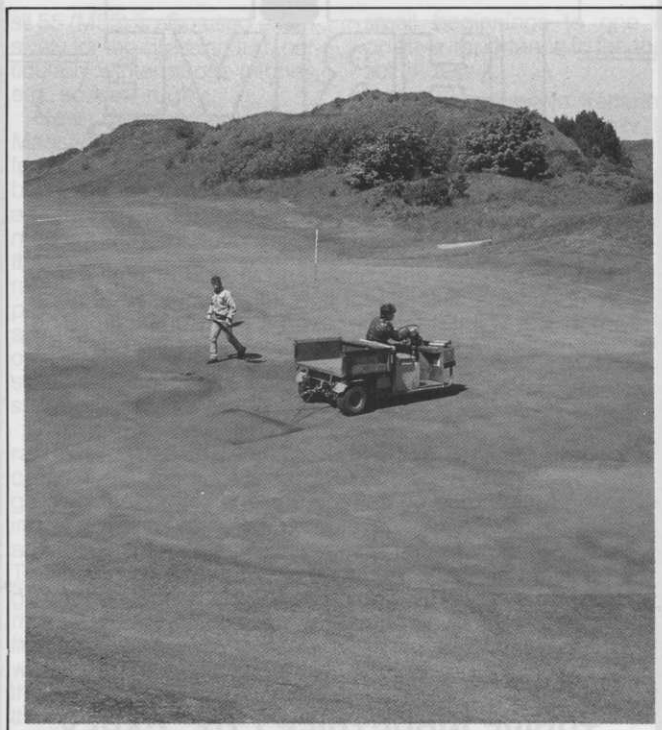
Treat the earth well - it was not given to us by our fathers, but loaned to us by our children.

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THE POCKET TOUCH WEEDER - SAFE, EFFECTIVE AND APPROVED

THE Pocket Touchweeder from Thomas Elliott Ltd. is a government approved (MAFF) weedkiller. A wax stick impregnated with selected weedkillers, it deals with most broad leaved weeds. The safest way to get rid of all unwanted weeds, it is ideal for use on the greens and in places where weeds cannot always be dug out or hoed.

It is safe because it is controllable - there is no dust or spray to blow onto or leach and it avoids the risk of accidental spillage or leaving traces in the watering can. The Pocket Touchweeder will kill most broad leaved weeds, including dandelions, plantains, buttercups and daisies etc, and will not harm grass if the manufacturer's instructions are followed. During consumer trials in 1987, Thomas Elliott are pleased to report that another important success can be added to the claims of this product £ a 99% destruction of field bindweed within 2-3 weeks of application. Further trials have recently concluded that over 100 weeds can be killed with only one touchweeder - thus it is economical too!



Putting in hard work on the green at Hillside Golf Club

The Pocket Touchweeder is impervious to water, both from hose and rain, and is therefore not only a labour saving product, as re-application is usually unnecessary, but also ideal to use near garden ponds where sprayed weedkillers cannot be used.

It is the only safe, efficient and economical way to treat unwanted weeds, the Pocket Touchweeder - a government approved Garden Care product from Thomas Elliott Ltd. For further details please contact Alan Gloak, Thomas Elliott Ltd., Hast Hill, Hayes, Bromley, Kent. BR2 7AJ, telephone: 01-462 2271. Fax. 01-462 7035.

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NEPTUNE Scotland Ltd, having established themselves as Scotland's leading manufacturer of seaweed based, organic soil improvers and allied products, are set to expand to meet increasing demand.

Mr Peter Walker, son of managing director John Walker, has recently taken over as sales director. Peter will have the responsibility for all distributor outlets and is expected to liaise with local authorities, landscape architects and contractors, throughout the UK.

The sales of Neptune's organic products for greenkeeping management in particular and the sports field market in general will remain in the capable and experienced hands of Stewarts of Edin-

TERRA-TIRES

As sole UK distributor for Goodyear Terra-Tires, Undergear carry the complete range of sizes and types, including built-up tyre and wheel units for LGP conversions.

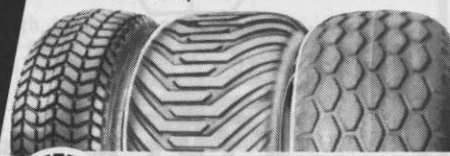
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NEPTUNE Special Mix

NEPTUNE Plus

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NEPTUNE Green

NEPTUNE Universal Organic Compost

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SPRING TURF MAINTENANCE

burgh in Scotland, Maxwell Hart in the North and South of England and James Cockburn in Northern Ireland. Neptune Scotland are also a present involved in re-organising and increasing their manufacturing and storage capacity at Irvine.

Regular applications of organic materials are considered by many greenkeepers and groundsmen to be one of the top priorities when it comes to promoting and maintaining fine turf surfaces in optimum condition.

Enquiries from greenkeepers and sports field managers have become a daily occurrence. We must be in a position to give a first class service and back-up to our distributors. Investment now will ensure our ability to remain in the forefront of manufacturing seaweed based organic products. Seaweed we believe is, and will always be, the best natural organic material available for improving soil structure. With the help of Dr Harry Duncan and his team at Glasgow University we will continue to strive to produce top quality organic products. "Seaweed is earth's best friend", says John Walker.

Another little known fact is that the standard of repairs and mower cutting efficiency can actually be improved by in house repairs. Sadly a minority of Clubs and Greenkeepers lack the necessary confidence to tackle their own repairs, preferring instead to call in the private contractor, who undoubtedly is costing the Club quite a tidy sum each year.

Hunter Grinder's appear to have the most attractive machine on the market at present. It has a full 36" capacity and can accurately grind the fixed bottom blade as well as the cutting cylinder.

The other technical benefits of using a Hunter JUNO machine are that due to the lack of friction, obtained by 'relief' grinding cylinders (1) a cleaner cut (2) less fuel is used to propel the mowing machine (3) doubles the service life of a bottom blade and (4) much longer intervals between major overhauls.

The six clubs or courses who have installed a Hunter Grinder between December 1989 and January 1990 are: Sleaford Hall Golf and Country Club in Northumberland, Leek Golf Club in Staffordshire, Whitecraig Golf Club at Giffnock, Glasgow, Kinross Green Hotel Golf Course, The Honourable Company of Edinburgh Golfers at Muirfield, Gullane, and Ely City Golf Club in Cambridgeshire.

They join an impressive number of courses using Hunter's machines, which include Gleneagles Hotel, Carnoustie and the Royal Dornoch in Sutherland.

ERIC HUNTER GRINDERS

In conversation with Hunter Grinder's recently, it was revealed that this company has achieved a personal best — delivering six of their mower grinding machines into British Golf Clubs in less than two months!

As Mr Eric Hunter the managing director readily admits, six machines installed in a little over six weeks, is more golf club business than the company has handled in the year previously.

Hunter's attribute this to resounding interest in Mower Grinding Machines, and simply that more Golf Clubs are waking up to the fact that they can save hundred's, indeed thousand's of pounds by equipping themselves with a grinding machine at a sensible price.

Most clubs have a Head Greenkeeper or least one member of staff who have a little mechanical knowledge. Many Clubs are discovering the advantages of owning a 'small' workshop for doing repairs under cover. Why in fact send machines out for repair when you can 'do-it-yourself'?

MANSFIELD SAND TURF DRESSING PRODUCTS

MANSFIELD Sand Company produce a range of high quality, washed and graded sands which are fully approved by STRI, Bingley for sports turf applications.

The range is sold under the 'Mansil' tradename and includes a medium-coarse grade, Mansil 35 (M35), which is used by many golf courses as a bunker sand and for various specialised drainage uses in addition to its use for top-dressing either alone, or in a blend with topsoil and/or peat.

The sand can be supplied in a dry condition in order to facilitate on site mixing by the greenkeeper.

A medium-fine grade, Man-

sil 55 (M55) is also used extensively for top-dressing turf, particularly winter sports pitches, e.g. soccer, rugby.

New developments from Mansfield sand include a reinforced silica sand which can be used to produce a stabilised free-draining root zone medium and, as such, forms the basis of a new product range named 'Fibreturf'. This product can be used as a pure sand medium or easily mixed on site with a small amount of suitable top-soil to give a sand-soil medium.

The other new product range is 'Gypsand' which is a controlled blend of sports grade, Mansil sand with varying proportions of powdered, agricultural grade, gypsum. The virtues of Gypsum as a general soil conditioner and more specifically as a flocculating agent for clays, are widely recognised, however, the Gypsand range now offers the groundsman opportunity of combining the beneficial effects of two natural products in one relatively simple, dust free operation.

FROM QUARRY TO QUALITY

Boughton Loam Limited is a Company that has grown from

small beginnings to one of positive importance in the top-soil industry.

Their premises in Kettering were planned specifically to produce quality turf dressings, loams and horticultural products and their high-tech plant for mixing, sterilising and bagging is purpose built. As you might imagine, such investment has brought its rewards and Boughton Loam is able to supply not only a standard range of dressings, but also to any specification that the greenkeeper may require, be it for additives, soil improvers etc.

To ensure a maintenance of consistent quality, the top soil that is continually available to them is thoroughly checked as to its suitability before being bought in and stockpiled. The final destination is processing for their 'Top of The Table' range of top dressings.

The Soil is blended with a constant source of Leighton Buzzard sand to give a mix of carefully selected top soil with a minimum of clay and silt, and washed lime free silica sand with the majority of particle sizes in the range 0.125mm - 0.5mm. This produces a final product that will encourage

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Over the past 23 years, the Wessex Peat Group have built up an enviable reputation for the manufacture and distribution of quality products throughout the United Kingdom and Europe; and now after many years of research we are now bringing to the UK market **WESSEX COCOPEAT*** the only genuine alternative to peat.

WESSEX COCOPEAT* is a 100% renewable resource, with all the characteristics of a high quality peat moss, thereby making it the perfect alternative for peat, so helping to save the world's ever diminishing resources.

Not only is it a natural alternative to peat but, as it is made completely from coconut husks, it contains several of its own unique characteristics:

Unlike traditional peat, **WESSEX COCOPEAT*** has a unique sponge-like structure which will retain larger quantities of water, nutrients and oxygen (AFP), thereby improving aeration. This also results in less leaching, thereby reducing the amount of additional feeding and also has the advantage of being 100% weed free, with an ideal pH of 5.

Due to its naturally high AFP, another major saving in both material and labour in using **WESSEX COCOPEAT*** over traditional peat is that there is no need to add perlite and bark etc.

More than just being a peat alternative; with all its added benefits one would expect to pay a premium for **WESSEX COCOPEAT*** but, in fact, it is competitively priced against a good quality sphagnum peat moss.

*Treat the Earth Well —
It Was Not Given To Us By Our Fathers,
But Loaned To Us By Our Children.*

**COCOPEAT is a trademark of the Wessex Peat Group.*

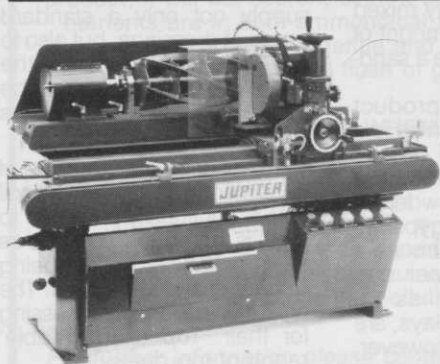
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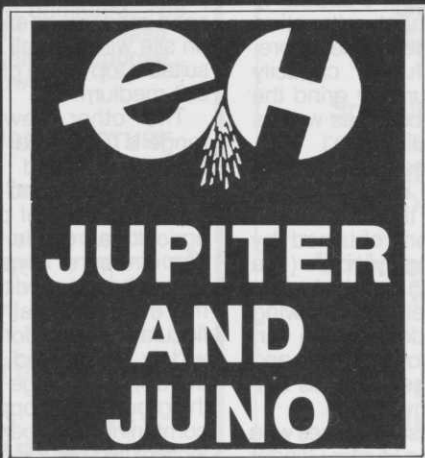
- Carnoustie Golf Links
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- Royal Liverpool Golf Club
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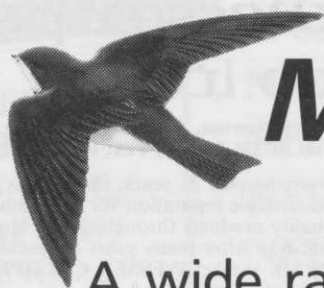
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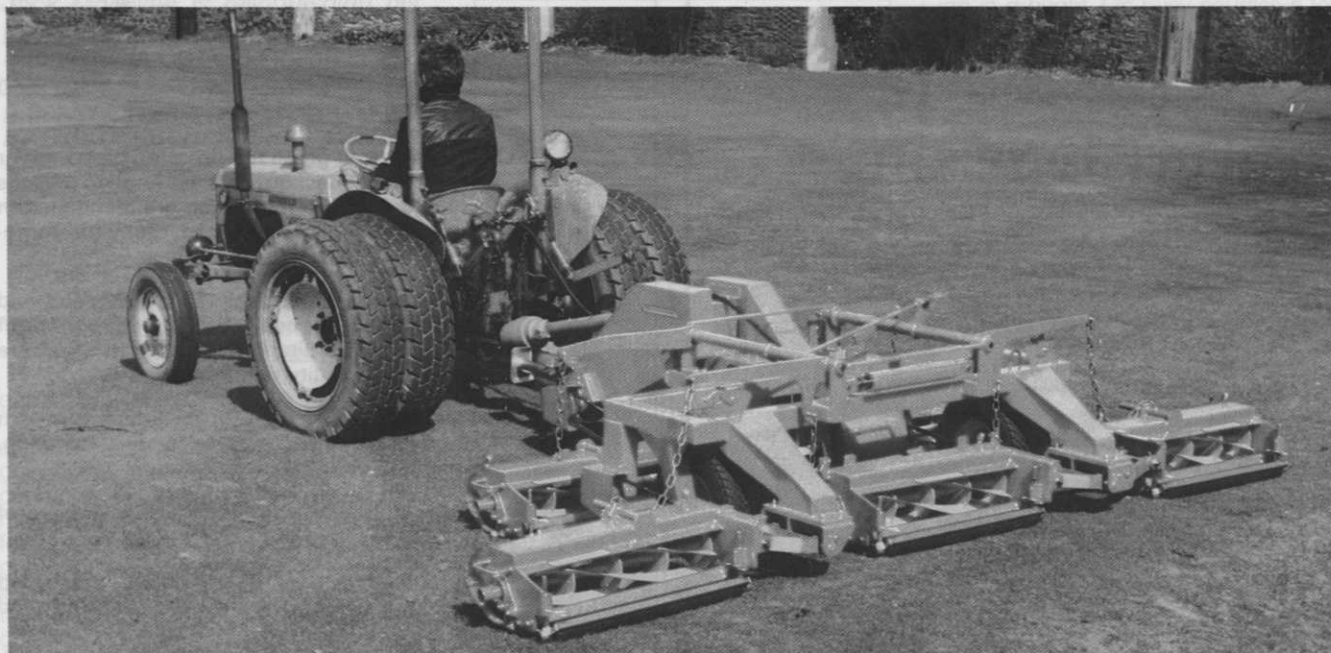
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SPRING TURF MAINTENANCE



The use of high-tech equipment is vital in the propagation of good turf.

finer grasses, assist drainage and integrate rapidly into the sward.

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FEN TURF DRESSINGS LTD.

FENDRESS Golf and Bowling Green top dressing which has been manufactured to the highest standards for over ten years, is now established and recognised as one of the leading national brands of top dressing.

The consistent high quality of Fendress is ensured by careful use of only the very best raw materials, which are selected not on cost, but quality. East Anglian Fensoils, rich in humus with minimal clay and silt fractions are blended with lime free Leighton Buzzard washed silica sands and finely screened to produce Fendress, a top

dressing of exceptionally high quality.

Fendress is manufactured for the Professional, where the correct pH content, clay and silt fractions and particle sizes are important. This is essential to help reduce compaction and encourage the finer grasses for top quality putting and bowling surfaces.

Supplies are available to all parts of the U.K. from Northern Ireland to East Anglia and Scotland to the South West, principally in 25 and 20 tonne loads, although smaller loads can be supplied. We are offering a special discount for the first time purchasers, also to existing users for a limited period.

Available in bulk loads or pre-packed in 25 kg heat sealed sacks, 10/15/20/25 tonnes. Discounts for multiple loads.

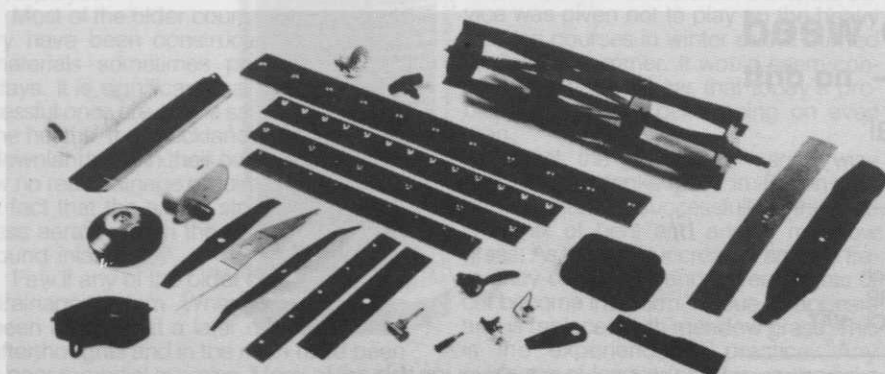
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Enjoying the fruits of the greenkeeper's labours

INNOVATIVE GRINDERS FROM ATTERTON & ELLIS

ATTERTON & Ellis offers a range of machines to sharpen all sizes of cylinders and bottom blades.
Continued on page 24



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MANY CHAMPIONSHIP COURSES FOR OVER 10 YEARS

A superior and consistent golf green top dressing prepared for the professional using the highest quality East Anglian fensoils (with very low clay and silt fractions) which are blended with lime free silica sand, shredded and screened, ready for immediate application.

Save capital outlay on expensive equipment, which can stand idle for long periods, also labour costs, but most important of all, save the difficulty of finding suitable raw materials which are essential to produce a high quality top dressing.

Bulk deliveries to all parts of the UK, including Northern Ireland in 10-25 tonne loads. Also pre-packs for easy handling. Special mixes prepared to your own specification.

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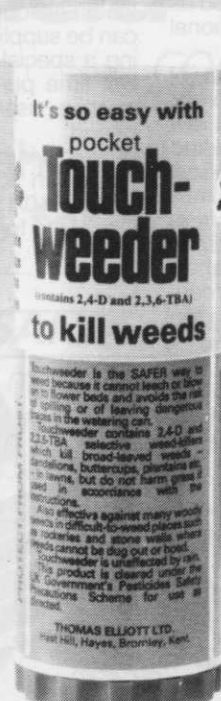
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Read the label before you buy

SPRING TURF MAINTENANCE

Jack McMillan is relinquishing his position as head greenkeeper at Sunningdale Golf Club at the end of this month to become the first greenkeeper/consultant employed by the International Golfers Club/BIGGA.

THE CHANGING FACE OF GREENKEEPING IN BRITAIN

THE game of golf is currently enjoying an all-time high in terms of the number of people participating in the game.

However, spare a thought for the person who has to maintain and prepare the golf course. Increase in play has put new demands on both maintenance and management programmes. It was only a few years ago that the average number of rounds per annum was 5,000, now it is nearer 50,000. This is without question the major cause of concern facing greenkeepers as we move into a new decade.

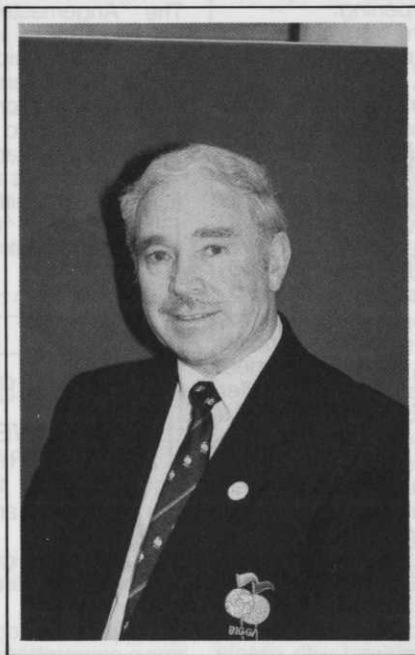
Much of this traffic occurs during dormant winter conditions, and there is increasing pressure to keep courses open irrespective of weather conditions or the amount of golf played during bad weather. Greenkeepers today, not from choice but from pressure accept golf in weather conditions where previously courses would have been closed. Anyone who tells us that we do no harm with prolonged heavy traffic during frost on courses with a short growing season and year round golf has no experience of looking after a golf course. They should talk to the greenkeepers who are at the sharp end and who have to prepare courses for major events early in the season.

Courses are now being used as a source of revenue more than at any time in the history of the game. This applies to the private members club, the corporate set up, the family business, the local authorities and the hotel groups. I do not at this time see this situation changing, again due to the increased popularity of the game.

This has had a detrimental effect on the conditions of greens. Any deterioration in the condition of greens in the UK at the present time is due primarily for two reasons - bad construction and being overplayed.

Most of the older courses in this country have been constructed using local materials sometimes poor impervious clays. It is significant that the more successful ones are on the sands of the links, the heaths, the Brecklands and the chalk downlands, all in their own way with little or no real drainage requirement. It is also a fact that the sandy structures require less aeration than the heavier materials found inland.

Few if any of the older courses have a drainage system. Where systems have been installed at a later date they were afterthoughts and in the main have been a poor remedial exercise. Many of the old greens were constructed to retain water during periods of drought, a dew pond system being used. This called for a layer



Jack McMillan

"Any greenkeeper experiencing difficulty at his club over the level of aeration he is applying should make it clear that as long as his course is expected to take heavy traffic, he will have to continue with the regular aeration programme. He can with no guilt tell his club that it is not a greenkeeping or an aeration problem but a poorly constructed green problem."

of clay to retain much of the surface water. Modern construction allows for both an excellent drainage system and drainage raft.

On the heavy clay inland courses, the problems of managing the great increase in the popularity of the game, resulting in a more intensive playing programme have been enormous. Many years ago in an article in Bernard Darwin's time the advice was given not to play on the heavy London courses in winter or the burned up links in summer. It would seem contrary to what we hear that today's problems may have been going on even then.

At best, the grass cover variety wise that most greenkeepers in Britain can hope to manage successfully at this time is a mix of bent and annual meadow grass. As the traffic increases and the frequency of mowing and lower heights of cut become the norm, fescue disappears and is replaced with meadow grass. This is the experience in practice. Any evidence of fescue found is on the links and sometimes the policies applied to achieve this become totally unacceptable, ie burning off of meadow grass by stress-

ing in drought. On busy courses a total of two wet years will normally return this situation to meadow grass and the continuing struggle to win back some fescue.

The real cause for conflict between the greenkeeper and his members is that the poorly constructed greens require a level of aeration to keep them alive that offends the member who feels that the management programme is weighted against him. There is no softer, easier way, most of the courses in this country today are doomed to the heavy intensive aeration programmes they are receiving. If someone somewhere knows of another way of keeping badly constructed golf greens alive under heavy traffic would he please let all the greenkeepers in this country know.

Any greenkeeper experiencing difficulty at his club over the level of aeration he is applying should make it clear that as long as his course is expected to take heavy traffic, he will have to continue with the regular aeration programme. He can with no guilt tell his club that it is not a greenkeeping or an aeration problem but a poorly constructed green problem.

We do today have available to us methods of constructing more modern greens, with a rootzone material that will survive with a fraction of the aeration we currently apply. This material is not plucked out of the air in percentage mixes but is put together in a laboratory, to a suitable bulk density, porosity and ability to retain moisture.

It is only fair to warn any interested parties that this is not the cheapest method of construction but in the considered opinion of many experts is the only way forward. The USGA would go as far as to say it will last under heavy play for 100 years or more. When constructed a USGA Greens Section Specification will be slightly more costly in day to day management. There is no such thing as a modified USGA Greens Section Specification.

I am not at this time advocating that every green in this country should be torn up and replaced with a first class specification, the cost of such an exercise would be immense. I am however saying to golfing members get off your greenkeeper's back. He is at this time applying policies in your best interest not from choice but from necessity. No greenkeeper takes any pleasure in the intensive aeration, the regular top-dressing programmes, the sensible use of water programmes. He is, in fact, applying these same programmes in the best interests of the golf course.

Might I suggest that every club choose a green and apply the programme the membership would like - no aeration, no top-dressing, plenty of water in drought, plant cover scoured off to find pace and bags of fertiliser to make it green. This green could be called the members green. By the end of this year we would have one green in every club that would be a disaster area. Hopefully then members might just appreciate what their greenkeepers do for them. I am fed up listening to young greenkeepers who are being given a life of hell for doing a good job.

JACK McMILLAN

SPRING TURF MAINTENANCE

Continued from page 21

The "Master" cylinder grinding machine is designed for sharpening large quantities of heavy duty cylinders and is suitable for machines having up to 106cm (42in) cutting width.

Incorporating an automatic feed cycle facility, which can be preset to remove a specific amount of metal from the cylinder, it is claimed to enable unsupervised grinding. A coolant pump with a suds tank is provided for use when applying heavy continuous cuts and to take away the grinding dust. prices are from £7,946.

The company's "Express Dual" cylinder grinding machine is capable of both "in-situ" or plain cylinder grinding on a wide range of lawnmowers. When used "in-situ", the mower is located centrally on the machine, and locked into place. The grinding wheel can be adjusted to approach the cylinder at the most convenient angle. Adjustment of cut is by two handwheels mounted either side of the machine and the cylinder is driven by a geared motor through a flexible coupling and driveshaft. The "Public Authority Express Dual" has a heavy duty mains electric motor. Bottom blades have to be removed for sharpening.

Prices are from £4,245 for the "in-situ" only grinder.

£4,074 for the plain cylinder only grinder and £4,790 for the dual action machine. The "Public Authority" version is from £4,852.

The "Express Dual" is available with a "Professional" kit to enable "in-situ" sharpening of a wider range of cutting units and costs from £4,852.

The company says that the "Pilot" plain cylinder grinding machine is intended to meet the needs of the smaller workshop - say 5 to 10 medium sized mowers - and incorporates the essential features of the other machines, but without the high capital outlay.

Arranged for bench fixing, with the "Easitru" system of cylinder drive and mounting - a system claimed to give accuracy combined with simple setting up, the price of the "Pilot" is £1,956.

The range of bottom blade grinding machines offered by Atterton & Ellis include the "FH1 Fastcut", capable of grinding blades up to 24 inch long, and the "FH2 Supacut", for blades up to 36 inch long. Prices for the FH1 start at £735, and for the FH2 at £995.

The "Angemaster" can take blades of up to 106cm (42in) long, and is equipped with an adjustable eccentric bar can then be rotated for grinding the front or top lip to any desired angle. Prices start at £2,854.

Further details are available from: David Smith, Atterton & Ellis Limited, Iron Works, Haverhill, Suffolk CB9 8QH.

As well as exploring new markets, care is taken in assuring prompt delivery both to home customers and those abroad.

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STATUS QUO FOR U.K. BROUWER DISTRIBUTION

RANSOMES, who recently acquired the Canadian-based Brouwer Company as part of the Cushman Ryan deal, has announced that there will be no change to Brouwer distribution in the U.K.

Outside of North America, Ransomes commercial division, based at Ipswich, now have the responsibility for marketing Brouwer worldwide and intends letting Turfland Professional Equipment Ltd of Dutton in Cheshire continue selling and servicing the complete Brouwer range in the U.K.

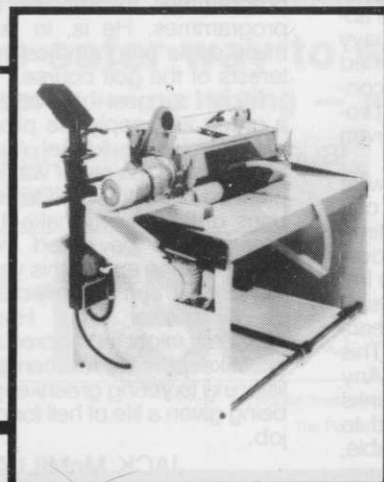
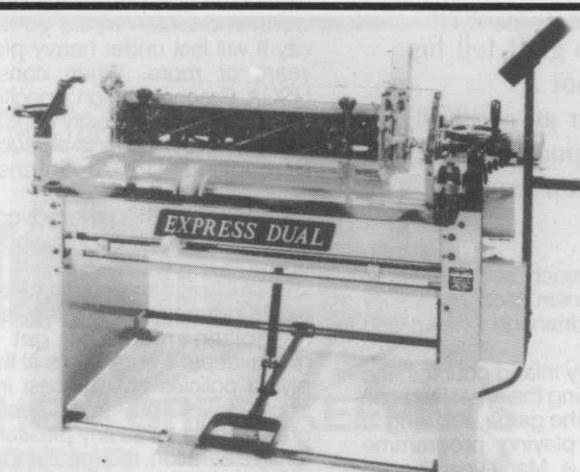
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MOWER ACCESSORIES LTD.

MOWER Accessories Limited are an established company manufacturing high quality bottom blades, cutting cylinders and rollers.

In addition the company carries a comprehensive range of spares for most types of machines, as well as supplying the home market, the company exports to Europe, Canada and Australia.

Great emphasis is placed on producing a high quality range of products and of maintaining good customer relations which it has built up over a number of years.



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With over 100 years experience we combine all the traditional skills of cylinder grinding with the advanced technology of the Express Dual.

A precise and beautifully made grinder that particularly complements the TORO range to provide the practical solution for keeping those cylinders sharp and the greens as you want them — innovation, a commitment to excellence and at an economic cost — the Express Dual — a real cut above the rest.

As well as our market leader, we also manufacture a complete range of bottom blade grinders including The Angemaster which is ideally suited to work alongside The Express Dual — send for our brochure for all the facts.



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St. Andrews

19th - 22nd July

If you wish to be considered for the Greenkeeping Support Team at St. Andrews, please forward your name and address to BIGGA Headquarters as soon as possible.

Please note that preference will be given to members who will be available for the period Wednesday, July 18th - Sunday, 22nd inclusive.

Book your space NOW for

THE BIGGA TURF MANAGEMENT EXHIBITION AND EDUCATIONAL SEMINAR PROGRAMME TO BE HELD DURING 23RD - 25TH JANUARY 1991 AT THE HARROGATE EXHIBITION HALL

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at BIGGA Headquarters

**Telephone 03473 581/2
Fax 03473 8864**

Those companies wishing to reserve the same space as they occupied at the 1990 Exhibition are reminded that existing space allocations were only guaranteed until 28th February 1990. If you would like to take up the offer please contact us quickly.

1990 NATIONAL TOURNAMENT

Ganton Golf Club

6th - 9th August

Entries are invited for the above event to be played over three days at the majestic Ganton Golf Club in Yorkshire.

A banquet will take place at the Royal Hotel, Scarborough on the Tuesday evening and the prize presentation will be held on the Wednesday, following completion of the third round at Ganton Golf Club.

The event will be multisponsored and coach trips will be arranged on two of the days for companions.

Entries to BIGGA Headquarters enclosing a cheque for £30.00 to include one banquet ticket.

Extras:

Banquet per ticket £14.00

Coach Trip:

Monday - Yorkshire Dales £7.50

Tuesday - Trip to York £5.00

LEGAL NOTICES

NATIONAL INSURANCE CONTRIBUTIONS RATES FOR 1990/1

By Paul Hilden,
a lawyer

FOR employees the Lower Earnings limit (Class 1) is raised to £45.99 (up 74p). In Class 4, the self employed, the 6.3% contribution rate remains the same but the annual limits of profits between which Class 4 contributions are payable will be raised to £5,650 and £18,200 (from £5,450 and £16,900 respectively). The maximum in Class 4 will be £803.25 and the overall maximum contribution for 1990/1 will be £1,669.50.

MOVING AN EMPLOYEE

The Inland Revenue has announced that employers may now contribute an increased amount, tax free, to the extra housing costs of an employee who has moved to a more expensive housing area. The increased maximum is £22,890 and it applied to moves which took place on or after December 1, 1989. The previous maximum of £21,210 applied to moves which took place on or after February 1, 1989.

VAT DEFAULT SURCHARGE NOTICES

Before a default surcharge liability can arise the surcharge liability notice must be served on the tax-payer. In recent cases in front of VAT Tribunals appeals have been allowed where the tax payer has shown the notice has not been received. In one case a couple were adamant that they had never received a surcharge notice and although the Customs showed it had been posted to them the Tribunal found, on the balance of probabilities, that it had not been received by them.

It seems, however, that rather than go to the expense of sending out recorded delivery letters the Customs intend to appeal against these decisions. Alternatively they may seek a change in the legislation.

In appeals by firms who maintain that a VAT return has been posted the practice is to call the person responsible for posting the notice to give evidence on oath that it was sent on a particular day. In a recent case where the company's managing director completed the VAT return in question and put it in his secretary's post tray the day before he flew to America he could not prove that the return was posted.

The Tribunal gave him an

adjournment to try to trace the secretary. Effort to find her failed and the Tribunal therefore could not find on the balance of probabilities that the return had, in fact, been posted on time. As a result the appeal failed. In a similar case the secretary was called and gave evidence that she remembered posting the return on a particular day. In this case the appeal was allowed.

DISCRIMINATION AGAINST JOB SEEKERS

Recruiting employees is something of a specialized art-form in itself. It is made even more complicated by the possibility that an employer is open to a suit for discrimination either sexual or racial by a disappointed applicant. As a rule it is an offence under the Race Relations act and the Sex Discrimination Acts to discriminate against people on grounds of sex, race or marital status. Not one of us likes to think we discriminate against others but it does easily happen.

There are two kinds of discrimination, direct and indirect. The first occurs when a job specification eliminates a whole category of people. 'Single men only to apply' 'No married women need apply'. These may be extreme examples but they go to show how careful an employer needs to be from the start. Do not use the word 'he' throughout an advertisement implying that only a man is really likely to be considered for the position.

Of course, the reverse may be true. In one of the first discrimination cases brought a man won compensation when after applying for a job as a telephonist he was told only women need apply. Applicants must be treated on merit and stereotyping must be avoided. It is all too easy to fall into the trap of thinking that navvies are men and typists are women.

Indirect discrimination occurs when for all practical purposes a group is eliminated. "only people over 6 feet tall need apply" effectively rules out all women. Of course, if a job really does require six footers that is another matter.

They must, however, be fairly few and far between. Discrimination is also permitted in certain circumstances such as a job which is to be held by a married couple or, where it is an essential part of the work that the employee mixes with

members of the other sex in a state of undress.

Permitted discrimination on racial grounds is even more restricted. One example would be where a white person wished to work as a waiter in an Indian or Chinese restaurant. He would not be able to claim he was discriminated against. It might, however, be very different if he wanted to be a cook and could show he had all the necessary qualifications.

He (or she) would almost certainly be successful if he merely wished to be a washer-up. For most businesses, however, these exceptions have limited application.

HIV POSITIVE EMPLOYEES

Sadly, an increasing problem for employers will be what should be done if an employee is diagnosed as HIV positive or is found to have full blown Aids. It is something which needs sensitive handling to be fair both to the employee in question and the rest of the staff who may be lobbying for his (or her) dismissal.

There is still a good deal of uninformed prejudice about Aids. People wrongly believe that merely by touching a person the disease may be contracted. Employers therefore need to set these groundless fears to rest.

As the Department of Employment guidelines emphasize if sufficient information is given about Aids then there would be less harassment in the workplace. Employers should almost as a matter of course provide information to their employees and point out that in most jobs there is little or no risk of becoming infected.

But what is to be done with an employee who is unwilling to work alongside a colleague or starts spreading gossip and rumour? As to the first an employee is required to obey reasonable instructions and therefore may him (or himself) be in breach of contract.

As to spreading rumours, in a case in the relatively early days of Aids, two law centre workers were dismissed for suggesting that because a new worker at the Centre was gay he might introduce Aids into work. The tribunal upheld the dismissal.

But most employees are reasonable. Prejudice arises out of fear more often than from malice. If an employee raises the matter he, or she, should be asked to have a word with a union representative, a representative of the health and safety unit or someone from the management.

By education and explanation the whole problem is one which can be solved even before it has begun.

WHEN GREEN MEANS GOLF

THERE has, as most people will know, been a dramatic increase in interest in 'The Green Movement' and in environmental issues; but there is another 'Green' Movement which started in Scotland and has been developing at a similar rate over the past few years and according to experts will continue to expand at an even greater speed, it is, of course, golf.

A recent report from St Andrews estimates another 700 golf courses will be needed in the next ten years if the demand for the sport is to be met. This explosion of Golf Courses means staff with Greenkeeping skills and continuous up date of skills. A seminar was held at the Welsh College of Horticulture and organised by Mr Graham Wright, amenity turf lecturer at the Welsh College of Horticulture, to which over 100 greenkeepers came. The seminar was addressed by turf

experts from the Sports Turf Research Institute, Mr J. Peris, assistant director S.T.R.I. who was brought up in Wales and educated at Bangor, spoke on maintenance of tees, fairways and bunkers.

The Welsh College has been establishing itself as a centre for Greenkeeping with strong support from the Welsh Golf Union, and many careers will start with training at Northop over the next few years.

A meeting has been arranged for April 10 at the Welsh College of Horticulture, Northop inviting all North Wales Greenkeepers. It is hoped that a North Wales Section of BIGGA will be formed on the day and if there are any greenkeepers who have not already received an invitation from Headquarters but would like to attend please ring 03473 581 for further details.

DAVID GOLDING

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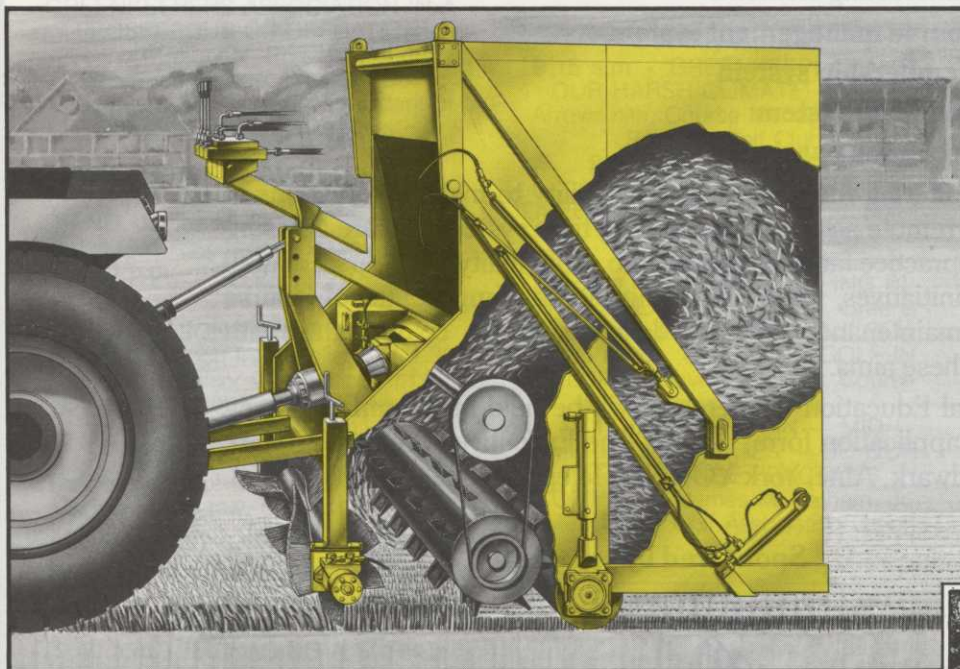


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STRIPES To complete the picture fully adjustable rollers leave your turf with an impressive light/dark striped effect.





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- Membership system
- Handicap system
- Accounting system

In addition, **IGC** is offering member clubs the facility to make reservations at other **IGC** clubs via remote access to the starting time system. We are advising on leasing facilities, practice facilities and in-club profitability. Of course, as well as those and other initiatives, we are stressing the vital importance of Course improvement and maintenance. We are delighted to be co-operating with **BIGGA** to achieve these aims.

The second National Education Conference will be held at Egham in Surrey. For full details and application form, contact The Executive Director, **BIGGA**, Aldwark Manor, Aldwark, Alne, York YO6 2NF Telephone: 03473 581.

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EDUCATION

BIGGA NATIONAL EDUCATION CONFERENCE

ROYAL HOLLOWAY AND
BEDFORD NEW COLLEGE
30TH MARCH - 1ST APRIL 1990
ORGANISED IN CONJUNCTION
WITH THE INTERNATIONAL
GOLFERS CLUB

DAILY PROGRAMME

Friday March 30

9.30 a.m. - REGISTRATION in
Founders Building

11.45 a.m. - LUNCH - Founders
Building

Conference Commences

Chairman: John Millen, Canterbury
Golf Club. Member of BIGGA Board
of Management and Education

Sub-Committee

1.20 p.m. - Introduction - Ivor

Scoones, Vice-Chairman, BIGGA

1.30 p.m. - 'POA ANNUA: MYTHS
AND REALITIES' Donald B. White,
Professor Turfgrass Science, University
of Minnesota

2.10 p.m. - 'GOLF AND
GREENKEEPING IN SOUTH-WEST
IRELAND' David MacIndoe, Course
Manager, Killarney Golf Club

2.50 p.m. - 'ROOM FOR
DEVELOPMENT' George Oldham,
Chief Architect, Barratt Developments

3.30 p.m. - Coffee

3.50 p.m. - 'THE SWEDISH GOLF
FEDERATION AND THE SWEDISH
GREENKEEPERS ASSOCIATION IN A
PROSPEROUS CO-OPERATION'
Lennart Poignant, President of the
Green Committee, Swedish Golf
Federation. Stig Persson, President of
the Swedish Greenkeepers
Association.

4.30 p.m. - 'THE EVOLUTION OF
PUTTING GREENS FROM SOIL TO
SAND' James M. Latham, Jr. United
States Golf Association Greens Section

5.10 p.m. - QUESTIONS TO THE
PANEL

COMPANIONS PROGRAMME:

Depart by coach from College at 1.30
p.m. to Windsor Castle for tour of
Castle and afternoon tea. Return to
College by 5.30 p.m.

Saturday March 31

The President of BIGGA, The Rt. Hon.
Viscount Whitelaw, C.H., M.C. will be
joining delegates during the luncheon
period.

9.00 a.m. - 'MANAGING A SURREY
CLUB' Ian McMillan, Course Manager,
Hankley Common Golf Club

9.40 a.m. - 'MANAGING A SURREY
CLUB' continued John Harris of the
Green Committee, Hankley Common
Golf Club

10.20 a.m. - 'THE GOLF COURSE IN
HARMONY WITH NATURE' J. Dudok
Van Heel, Golf Course Architect,
Belgium

11.00 a.m. - Coffee

11.20 a.m. - 'COMPARATIVE
MANAGEMENT PRACTICES:
APPRECIATING DIFFERENT

APPROACHES' Gerald Faubel,
President, Golf Course

Superintendents Association of
America

11.50 a.m. - THE GREENKEEPER
AND THE RULES OF GOLF' John
Glover, Rules Secretary, Royal &
Ancient Golf Club of St. Andrews

12.30 p.m. - QUESTIONS TO THE
PANEL

12.50 p.m. - Lunch

2.00 p.m. - INTERNATIONAL
GOLFERS CLUB PRESENTATION
Christopher Williams, International
Golfers Club

3.00 p.m. - 'WHY THIS YEARS
PROGRAMMES DETERMINE NEXT
YEAR'S QUALITY' Donald B. White,
Professor Turfgrass Science, University
of Minnesota

3.40 p.m. - Coffee

4.00 p.m. - 'GOLF BEFORE THE
GREENKEEPER' David Hamilton,
Surgeon and Historian

4.40 p.m. - 'COMMON PROBLEMS
FACING THE AGRONOMISTS' Jeff
Perris, Sports Turf Research Institute

5.20 p.m. - QUESTIONS TO THE
PANEL

COMPANIONS PROGRAMME:

Depart by Coach from College at 9.00
a.m. for guided tour of London
including Victoria and Albert Museum,
Hyde Park, Buckingham Palace,
Parliament Square, Westminster
Abbey, Theatreland, Fleet Street, St.
Paul's Cathedral, Tower of London,
Stock Exchange and Bank of
England. Shopping at Leisure. Pick-up
at 4.00 p.m. for return to College.

Sunday April 1

9.15 a.m. - 'GREENKEEPING AND
OUR HARSH CLIMATE' Sydney
Arrowsmith, Course Manager, Royal
Portrush Golf Club

9.55 a.m. - 'IRRIGATION
STANDARDS AND THE
GREENKEEPER' Robin Hume, British
Turf Irrigation Association

10.35 a.m. - Coffee

10.55 a.m. - 'GREENKEEPING IN
THE DESERT' Barry Carter, Greens
Superintendent, Emirates Golf Club
11.35 a.m. - 'CHANGING GOLF IN
BELGIUM' David Singleton, Course
Manager, Belgium

12.15 p.m. - 'BRITAIN — MID-
AMERICAN CLIMATES — DO OUR
MAINTENANCE PRACTICES
COMPARE?' James M. Latham, Jr.
United States Golf Association Greens
Section

12.55 p.m. - QUESTIONS TO THE
PANEL

1.20 p.m. - SUMMING UP
Paddy McCarron, Chairman, BIGGA

1.30 p.m. - Lunch

COMPANIONS PROGRAMME:

Depart by coach from College at 8.30
a.m. to Petticoat Lane market. Return
at 12.00.

BIGGA wishes to thank IGC for its
generous support enabling us to present
the Second National Education
Conference.

● For full programme and application
form please contact the Executive Direc-
tor, BIGGA, Aldwark Manor, Aldwark,
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Telephone: 03473 581/2. Fax: 03473
8864.

INSTITUTE OF GROUNDSMANSHIP SEMINAR SAND CONSTRUCTED TURF AREAS FOR SPORT

A Seminar on sand constructed turf
areas for sport is to be held at The
New Athletics Stadium, Leckwith
Road, Cardiff on Wednesday March 28,
at 2.00 p.m. The seminar is being
organised by The Institute of Ground-
smanship - Welsh Zone.

The Seminar will be led by Ian Green-
field, B.Sc. (Agric) C.Biol., M.I. Biol., of
Cayford Golf Course Construction,
Bishop's Stortford, who has travelled ex-
tensively throughout the world acting as
a consultant on many sportsground pro-
jects. Mr Greenfield has written a book
and many articles on the subject.

The seminar will be of keen interest to
all groundsmen, greenkeepers, players
and administrators and will include the
following topics: Selection of suitable
sites; Construction of all sand play areas;
Site preparation; Drainage; Irrigation;
Economic advantages of sand pitches
versus conventional methods; Establish-
ment of grass - seed or turf, feeding plus
disease control; Cutting height, frequen-
cy, cylinder or rotary mowers;
Maintenance - regular feeding, irrigation
requirements for turf; Particular needs of
golf greens.

Questions will be welcomed.
Refreshments will be served at 5 p.m.
Fee: IOG Members - Free. Non-IOG
Members - 5.00 (in advance). Details can
be obtained from David Hart on (0222)
755500 after 6 p.m.

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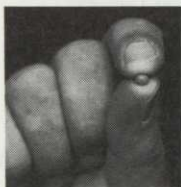
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AROUND THE GREEN

KENT SECTION

ON January 9 at West Malling Golf Club a few of us were treated to a very informative and interesting presentation and talk from John Hinton of B.A.S.F. about fertilisers, in general, and their benefits, miss uses, and how their use fits in with the yearly management of the golf course.

It was a thoroughly enjoyable afternoon, the only disappointing part being the lack of members that attended, and I am in full agreement with Chris Mardon's closing comment for those who stayed away, that it was their loss not ours.

Many thanks to John Hinton for making it such an informative afternoon, and to the catering staff at West Malling for providing us with the sandwiches and afternoon tea. As a note to the "what's in it for me" and "how much is it going to cost me" members of the Association I am pleased to inform you, after the event, that the whole afternoon and refreshments would not have cost you a single penny!

I'm pleased to announce that the committee has been increased by one other member, David Horn of Sittingbourne and Milton Regis Golf Club, the only drawback to this being that a round of drinks is now going to cost more!

At the time of writing this winter has not yet fully materialised and there seems to be increasing levels of play, perhaps soon we could benefit from a few weeks of snow.

I hope that those of you in East and Mid Kent are adhering to the Water Board's recent imposition of a hose pipe ban and banning of watering golf courses and sports grounds - it's nice to know that they are fully aware of how their customers use their resources and when and how much water golf courses use.

Although in saying this I cannot see it raining everyday before the start of the summer so it looks like we may be in for another difficult time as with last summer, but we shall see, as nature has a habit of levelling itself out in the end.

PAUL COPSEY

SURREY SECTION

Acouple of quick reminders. First, the greenkeepers annual gentlemen dinner takes place at Walton Heath on Friday March 16.

It is limited to one guest per greenkeeper and costs just £17 each, which for 18 holes and dinner sounds a very good price.

Secondly, the national education conference at the Royal Holloway College in Egham runs from March 30 to April 4. This event deserves all our support, so why not encourage your captains and committee members to attend, along with your staff?

Congratulations to Donald Wells, who has just been awarded the Silver Medal for the outstanding student greenkeeper in the British Isles, quite an achievement! Don works on the South Course of Wentworth, and received a cheque from his employers, and some very good local press reports for his efforts.

Congratulations also to David Wyburn, assistant head at Foxhills, and his wife Caroline, who is expecting their first child in late June. A prospective BIGGA member, perhaps?

New to the area is Chris Kennedy, who took up his new post as Wentworth's Course Manager on February 1st, after 21 years at Hagg's Castle.

Chris tells me they have over 400 trees down over the three courses, so doubtless they'll all be kept pretty busy there for

some time. When time allows, we'll hopefully see him at some BIGGA functions, meanwhile, all the best in your new post.

Leaving us, is Simon Wells, formerly a greenkeeper at Walton Heath, who has gone off round the world for a year. Also leaving us soon, is Jack McMillan of Sunningdale, who, after a tenure of ten years is leaving to take up a consultancy position, with The International Golfers Club (sponsors of the National Education Conference).

Jack is former Chairman of BIGGA, and presenter of The McMillan Tankard.

Sorry to see you're leaving us Jack, but glad that your knowledge and experience will now reach a wider audience. Although with your article in the Daily Telegraph recently, you seem to have a pretty good circulation now!

The news from the Surrey members who attended ETME 2, is that it was a great success and considered both valuable and enjoyable.

Clive Osgood from Walton Heath, the Surrey Section ex-Chairman, is now representing us at a regional level also. Thanks, Clive for giving up more free time in what must be an already busy schedule.

Despite, the appalling weather the lecture on grinding at the R.A.C. Club was quite well attended. The lecture by Atterton & Ellis, was very well given, and the machines (R.A.C.s own) were very impressive as was Tony's workshop, which I'm sure made a few people rather envious. An excellent evening and our thanks to all concerned.

If you have any problems regarding the magazine, please contact me and I'll try to rectify the situation. Also any items you would like put in this section, such as appointments or golf and social events, pictures included would be very

welcome. My number is (025 125) 4287.

PHIL BALDOCK

MIDLANDS SECTION

MAY 2 brings our spring tournament to Coventry Golf Club (Finham Park) which also combines with our qualifying round for the Iseki regional final being played this year at Kedleston Park.

The draw for the Rigby Taylor Greensomes Knockout will also be made at the spring tournament, so now is the time to choose your partners carefully.

Dates for your diary:

May 2 Spring tournament, Coventry Golf Club.

July 11 summer tournament, Broadway Golf Club and

August 29, autumn tournament, Llanymonach Golf Club.

Finally, if anyone has any news or ideas for the magazine or indeed for the section please do not hesitate to contact me on 0789 762912. I look forward to seeing you at Finham Park.

DEAN CLEAVER.

NORTHERN SECTION

IT was good to see so many Northern Section members at E.T.M.E. 2. The show seems to be getting "Bigga" and better each year!

I hear down the grapevine of personnel changes; at Fulford, Halifax West End and Wetherby. Philip Stirk moves from Fulford to become head greenkeeper of a new development at Stockton Forest. John Grierson moves from Elland Golf Club to become head man at Halifax West End. Committee man and regional administrator, David Hannam, moves from Baildon to take over the reins

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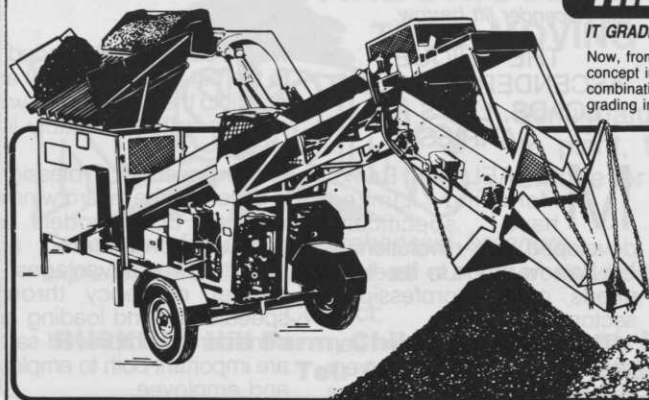
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AROUND THE GREEN



The last Northern Section Ransomes trip of 1972. Spot the familiar faces?

from retiring John Scott at Wetherby. Our very best wishes and good luck for the forthcoming season to the new appointees. So after all these moves the gossip round the section is: 'Who has got Baildon, West End and

Fulford?'

The first lecture of 1990 was a very good talk on conservation gardening by Patrick Crowley who has his own business in Leeds carrying out this work. He was formerly a professional photographer and this showed in his excellent slides. It was just a pity he had a sparse audience.

An extra lecture date for your diaries is in March when Ian Proudler of Endfield Nurseries talks to us about trees for the golf course, March 28 is the date, West Bowling Golf Club the venue and 8 p.m. the time. Please try and pop along and fetch a friend.

The BIG EVENT of the Northern Section social scene is

the annual dinner dance, which this year will be held at Baildon Golf Club on Saturday, April 28. The time is 7.30 p.m. for a meal at 8 p.m. The disco after the meal will play until midnight.

The cost for the evening is only £10.

This event is open to friends, relations and not just members. I hope we shall see more greenkeepers this year. Tickets are available from me and a deposit of £5. per double ticket is required. In case you do not know my telephone no. is Bradford 590463 and I can also be found at Cleckheaton Golf Club.

Going through some books the other day I came across an old photograph which by chance is very topical to the Northern Section at the moment with the Ransomes trip in prospect.

It is of the last Ransomes trip some 18 years ago (I think!). See if you can spot the following (younger) faces: Brian Birdsell, (County Mowers) Geoff Mawson (retired), Hugh Marshall (retired), David Anderson (Moor Allerton), Mick Hegerty (somewhere in Germany), Ralph Smith (Bradford), Joe Baxter (St. Ives), John Storey (Ogden), John Scott (retired),

Continued on page 31

NEW VERTI-GROOM CUTTING UNITS FOR RANSOMES GT GREENS TRIPLE

INTRODUCED to maintain constantly good putting surfaces on golf greens more economically, and being exhibited at ETME 2 for the first time, were Ransomes new hydraulically driven Verti-Groom cutting units seen on their GT Greens Triple mower.

Compared with conventional greens cutting units, during trials both in Britain and overseas, the Verti-Groom units collected up to three

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The Ransomes Verti-Groom on Greens Triple mower.

AROUND THE GREEN

Continued from page 30

David Spurdun (Ganton), Donald Roberts (retired), Adrian Robertshaw (Ilkley), Colin Garnett (Garforth), and Bill Mountain.

P.S. More news of staff changes. Chairman Philip Sutton moves from West Bradford to take Baildon Golf Club and Robert Gee has been promoted to assistant course manager at Cleckheaton Golf Club.

BOB LUPTON

SOUTH COAST SECTION

DESPITE police warnings not to venture out unless your journey was absolutely necessary, a hardy band of stalwarts attended our February meeting. This took place during the second winter storm to hit the South and made road driving conditions particularly hazardous.

However, those who made the journey had the pleasure of listening to Bob Young from Sparsholt College Hampshire. Bob gave a paper on "Principles of Nutrition as applied to Fine Turf". This gave an up-to-date outline on the thinking and understanding of topical nutritional policies and ended with a question and answer session. Bob also covered the range of Courses on offer at Sparsholt College Hampshire for Greenkeepers and will be happy to supply a written report of his paper to any interested members.

My thanks to Bob for turning out on a foul evening, knowing that earlier in the day rain was seeping into his house from a number of dislodged tiles.

Finally, if you have not yet completed your application form for the Regional Seminar at Sparsholt College Hampshire on the 13 March 1990, you could be too late.

BOB DENNIS

SCOTTISH, NORTH SECTION

THE Section will be holding a one day conference on Saturday December 5. It will be at the North of Scotland College of Agriculture, King St., Aberdeen and it is hoped that we shall be able to attract some first-class speakers and hope to attract well over 100 greenkeepers, secretaries, greens convenors etc.

More details to follow, watch this space.

Lottery tickets will shortly be distributed and the committee hope all members will assist in selling them.

The Spring outing will take place at Arbroath Golf Club on Thursday May 17.

GORDON MOIR

NORTH WEST SECTION

I start this month's notes with sad news that Tommy Dirkin a North West member for some years, died suddenly of a heart attack. Tommy was always active and enjoyed his membership. He will be sadly missed, especially by the Manchester members.

On a lighter note we have two long-serving members this year becoming life members.

These are Robert Janovskis, who retired from Worsley G.C. last May, and Arthur Warhurst, who retired from North Manchester G.C. after completing 35 years there. Congratulations to both these members and may they enjoy their retirement for many years to come!

Two golf tournament dates for the year have been confirmed and these are: Spring tournament - Withington G.C. May 30 and greenkeepers stewards - Turton G.C. September 10.

These fixture and others when confirmed will be in future section notes. The spring tournament will be played also as a qualifier for the ISEKI tournament. Any members with any interesting news or enquiries please contact me on 051 724 5412.

BERT CROSS

LONDON SECTION

FIRST of all, our best wishes go to Michael Peters who has left us to join Albergh Golf Club in Suffolk.

Anybody who remembers David Low will be pleased to hear of the birth of his first child last November. A huge baby boy weighing in at 9 lb 7 oz and named Tom after his father.

David was head greenkeeper at Harsbourne Golf Club before moving onto Northampton Golf Club. I had the pleasure of his company during a few rounds of golf so on behalf of the London Section, congratulations to you and your wife.

The storm at the end of January gave everybody extra work. At Hadley Wood we were lucky with only a dozen or so trees falling, but others were not so lucky. (Section Chairman John Edwards at Moor Park lost over 100 trees and that magnificent clubhouse received bad damage to the roof. Just one example, I'm sure there are many more.

Finally a few dates for your diary. The first Tuesday in March sees our last winter lecture at Aldernham Golf Club at 7.30 p.m. Wednesday April 18 at Grymsdyke Golf Club for the Iseki Qualifier (London Section) A.M. and 18 holes in the afternoon, format to be arranged.

There are two midsummer meetings, the first on the 7th or 8th of May at North Middlesex Golf Club starting 3.30 p.m. and the second at Muswell Hill sometime in June at 3.30 p.m., dates to be arranged.

Our autumn meeting is a 36 hole tournament to be played at Porters Park Golf Club on October 25. The Iseki Regional Final will be played at Sudbury Golf Club on July 4.

ANDREW PHILLIPS

SOUTH WEST SECTION

HAVE you ever noticed what an empty, forlorn lonely place a deserted clubhouse is? Torrential rain, or a hurricane raging or lately a South West Section lecture.

I have postponed the rest of the planned programme until this Autumn. I hope that with some new quality speakers, demonstrations, guided course tours and golf competitions we can cater for everyone and provide some reasonable audiences. In the meantime we are hoping to run another one day course to cover the foundation module of the FEPA regulations. I need another five names to get this one off the ground. Also on the horizon is Westurf 90, again at Long Ashton on May 2nd. The trade support and interest is quite staggering, we must have your support and interest coming through the gate on the day, entry is free, there will be at least fifty companies exhibiting, please make a point of being there in numbers.

Finally my commiserations to all who have suffered storm damage, there have been some horror stories coming up from the far South West, I would appreciate any quality photographs of any such damage for possible future publication.

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For the golf course market Inturf produce a traditional 80/20 fescue/bent mixture of grasses grown on a stone-free sandy soil, all treated against poa annua using their own specialist system of pre and post emergence spraying treatments. Inturf also produce a pure fescue mixture of around eight top varieties of chewings and slender creeping red fescues, again grown on stone-free sandy soils and

treated against poa annua. The Company have also considered growing a pure agrostis turf but this will only be undertaken for special applications/requirements and for the foreseeable future will only be grown to order. As Derek Edwards put it "Whilst pure agrostic swards, particularly creeping bent, are popular in the United States and in Southern Europe and can look and perform stunningly well in those climatic conditions, unfortunately it is far from suitable for the vagaries of our own climate. Here we need a good variety of species and cultivars for all year round results."

For teeing areas, Inturf produce their SS4 turf, being a mixture of smooth stalked meadow grass, slender creeping red fescue, chewings fescue and browntop. All these species are of the highest quality available and grown in stone-free sandy soils and

treated against poa annua.

The Company offers a further four types of mature cultivated turf and with their new and quite unique harvesting equipment can now supply turf to virtually any thickness and in sizes of half square yard, one square yard, half square metre and one square metre. Derek commented that in his own trials he noticed that a thinly cut turf (say between quarter and half inch thick) transplanted very much more vigorously than turf cut to a more traditional thickness of between three-quarters of an inch and one inch. Derek went on to say that this was only possible providing the turf was laid within a forty-eight hour period of harvesting and watered in immediately.

Derek Edwards went on to emphasize the importance of talking to properly qualified and experienced turf growers when selecting turf for golf

green or tee development.

"Surprisingly there are very few turf growers in this country with sufficient experience or the necessary qualifications to advise greenkeepers on how to cultivate and manage turf grass properly. Often they pretend to know sooner than admit to their own inexperience and provide the wrong information, which could potentially be very damaging to the whole of our industry."

Inturf has its own in-house turf advisory service operated through their Company, Turfgrass Services International Limited which comprises a team of the country's leading sportsground specialist, horticulturists and greenkeepers who come together on specific projects where a high quality result is demanded.

SEEDS & TURF PRODUCERS



The spectacular island green at Collingtree - opening for play at Easter. The superb end result of excellent use of seed and turf.

CUCKMERE VALLEY TURF FARMS

CUCKMERE Valley Turf Farms was founded in November 1987 by Keith & Linda Winter. Keith has been involved in the turf industry since 1963 of which the last 12 years were spent in the production of seed grown turf.

They are based near the south coast in East Sussex, on approximately 300 acres in different locations to allow all year round production and delivery regardless of weather conditions.

Cuckmere Valley Turf Farms was created to specialize in the production of top quality seed grown turf from general landscaping to golf and bowling greens.

Keith is actively involved with the growing of the turf using his many years of experience to continuously monitor the turf during all of the growing stages, constantly trying to improve the product.

Since its inception the business has grown considerably and the workforce has already doubled, they are already supplying turf to Golf Clubs, Local Authorities and many Landscape Gardeners.

They are even supplying an increasing amount of quality turf to other well known turf suppliers. The company is gaining a considerable reputa-

tion for its fast efficient delivery service.

Whilst Keith is involved with the task of growing the turf with his efficient work force, Linda is dealing with the every day running of the business in the office. One of them is always available to deal with any queries from existing or prospective customers.

106

No wear, no tear... just turf?

From sowing the seed to delivery to your site, Turfland offers you a complete service. Delivery by fully trained drivers via Turfland's own fleet of trucks with mechanical off-loading for minimum handling.

Fine quality turves, cultivated and fully matured, tended and cared for at all stages in the growing process.

To produce hardwearing, easily transportable rolls of turf to your requirements.

Turf that will withstand all the rigours of daily use, to last a lifetime.

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THE REALITY OF TURF AND SEED

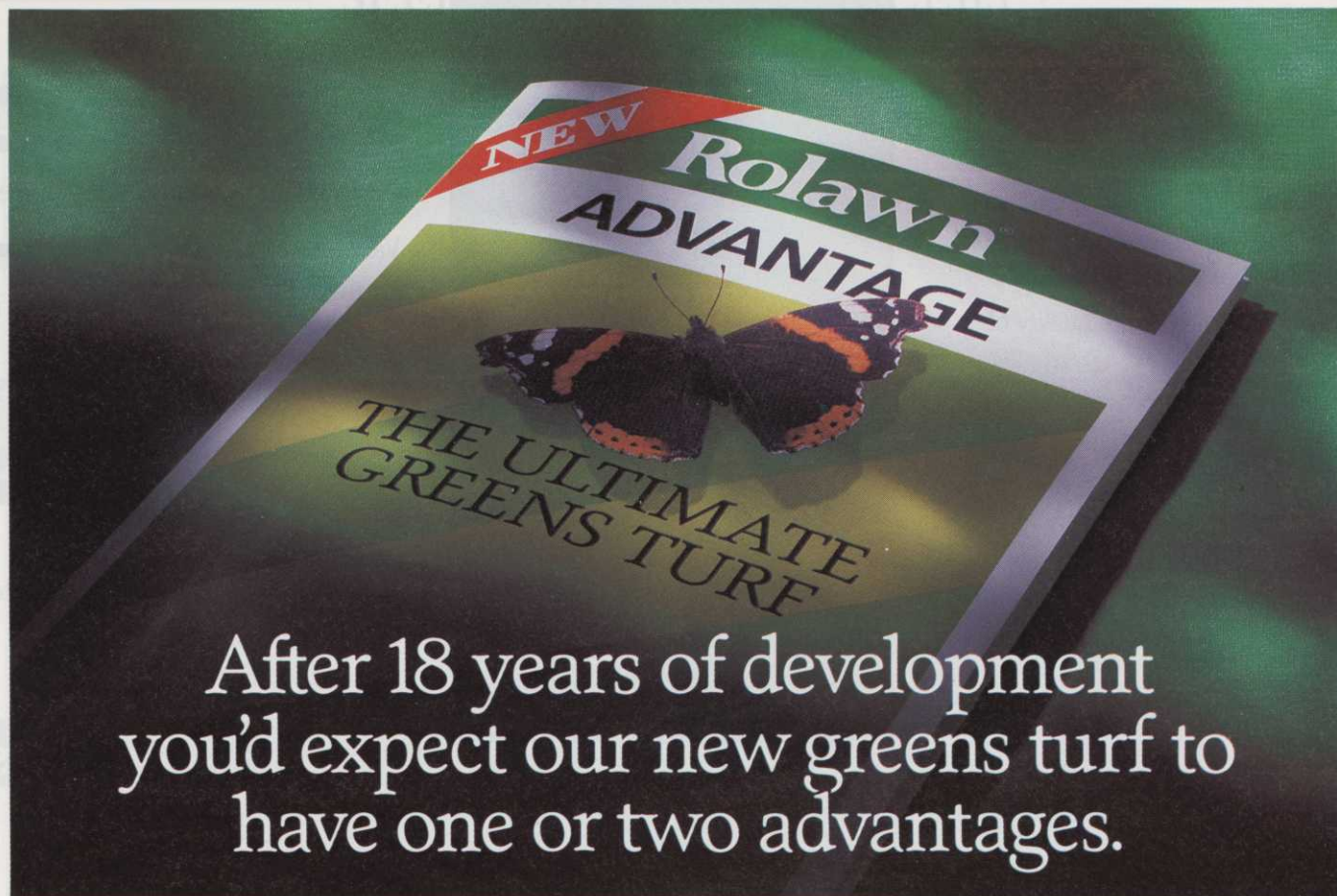
THROUGHOUT the country, individuals, syndicates, councils and national companies are applying for planning permission to construct golf courses and leisure complexes. Once their applications are approved, who should they approach for advice and quality products?

Greens Chairmen/Greenkeepers of existing courses are looking for updated information and advice, the possibility of on-site discussion, to find solutions to their problems.

Lindum Turf are recognised for their expertise, products and commitment.

Quality seeded turf. Grades are available for all applications, for example, Greens, Tees.

Continued on page 37



NEW Rolawn ADVANTAGE

THE ULTIMATE GREENS TURF

After 18 years of development
you'd expect our new greens turf to
have one or two advantages.

For 18 years, scientists at Queen's University, Belfast worked to solve the perennial problem of annual meadow grass. The result is a unique seed mixture of Chewings fescue and browntop bent for our exclusive new greens turf, Rolawn Advantage. It's a significant breakthrough and represents another important milestone for Rolawn, Europe's finest turf grower.

So what are the advantages?

- First, no annual meadow grass means the smoothest textured, "greenest" green for your members (and your committee).
- And Rolawn Advantage is actually **guaranteed** supplied free of annual meadow grass.
- There's also the option to have Rolawn Advantage closer mown to bring the green into play even earlier.
- There's fast delivery nationwide (within 12 hours of harvesting) from Rolawn's own network of Turf Depots.
- And of most importance, there's peace of mind -

through Rolawn's fastidious reputation for quality. Quality achieved through meticulous checking of every part of every field. (Ask any top greenkeeper and he'll tell you as much).

If other turf growers promise similar advantages, just check their credentials.

You can check ours by filling in the coupon and sending (FREEPOST) for the Rolawn Advantage Information booklet. Even better, you could book an inspection visit to see the turf for yourself. We'd be delighted to welcome you.

To: Rolawn Ltd., FREEPOST, Head Office,
Elvington, York. YO4 5DH

Please send me without delay my copy of Rolawn Advantage - The Ultimate Greens Turf ☐ I/we should like to inspect the growing turf ☐ Please send details of your other turf and how I can obtain it ☐

Name: _____

Club/Business: _____

Address: _____

Tel No: _____

G.M. 3/90

**Rolawn
ADVANTAGE**

Rolawn® **EUROPE'S FINEST TURF**

ROLAWN LTD., ELVINGTON, YORK, ENGLAND. YO4 5AR TEL: (0904-85) 661

Lindum are renowned for the high quality of their seeded turf. And their customer service.

It's their knowledge and expertise, their groundsmanship skills, the quality of their seed varieties and fertilisers, and their innovation these are the grass roots from which Lindum's success has grown and flourished.

Their complete turf service includes:

Quality Seeded Turf

The range includes:

PAF (Poa Annua Free), for finest golf and bowling greens.

HERITAGE for luxury lawns and prestigious applications.

LG1 for golf tees.

SPORTURF for sports pitches.

LG2 for low maintenance amenity areas.

'Sodnet' Netting

Designed to prevent soil bed erosion: it acts as a mulch, reduces moisture loss, works as a

holding medium for the root mat and enables early lifting. Grass seeding of land reclamation areas will benefit by the use of 'Sodnet' to stabilize the soil surface, particularly on sloping sites.



Seed Prescriptions

Designed for customers' special needs.

Varieties are chosen for their disease resistance, winter hardiness, drought tolerance, growth pattern, colour and compatability and high germination levels.

The vigour-proven seed is cleaned to a high purity standard prior to prescription mixing.



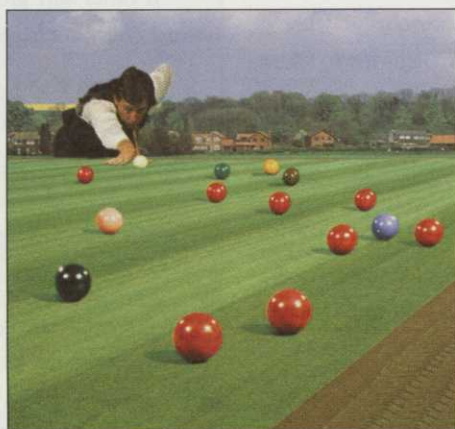
Fertilisers

The Lindum formulations are designed to give turf and seed healthy growth, good leaf colour and resistance to disease and drought.

Preparation and After Care Service

Lindum will provide advice on the preparation of new sites, will carry out a soil analysis and offer an agronomy advisory service.

**LINDUM HAVE THE ANSWER.
THE EXPERTISE
AND THE COMMITMENT**



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FOR LANDSCAPE AND LEISURE

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South Humberside, DN18 6BG
Telephone (065 261) 329 or 564 Fax 065 261 447

SEEDS & TURF PRODUCERS



The working greenkeeper at 5 a.m. at Belmont Golf Club tending his beloved turf.

Seed prescriptions. Individually designed for customers specific needs. Subject to soil analysis and location prescriptions are designed specifically for renovation/compatibility work and/or full course construction.

Fertiliser Compounds. Individually designed per location/application are subject to analysis results.

Sodnet netting. The product designed to eliminate soil/seedbed erosion also incorporated in certain grades of turf to enhance wear resistance.

From conception to completion or renovation, Lindum will be pleased to provide both up-to-date information and advice.

Lindum Quality Seeded Turf. Contact: Geoff Hodson, Sales and Marketing Manager, tel. 065-261 564.

The first product of Johnsons' amenity grass breeding programme and launched after 15 years of assessment, commercial development and trials, Jupiter offers all the attributes which sports people and amenity turf managers look for in a cultivar, notably:

- *Bright emerald green and distinctive strong winter colours
- *Uniform and compact low growth
- *Compactness
- *Tolerance to drought in summer and cold in winter
- *Disease resistance

The remainder of the J range comprises fine turf, flexi-turf, tough turf and tolerant turf, all bred for specific situations.

Specifically these are J1 for bowling, golf and putting greens, J2 for golf greens and cricket squares, J3 for golf fairways and tees and hockey pitches, J4 for cricket outfield and hockey pitches, J5 for golf fairways and playing fields, J7 for football and rugby pitches, J8 (Slowgrow) for golf roughs, building surrounds and slopes, Greenmaster for golf and bowling greens, Taskmaster for golf tees, cricket squares and tennis courts and Sportsmaster for soccer and rugby pitches.

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IN SCOTLAND



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

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IN TOUCH WITH
"THE BEST TURF ON EARTH"

JOHNSONS' JUPITER IN ORBIT FOR THE 1990s

JOHNSONS Seeds of Boston enter the new decade with a fine selection of turf from their J range, led by Jupiter, the outstanding fine-leaved cultivar of the slender red fescue group

38

64

SEEDS & TURF PRODUCERS



The low centre of gravity of the Belos gives extra stability and safety - especially on slopes.

STEWARTS

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OF TURF
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Dalkeith
EH22 4BZ

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Fax: 031-663 0651

Stoney Brae,
Potterhill,
Paisley
PA2 7TG

Tel: 041-884 7525
Fax: 041-884 6252

MOMMERSTEEG

MOMMERSTEEG introduce Headstart (TM), the new revolutionary seed dressing.

For many years now Mommmersteeg has been looking into various methods of dressing seeds with the purpose of improving field germination. Having looked at and rejected various seed coatings - some because field germination was retarded as opposed to improved, some because they contained chemicals - Mommmersteeg came up with the answer: Headstart (TM).

Working with Microbial Developments Limited, it was decided that what was needed was a 100% organic, non-toxic treatment which could only enhance the seeds performance, yet at the same time have a beneficial advantage to the environment. This was particularly important with the advent of the C.O.S.H.H. regulations, which place a legal duty on employers to reduce potential risks when dealing with chemicals and seed dressings.

Mommmersteeg set out its aims; Microbial Development Limited went to work to achieve these goals, producing an integrated product which works in a variety of ways to stimulate seedling growth. Headstart contains:

1. Natural plant hormones which would speed up germination, root and shoot

development. **Object we achieved.**

2. Enzymes to help break down the natural seed coat thus allowing ready uptake of moisture. **Object we achieved.**

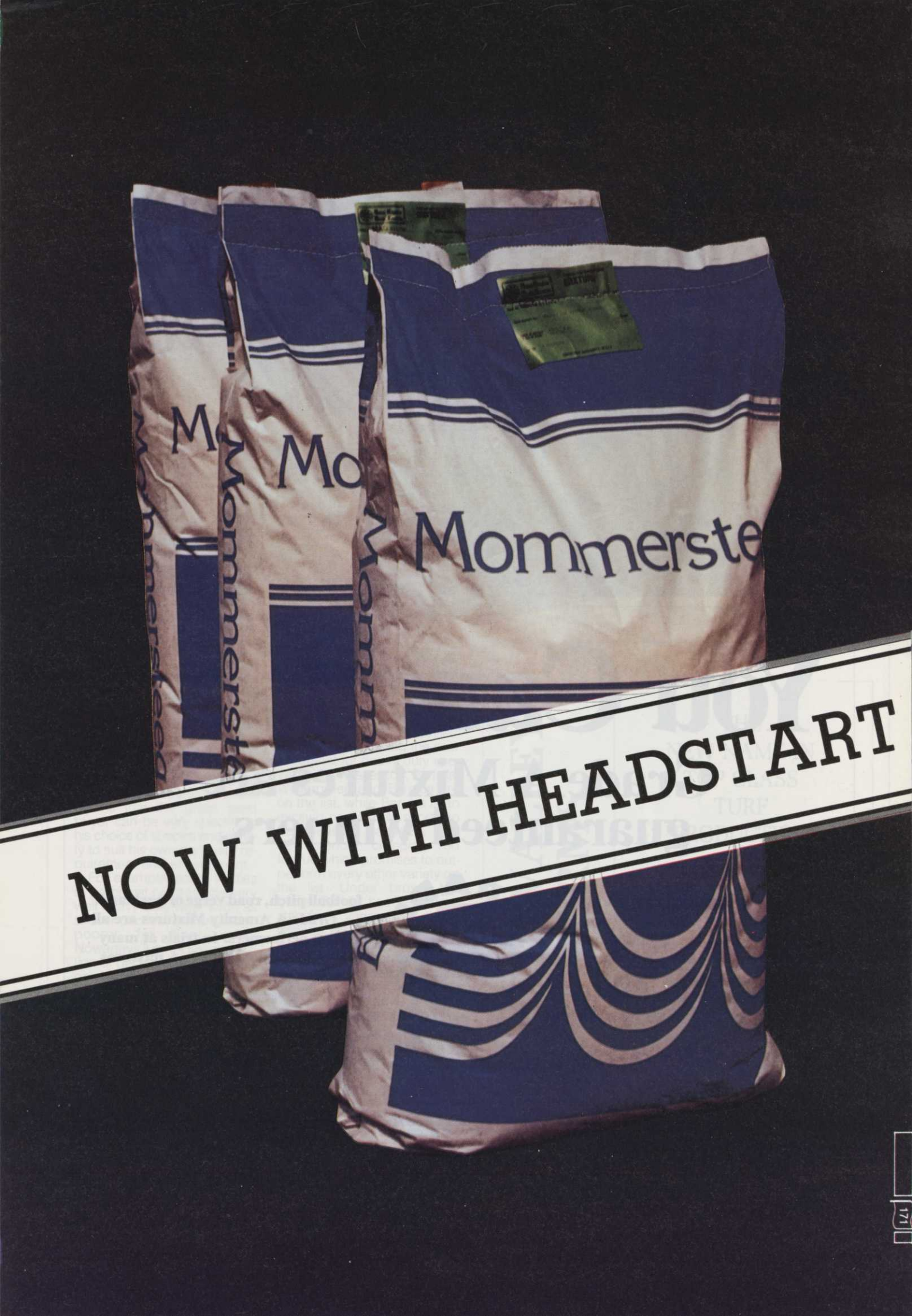
3. Enzymes which would speed up starch mobilization which in turn would encourage more rapid growth. **Object we achieved.**

4. An organic molecule which would attract water to itself thus allowing for a more rapid absorption. **Object we achieved.**

5. A totally organic complex or, put in more exotic terms, hydrolysed protein complex which would provide nutrients to the germinating seedling and, at the same time, stimulate localised bacteria within the rhizosphere. **Object we achieved.**

Add all these points together and you have Mommmersteeg's Headstart (TM) seed dressing. Increased vigour means increased resistance to disease. Quicker establishment means you achieving your goals in a shorter period of time, and all with the use of an environmentally safe seed dressing.

Headstart is the Registered Trade Mark of Microbial Developments Limited.



NOW WITH HEADSTART



You Can't Lose.

Grade A Mixtures are guaranteed winners.

Waste no time or money taking chances. When it comes to choosing amenity seed you simply must have the best there is. Mistakes are both costly and unsightly.

Reduce all risk by choosing from the Grade A range. With 24 different Grade A Mixtures there is one that's perfect for every amenity requirement – whether it's for golf green,



football pitch, road verge or parkland.

Grade A Amenity Mixtures are all proven performers. In trials at many different locations Grade A mixtures produce consistently reliable results, over and over again.

They will do the same for you. Why risk using anything else?

For details phone:



BRITISH SEED HOUSES LTD

WARRINGTON 0925 54411 • BRISTOL 0272 823691
LINCOLN 0522 86714 • EDINBURGH 0968 78480 • BANBRIDGE 08206 62207



Michael Bonallack, centre, talks to Rolawn staff at the recent ETME exhibition.

BARENBRUG UK LTD

ONE look at the S.T.R.I. Turfgrass Seed booklet and another at the bewildering array of grass seed mixtures available from seed houses show how much grass breeding has advanced over the past twenty years or so. The selection and evaluation of new varieties now means that the grass seed buyer can be very specific in his choice of species and variety to suit his own particular requirement and environment.

For example, some varieties of perennial ryegrass do very well heavy duty wear such as soccer pitches, but are much poorer for finer uses. Nowadays it is not just a question of deciding which type of grass species to have - choice of variety within each species has become much more important.

Barenbrug has been a market leader in the breeding and selection of amenity grasses for many decades. The Barenbrug breeders spend many years carefully crossing and evaluating potential varieties before submitting them for official trials. Many thousands of lines have to be screened to produce one new variety. The care and attention devoted to breeding has been well rewarded in the performance of many Barenbrug

varieties in the S.T.R.I. trials. There are few other companies with the range of quality varieties leading the lists in the UK.

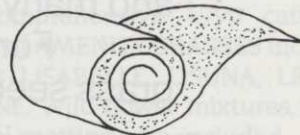
In perennial ryegrasses both Barclay and Barry are established Barenbrug varieties, with Barrage topping the new variety list for heavy duty use. With chewings fescue, Barfalla, Wintergreen and Barnica are on the list, while Baruba is an exciting new variety shortly to be released. Barcrown is a new slender creeping red fescue which promises to outperform every other variety on the list. Under brown top bents, Bardot has become a standard variety for those wishing a better quality bentgrass turf than Highland. And finally Baron which even after 20 years is still the world's best selling Poa pratensis.

With this stable of amenity grass varieties, it is not surprising that Barenbrug UK is set to become one of the leading suppliers of quality grass seed to the UK market.

For further information on any of the varieties or company, please contact Anthony Campson (Managing Director) or Jonathan Turner (Marketing Director) at Barenbrug UK Ltd, Rougham Industrial Estate, Bury St Edmunds, Suffolk.

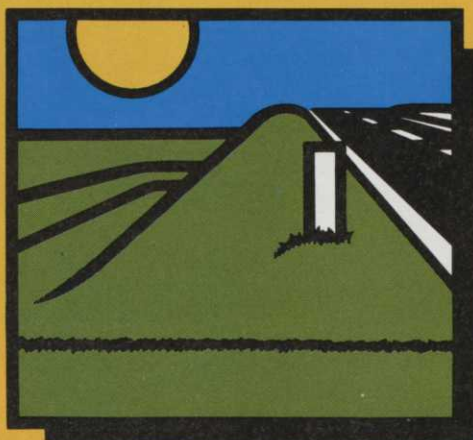
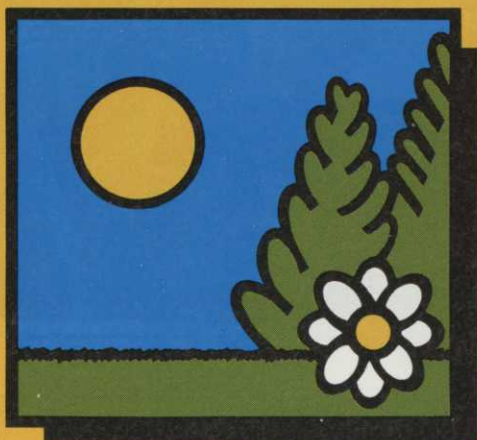
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TURF
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A FULL
RANGE OF
TURF FROM
GENERAL
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TO GOLF
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Everyone's better off with Barenbrug.



The breeders of winning grass varieties such as **Barclay, Barrage, Barry, Baron, Bardot, Barcrown** and many more.

For further information on these and all your grass seed needs call us.



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Tel 0359 70766 Fax 0359 71021

SEEDS & TURF PRODUCERS

AVONCROP LTD

AVONCROP Ltd, the well known and respected suppliers to the Commercial Horticultural Industry, have pleasure in announcing their move into Amenity Horticulture with the formation of Avoncrop Amenity Products.

Avoncrop Amenity Products will operate out of the existing Avoncrop Ltd., premises at Sandford, near Bristol where extensive warehousing and transport facilities are available to give Customers a first class service.

Avoncrop Ltd., with their many Main Distributorships and extensive range of Commercial Horticultural Products already in stock enables the new business to make much of this available to the Amenity Customer along with leading brands of Amenity Chemicals, Fertilisers, Grass Seed Mixtures, Top Dressings, Sportsground Equipment, Line Marking Materials, etc.

Avoncrop Amenity Products "Customer Service Policy" is well backed on the Sales and Technical front with the expertise of Mr David Padfield and Mr John Palfrey who have recently joined Avoncrop and will be available to discuss any enquiries you may have.

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FAIRFIELD TURF

FAIRFIELD Turf have increased production to over 800 acres to cater for the exceptional demand for their products:

Flora Turf. This new product has been well received by the trade and especially by local authorities and architects looking to create small conservation areas, and to provide attractive swathes of colour during the growing season.

Supersport Turf. This product keeps improving, and is now, thanks to the latest ryegrass cultivars like "Numan", a much finer looking turf requiring less mowing due to the dwarf habit of this ryegrass.

For utility areas, tees which are difficult to keep grass cover on, for construction of revetments (bunker sides), ditch banks, Supersport is the ideal turf.

Superturf. Is increasingly popular as a tee's turf and for aprons and bunker slopes. The smooth stalk meadow grass contained in Superturf is extremely persistent in growth habit, and is able to shoot

JENNIFER'S POST

INTER Seeds Ltd., the amenity grass seed and wild flower seed specialists, has appointed Mrs Jennifer Waterfield as their Sports and Amenity Grassland Consultant for the South East of England.

Jennifer joins Inter Seeds Ltd. from a major fertiliser company and her role will be to advise local authorities, landscape architects, landscape contractors, turf growers, sports clubs and golf clubs on the correct choice and use of grasses, wild flowers, fertilisers and biodegradable erosion control matting.

Contact can be made through Inter Seeds Ltd., Southern Avenue, Leominster, Herefordshire HR6 0QF. Tel. (0568) 6363. Fax. (0568) 611344.

Jennifer Waterfield.



again from its rhizomes which is particularly advantageous when used on tee areas. Superturf is also well adapted to areas where drought and shade can be a problem.

Superfine Turf. Is grown from a fescue/bentgrass seed mix, providing a superb putting surface for golf and bowling greens. This grade of turf is treated against invasion by poa annua. Production is available now, and we expect demand to be very heavy for Superfine Turf this Spring.

18

STEWART AND CO. SEEDSMEN LTD.

STEWART & Company Seedsmen Ltd were traditional Seedsmen when they were established almost 100 years ago, as suppliers of flower and vegetable seeds to Estates and Commercial growers throughout Scotland and England.

It was the interest in sport, and golf in particular, of John Forbes, grandfather of the present Managing Director, that led to the development of the Sports Turf division of the Company.

It became apparent a number of years ago, that despite the growth in the traditional Sports Turf Market, any



Inter Seeds

Growing for Success.

Send now for our comprehensive 1990 catalogue detailing the PRO range of AMENITY GRASSES including the top D.S.V. varieties LISABELLE, LISUNA, LIFALLA, LIPROSA and LIMOUSINE. Wild flower mixtures, fertilisers and erosion control matting also included.

Inter Seeds Limited

Southern Avenue Industrial Estate Leominster Herefordshire HR6 0QF
Tel. Leominster (0568) 6363 Telex 35307 INTERS-G Fax. (0568) 611344



SEEDS & TURF PRODUCERS

real growth would have to come from diversification within the market place best known to the Company.

The acquisition of Sportsground Construction Ltd of Paisley, provided the ability to carry out operations as varied as machine work on Bowling and Golf Greens, construction of Five-a-Side Artificial Pitches and Full Size Grass Pitches, as well as Golf Course alterations.

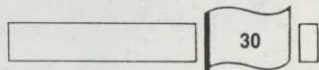
Further diversification was announced last week with the setting up of Groundcare Services, a new division within Sportsground Construction, which will supply specialised machinery to the Sports Turf market.

Another dramatic upturn in the fortunes of the Company came after its investment, four years ago, in the York-based company "Inturf", managed by Derek Edwards.

This interest in the production of quality cultivated turf, led Stewarts into setting up their own turf farm in East Linton, which has over 340 acres currently under cultivation. Stewarts turf is marketed through the Inturf Group, which has nurseries in East Lothian, York, Grantham and

Newmarket.

Although no longer traditional Seedsmen as they once were, Stewart & Company do supply their own range of Stronghold Seed and, as Scottish distributor for Mommersteeg International, still supply the Amenity market with a variety of quality grass seeds.



BRITISH SEED HOUSES LTD.

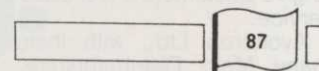
THERE is no doubt that more people than ever before are swinging a golf club and with the Royal & Ancients recent announcement that a further 700 golf courses are required in the UK over the next few years, the picture of golf in this country looks well assured. Over the last 15 years the Amenity Grass Division of B.S.H. have been carrying out a great deal of research and development work concerning new grass varieties as well as trials on different grass seed mixtures. The company are currently sponsoring a heavy research programme at both

the Plant Breeding Station at Queens University Belfast and at Abetysththo University. Independent grass trials are also being carried out at the Long Ashton Research Station near Bristol and the North Scotland Agricultural College at Aberdeen. The first results from Queens University have recently been introduced with the new low-growing slender creeping red fescue called Logro. Which grows to a height of 10/12 cms and therefore requires the minimum of cutting.

B.S.H. are the main distributors for the Penn range of creeping belts which have performed well in the South of England. Penncross was sown on the greens of the Belfry at Sutton Coldfield some 12 years ago and the greens where in perfect condition for the recent Ryder Cup Tournament. Penncross was chosen for the greens at the St of a Golf & Country Club near Plymouth and more recently this creeping fescue was used at the Collingtree Park Golf Course at Northampton and at Hanbury Manor Hotel Golf & Country Club near Hertford. A major golf project at Mount Juliet in

Southern Ireland is currently under construction where Penncross is again being sown on the greens and a fine fescue mixture on the tees and fairways

While there is a very real need for new golf courses in the UK there is no doubt that the present high interest rates are worrying developers and several major golf projects have been put back for twelve months in the hope that the countries economic situation will improve.



High-Tech coated seed samples

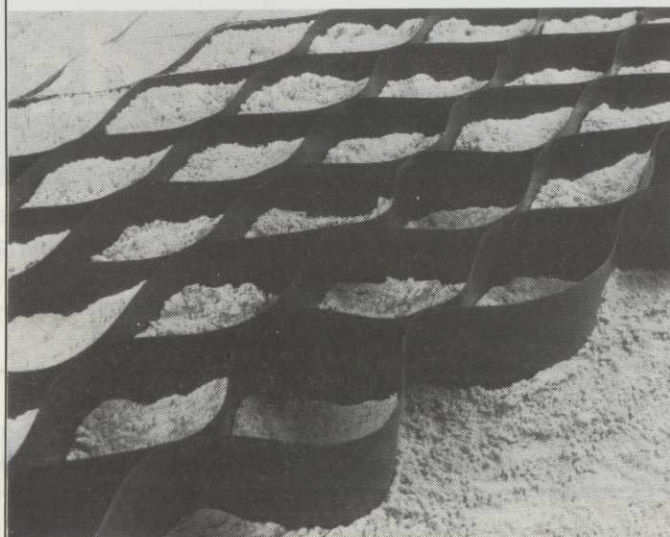


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Geoweb is a three dimensional soil stabilisation system, used for a wide variety of applications – embankment reinforcement, retaining walls, road construction, etc.



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Geoblock a grass reinforcement system made from reclaimed polyethylene, has many advantages over more conventional concrete products. Used for temporary car parking or fire access, the interlocking units are quick to install and form a secure construction for taking any loads, from pedestrians to H.G.V. vehicles.

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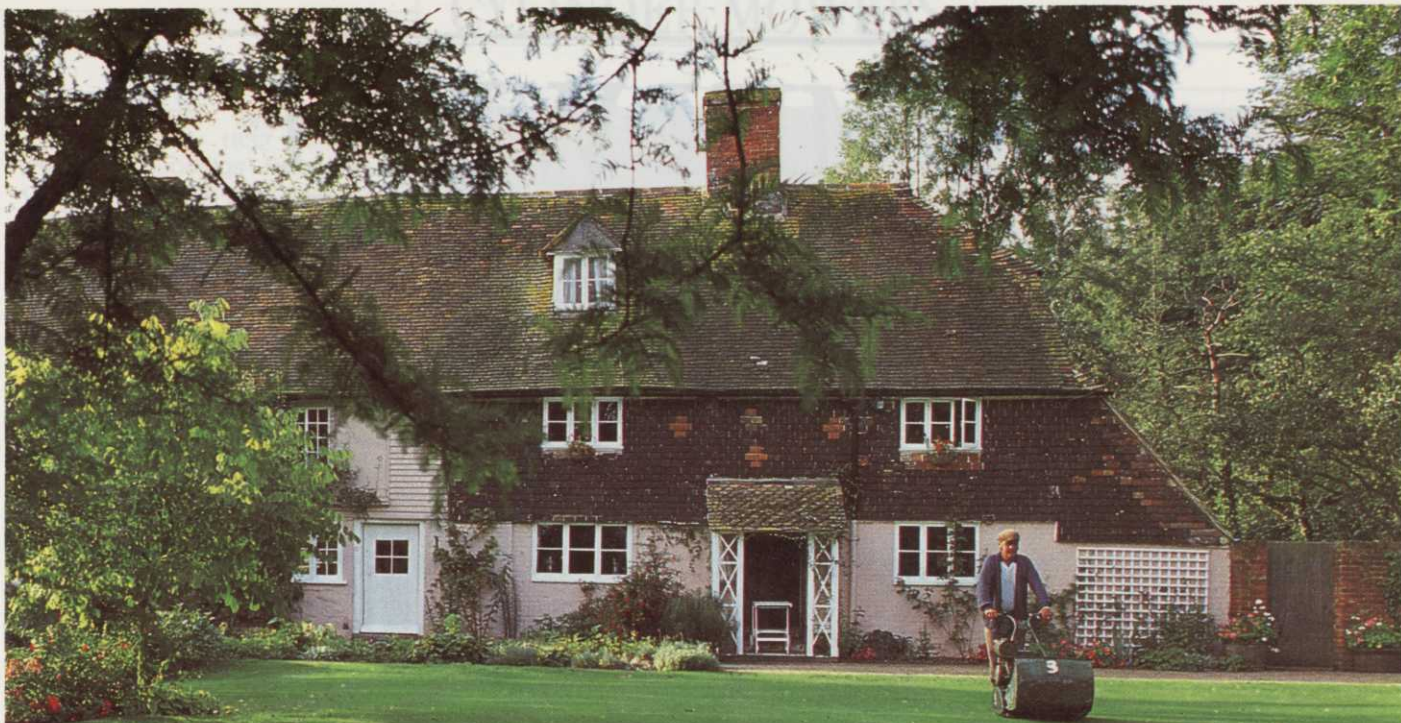
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The finest, mature and close-knit turf for Golf Greens and Bowling Greens.

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A fine lawn for Tennis Courts, Cricket Squares, low maintenance, and high quality landscapes.

Fescue/Bent/Smooth stalk meadow grass

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Hard-wearing, evergreen turf for high quality landscapes and sports surfaces.

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Company

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WE MIX WITH SOME OF THE TOP NAMES IN EUROPE

Verdant Grass Seeds offer an outstanding selection of mixtures to meet every conceivable sports and amenity requirement.

Using top European varieties, our mixtures represent the highest quality and the most exceptional value for money in fine turf and outfield grass seeds.

And, when you choose Verdant from Parkers, you can rely on the service, friendly advice and technical support that you'd expect from the largest turf care company in Southern England.

Two of our top value popular mixtures are —

VERDANT No. 1:

A mixture designed to withstand very close mowing whilst producing a dense and prostrate growth habit to ensure a close-knit and even-textured turf.

VERDANT No. 5:

Blended for use when sowing-down new pitches although it is also suitable for renovation work. This mixture establishes very quickly to form a dense, compact and hard-wearing sward.

For literature and more information about other mixtures in our range contact us now.



T. Parker and Sons (Turf Management) Limited, Worcester Park, Surrey. KT4 7NF. Telephone 01-337 7791

CYLINDER MOWERS

CYLINDER Mowing started in 1832 with the Buddings Patent pedestrian machine being manufactured by Ransomes in Ipswich. Since then a number of different methods of cutting grass have been developed, all of which have their place. It has to be said though that the cylinder mower is still the most efficient way of cutting grass and of course for fine turf is the only way. In a fast changing world it is often unwise to predict what will happen in the future but I am confident that the cylinder mower, although it will be steadily improved, will continue to be the most efficient method of cutting grass for a long time to come.

Since those far off days of the Budding Patent the cylinder mower has developed out of all recognition. Many of the major developments have been pioneered by Ransomes. Take for example the introduction of the first mower with an internal combustion engine in 1902, the first mains driven mower in 1926 and, much more up to date hydraulic driven gang mowers in the 1960s and now, high output machines with electronic control systems. In 1990 the professional user of grass cutting machinery has a bewildering array of types and specifications of machine to choose from. With the increase in leisure time (for some of us), areas of amenity and fine turf will increase. That will inevitably attract more companies in wanting to get in on the scene. Those of us who have been in the industry for a number of years are wondering where it is all going to end?

Whatever area and type of grass needs to be maintained there is a cylinder mower to do the job. For cutting fine turf on greens there are pedestrian mowers or sophisticated ride on units. Both types are now very often available with a Verti-groom type reel mounted in front of the cutting cylinder. This really is the ultimate in "grooming" the turf. The Verti-groom unit is an invaluable aid to control thatch and eliminate grain by cutting internal growth resulting in a faster and more consistant putting surface.

For other areas on the golf course such as fairways, tees and surrounds, there is a wide choice of equipment. Fairways in particular in recent years have been maintained to a very much higher standard than in the past. Whether a tractor mounted or trailed machine is required or a multiple unit ride-on is preferred cut-



Ransomes Quality Audit Engineer, Mr. Barry Saunders, checking the hydraulic oil pressure while carrying out a quality audit on a triple mower off the production line.

ting units with multi blade cylinders to give a very fine finish are available. The normal number of knives in cylinders used on golf courses in the UK and Europe is 6 or 8. Our colleagues in the USA very often will specify 11 knife cylinders. The difficulties of coping with undulating fairways have been much reduced with the introduction of floating headed units which float in all directions to ensure that scalping is kept to a minimum and that grass in hollows is cut to the same

height as the rest of the fairway.

Cylinder mowing is not restricted to golf courses. Multiple unit machinery with 3 or 5 cutting units hydraulically driven are now commonplace with local authorities and contractors. The efficiency of the cylinder mower, with its relatively high cutting speed and low fuel costs has been fully appreciated by those people responsible for the upkeep of roadside verges, parks and open spaces. With reduced

costs constantly being sought to cope with the challenges of Compulsory Competitive Tendering or Privatisation as it is often mistakenly called, the high output multiple unit cylinder mower is often the first choice. The output of these machines is impressive to say the least. Take the Ransomes Motor 350D 5 unit ride-on.

Yes it is a lot of money, retailing at over £21,000. When the output of 8 acres per hour is taken into account with each one of those acres only costing

CYLINDER MOWERS

around £1.40 to cut it can be easily seen that the initial purchase price of any product should not be the first consideration. There are very few machines that could reach anything like the cost effectiveness of the Motor 350D.

The manufacturing of grass cutting machinery today is extremely advanced.

In today's very competitive works designs and manufacturing efficiency must be constantly improved to ensure that the customer gets the right product at the right price.

These investments will inevitably lead to innovations in grass cutting machinery in the future. It is very unlikely though that a better and more efficient way of cutting grass will be found than with the cylinder mower for many years to come, if at all.

RICHARD BISHOP
UK Sales Manager
Ransomes

DRAGON 5 AND 3 GANG MOWERS BY ROCRAFT

THE Rocraft Red Dragon is a British designed and manufactured power

driven gang mower incorporating a robust frame of high-stress structural steel and a straightforward assembly of simple components which reduce breakdowns and maintenance to a minimum.

The 5 gang unit with a full 11ft 6in width of cut and low power requirement make it an ideal choice for mowing large areas economically with smaller lightweight tractors.

The Red Dragon can be attached in minutes to most towing vehicles equipped with P.T.O. drive giving a wide flexibility of choice of towing unit.

Transport between sites is made easy by folding the cutting units which can be raised either hydraulically or manually.

FEATURES

- Unlike ground driven machines the P.T.O. drive will maintain a constant cylinder speed independent of forward speed enabling efficient cutting in the wet when other machines slip.
- Lighter than many hydraulic machines therefore reduces damage to wet ground.
- Automatic tension of independent 'V' belt drives to each cutting unit transmits

maximum power to the cylinders but provides flexibility to permit slip should obstacles be encountered.

- Full articulation of each cutting unit allows the Red Dragon to follow ground contours on its rear roller.
- A unique fully floating head system is available with full width front and rear rollers to give consistent height of cut over severe undulations without scalping and is particularly suitable for golf course fairways.
- Floating heads can be locked into a fixed head position with a simple lever and front rollers easily removed.
- Quick height adjusters are fitted as standard and make changes simple for those golf courses requiring one machine for both fairway and semi-rough mowing. For finer adjustment screw type adjusters are available.
- A third wheel is available as an option for any specially difficult contours to be mowed allowing complete articulation of the whole mower frame from the tractor drawbar but it is not recommended for highway duties.

STIGA-BELOS BEST ON SLOPES

MULTI-use tool carriers like the Belos are often criticised for not performing individual operations as well as a dedicated machine. Professional mower users report that the opposite applies on the 4 wheel drive Belos 1500.

Triple cylinder mowing on banks is a case in point. With its fully hydrostatic four wheel drive plus electrically selected limited slip differential, the traction and steering ability on slopes has to be tried to be fully appreciated. And because the 1500 has three double acting hydraulic power circuits in its standard specification, when fitted with the 83" wide Belos front attached triple cylinder, actual cutting performance is equal to the best dedicated out front triple cylinder rider.

Golf courses, country parks, landscaped sites, etc. often have slopes dotted with trees and shrubs which are ideal for the unique manoeuvring ability of the centre pivoting, fully articulated Belos. Add the highly sophisticated hydraulic

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CYLINDER MOWERS



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hub, oil is diverted to the relevant wheel to give more traction.

The low centre of gravity on the Belos gives extra stability and safety, especially on grass slopes, and also on the subject of safety, a special all-weather

safety cab is available as an optional extra.

In Sweden Stiga products are famous for quality, and their long lasting reputation is one WestMac will be wanting to build on, with this unique versatile machine from

Sweden.

Model 1302 two wheel drive, centre pivot power unit retails at £10,977.90 and model 1500 four wheel drive, centre pivot power unit retails at £14,371.55 (both prices include VAT).

EDUCATION UPDATE

ELMWOOD AWARD WINNERS COME FROM NEAR AND FAR FOR THE ANNUAL AWARD CEREMONY

WITH over two hundred greenkeepers at Elmwood College it is perhaps not surprising that there should be award winners from such a wide geographical area, studying courses from apprentice to supervisory management level.

Richard Barker from Leicestershire, winner of Elmwood's distance learning supervisory course is flanked by equal second's right: Brian Story from Cumbria (who remarkably was also the award winner for the first year

greenkeeping course attended by over 55 students) and Bruce Cruickshank from Crail, Fife.

Darren Easingwood from Dunbar Golf Club with the coveted Gleneagles Challenge Trophy awarded for his outstanding project work as part of his SCOTVEC national certificate course.

Paul Seago from the Royal West Norfolk Golf Club, Brancaster, Norfolk, this year's most "far flung" award winner, with his certificate which recognises him as top student in his SCOTVEC third year course. No mean achievement considering there were over sixty trainees competing for the award.

The head greenkeeping supervisory management course offered at Elmwood is believed to be unique in the United Kingdom. James McKenzie, head greenkeeper at Renfrew Golf Club, produced written work of an outstandingly high standard to win this year's award.

JAMES M. LATHAM BIOGRAPHICAL INFORMATION

JIM Latham is the Director of the Great Lakes Region of the United States Golf Association Green Section.

He was born in Hillsboro, Texas and attended High School and Junior College there. After a tour of duty in the Marine Corps, he attended Texas A&M University where in 1952, he received a Bachelor of Science degree in Soil Science and in 1954, a Masters Degree in Agronomy (Plant Breeding).

After working as a Turf Specialist on warm-season species at the Coastal Plain Experiment Station in Tifton, Georgia, and additional graduate study at Rutgers University, he served on the USGA Green Section Staff as Northeastern Agronomist in 1956 and Southeastern Agronomist from 1957 until

1960. From that time until 1985, Latham was on the agronomic and Milorganite marketing staff of the Milwaukee Metropolitan Sewerage District.

Mr Latham is a Certified Professional Agronomist and a member of the American Society of Agronomy. He received the Distinguished Service Award from the O.J. Noer Research Foundation following his tenure as Research Director. He is also a member of the Council for Agricultural Science and Technology and holds Honorary Memberships in several Golf Course Superintendents Associations.

The Great Lakes Region is a nine-state area just south of the Canadian border, some 2,000 road miles east-west and 800 miles north-south. During the April-October period, the staff makes 220 half-day Turf Advisory Service visits to 175 subscribing clubs and courses. Until April 1, 1990, the technical staff has been one person.

ON COURSE FOR QUALITY

An Ecological Concern

By R. Taylor

Advisory Agronomist/Ecologist
The Sports Turf Research Institute,
Bingley, West Yorkshire, BD6 1AU

GOLF is the fastest growing sport of today, indeed the demand far exceeds supply and the waiting list for membership is growing longer and longer. It is the urban expansion, the increase in leisure time due to redundancy and retirement from work that now calls the tune to open up the course, to destroy the character, the natural and the national heritage at the expense of the wildlife and the landscape character.

Many clubs are looking towards course expansion by opening up the fairways and manicuring all areas in an effort to achieve a faster throughput of traffic. Unfortunately, what is gained through increased throughput can result in a significant loss in course quality.

It must be remembered that the injudicious increase of throughput gained may be counter-productive in the longer term. The widening of fairways or the increasing desire towards Americanisation will cause an increased workload on the greenstaff and will result in the degradation of the course in view of its wildlife and landscape potential. There is a limit to the carrying capacity of any course.

Over-loading the greens, tees and fairways can only increase the agronomic problems of disease, wear and compaction that were amplified by the summer drought of 1989, all of which will do little to improve the throughput, but would certainly reduce the challenge and the integrity of the course.

It is the course quality that this paper seeks to address.

Contributory Factors to Course Quality (a) Increasing Throughput of Golf

Many greenkeepers have commented to me that they spend so much time manicuring the semi-rough and rough that the priority areas struggle in the competition for maximum attention. The semi-rough and rough, particularly on many parkland courses, is mown to 1/2 inch (13 mm), the same height as on fairways. This reduces the amount of time that the greenkeeper can spend improving or maintaining the quality of the greens.

Opening up the course will certainly accommodate a greater year-round flux of traffic. However, as we found in the drought of 1989, without concentrated attention to greens and tees the course will quickly lose its turf cover and become seriously compacted. The drainage would become severely impeded to the overall detriment of the course quality.

(b) The Use of Natural Features

The above are representative of problems arising from opening up the course. Course quality should, however, also incorporate the natural heritage, and its part played in terms of Britain's landscape history. Many of the courses of today are the descendants of late 14th and 15th century landscapes that were typical of dune or upland heath environments. The early golf architects used the existing natural features to build and construct courses around nature.

They enveloped natural features into

their design and sought not to destroy them when they provided either an obstacle or hazard. Such natural features are an important part of the British golf heritage. To quote H.S. Colt (Book of Links 1912) "The only way to make attractive land provide satisfactory golf was to work in all the natural features, and not develop them more than was essential, but use them to create courses of their own character."

(c) Existing Flora and Fauna

Innumerable individual courses of today represent ancient habitats. The links and dune systems being probably the more obvious. However, many parkland courses consist of acidic heath or ancient grassland environments. A course at Doncaster, South Yorkshire, the Town Moor course, is a local authority owned course and has been historically documented in terms of its changing botanical flora. In the past, it was a principle site of the autumn gentian (*Gentianella amarella*), today it is a last stronghold of the rare dwarf and western gorse (*Ulex galii and minor*) and the rare petty whin (*Genista anglica*). These exist primarily as a consequence of its unchanged past. Many courses are set upon species-rich sites and have the potential to recreate the past habitat.

(d) Aesthetic Qualities

Course quality must also incorporate the natural beauty in terms of the visual qualities and the feeling of isolation between each fairway, and the restfulness and the tranquillity of the surroundings. With the above in mind, the description of several parkland courses can best be summed up by two adjectives, flat and artificial. Flat, together with the artificial, occasional trees that stand as isolated sentinels, certainly present a limit to our powers of exhilaration and enjoyment.

Improvement of Course Quality

(a) Areas to Consider.

There are many ways in which course quality can be improved upon. Golf need not be the selfish user of land that it is often criticised as being.

The semi-rough and rough provide an excellent opportunity for development in terms of the wildlife that they come to attract. A careful programme fitted to suit the individual requirements of the course would be rewarding in terms of its aesthetic appeal. It would present variations to the course, give definition and gradation, thereby making the course overall more attractive. Areas left on the golf course provide vital pockets or islands which are becoming increasingly valuable as natural land is being taken for domestic or industrial development. These habitats being under the preserve of the golf course are therefore becoming especially important. They can, given correct management (which is only required very infrequently), support a wealth of birds, mammals, plants and insects.

(i) The rough

The rough areas, when graded, zoned and maintained, need not severely affect the throughput of traffic, they require less maintenance than the fairways and give definition to the course. Also included within the rough are the boundary

perimeters, out of bounds hillsides or just corners of land that are often a source of neglect. The definition of the rough can be extended to include several areas on the course, all of which represent principle habitat types. These include short/long grass areas, individual trees and bushes, thickets, woodland, hedges, lakes, streams, ponds and ditches. All are found within the relatively small, confined areas of the golf course.

The roughs representing fairway divides on many parkland courses need not severely affect the throughput of traffic given correct maintenance. The British fairway should represent a hazard, from which a bad shot should be penalised with a bad lie. Zonation or grading the rough is a positive step to creating a workable hazard for the golfer and will provide a wildlife shelter area, as well as giving definition to the fairway. These areas would benefit from the introduction of wild meadow flower species which, in turn, will attract a wide range of animals for whom the area will provide food and shelter.

The creation of such an area would require infrequent attention, allowing the greenstaff time to carry out improvements and maintenance on the greens and tees. Mowing of the rough would be modified to suit the life cycle of the flowers so that they establish to become an integral component of the sward. Mowing may be adopted in July/August only. The hay is removed to prevent nutrient build up and avoid the increase in build up of debris which hinders ball hunting. The planting scheme would be such to discourage rank (tall) grass dominance which would make the finding of lost balls much easier and certainly more pleasant.

(ii) Boundary perimeters, out of bounds hillsides, neglected corners

All around the golf course perimeters the land is being destroyed or modified. The habitat loss directly affects Britain's natural history. Pressures now on the golf courses are not only to provide the golfer with a source of enjoyment and pastime, but it must also provide sanctuary to the wildlife that is increasingly under threat due to the continued urban expansion.

Conclusion

Conservation on the golf course seeks to make use of the natural resources sensibly. Habitat creation is an integral part. Careful management and sensible advice can enhance and provide variety, and thus increase the wildlife potential of the course. It is on the newer courses that creative land management and conservation is particularly great. The only way forward is the development of new courses and the retention of the existing at a standard which now exists (see D.White's editorial article in *Greenkeeping Management*, August 1989).

The Sports Turf Research Institute at Bingley has over 60 years experience in golf course maintenance. It is now expanding its services and is able to offer clubs advice on any aspect of ecological management or conservation. The Institute is able to offer clubs ecological assessments, woodland planting and management programmes, advice on the various grant aid schemes available, and an advisory service for on course ecological management.

The long and the short of it



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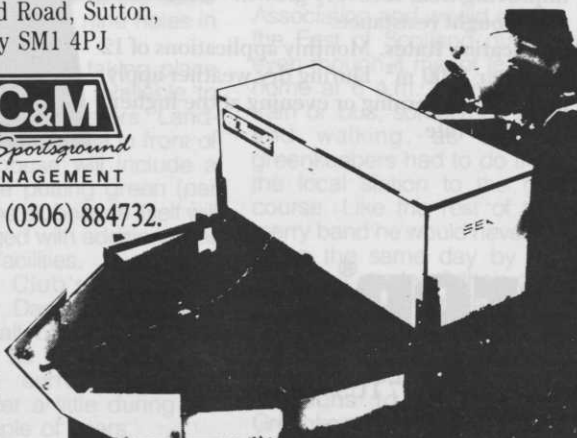
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MOVEMENTS AND MURMERINGS



Ian Mathews.

IAN'S POST

TWENTY-six-year-old Ian Mathews, after nine years in greenkeeping, has taken a new position of sales executive with Purdy's Grass Machinery, Retford.

Purdy's have recently been appointed Jacobsen distributors for Nottinghamshire, Derbyshire and South Yorkshire.

Ian will be responsible for opening new accounts in areas not previously covered due to territorial restrictions.

EAST DORSET GOLF CLUB CONSTRUCTION PLANS

PROPOSALS for the construction of the additional nine holes and the reconstruction of the existing 18 holes have now been submitted by the East Dorset Golf Club's course architect, Martin Hawtree of Hawtree & Sons.

Work on the additional nine holes should start in April and it is anticipated that they will come into play in 1992. Reconstruction of ten of the holes on the existing course will start in May, and by turfing (as opposed to seeding) the greens involved it is hoped that they will come into play in 1991.

Work on the remaining eight holes of the existing course will start in 1991 and these should be back in play at the same time as the new nine holes in 1992.

Whilst work is taking place 18 holes will be available to members and visitors. Landscaping of the area in front of the clubhouse will include a new large putting green (par 3!) and the clubhouse itself will be enlarged with additional car parking facilities.

The Club's General Manager, David Thomas, sees the overall construction programme as an exciting one although current members may suffer a little during the next couple of years.

EMPLOYEES BUY TURFMASTER

THE employees at grass machinery manufacturers Turfmaster,

Gainsborough, Lincolnshire, have bought their company from the previous owners, Harlow Agricultural Merchants (HAM).

Turfmaster is now an independent company with HAM retaining only a 20 per cent share. Funding arrangements are also in place.

HAM, of Bishops Stortford, Essex, was keen to reduce its stake in Turfmaster because the fit with HAM's, "corn, seed and feed" business was poor. Equally Turfmaster's managers and employees felt they were ideally placed to move the company forward into the 1990's.

John deGraft-Johnson, Turfmaster's chairman, says: "Product performance, quality and service are the key issues in the professional market. So employee commitment is paramount."

"In many companies these words are truisms without teeth. But in Turfmaster's case, the employees have backed their words with hard cash. The enthusiasm and dedication is therefore total."

END OF AN ERA

WHEN George Small, Greenkeeper/Professional at Galashiels Golf Club in the Borders of Scotland, retires on the 29th March 1990, it will bring to an end 62 years of unbroken service by the Small family at this club. In 1928 Bob Small moved to Galashiels from Lundin Links to take up the position as Greenkeeper/Professional. Those were the days of the horse drawn mowers and greenkeepers walked everywhere their tools over their shoulders or in a wheel barrow. Bob Small was a great believer in the Greenkeeper's Association and would attend the East of Scotland outings even though it meant leaving home at 6 a.m. travelling by train or bus, sometimes both and walking, as all the greenkeepers had to do from the local station to the golf course. Like the rest of that merry band he would never be home the same day by the time they made all their connections to get home again. In later years, though he could not play himself because of war wounds he encouraged his sons to play in the Greenkeeper's outings and he

was a proud man in 1953 when at the Scottish National Tournament at Glenbervie two of his sons George and Alec won both the Scratch prize and Handicap prize. Bob retired in 1960 after serving Galashiels Golf Club for 32 years. And his son George immediately took over. Although George was not a long term member of the Greenkeepers Association, being a Greenkeeper and Professional and raising a family of 6, after the untimely death of his wife, did not leave him time to be involved, however he was always interested in the Greenkeepers Association. George started as a greenkeeper at Galashiels, then moved to Buchanan Castle under the late well known Willie Bradford before moving to Dunbar as Greenkeeper/Professional and finally back to Galashiels. George will stay in Galashiels after his retirement, where most of his family live and no doubt still have a regular game on the hill and may be ponder over all the changes that have taken place in greenkeeping in the last 62 years. Even though the break has been made with Galashiels Golf Club the family connection with greenkeeping lives on in the shape of Bob's youngest son as a head greenkeeper and this son's son has also entered the greenkeeping profession.

ROUGH ON THE GRASS

IT has come to our notice that the Marquess of Salisbury has a major problem with the turf at Hatfield House and the damage perpetrated by the visiting hordes who pay handsomely to walk on the ancient sod.

In 1986 the Marquess decided gently to redirect people from the house by making more of the gardens maintained by a team of six gardeners. Last year over 60,000 people tramped round what was designed as a private pitch.

David Beaumont, the head gardener, explained that they have tried growing the grass through wire mesh, putting in four inches of easy draining sand and installing upturned cones with mesh tops at particularly susceptible points like gates and crossroads.

The current approach is to use a plastic variant on the concrete cone or simply putting in a few bricks to act as stepping stones. The topic is now standard at the quarterly meeting of the Professional Gardeners' Guild but it seems

no one has the answer. "There are some people," he says, "who swear by some fancy method or other but most just re-turf. And to be honest, I think that's all you can do."

Can those more inspired with their own answers please write to me. And if you go visiting, please step on the bricks!

TREES ON COURSE TO SAVE MONEY

WHEN Castle Point District Council, Benfleet, Essex, decided that the new club house on their municipal golf course could benefit from a little landscaping, it had all the hallmarks of becoming a costly exercise.

However, Peter Crowe, Arboriculture Officer came up with the idea of using assets already owned by the Council, namely the trees. To one side of the course was a small copse of Scotspine left to grow wild.

With the assistance of local contractors RUSKINS, who were the only company in the south east with the specialised Big John tree spade required for the job, a total of eight trees were up-rooted and re-planted around the club house, in a single day.

The Big John digs below the roots freeing them without damage ready for transporting to the new site. Specially formulated fertiliser lines the hole dug to receive the tree to ensure that all the ingredients for the trees survival are present.



Pictured during the 'dig-up' are Jamie Martin, above left from Ruskins and Peter Crowe of Castle Point District Council.

IN THE PICTURE

ROLAWN AND BIGGA GET TOGETHER

AT the European Turf Management Exhibition in Harrogate, Rolawn Turf Growers announced their sponsorship of the first in-house construction course to be held by the British and International Golf Greenkeepers Association.

The course: "The Use of Cultivated Turf in the Construction of Tees and Greens", will be held on March 28-29 at BIGGA's headquarters at Aldwark Manor near York.

"As older or heavily used greens and tees require major renovation, greenkeepers are finding an increased need to know all about aspects of construction" says David Golding, BIGGA's Education Officer.

BIGGA has organised this course as part of their training programme and delegates attending will receive three credits towards the newly launched Master Greenkeeper Certificate.

The course includes lectures and demonstrations by Brian D. Pierson, one of the country's leading golf course constructors and Robert Laycock, Rolawn's Technical Director and a turf scientist in his own right.

Also on the programme is a visit to Rolawn's turf production fields near York, to see the latest developments in the cultivated turf industry.

Rolawn's sponsorship of the course means delegates will only have to pay a nominal fee (£30 residential, £10 day) for this BIGGA course, although places are strictly limited and early application is advisable.

Rachel Semlyen, Rolawn's Marketing Director says of their sponsorship, "We are pleased to have been asked to sponsor this course as part of BIGGA's programme to improve standards and training of greenkeepers."

In the cultivated turf industry there have been many changes and developments that make construction and renovation more feasible for more greenkeepers, but only if they have the knowledge and training."

PRINCES G.C. BOOKED

NORMAN Exley, the South East regional Administrator has confirmed that Princes G.C. in Kent has been booked for the Greenkeeper 1992 National Tournament. Ganton this year, followed by Royal St Davids in 1991, certainly sets the standard for our future venues - first rate courses all!



Left to right: Simon Tullett, General Manager of Agria UK Limited, Mike Butler of Warwickshire County Council and Richard Forty, Sales Director of Murleys stand beside the 9300 Agria ride-on mower.

LESSONS ON THE LAWN

IN January Warwickshire County Council's Sports and Ground Services Department took delivery of £160,000 worth of ground care machinery from Murley Agricultural Supplies Limited of Warwick.

The nine Agria 9300 triple cylinder ride-on mowers and three Ford 3910 tractors will be used by sports and ground services throughout Warwickshire, where they maintain in excess of 5.5 million square metres of grass.

Grounds Maintenance Manager, Mike Butler, said: "Our decision to buy the Agria 9300s was reached after extensive research into the equipment available and more importantly after extensive working trials."

Of the working trials, Phil Garrett, Area Manager for Sports and Ground Services said: "The Agria came through with flying colours!"

Simon Tullett, General Manager of Agria UK Ltd, said that he was especially pleased that Murleys got the order, as Warwickshire County Council, where possible, like to procure equipment from suppliers within the County.

Murley Agricultural Supplies Limited of Warwick, who supplied the machines have been Agria dealers for two years and Richard Forty, Sales Director, said: "We have a reputation for quality and service and the Agria range completely supports our policy."

FINDLAY PICKEN IS NEW CHAIRMAN OF GOLF FOUNDATION COUNCIL

FINDLAY Picken is the new chairman of the Golf Foundation Council following the Foundation's annual general meeting in February. He succeeds Tony Wheeler who was chairman for the past seven years. Mr Wheeler remains a member of the Council.

A chartered accountant by profession, Findlay Picken is well known in the world of golf having worked for many years for the Dunlop Company, including 12 years as managing director of the International Sports Company. He has served on the Golf Foundation Council for the past ten years with special responsibilities for finance.

A single figure handicap golfer, he is a member and past Captain of Walton Heath Golf Club and a member of the R & A.

HAWTREE - NEW CONCEPT IN GOLF COURSE PROVISION

MANY farmers are deterred from converting their land into a golf course because of the high production costs involved. With 700 courses required by the year 2000 to meet demand, the irony is that these landowners have ideal sites but feel limited by finance.

Now Hawtree, the international golf course architects, have come up with a revolutionary idea for what in essence are do-it-yourself golf courses, in which they submit a simple design and then allow the farmer and his workforce to build it in their own time, while maintaining a supervisory role.

By this method the Oxford-based practice, responsible for more than 300 courses worldwide is making golf course ownership more attainable. The first example of this new concept is the Sandford Springs Golf Club near Kingsclere in Hampshire on the site of Sandford Farm owned by Raleigh Place.

The complex was opened by Nick Faldo U.S. Masters champion earlier this year.

THE VICTA RYAN CHANGEOVER

VICTA (UK) Ltd announce that with effect from July 1 they will be relin-

quishing the distribution of Ryan turfcare equipment. After that date Ransomes, new owners of Ryan, will arrange their own distribution.

Commenting on the situation, Victa's managing director, Bill Brooks said: "To ensure that our customers are not inconvenienced, we have negotiated with Ransomes for spare parts to be available from our dealers until June 1991. Every effort will be made to make the transition as smooth as possible."



Grounds maintenance manager Miles Milner (left) and parks and sportsgrounds supervisor Mark Hogan, with the Overseeder.

CRICKET SQUARE SAVED, THANKS TO "CHARTERHOUSE OVERSEEDER"

CRICKETERS in Reading have an extra cricket table, thanks to the versatile Charterhouse Overseeder, from turf management specialist Charterhouse Turf Machinery.

The pitch at the Sol Joel Playing Fields, owned by Reading Borough Council, had been overgrown for some years and was proving difficult to re-establish.

But then the Borough's grounds maintenance unit contract services decided to use the Charterhouse Overseeder, which had been bought in May this year. "Having failed the long grass, we overseeded, and the new turf came up a treat, in the middle of the season," said Miles Milner, grounds maintenance manager. "The wicket will be in play next year."

Mr Milner said that, in the past, many groundsmen would have been wary of using so large a machine on a cricket wicket. "But we gave the Sol Joel pitch the intensive overseeding it needed - and it worked."

LESCO

CUT COSTS NOT QUALITY

LESCO 300D

For sheer value the LESCO 300D Greens Mower cannot be beaten. A combination of superior hydraulics with proven quality components, LESCO have engineered the tournament Greens Mower.

Powered by a 3 cylinder diesel engine or an 18hp petrol engine provides complete hydraulic operation, including power steering and hydraulic drive to the cutting cylinders.

Optional extras include turf groomers, verti-cut units and tees units.

The Greenkeepers dream – simplicity with quality.

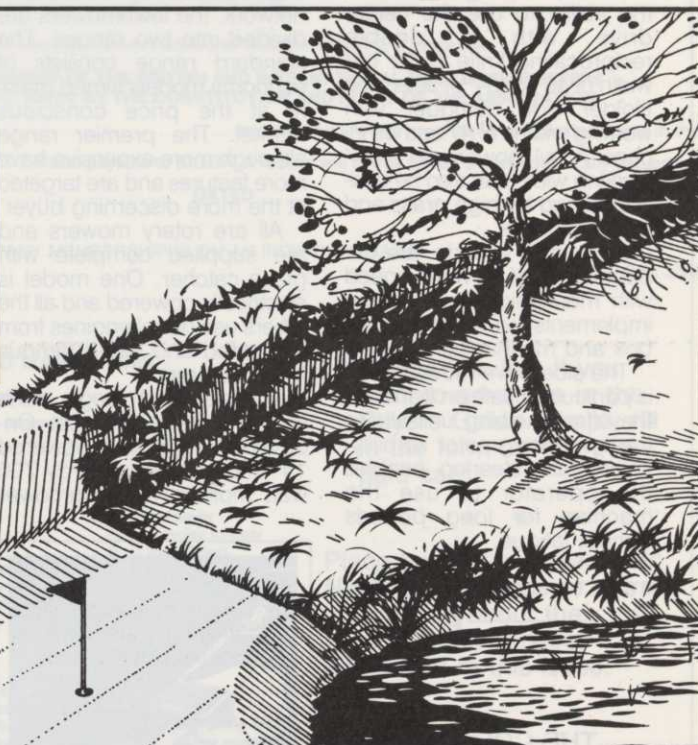


LESCO

HAS THE CUTTING EDGE

CONTACT CLIVE LOCKWOOD
CDC Horticultural Equipment Ltd
Chapel Works Wadringfield
Woodbridge Suffolk IP12 4PT
Tel 0473 36 791 Fax 0473 36 370

Turner



Hedges, verges, banks, playing fields, greens — whatever aspect of 'green maintenance' you're dealing with, *Turner* has the edge.

Turner International (Engineering) Ltd., PO Box 16, Salford Priors, Evesham, Worcs, WR11 5SU. Telephone: (0789) 490666
Turner International is an Elswick plc company

PRODUCT FOCUS



The Holder M1000 professional bank mower in action.

THE HOLDER M1000 - A TRULY PROFESSIONAL BANK MOWER

BANKS, verges and steep grassland slopes up to 45 degrees, some of the more problematic areas for mowing, can now be tended by the Holder M1000 professional bank mower.

The rugged design of the machine, with its low centre of gravity and wide track make it ideal for use on banks for mowing and shredding grass, weeds and scrub.

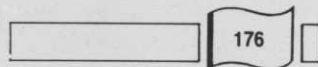
A unique design feature is the ability to use the centre drive with a double reciprocating knife cutter bar width of 48" or 54" or select the Holder side outtrigger with working widths of 47 and 55 inches. A flail mower with a 39" working width can also be easily attached for high grass and wasteland use.

All cutter speeds are independent of forward speed with mechanical drive to the implements via a bevel gearbox and mechanical clutch.

The side drive mower head is particularly safe on banks as the offset mowing unit allows the operator greater stability. Hydrostatic steering enables the operator to use the machine for long periods without fatigue.

The frame is tubular steel with a front body of virtually indestructible RIM moulded Metton. The rear body is steel with aluminium plate flatbed, steel cargo box and tailgate. The Utilitruck has a carrying capacity of 1000lbs and speed is governed at 12 mph.

SISIS Equipment (Macclesfield) Ltd are sole importers of the Columbia Utilitruck for UK and Eire. Also available are the Columbia Shuttle 4-seater transporter and the Columbia ParCar golf buggy or runabout, all with choice of power source.



NEW RANGE OF SACHS-DOLMAR LAWNMOWERS FOR 1990

FOLLOWING in-depth research into customer needs and EEC requirements, Sachs-Dolmar have launched a range of eleven lawnmowers which meet their high safety and construction specifications, for the 1990 season.

Marketed in the British Isles only by Sachs-Dolmar (UK) and their country-wide dealer network, the lawnmowers are divided into two ranges. The standard range consists of economy models aimed mainly at the price conscious market. The premier range although more expensive have more features and are targeted at the more discerning buyer.

All are rotary mowers and are supplied complete with grass catcher. One model is electrically powered and all the others use petrol engines from respected and world famous manufacturers.

The standard range starts with the very low cost On-daverde, an electric powered 14" mower with a sturdy 700 watt motor. This lawnmower

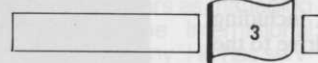


The Sachs-Dolmar model GR 480 OBK 19" four-wheel mower with power drive.

promises to effectively take on the mowers sold by the large DIY stores.

The other three models in the standard range all have Briggs and Stratton engines. They are the Maxi 35, the Model M40 - a 19" mower featuring an alloy deck and a 4hp Max 40 motor and the same model with power drive designated the Model Max 40SP.

The seven models in the premier range are all powered by the world renowned Kawasaki VX 4-stroke, 4.5hp petrol engine which is designed to run on lead free petrol.



The Honda H4514 lawnmower which is equipped with the Honda 'Slick Shift' hydrostatic stepless shift mechanism.

HONDA MAINTAIN LEAD IN TECHNOLOGY CONTEST

INNOVATIVE technology takes the Honda range of garden machinery into the '90s with a new lawnmower and a ride-on mower both equipped with the Honda original hydrostatic stepless shift mechanism to make mowing even easier and more enjoyable.

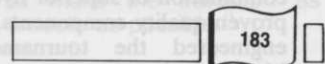
An advanced development of conventional hydrostatic transmission, Honda 'Slick Shift' is an innovative unit which offers reliability and stable performance and allows effortless, stepless, single-lever starting/stopping and speed control.

The optimum speed for the job can be set by using one lever which provides the control for moving off, accelerating and slowing down. The system transmits engine power more effectively than conventional mower mechanisms giving a smooth ride throughout the speed range, and an even finish.

'Slick Shift' minimises power

loss through internal friction and drag ensuring maximum power to drive the wheels. Designed specifically for this application it is remarkably compact, a feature achieved by housing the differential gears in a unique, Honda-developed transmission casing which is virtually maintenance free.

The engine cover's double layer structure effectively suppresses engine noise.



NEW SHUTTLE SHIFT FROM SHIBAURA

THE new Shibaura S 445 incorporates a new forward/reverse change without use of the clutch using a hydraulic system which gives immediate forward-reverse change by use of the single change lever the system is hydro-shuttle.

The gearbox has 24 forward and 24 reverse with creep speeds as standard with steps from 180 metres per hour to top speed of 30 kph.

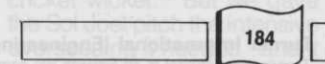
The Shibaura S 445 has a four cylinder Shibaura diesel engine producing 45 hp (DIN) with a cubic capacity of 2269cc.

Lift capacity at the three point linkage is 2175 kg. An extremely small turning circle of 2.72 metres is obtained by the unique Shibaura front axle and is possible by the front axle drive going via the king pin.

The Shibaura S 445 is because of its low weight, short wheel base, tight turning circle a very versatile tractor and is ideal for turf and ground work, golf courses, horticulture and agriculture.



The new Shibaura S 445.



THE COLUMBIA UTILITRUCK

NEW to the UK for 1990 is the Columbia Utilitruck available with electric motor or petrol engine. This has been developed from the Columbia ParCar, originally of Harley-Davidson pedigree.



THE OFFICIAL PUBLICATION OF THE
BRITISH AND INTERNATIONAL
GOLF GREENKEEPERS ASSOCIATION

1990 BIGGA GREENKEEPER MEMBERSHIP PACKAGE

BIGGA offer a comprehensive membership package for greenkeeper members. The full range of services and benefits is in line with a progressive professional Association. Full details are available from Headquarters Office on request, but the package includes:-

- (i) Monthly copies of Greenkeeping Management — the Association's official publication.
- (ii) The annual Journal and quarterly Bulletins of the Sports Turf Research Institute.
- (iii) Full Legal Advisory Service, including personalised card.
- (iv) Full Employment Cover.
- (v) Full Personal Injury Cover.
Pursuit of civil claims by the Insured for damages, specific performance or injunction arising from or out of
 - (a) A contract of employment.
 - (b) Death or personal injury of the Insured from any cause.
- (vi) Beneficial Insurance Options in respect of Car, Home — Building and Contents, and Vehicle Breakdown.
- (vii) BIGGA Enamelled Lapel Badge.
- (viii) BIGGA Membership Card.
- (ix) Use of Placement Referral Scheme.
- (x) BIGGA car badge sticker and golf bag tag.
- (xi) Personal Accident Cover, providing capital sums for: Death (£5,000), loss of use of one or more limbs and eyes (£5,000), permanent total disablement lasting 104 weeks at the end of which being beyond hope of improvement (£5,000).

However, a most attractive feature of the negotiated scheme will enable members suffering temporary total disablement in excess of seven days to receive a weekly income of £25 for a maximum of 104 weeks.

Also, it will be possible for members to purchase additional units at their own cost within the scheme and a pamphlet incorporating an application form will be made available upon payment of subscription.

INTERNATIONAL MEMBERS — All items in the package are available to members both in the Republic of Ireland and internationally with limitations on items (iii), (iv) and (v). The personalised card can be used for seeking legal advice, but this advice will relate to either English or Scottish Law. The card can be used when the member is visiting Great Britain, both for advice and in respect of any claims arising during or from such visits.



BIGGA 1990 GREENKEEPER MEMBERSHIP APPLICATION FORM

(not to be completed by 1989 members)
(PLEASE COMPLETE FULLY IN BLOCK CAPITAL LETTERS)

FULL NAME..... NAME OF EMPLOYER.....
HOME ADDRESS..... ADDRESS.....
COUNTY..... POSTCODE..... COUNTY..... POSTCODE.....
TELEPHONE..... TELEPHONE.....
DATE OF BIRTH..... POSITION HELD.....
PERSONAL QUALIFICATIONS.....
DATE OF APPOINTMENT.....

I HEREBY APPLY FOR MEMBERSHIP OF THE BRITISH AND INTERNATIONAL GOLF GREENKEEPERS ASSOCIATION AND AGREE TO ABIDE BY THE CONSTITUTION AND RULES OF THE ASSOCIATION

SIGNED..... DATED.....

SUBSCRIPTIONS ARE NOT TO BE SENT WITH THIS FORM BUT WILL BE INVOICED SEPARATELY.

FEES PAYABLE WILL BE:

Deputy Course Manager/Deputy Head Greenkeeper.....£33.00
20 Years of Age or Under.....£20.00

Course Manager/Head Greenkeeper.....£36.00
First Assistant/Assistant Greenkeeper*.....£31.00
International Members - All Greenkeeping Staff.....£48.00

*The First Assistant is a post designed to recognise a third-in-charge where appropriate to the size of the Club. In cases where the First Assistant is the recognised Deputy, the Deputy Course Manager/Deputy Head Greenkeeper subscription rate should apply.

REF.—G.M. 3/90



BIGGA 1990 ASSOCIATE/COMPANY MEMBERSHIP APPLICATION FORM

(not to be completed by 1989 members)

PLEASE COMPLETE FULLY IN BLOCK CAPITAL LETTERS:

FULL NAME..... NAME OF COMPANY (where applicable):.....
HOME ADDRESS..... PREFERRED MAILING ADDRESS.....
COUNTY..... COUNTY.....
POSTCODE..... POSTCODE.....
TELEPHONE..... TELEPHONE.....
POSITION.....

CATEGORIES OF MEMBERSHIP:

ASSOCIATE/COMPANY £50.00 (includes 1 year's subscriptions to 'Greenkeeping Management')

CORPORATE (10 or more) £500 maximum. Add £20 for each additional member requiring a magazine.

I HEREBY APPLY FOR MEMBERSHIP OF THE BRITISH AND INTERNATIONAL GOLF GREENKEEPERS ASSOCIATION AND AGREE TO ABIDE BY THE CONSTITUTION AND RULES OF THE ASSOCIATION.

I wish to join as a..... member and enclose my cheque as indicated above in the sum of £.....made payable to BIGGA. A receipt will not be issued unless specifically requested.

SIGNED..... DATED.....

PLEASE NOTE THAT ASSOCIATE/COMPANY MEMBERSHIP IS ON AN INDIVIDUAL BASIS

REF.—G.M. 3/90

READER REPLY PRE-PAID CARD MARCH 1990

Please check the appropriate box for each category

1. How did you receive this issue of GM?

- 1. ☐ It is part of my BIGGA membership benefits.
- 2. ☐ I am a subscriber.
- 3. ☐ This issue was given to me by a member or subscriber.
- 4. ☐ This issue was sent to me by post.

2. Type of facility

- A. ☐ Private golf course
- B. ☐ Municipal golf course
- C. ☐ Hotel/Resort golf course
- D. ☐ Park
- E. ☐ Sod Farm, Nursery
- F. ☐ Manufacturing
- G. ☐ Business
- H. ☐ Other

3. If at a golf course, number of golf holes

- 1. ☐ 9 hole
- 2. ☐ 18 hole
- 3. ☐ 27 hole
- 4. ☐ 36 hole
- 5. ☐ Other

4. Job title

- A. ☐ Head Greenkeeper/ Course Manager
- B. ☐ Club Official
- C. ☐ Owner
- D. ☐ Manager
- E. ☐ Architect
- F. ☐ Builder
- G. ☐ Turf Specialist/Technician
- H. ☐ Golf-Related Personnel
- I. ☐ Dealer/Distributor
- J. ☐ Other — Specify

5. Purchasing Authority

- 1. ☐ Recommend
- 2. ☐ Specify
- 3. ☐ Approve
- 4. ☐ Not involved

6. Reason for inquiry

- A. ☐ Immediate purchase
- B. ☐ Future Project

Please complete all the above questions

Mr. ☐ Ms. ☐

FIRST NAME										SURNAME									
TITLE																			
COMPANY OR COURSE																			
ADDRESS																			
CITY										POSTCODE									
WORK PHONE																			

Signature..... Date.....

☐ Please tick box if you want to advertise in the Buyers Guide. Simply fill in the form on this pre-paid card.

★ ★ ★

Place below the advert Flag Number — to receive more information about the products and services advertised in this issue.

REF.—G.M. 3/90

BUSINESS REPLY SERVICE
Licence No. NT 1638

2

GREENKEEPING MANAGEMENT
SPENCER HOUSE
MARKET LANE
SWALWELL
NEWCASTLE UPON TYNE
NE16 3DS

GREENKEEPING
MANAGEMENT

Don't be **GREEN** take this opportunity
now for **KEEPING** a tight grip on your company's profits
Show your **MANAGEMENT** skills by buying this space.
Tel: Bill Lynch on 091 496 0003.

BUSINESS REPLY SERVICE
Licence No. NT 1638

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GREENKEEPING MANAGEMENT
SPENCER HOUSE
MARKET LANE
SWALWELL
NEWCASTLE UPON TYNE
NE16 3DS

BUSINESS REPLY SERVICE
Licence No. NT 1638

2

GREENKEEPING MANAGEMENT
SPENCER HOUSE
MARKET LANE
SWALWELL
NEWCASTLE UPON TYNE
NE16 3DS

GREENKEEPING
MANAGEMENT

ISEKI

The driving force



TU

The midrange maestros – the Iseki TU range offers you a choice of manual or hydrostatic drive, with models from 19-27 horsepower all designed for more productivity and performance, whatever the task.



TA

Iseki TA Tractors mean big productivity on courses or in parks – three models from 33 to 48 HP, all with

four wheel drive and Iseki shuttle drive gearboxes.



DIESEL Rider



TX

The original compact tractor – these 16-18 horsepower machines offer you real versatility with 2 or 4 wheel drive and front, mid or rear mounting points.



For professional or domestic grass cutting the Iseki Diesel Rider means you can cut and collect in one productive pass.

A choice of 13-15 horsepower models with manual or hydrostatic drive.

Iseki have a range of tractors to suit your needs. From 14-48 horsepower you'll find no more versatility, no more technical excellence, no better support and no better finance schemes. That's why Iseki are the driving force – because no one looks after your compact tractor needs more than Iseki.

Iseki UK Ltd, Broadway, Bourn, Cambridge, CB3 7TL. Telephone 0954 718981. Fax 0954 719731.

Please send me more details on the Iseki range of Tractors.
I am particularly interested in the following ranges:

Diesel Rider ☐ TX ☐ TU ☐ TA ☐

Name _____

Address _____

Tel No. _____

Postcode _____

TRACTORS · MOWERS · POWER EQUIPMENT · ATTACHMENTS

RECRUITMENT

WALTON HEATH GOLF CLUB

requires an

ASSISTANT GREENKEEPER

The club maintains two 18 hole championship courses and adjacent land.

Good job training including maintenance and construction experience is offered.

Please apply in writing to:
**The Secretary, Walton Heath Golf Club,
Tadworth, Surrey, KT20 7TP**

FILEY GOLF CLUB

require a

HEAD GREENKEEPER

Applicants must have head greenkeeping experience and be fully conversant with all aspects of greenkeeping and the maintenance of equipment and machinery.

ATTRACTIVE SALARY OFFERED

**Applications by 28th March
in writing with full C.V. to:**
**The Secretary, Filey Golf Club, West Avenue,
Filey, North Yorkshire, YO14 9BQ**

ELTHAM WARREN GOLF CLUB

require a

GREENS MANAGER

With the ability to motivate and lead staff. Sound experience in modern course management, use and maintenance of modern greenkeeping equipment is essential.

Salary negotiable, no accommodation.

Applications with full C.V. to:

**The Secretary
Eltham Warren Golf Club
Bexley Road
Eltham SE9 2PE
Tel: 01 850 4477**

GOLF COURSES SUPERVISOR

The Gleneagles Hotel, one of the foremost leisure resorts in Europe, wishes to appoint a Golf Courses Supervisor to join the team in Scotland.

Reporting to the Estates and Golf Courses Manager the position involves daily management of a team of Head Greenkeepers to ensure the courses are retained in excellent championship condition.

In the initial period, however, the successful applicant would be required to oversee the constructional phases of the new Jack Nicklaus designed golf course and development of an executive par 3 nine hole course.

The ideal candidate will have recognised college qualifications, and no less than two years' relevant experience with an American style golf course operation.

The position also demands an articulate communicator, an ability to use initiative and a high level of self motivation.

If you are interested in this challenging position and feel you have the experience, please send an up-to-date CV to:

Ann Bulleid, Personnel & Development Manager, The Gleneagles Hotel, Auchterarder, Perthshire PH3 1NF.

Telephone: (0764) 62231.



**THE
GLENEAGLES
HOTEL**

RECRUITMENT

WOODBROOK GOLF CLUB (Dublin)

require a

DEPUTY HEAD GREENKEEPER (Head Greenkeeper Designate)

Applications are invited from suitably qualified and experienced persons for the above position.

Salary negotiable

Applications in writing to:

**The Secretary/Manager
Woodbrook Golf Club
Dublin Road, Bray
County Wicklow**



NEWBURY AND CROOKHAM GOLF CLUB LTD.

require a

COURSE MANAGER

Applicants, preferably with BIGGA qualifications, must be experienced in 18 hole golf course management, machinery maintenance and with proven ability to manage staff.

Salary £14,000 - £16,000 in accordance with experience and qualifications. Accommodation is available and the position is pensionable.

Apply in writing stating age, experience and qualifications to:

**The Secretary
Newbury & Crookham Golf Club Ltd
Bury's Bank Road
Greenham
Newbury
Berks RG16 8BZ**

WESTON-super-MARE GOLF CLUB

COURSE MANAGER/ HEAD GREENKEEPER

A fully qualified and/or experienced person is required to fulfil an essential role as part of a progressive Golf Club Management Team.

The successful applicant will assume responsibility for all aspects of course maintenance and development and will be expected to make a significant contribution to the club in its commitment to bring to its full potential one of the leading Links Courses in the West of England.

The position will be salaried with an attractive employment package to be negotiated.

Apply in confidence with full C.V. to:
**The Secretary, Weston-super-Mare Golf Club,
Uphill Road North, Weston-super-Mare,
Avon BS23 4NQ**

ALDERSHAW

**GOLF AND COUNTRY CLUB
Kent Street, Sedlescombe,
East Sussex, TN33 05D**

A VACANCY EXISTS FOR AN ASSISTANT GREENKEEPER

Applications are invited from suitably qualified persons with a good knowledge of turf-care, greenkeeping and maintenance of equipment/irrigation.

No housing is available, but a generous salary package is offered for the right candidate, who will be part of the team bringing the development up to impeccable readiness for play.

Please submit full C.V. (applications required in writing only) to:

**Mr. Bill Cooley
Aldershaw Golf and Country Club
Kent Street, New Hastings
East Sussex TN33 0SD**

All enquiries in the strictest confidence

RECRUITMENT

WELLS (SOMERSET) GOLF CLUB

requires a

HEAD GREENKEEPER

Applications are invited from suitably qualified persons having a thorough knowledge of modern greenkeeping methods including new course development.

In addition an ability to lead and motivate staff is essential.

Salary and conditions are negotiable depending upon experience.

No accommodation is offered.

Applications with full C.V. to:

**The Secretary/Manager,
Wells (Somerset) Golf Club Ltd.,
East Horrington Road,
Wells,
Somerset BA5 3DS**



GOLF COURSE COMPANY in AUSTRIA

with 18 hole + 9 hole course

require a

HEAD GREENKEEPER

This is a unique opportunity for a go ahead person who will have full control of these proprietary owned courses.

Though English spoken, German, or willingness to learn, will be a big advantage. 8 months season, but annual pay and employment.

Thorough knowledge of modern methods, use and maintenance of machinery and watering systems essential.

Paid accommodation for single person available.

Apply with full C.V. to:

**The Secretary, 15 Middlefield,
St. John's Wood Park,
London NW8 6ND**



Experienced FIRST ASSISTANT GREENKEEPER

required

For this prestigious Jack Nicklaus designed 18 hole Championship Golf Course, 3 hole Teaching Academy and practice areas.

The successful applicant will witness the final stages of construction including the installation of one of the most modern automatic irrigation systems.

A formal greenkeeping qualification is preferred but proven experience of working to high standards in the management of the course will be equally acceptable.

The successful candidate shall be fully capable of deputising for the Head Greenkeeper and have the ability to teach and motivate staff.

Please apply with your full C.V. to:

**Mr. Aidan O'Hara, Head Greenkeeper,
Mount Juliet, Thomastown, Co. Kilkenny.**

CHARNWOOD FOREST GOLF CLUB

require a

HEAD GREENKEEPER

The nine hole heathland course is a designated area of special scientific interest and of outstanding natural beauty.

The applicant will have:

(a) Thorough knowledge and qualifications in greenkeeping methods

(b) Possess a sound understanding of modern machinery.

(c) Be able to motivate and manage staff.

Salary negotiable (will show importance of position, and in line with experience).

No accommodation available.

Replies to:

**The Honorable Secretary
Charnwood Forest Golf Club
Breakback Road, Woodhouse Eves, nr. Loughborough,
Leicestershire, LE12 8TA.**

HEAD GREENKEEPER REQUIRED

For busy 18 hole golf course in the Derbyshire Peak District.

Must have experience in the management of staff and machinery.

Salary negotiable.

Apply to:

**The Greens Chairman
CHAPEL-EN-LE-FRITH GOLF CLUB
Manchester Road, Chapel-En-Le-Frith
Stockport SK12 6UH. Tel. (0298) 812118**

RECRUITMENT

LADYBANK GOLF CLUB

This prestigious Open Championship qualifying course requires a

HEAD GREENKEEPER

To take full responsibility for a willing and conscientious green staff in the maintenance of the course.

Applicants should be able to lead and motivate staff in the execution of their greenkeeping duties, and exhibit a comprehensive knowledge of all aspects of greenkeeping.

A sound mechanical knowledge is required together with the ability to undertake normal day to day minor machinery repairs.

The salary will be negotiable.

Applications in the first instance should be addressed to:

**The Secretary, Ladybank Golf Club,
Annsmuir, Ladybank, Fife, KY7 7RA**
and a comprehensive C.V. should be submitted with the names of two referees.

Applications should be submitted not later than Friday, 30th March, 1990.

WEST BERKSHIRE GOLF CLUB

require an

ASSISTANT / 1ST ASSISTANT GREENKEEPER

18 hole course - over 7,000 yards.

Major improvements are being carried out at the present time.

We are looking for someone with experience, qualifications preferable but not essential.

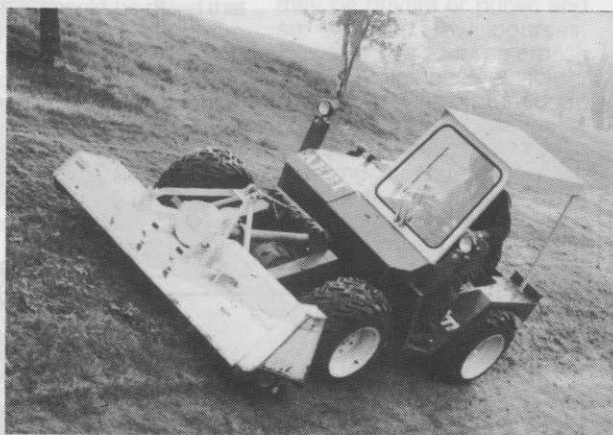
An attractive salary will be offered to the right person.

No accommodation available.

Please apply in writing with C.V. to:

**The Manager
West Berkshire Golf Club
Chaddleworth, Newbury
Berkshire RG16 0HS**

AEBI TERRATRACS THE ULTIMATE GROUND CARE MACHINE



The Aebi Terratracs are extremely versatile implement carriers with three point linkage and PTO at the front and rear of the machine. Therefore the Aebi terratracs can be equipped with a whole variety of grasscutting and landscaping implements.

The Aebi's are fitted with low ground pressure tyres and this in combination with the wide wheel base and low centre of gravity and the low weight enables the machine to work under all ground conditions, and is still capable of working on banks where others fail.

For further details please contact your nearest dealer or

Inter-Drain (England) Ltd

Holland Hill, Low Road, North Wheatley, Retford, Notts DN22 9DS
Tel. (0427) 880000. Fax. 0427 881024

ALL BRITAIN LAND SERVICES LTD.



GOLF COURSE DRAINAGE

- CONSULTATION • DESIGN
- IMPLEMENTATION SERVICE

DRAINAGE & CONSTRUCTION OF

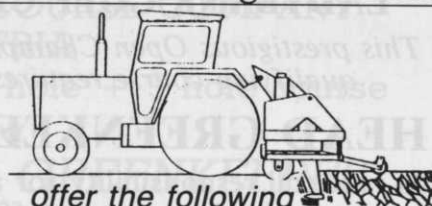
- SPORTSFIELDS
- CRICKET SQUARES
- BOWLING GREENS

FULL RANGE OF SERVICES
THROUGHOUT THE COUNTRY

ALL BRITAIN LAND SERVICES LTD.
21 CITY ROAD, WINCHESTER
HAMPSHIRE SO23 8SD

TELEPHONE (0962) 840340
FAX (0962) 842667

Aeration & Drainage Services



offer the following

1. AERATION

Verti Drain hire/Twose Turf Conditioner & Robin Dagger - we are, at present running 4 Verti Drains (various sizes) and can offer tine sizes from 1/2" diameter by 12" long at 2 inch centres, up to 1" diameter by 16" long at 4 inch centres. Also available, Hollow tines. Therefore we can cater for any Verti Draining need such as Greens, Tees and Fairways, etc.

Twose - this machine operates by way of seven vibrating blades which are pulled through the ground in a similar fashion to small mole ploughs, therefore relieving compaction and improving surface drainage.

Robin Dagger - This very light and portable machine injects oxygen into the soil and around the roots.

2. DRAINAGE/SANDSLITTING

Wizz Wheel Trencher + Backfill sand/gravel hopper this is to be available on a weekly rate (min. hire 3 days) should you just require trenches excavated to be backfilled by yourselves, or, quotations can be submitted for complete sand slitting/drainage programmes including 'Hitek' stripdrain.

3. CONSTRUCTION/ALTERATION

Should you find the work load too great on your own greenstaff regarding construction/alterations of greens tees and bunkers, etc., we would be pleased to submit a quotation for such projects.

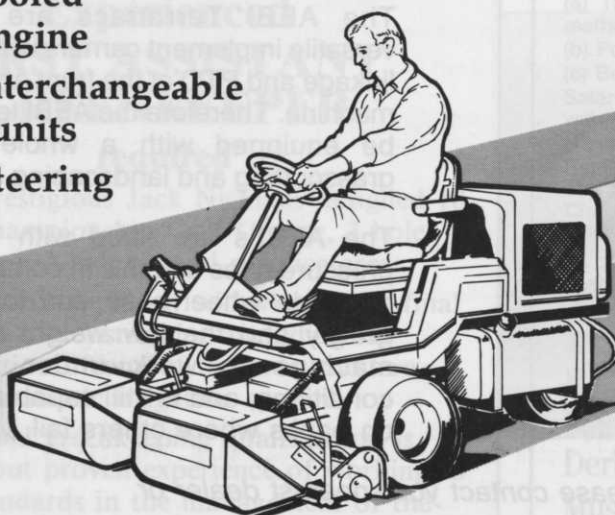
Paul Wright, Aeration & Drainage Services,
20 Westminster Close, Eastbourne,
Sussex BN22 0LQ

Tel: Eastbourne (0323) 506725
Mobile: (0860) 838241. Fax: (0323) 411980

HUXLEY ^{THREE} 58 GREENSMOWER

"The Greenkeeper's machine"

- Water-cooled diesel engine
- Fully interchangeable cutting units
- Power steering



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ASK US FOR A
DEMONSTRATION
OF THE 358
ON YOUR
FINE TURF

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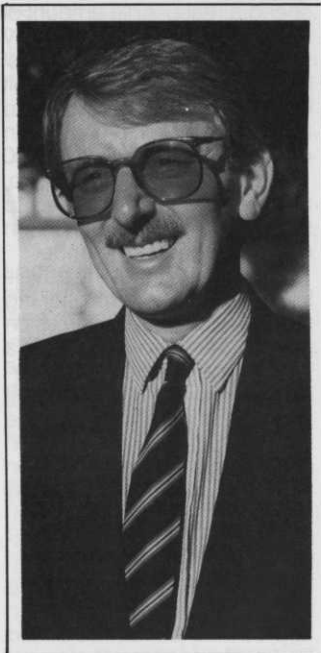
PROFESSIONAL STANDARDS IN GOLF COURSE

CONSTRUCTION
By Howard Swan MSc
Chairman, National
Turfgrass Council
Founder, British
Association of Golf
Course Constructors
Howard Swan Limited

THE growth in golf throughout the world is quite staggering. We are not alone in Europe in seeing a boom in what is a wonderful game and little has been seen like it in those more developed countries since the early 1970s.

In Europe golf courses are being developed from Finland to Portugal, from the Azores to Turkey. They are being produced in significant numbers to meet the increase in interest in the game at all levels. Without doubt, the success of our male and female golfers has meant that more people want to play the game, better. Increased television coverage by our satellite links of tournaments in America, in the far East, and on the European Circuit, both through the Mens Tours and the Ladies Tours have meant that more people have seen the game of golf and more people have seen golf courses for the very first time. Their interest in the game, and the landscape in which the game is played, is keenly alerted and they too want to see more of that in their own countries.

As we move to the end of the decade, it should be noted that throughout Europe there are vast provisions of new golf courses. In Sweden some 200 are planned to almost double the present provision. In France in excess of 100 are presently being constructed, in Germany to a lesser extent but still the game thrives there and more and more people are



Howard Swan.

joining it and more and more people want to play it on more and more golf courses. Throughout Scandinavia, in Spain, in Portugal, in the South of France and in Italy, where the accent is on resort golf, there are more courses. In my own country, in England, we are experiencing the same. In the early 70s there were many courses until the oil bubble burst and the world economy was seriously shaken. Thereafter, we experienced a lull, if not a stagnation, in the market. We found that few investors felt that satisfactory returns would be gained from setting up golf clubs, whether they be private or public and so we had few courses. However, as our enterprise economy has been established in the United Kingdom, under the present government structure, there has been increasing confidence in investments of significant size in the private sector and we have seen, particularly in the last two

years, a great, great increase in the game and its popularity and the need for more courses to be provided.

Our own Sports Council, our government agency, has recently changed its parameters by which it judges the need for golf courses from one 9 hole unit per 20,000 people to one 9 hole unit per 12,000 people, on 80% increase.

The governing body of the game, The Royal and Ancient Golf Club of St Andrews, recently commissioned a survey throughout the country about the need and the demand for new courses. It was their view, I believe, although it has not officially been published, that some 600 courses were required in the next few years. The English Golf Union, which controls and administers the game in my own country, has taken the initiative in golf development by contributing its own committee and predicts that NOW some 675 golf courses are required to sustain the present demand, let alone to satisfy it in the years to come. This, in all, with the fact that we have around 2,000 in the United Kingdom already in operation.

It really is some prospect for all of us who are here today.

So how can we satisfactorily meet this requirement in providing courses?

I believe it is a worrying prospect as I recall only too well that in the early 70s when demand was high in my country we had some indifferent golf courses designed and built and irrigated and since then those greenkeepers who have tried to maintain them, some well, some indifferently, some badly, have struggled because the basic concept and engineering was indifferent and defective.

We must not let this happen again

After all, the investor has

rarely the experience of building more than one golf course. He wants to build it once, correctly, and first time only and does not want to suffer, I am sure, from recurring nightmares of remodelling and reconstruction and excessively costly greenkeeping because the initial product was simply not good enough.

In the United Kingdom we have recognised this situation,

I think responsibility, and are trying to address ourselves to the problem. The National Turfgrass Council, of which I have the privilege to be Chairman, has together with the English Golf Union formed a Golf technical Committee, and it is our remit to attempt to look towards providing minimum standards and guidelines for performance in the provision of golf courses. We have on our committee, the National Turfgrass Council members of the golf course architects and the golf course constructors, the irrigation companies and the greenkeepers, our research body the Sports Turf Research Institute, of whom Jeff Perris has already spoken to you earlier in this session, and the Golf Course Wildlife Trust, our ecologists and environmentalists in the field. This Committee together with the administrators of the game will be working hard towards setting up these standards and once established we hope that they may be able to be published, widely regarded by practitioners, investors, and golfers alike and so a policing and maintaining standard realised. From this, we hope that a more intensive, more realistic and pertinent education process will ensue in all sectors of the game so that by the pulling together of all the parties involved we will have an all encompassing, all meaningful, advance towards thoroughness in golf course provision.



British Association of Golf Course Constructors

CONTACT THE PROFESSIONALS

NEW GOLF COURSES, ALTERATIONS, DRAINAGE LAYOUTS.

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Mr. Tim Banks, The Secretary,

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Each of use therefore, has a responsibility to play in this. Although it is not my brief to talk specifically about golf course design and architecture in this paper I do hold some strong views on the subject. I am involved very closely with many golf course architects around the world and do, from time to time, become involved in golf course design myself. I look back to the traditions of the game in my British Isles and see nature having a profound influence on matters. In fact, I have often thought the greatest of our golf courses were those where man had very little hand in their manufacture. But clearly, that can't always be the case. Whatever, however, I fervently believe that the way we design golf courses should complement nature. It should not attempt to replace it but we should maximise utilization of the features which nature has given us on a particular site as far as is humanly possible in providing something which looks, as Alastair MacKenzie said in 1892, "as if nature had provided it herself". Such a statement is so relevant today.

I have to admit I am not a great believer in moving dirt to build the golf course, moving mountains to produce greens, tees and fairways. This surely isn't the way forward. The movement of large, often millions of cubic metres of sub-soil means great expense, high budgets, and I am far from convinced that, except in a few relatively isolated cases, the financial equation just cannot make sense and the golf market just cannot afford such extravagance. Perhaps its my inbred British modesty and regard for our heritage that sways my mind, but in the two or three examples which we have in England, I am concerned about the amount of money being spent on building a golf course, and more so the effect of such, dare I say it, rape, of my traditional landscape which I hold so dearly.

I can only exhort the golf course architects of the world to take the ultimate regard of what God and Mother Nature has provided and use it to its maximum advantage in changing the use of the land for this wonderful game of ours, and so enhancing the environment in which we live and play.

In providing the satisfactory standard of golf courses now and in the future it is important that construction is correct. The construction of a golf course is no easy task and should not be underestimated. It is specialist

in nature and needs a considerable understanding of a wide number of disciplines on the part of the project manager or the contractor who is responsible for executing the works. They need to be engineers, botanists, ecologists, geologists, hydrologists, agronomists, mechanics - is the list never ending? — as well as being sound businessman. The specifications to which they work need to be comprehensive, they need to be pertinent to the particular situation on any one site, and they need to be thorough, yet clear for all to read, comprehend, and comply with. In the old days, golf courses were often laid out from the back of an envelope or a cigarette packet. Today no more. It is necessary that the golf course architect, or the project manager has a document which adequately details the quality and the quantity of the work envisaged in building the golf course, and there is no room for error in the provision of the correct materials and the right standard of workmanship in effecting the construction. I have seen specifications which are wholly inadequate, and I have seen specifications that are so elaborate that they are just too difficult to see the light at the end of the tunnel. It is imperative that, particularly, materials are well specified and their quality is ensured by laboratory testing before they are used in any construction process. It is imperative that they are used correctly and with due regard to the weather and ground conditions which prevail in the period of work. It is all too easy to simply ruin the soil by the utilization of heavy machinery in poor conditions. It is easy for the constructor to walk away and say to the client and the greenkeeper "well there you are, I have built you your golf course" and they are left to pick up the pieces and struggle for years with only the method of surface treatment available to them, to try and restructure the soil. Its a sad tale, but it has often been seen.

There needs to be, in the golf course construction market, a sensible pricing policy, and an acceptance that golf courses are not built for inconsequential amounts of money. They can certainly cost too much, I believe, with excessive profits being made, and going into somebody's pocket somewhere. However, there is a need to understand that a golf course does cost something in its construction and if anyone want to see it done well, then they need to

spend a reasonable amount of money to ensure a thoroughly worked product. I am often faced in the demand for new golf courses, particularly from farmers in my country, with an expectation that for £100,000 18 holes may be built. Not so, and yet is there any need to spend millions of pounds on one golf course? I wonder.

I find, throughout my travels in Europe, that approaching the provision of golf courses on project management base is a sound one whereby, a coordinating ability, with specialist experience and knowledge may be applied to any situation and with good on site direction and supervision, with qualified personnel the necessary standards of golf course construction may be achieved efficiently, economically, and to a realistic programme. Such an approach is entirely fee based and contains no profit element in that a specified time involvement is involved and nothing else. Such an approach is particularly pertinent in countries where there is no tradition in golf course construction. There are caterpillar tractors, there are materials, and there is sufficient labour to build a golf course, but it just needs organising and I am finding an increasing place for my practice in that coordination in management.

But I would say that, whether the golf course in question is to be built by this, rather innovative approach, away from the traditional contracting base, or by a competitive tendering situation with contractors, the opportunity is here for us all to make sure that we provide the golf course that we would wish to see played upon in the years to come.

We have a wonderful opportunity throughout Europe to make sure this happens; a wonderful opportunity to meet this staggering demand for our game and we must make sure that we take this opportunity wholeheartedly, in a truly committed fashion, honestly, thoroughly, and above all professionally, and we can be proud of being part of the game.

ALL BRITAIN LAND SERVICES LIMITED

THE increasing number of golf courses being planned and built as land owners look for diversification has required that less free draining soils be considered for golf course construction.

Poor quality land and wayward retentive soils require efficient

drainage if good quality grass is to be grown. The best financial returns come from frequency of play but numbers of people put pressure on grass and inadequate drainage will often cause a course to be restricted or closed during wet periods.

This will not happen if drainage is considered at the outset of design and given as much importance and consideration as irrigation, for the two should work in close harmony for efficient results.

A company which is very much concerned with this aspect of land drainage is All Britain Land Services Ltd. ABLS offers a consultancy service to Golf Course Architects and Agronomists, both for new courses yet to be constructed, and existing golf courses who wish to improve their facilities.

Based in Winchester they, as their name suggests offer a nationwide service and can undertake design and installation using their own experienced teams if required.

They have been closely associated with the prestigious East Sussex National Course at Uckfield, Sussex where drainage continues to be installed to overcome water movement on a site where complex soil types both natural and man made have made drainage of vital importance.

All Britain Land Services', Managing Director, Marc Caplat, believes that the Company has the dedication to land drainage problems on Golf Courses that such a crucial element in a Golf Course's success requires and by careful attention to details and individual treatment for each course he believes the Company has much to offer and can provide a detailed drainage design at an early stage so allowing adequate provision in establishment and maintenance costs to be made.

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GOLF BUILD (UK)

GOLF Build (UK) may be a new name in the European Golf Course construction market, but the personalities behind it are old hands.

Chris Bakhurst recalls that it was in 1965 that the late C.K. (Ken) Cotton persuaded him to set up a construction company to join in the boom of new courses which lasted ten years. Golf Build's co-director, Bill Cooley, joined with Chris shortly after and jointly or individual-

ly they have since been involved in the construction of over thirty courses in the UK, Europe and Africa.

In 1989 they came together again working for the Bahar Leisure Group and after a highly successful contract were persuaded by the director of Bahar Leisure to accept funding and form the new company to enter the current booming market both to build courses within the group and for outside clients.

Chris Bakhurst says: "the industry is a pleasant marketplace still peopled with many personal friends and I am sure we have a lot to offer without kicking any shins, due to the high volume of current and anticipated projects. We already have 27 holes on our 1990 order book and are actively bidding in the UK and France. There is plenty of work for serious companies".

weather conditions permitting), can be completed in a matter of days or weeks.

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WHITE HORSE CONTRACTORS LTD.

WHITE Horse Contractors Ltd., operates from Blakes Oak Farm, Lodge Hill, Abingdon, Oxfordshire and provide services in land drainage, ditching, reservoir construction, landscaping and sportsfield/golf course drainage and construction, Civil Engineering and Plant Hire.

An increasingly important aspect of the business however, is Golf Course Drainage. Kevin Smith, Contracts Manager of White Horse Contractors Ltd comments: "The gradual change to Golf Course Drainage has resulted not only in a need for specialist equipment, but has meant that a higher standard of work has to be achieved. There is an emphasis on a quick tidy job with the least amount of damage to the Course as possible."

Mr Smith acquires the majority of his Company's amenity work through competitive tendering - although more and more work is now being obtained on recommendation. "If the job is large enough, then we will travel anywhere in the country," he says.

A complete design service is offered to customers and includes a site survey to find out if there is an existing drainage system with suitable outfalls. Soil types and levels must also be determined - the latter dictating the design of the new drainage scheme. Estimated costs for the proposed scheme are then presented to the customer.

"With a comprehensive drainage system" he comments, "it is important to consider the on-going maintenance costs when budgeting for a new drainage system for sportsturf," says Mr Smith.

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STA-BRITE CHANGE OF NAME

'STA-BRITE', registered company name has been changed to 'STA-BRITE SUPPLIES LIMITED'.

Its trading address has moved to a newly fitted-out freehold warehouse and office complex in Basingstoke.

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Working machines such as this Cushman are essential in the maintenance of good turf quality on the golf course, following professional construction.

THE occasion of my election as Chairman of the British Association of Golf Course Construction provides me with a reason - or excuse - to look back on 25 years of Golf Course Construction and to compare conditions at the start with those which exist nowadays.

It may come as a surprise that today there is less divergence of opinion between the main architects and contractors on basic construction than there was at the start of the golf course boom of the mid sixties.

It was then the exception rather than the rule for Architects to specify that greens were built on underdrained stone carpets. Certainly most specifications stipulated the use of local soil topped with "2" of seed-bed compost!

Greens were built in isolation from their environments and the imaginative marrying-in of greens with wide gently contoured surrounds was almost unknown. There was none of the current emphasis on keep-



Brian D. Pierson

ing constructional machinery away from vulnerable and very important approaches.

Some specifiers were still advising the use of perennial ryegrass for fairways and only minimal attention was given to construction and design.

What a contrast today! There is almost universal agreement

that both greens and tees must be built on drainage rafts, properly blinded and with a uniform imported sandy soil root zone two mix.

Often on entire courses from greens to rough is sown with basically the same fescue/bend seeds mixture, variations occurring only regarding seed rates and perhaps the use of cheaper strains for the rough.

Of course it costs a great deal more to build a golf course today than 25 years ago - from which time there are however plenty of examples of quite satisfactory courses being built for less than £10,000. This is not only due to inflation, but much more to higher standards and more elaborate specifications, including full automatic irrigation.

However, a word of warning may be appropriate. If the need for more golf courses is to be met economically (which does *not* mean building cheap, bad courses) then money must not be wasted in enormously expensive earth moving opera-

tions. Nor must we overly rely on extensive water features, to create character.

Contractors have to build to architects specifications and none of us should be inveigled into accepting constructional standards which have no relevance to our climatic and soil conditions. Sand greens! Will they ever work!

We, the contractors, have the experience and skill to make good courses to suit our Northern European conditions. It is depressing when inexperienced clients opt for much more expensive specifications quite needlessly, just because they think if they pay much more they will necessarily get a much better golf course.

The need for more courses is not arguable. How to produce them is, but we should, I feel, be thinking far more about providing for the beginner golfer because if he starts on something better than golf in a field, I feel that the long term future of golf will be in much safer hands.

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FLYING DIVOTS

NEW CHAIRMAN FOR WOMEN'S TOUR

CAROLINE Griffiths was selected chairman of the Women Professional Golfers' European Tour at a recent meeting of the board of directors.

The 24-year-old Gloucestershire professional takes over the Mme Catherine Lacoste de Prado, who has been acting chairman following the resignation of Beverley Huke. Mme. Lacoste de Prado remains the Tour's honorary president.

Miss Griffiths, who has been a member of the Tour from 1986, has served on the WPG European Tour's Board of Directors since her election at the annual general meeting in October 1988.

She said: "I am looking forward to my new role and the challenge it offers at the start of another decade in the Tour's history."

NEW PROFESSIONAL ROBIN BRUSHCUTTER

SACHS-Dolmar (UK) Ltd, sole British concessionaires for Robin brushcutters, hedgetrimmers and the Dagger soil ameliorator, have filled an identified slot in their professional range of Robin brushcutters, with the new Model NB 351.

The 34cc Model NB 351 is a rugged straight shaft, double handle machine with an efficient damper anti-vibration system and supplied with full harness. It will suit the needs of many types of users including those in farming, landscaping, highway maintenance and forestry.

Model NB 351 has a recoil starter, maintenance-free solid state ignition and a float type carburettor. A one litre tank for the 25:1 leaded or lead free

fuel/oil mix, allows long operating cycles between refills. Weighing only 6.2kg, the new Robin brushcutter is supplied complete with toolkit, full instructions and safety goggles.

WOMEN'S EUROPEAN TOUR ANNOUNCES 1990 SCHEDULE

EUROPE'S top women golfers will be playing for a minimum of £1.68 million when their 1990 season gets underway in April, European Tour Executive Director Joe Flanagan has announced.

Twenty events, including two new tournaments are announced, but negotiations are still continuing with prospective sponsors regarding further events which will take the Tour past the £1.7 million mark for the first time in its history.

Two new tournaments are the Swiss Classic at the end of May, and the Paris Open in September which will take the total number of events in France to four.

JOINT INITIATIVE IN GREENKEEPING CONSULTANCY

INTERNATIONAL Golfers Club and British and International Golf Greenkeepers Association are pleased to announce their joint initiative to create a greenkeeping consultancy service for golf clubs and developments throughout Europe.

They will offer the services of highly experienced greenkeepers for: regular inspection visits; staff training and advice; trouble shooting for particular major problems,

and employment of teams for new developments.

The service will commence from April 1st and can be booked by clubs who wish an initial day's report on their current requirements. The first greenkeeper consultant to be appointed by IGC/BIGGA is Jack McMillan, who will be relinquishing his position as head greenkeeper at Sunningdale Golf Club at the end of March.

The BIGGA national education conference at Royal Holloway and Bedford New College from March 30th to April 1st is also being totally sponsored by IGC as part of their overall commitment to improving the quality of greenkeeping throughout Europe by education and specialist advice.

GORDON SHOOTS WINNING BRAND OF GOLF IN AFRICA

THE record collection of Safari Tour titles held by Ryder Cup international Gordon J. Brand swelled to seven with his four-shot win at the Zambia Open.

Yorkshireman Brand, winner of the 1981/86/88 Ivory Coast Opens; the 1983/86 Nigerian Opens; and the 1987 Zimbabwe Open, claimed a familiar role at the top of the Safari Tour Order of Merit when earning the £12,500 victory cheque on the demanding, 7,216 yards Lusaka Golf Club course.

He was eight under par with a 284 total that left Scotland's Craig Maltman, the defending champion, and Phil Golding, of England, as joint runners-up on 288. A further shot behind, sharing fourth place with 289,

were Paul Carrigill, Paul Carman and young Steven Richardson, the 1989 English Amateur champion who graduated impressively at the PGA European Tour Qualifying School last December and was third in the Zimbabwe Open a week ago.

A NEW CONCEPT IN WEED CONTROL THE SAFER SYSTEM THAT THINKS...

THE launch of the world's first CDA hand lance with micro-chip technology incorporating a pump which is programmed to monitor flow rate irrespective of swath width selected.

The launch of the Powaspray low volume weed control system marks a "new era" in solving an age old problem.

New legislation dictates that new application equipment must be capable of giving greater assistance to operatives in their task so that overdosing and re-calibration calculations are a thing of the past.

The new Powaspray Charger hand-held lance combines the ease of use of a CDA system with a revolutionary pump which automatically recalibrates itself to any pre-set swath width.

The lance can be "programmed to memorise" any four swath widths between 4" and 4' and the microchip technology then monitors the correct flow rate output for each swath width selected.

The standard lance is programmed to deliver 15 litres h/a at widths of 4", 9", 20" and 36".

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THE PUTTING GREEN

WHAT GOLFERS WANT FROM PUTTING GREEN SURFACES!

by Harold Swash with John Nelson

OUR guide as to what golfers want from putting green surfaces is Harold Swash, pictured sizing up a putt on one of the putting greens at The Royal Birkdale Golf Club, the venue of the 1991 Open Championship (Head Greenkeeper, Tom O'Brien MBE, looks on approvingly).

Harold is known throughout the world of golf as "Britain's Putting Doctor". It is an accolade deservedly bestowed by the game's top professional names in the world of golf!

He is an excellent putter (as well as being a category one amateur golfer) — if your life depended on a putt being sunk, he would be the one you would choose to putt for you.

But his reputation as Britain's Putting Doctor rests on his mastery of the theory and practice of putting and putters. He is more than just an excellent putter. He is a successful designer of putters, (he is an automation production engineer by profession) and he is able to judge whether or not your putter is right for you. He is also able to spot the flaws in your putting action (if you have any, of course!).

Recently he achieved further national and international publicity through designing the Wilson Long Putter which Sam Torrence and Peter Senior have used to over-come the 'Yips' and give themselves a new lease of life on the circuit.

Harold recognises, however, that successful putting is more than just having the right kind of putter with a fluent and true putting action. It also depends on being able to read putting greens correctly, and it is this attribute on which he will be concentrating in this series of articles in "Greenkeeping Management".

There is no mileage in having a correct putting action and an appropriate putter if you can't read putting greens; but, equally, there is little point in being able to read putting greens if your reading tells you that they aren't true, and that they are **unpredictable**.

Harold's view is that putting should not be a lottery. The putting green surfaces should be true, consistent, comparable and predictable. The golfer should be provided with the opportunity to read them and putt successfully on them if he reads them accurately and has sufficient putting skill.

Even the fastest of putting greens are acceptable if they satisfy these criteria. No doubt you join the rest of us in staying up late on the first weekend in April each year to watch via satellite TV the US Masters Tournament at the Augusta National Golf Club in Georgia.

I'm sure you are fascinated seeing the world's finest golfers coping (with difficulty) with the lightning fast putting greens. (There is only one topic of conversation among the players — the speed of the putting greens and whether or not it is faster than the previous year).

It is true that the former Bermuda Rye grass at Augusta National was replaced in the late 1970's by Bent grass (actually Pennecross) to provide superior putting



Harold Swash on the putting green.

green surfaces and give them the speed and firmness which were wanted. But it is equally true that the world-wide reputation which Augusta enjoys for the speed of its putting greens has been made possible only by having available a tool for measuring and thereby controlling their speed and, further, guaranteeing their consistency and comparability.

This tool is the Stimp Meter and Harold will be describing what it is and its potential value to you later in this Series. His guess is most of you haven't seen one — let alone used one — and he would find it helpful if you would fill in the short questionnaire which accompanies this article and return it to him via the Editor.

He will also be explaining his own invention — the Bump Meter — which is a relatively more sophisticated tool for measuring the undulations on putting greens.

He will be covering the design of putting greens; analysing qualities of putting greens such as size, slope, shade and exposure; and providing his own check list on how to recognise good putting greens (and less good putting greens).

He hopes to be able to formulate a Putting Green Rating Chart so that a relative value can then be assigned to any golf course reflecting the quality of its putting greens.

Harold is convinced about the crucial importance of putting — he would argue that golf tournaments are invariably won and lost on the putting green; and hence his delight in being invited to initiate an ongoing dialogue through the pages of Greenkeeping Management with Members of BIGGA.

JOHN NELSON

WHAT GOLFERS WANT FROM PUTTING GREEN SURFACES

A Questionnaire for Greenkeeping Staff on the Stimp Meter and the Speed of Greens

Please tick the appropriate 'Yes' or 'No' for each question, and then return the Questionnaire to the Editor of Greenkeep-

ing Management. It is an anonymous enquiry so there is no need to sign it.

1. Do you use a Stimp Meter Yes/No
2. How important to you is the speed of your greens:

Very important?	Yes/No
Important?	Yes/No
Unimportant?	Yes/No
3. Do you vary the speed of your greens according to, say, everyday use, weekend competitions, championships? Yes/No
4. How do you vary the speed of your greens:

Lowering the cutter blades?	Yes/No
Cutting more frequently?	Yes/No
Lowering the cutter blade & cutting more frequently?	Yes/No
5. Do you consider the Augusta National greens for the US Masters to be too fast for the participating professionals? Yes/No
6. How much slower would you cut the Augusta National Greens for your own Members:

A little slower?	Yes/No
Much slower?	Yes/No
7. What percentage of your Members could putt on the Augusta National greens with any degree of confidence/success:

Over 75%	Yes/No
Over 50%	Yes/No
Between 25 and 50%	Yes/No
Under 25%	Yes/No
8. What would be the reaction of your own Members if your greens were as fast as are the Augusta National greens for the US Masters Tournament:

Supportive?	Yes/No
Upset/turbid?	Yes/No
Hostile?	Yes/No
9. Do you take into account the bumps and hollows on your greens when deciding the direction of your cut? Yes/No

Thank you. If you feel that you need to accompany any answer with comment, please do so.

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ASPECTS OF DESIGN

ASPECTS OF DESIGN VII SOURCES FOR COURSES

THE golf course architects of the twenties enjoyed love-hate relationships. They formed little teams for mutual support but only one persisted, apparently because there were no clear-cut arrangements for responsibility. The older members unloaded all the dirty work on to their latest recruit and he, not unnaturally, wanted his share of the fun at the top.

They also tended to disparage each other's talents though never averse to purloining useful ideas and figures likely to blind an awkward green committee.

Tom Simpson, for example, in his forthright way, laid down the law precisely on the proportion of a green's putting-surface which should be made relatively flat for hole cutting. '75 per cent', he asserted roundly, as if he has worked it out over a lifetime. By coincidence, nevertheless, **Harry Colt** had suggested the same figure ten years earlier. Coincidence? Unfortunately I can feel a reminiscence coming on. Simpson and his colleagues will have to wait another month.

The tendency to plagiarise without admitting ones sources is a failing which one tries to grow out of in later years, although it is still tempting to repeat the occasional borrowed witticism as ones own without disclosing authorship. Men of science are expected to rise above these temptations. The rest of us try to cover our tracks with 'grateful acknowledgements'.

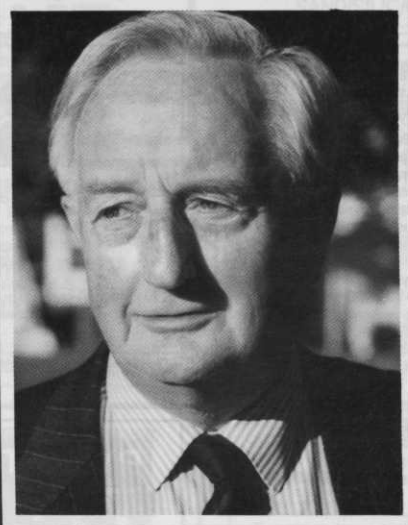
This page once re-wrote the golf architectural gospel in a book which still sells well thanks to the growth of the leisure industry, tourism, and agricultural set-aside. It has also been found useful for the growing number of recruits to golf course designing because all the old favourites are out of print.

When writing a whole book, even this dog-eared page is bound to come up with the odd original thought, simply by the law of averages, since most original thoughts consist of two earlier thoughts put together.

For example, the said treatise, when discussing the bunkering of seaside links and using the folds in the ground to create natural form, 'gather' the ball, and avoid erosion by wind, used the word 'shadow'. Modesty and common sense prevent me from describing the choice as memorable but it might at least be termed apt. The player, it was suggested, would see many links bukers not as sand but as a 'shadow' in lighter areas of fairway.

Six months went by without the golf architectural world being unduly shaken by this revelation. Then a magazine article reported Jack Nicklaus professing himself to be attracted by the idea of 'shadow bunkering'.

As a good greenkeeper, with both feet on the fairway, you will dismiss this as pure coincidence. I prefer to think that somewhere in the Nicklaus residence, if you can find your way, perhaps even in The Den itself, there is a quiet corner dedicated to the literature of golf course architecture and that among all the gems of the past, there is one particular blue-



Fred Hawtree

covered volume which is well-thumbed even if only because it stands out from the rest owing to its awkward shape.

More recently there have been two articles on building tees which made me sit up with a sense of déjà vu. However, I can only continue if what follows is treated in the strictest confidence. I rely entirely on the discretion of the staff and readers of Greenkeeping Management. Should there be one of these who feels that his lips might become unsealed in an unguarded moment, especially following invitations which begin with the words 'what will you have?', he should turn over the page. The sensitive material starts here.

"Still relying heavily on your confidentiality, I will now reveal that if you start designing informally shaped tees by drawing overlapping circles, you may conceivably arrive at an acceptable plan but you will also have wasted a good deal of time."

When Hawtree III read through the proofs of the chapter on tees in Jack's preferred reading, he pointed to one page and asked: "What's all this nonsense?" I explained that in order to reply fully to his courteous enquiry, I was obliged to tell him a story. He appeared depressed but it may have been concentration.

I related how ten years earlier in a booklet which briefly sketched a few basic principles of design, I had mentioned the figure of ten per cent as the maximum cross-fall desirable on a fairway at the landing area of tee shots. I am still not sure

that such a rule is desirable, since so much depends on angle of attack, adjacent contour, and other optional lines available.

But I was gratified to have this figure used (not quoted) back at me within six months by one of my senior "confrères" in the design field. So far as I knew, mine was the first effort to legislate for this matter but obviously if it could occur to me, it could have occurred to him or at least from his subconscious, fresh and glistening, like the morning dew.

"To settle the matter in future, Hawtree III", I said, with a dig in his ribs to stir him from his slumbers, "The tee section of my current opus contains a code or marker". This was a nonsense, as he rightly suspected, though endowed with a certain superficial verisimilitude designed to unmask the plagiarist. It was described as the theory of overlapping circles, a fictitious device, claimed to relate agreeable shaping of the outline of informal tees to their orientation.

Still relying heavily on your confidentiality, I will now reveal that if you start designing informally shaped tees by drawing overlapping circles, you may conceivably arrive at an acceptable plan but you will also have wasted a good deal of time which would have been better spent listening for the mating call of the Leather-jacket. You could have got there hours ago by using your own native instinct or by using interlocking squares, triangles or even, if I may use the term in such distinguished company, rhomboids.

Having set the trap, I sat back and waited for a year or more until I heard the jaws snap smartly. Between them I found no less a quarry than the Bulletin of the Sports Turf Research Institute. An excellent article on teeing grounds gave a lot of good advice, much of which I seemed to recognise. But it also contained one reference which I could identify positively. It mentioned the theory of overlapping circles.

There may be a rule which permits the scientific fraternity to avoid disclosure of its sources in articles of a popular nature, which I suppose is how those in the bulletin are regarded. At the same time, their articles in the annual journal are copiously referenced. It is indeed sensible to quote the authorities consulted on the points you raise in case you get attacked on any one of them.

I reset the trap and waited patiently. The next quarry was less weighty but struggled longer. He not only explained the theory of overlapping circles, he actually produced the diagrams to prove it — flattery indeed. His article appeared in one of our very own favourite greenkeeping publications but as a reciprocal gesture, I shall not reveal its name.

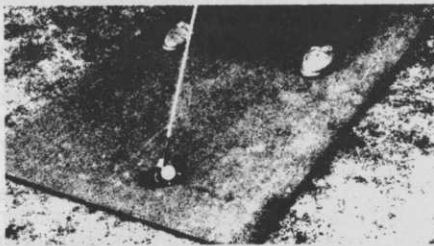
There is heavy snoring in the armchair but he might as well sleep on now because the tale is told. Only the moral remains to be deduced and I am sure I can safely leave that to you. I have enough other worries already. If the theory of overlapping circles invades the main-stream of classical design like a computer virus, the circles may become ever-diminishing until they disappear altogether. But how?

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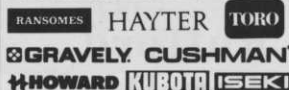
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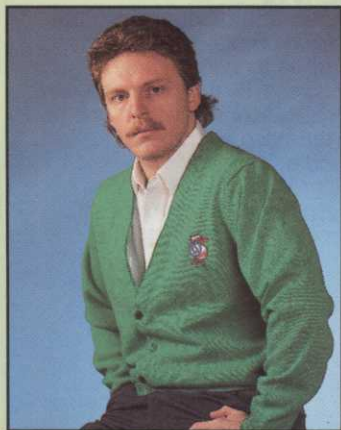
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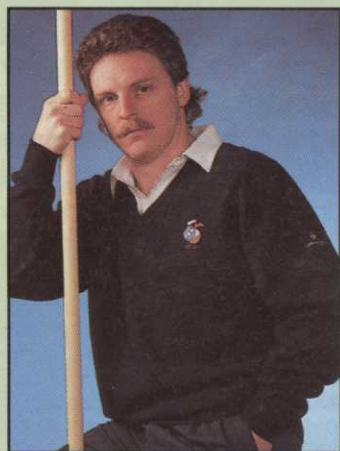
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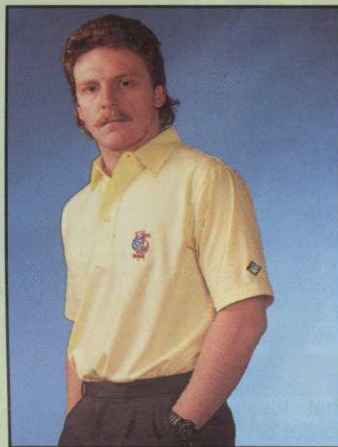


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THE WAY FORWARD

THERE are two things to be said about the Royal and Ancient golf club's survey "The Demand for Golf" which points up the need for 700 new golf courses in Britain.

1. There is not the slightest chance, other things being equal, of opening new courses at the rate of one every 5.2 days until the end of the century.

2. Even if such a rate of construction could be met it would still not satisfy the demand for golf.

The survey is based on a natural demand of 18 holes of golf for every 25,000 of population. But other expert studies, and practical experience in places such as Edinburgh where supply just about balances demand, suggest that the natural demand for golf is of the order of 18 holes for every 15,000 of population.

Even then the statistics can be misleading. Take the area around Virginia Water and Ascot which is positively saturated with golf clubs at Sunningdale (2), Wentworth (3), Berkshire (2) and Windsor. On a strict head count of population you would conclude that this area was over-supplied with golf. Yet for the golf-mad son of a window cleaner living in, say, Egham, there is no access at all to golf.

Clearly we must bear in mind the wise words of Mark Twain, appropriated to his own use by Disraeli: "There are lies, damned lies and statistics".

The most important factor in planning a new golf project is to establish the need for it. In this context it is unfortunate that most of the current golf construction is for the top of the market. Private clubs such as the East Sussex National and Wentworth's new south course do make important contributions to the game but they contribute very little if anything to solving the vital problem of making provision for everyone who wants to play golf. The same goes for resort development, the main source of new courses.

The irony of the current golf starvation is that the main constraint on course construction, the forbidding price of land, has eased considerably. Land is available and farmers are desperate to find alternative uses for their idle acres, land for which we tax-payers are paying subsidies to the farmers to take out of crop production.

There is also, as we know, a chronic shortage of houses in Britain and a no less pressing need to provide the employment to build them.

The third factor in this frustrating equation is that private finance is available to build houses in conjunction with a golf course which, in the curious economics of the housing market, does not cost anything.

If market forces were allowed to operate freely those three circumstances outlined above would very quickly supply the demand for golf in the hard pressed middle sector of the game, the run-of-the-mill golf club. But market forces are frustrated by planning restrictions. And quite right, too, you may say. We cannot have unrestricted housing development all over the nation's heritage of natural beauty.

My problem with that attitude is that planning is all too often applied as a



Peter Dobereiner . . . "the need for high quality courses is imperative."

synonym of prohibition. Well planned development does not despoil the countryside; it enhances it. The city of Cambridge is the outstanding example, among many, of how good development can compliment the natural surroundings.

For the end of the market which embraces the newcomers to the game, the casuals who do not want or cannot join established clubs, the frustrated masses most in need of access to golf, the local authorities should be doing much more. In most cases they have the land. They have an obligation to preserve green belts and, with golf courses, a perfect way of doing so. And at the same time they have an opportunity to exploit a sure fire way of generating income to relieve the burden on municipal finances. If any city councillor wants a vision of golf as a licence to print money I suggest he visits Beckenham Place Park in south London any time of day, any day of the week.

English municipal authorities in general are strangely reluctant, unlike their enlightened Scottish counterparts, to go in for golf. And it is in this area that I think the R and A's proposed National Golf Development Council could play a most important role as a catalyst, particularly in providing information on the economic potential of municipal golf projects.

The other vital function I envision of the NGDC is as an informed pressure group to gain the necessary concessions for golf in the planning process. Presumably it will also act as an advisory service for landowners contemplating going in for golf development, although most golf course architects routinely make site visits and give a free general assessment of the possibilities.

But by far the most important in solving the problem of providing for all who want to play the game, at a price they can afford, is the profit motive. I believe that the most fruitful approach will be partner-

ships agreements, between entrepreneurs and farmers, landowners and public authorities to build simple, basic fee-paying courses. By this I do not mean cheap and nasty courses, which has so often been the case with the despised 'muni'. A good golf course is the product of good design and the result does not have to be expensive. If a course is built from sound principles, allowing the land to tell the architect how the holes should flow, which is how Donald Ross and Alister Mackenzie worked, then good golf can be provided at a reasonable cost. And if the essential groundwork, such as drainage and soundly based greens, is done well in the beginning then courses can be upgraded over the years on a five or ten year plan, adding trees, shrubs, hazards and the embellishments which increase the character of the course.

So strongly do I believe in this concept of basic, high quality courses that I propose to devote the rest of my life to designing and building them.

PETER DOBEREINER

VETERAN golf correspondent, Peter Dobereiner, has retired from The Observer in order to pursue a new career as a golf course designer and consultant. He intends to restrict his writing commitments to books and magazines and to specialise in creating low budget golf courses. Dobereiner's experience in farming and golf has convinced him that economic construction and maintenance charges need not mean a sacrifice in the quality of golfing values. His first course opens next year and he has a number of projects in the planning stage.

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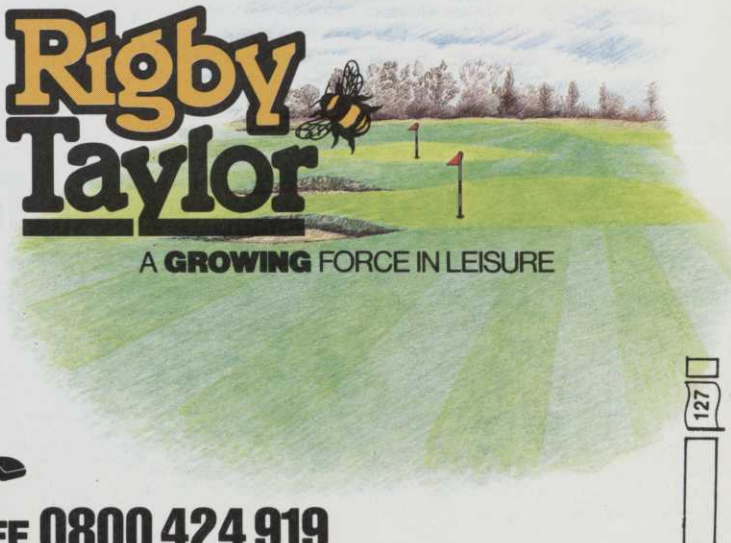
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