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March
1987



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GOLF GREENKEEPING

and Course Maintenance

The Official Magazine of the
British Golf Greenkeepers'
Association

Founded 1912

The Association is affiliated to the
English and Welsh Golf Unions

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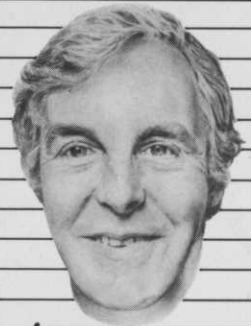
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Greenside Comment...



John Lelean

Another generation - A brighter future

Looking around the golf scene, many of the Head Greenkeepers who returned from serving their country to fight another battle reclaiming their derelict courses from the ravages of sheep, potato fields and the training exploits of the 'Home Guard', will soon be gently moving into retirement.

They are part of the old school of greenkeeping, men who were denied the educational opportunities the youth of today claim as their right. Their 'know-how' came from discussing problems with neighbouring greenkeepers, reading every book and magazine on matters of agronomy and through visits from salesmen picking up the latest information on mechanical equipment.

Not only have they maintained and developed their courses for the past forty years, but latterly have seen a massive increase in play with the accumulative problems that has brought. Compaction, thatch, disease, drainage, are all conditions exacerbated by the increased wear caused by seven days a week golf, even during the winter months.

Their successors, who do not remember the days when golf was played mainly at weekends, will now need to strive for better management of their resources.

The opportunities for business education are available, both through Polytechnics, Evening Institutes and the local library. In time it is to be hoped the Greenkeeper Training Committee will encourage one of the Universities to produce a syllabus for a degree course in amenity turf management, but until that day arrives, the present generation of greenkeepers will need to follow in the footsteps of their predecessors and seek out every opportunity to improve both their 'on course' knowledge and organisational abilities.

A change in government planning policy whereby poor agricultural land previously regarded as sacrosanct 'green belt' can now be released for development could encourage a number of private golf course constructions, particularly if they are linked with a hotel complex and residential housing.

Such a move could only be a step in the right direction for greenkeepers as events have shown it is the commercial undertaking in golf that recognises the worth of the man who manages the course and rewards him accordingly.

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Next Month

TRACTOR REVIEW

Including Golf Greenkeeping's *exclusive* survey of tractor use on the course
Fred Hawtree continues his educational review
New technology for golf course irrigation

Geoff Sadler, Head Groundsman,
Talbooth Hotel & Restaurant, Essex.

Bill Matthews, Superintendent,
Parks & Gardens,
Thanet District Council, Kent.

David Jones, Superintendent,
Parks & Gardens, City of London.

**“From grass to shrubs, from flowers to trees
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David Jones said, “Floranid cut leaching to a minimum so we needed fewer applications. We used it on a wide range of areas including raised shrub and flower beds.”

Bill Matthews was looking for strong, even growth sustained throughout the season. “Floranid more than lived up to my expectations. It produced the hard wearing grass that I needed and also gave me vigorous, healthy shrubs with good colour and appearance.”

Geoff Sadler considers that he has already saved money. “Our grass has to look good. Floranid gave us good colour and rapid recovery even after hard wear but without any excessive growth. Floranid has certainly worked well for us.”

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NEWS Round-up

NEW PESTICIDES SAFETY TRAINING VIDEOS & SEMINARS

Following the introduction of new legislation governing the use of environmental chemicals, May & Baker Environmental Products and Burts & Harvey have produced a valuable new training 'package' for everyone involved in the use of amenity pesticides.

A 14 minutes video film featuring television journalist Howard Stableford, examines the statutory requirements and vividly demonstrates the "do's & don'ts" of handling chemicals.

A 16 page booklet detailing essential safety procedures contains a useful ten-point safety check list as a separate self-adhesive sticker.

Entitled "The Safe Use of Environmental Chemicals", the video cassettes are available for purchase (VHS and Beta format at £46 each or U-Matic at £62).

A copy of the safety booklet and check list is available free of charge on request from May & Baker Environmental Products.

Contact:

May & Baker,
Regent House, Hubert Road,
Brentwood, Essex CM14 4TZ.
Tel: (0277) 230522

A seminar entitled "Pesticide Legislation and the Groundsman" will take place at the Manor House, University of Birmingham, on Thursday 9th April, 1987.

Papers to be presented include 'Legislation and Codes of Practice' by Mrs. H. Hamilton of the Ministry of Agriculture; 'Legislation and the Manufacturer' by Mr. K. Cleverley, ICI 'Pesticides and the Environment' by Dr. M. Anderson, Lecturer in Zoology at the University of Birmingham.

Cost of attendance at the seminar organised by the IOG Birmingham Branch will be £5.00 for Members and £10.00 for non-members.

DO YOU HAVE YOUR WARNING NOTICES?

WHEN APPLYING TURF CHEMICALS

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NEW WEATHER-MATIC DISTRIBUTOR

Prime Waterman Limited are the newly appointed distributors of the well known Weather-matic range of turf irrigation equipment in East Anglia and South East England.

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RANSOMES SIMS & JEFFERIES PLC TEL. NO. CHANGE

Ransomes Sims & Jefferies PLC have a new telephone number with effect from 2nd January 1987 and the following will apply:-

Tel. No: (0473) 270000
Fax. No: (0473) 270030
Telex: 98174
Cables: Ransomes Ipswich

Strike at John Deere's causes huge trading loss.

The slump in the western world's farm economy is reflected in the annual report of the John Deere Company who have just announced a massive net loss of 229 million dollars, on their world wide activities.

Part of the loss is attributed to a labour dispute with the United Auto Workers at eleven factory units in the USA, which, added to the reduced sales of farm equipment has produced the worst trading year in the company's 150 year history.

Shareholders are told John Deere intend to move further into 'grounds care equipment'. Last August they announced a new thrust into the golf and turf equipment market and introduced twelve new products especially designed for professional applications. They say they intend to introduce a wide range over the next two years and aim to make John Deere a major

equipment supplier in an expanding market. It is stated that there are currently 14,000 golf courses in the USA and about 400 new ones are constructed each year.

John Deere have a sales division at Nottingham and it is from this base they have already commenced to nibble at the British golf course market.

Last year they introduced three new compact tractor models with considerable success at the Windsor Show. Will it be long before some or all the new products such as the hydraulic gangs are brought into the UK?

Despite the net loss suffered in 1986, a closer look at the balance sheet reveals cash and short term investments totalling over 180 million dollars. Surely enough to keep the 'wolf from the door' for another 12 months and perhaps a bit over for further investment in golf course business.

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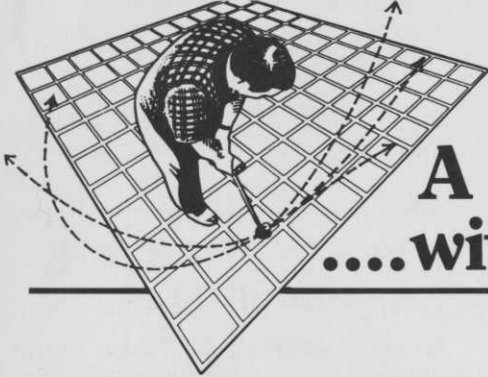
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A ROUND AT PEBBLE BEACHwithout leaving the Club-house!

A diagram of the first hole is projected on to the 12 foot by 8 foot screen. After studying the diagram, the first player (whose name will appear in the display panel) chooses whether he or she will tee off from the ladies' mens' or pro's tee. This information is fed into the micro-computer which directs the projector to advance to the appropriate tee. Instantly a full colour picture of the view that would be seen from that tee is projected on to the huge screen. The distance to the flag is shown on the display panel along with the player's name.

Using normal golf balls and clubs the player drives into the high-impact, heat-sealed screen. The distance the ball was hit, to the right or left and the amount of hook or slice is immediately shown on the display panel. Should the ball be lost, or go out of bounds or into the water it will be reported as such. The computer knows the precise location of every hazard.

After each player has played from the tee, PAR-T-GOLF'S computer determines which player's ball is "away". The projector is then advanced to the appropriate full-colour view of the hole and the players are informed, by name, of both the distance remaining to the flagstick as well as the type of area in which their ball lies (i.e. fairway, rough, sand, water, etc.) Should the ball land in the sand the player would play out of the simulated sand trap. If the ball should go into an unplayable area, water, hazard or lost the display panel will inform the Golfer of the lie, the appropriate picture will be projected on to the screen and the computer will add the correct number of strokes. Even penalty strokes are calculated.

The computer also observes golf etiquette, the player who wins the hole will "tee up" first on the next hole. The simulated turf Putting Area provides a fast, undulating surface and the cup is connected to the computer so that a Hole-In-One score can be achieved.

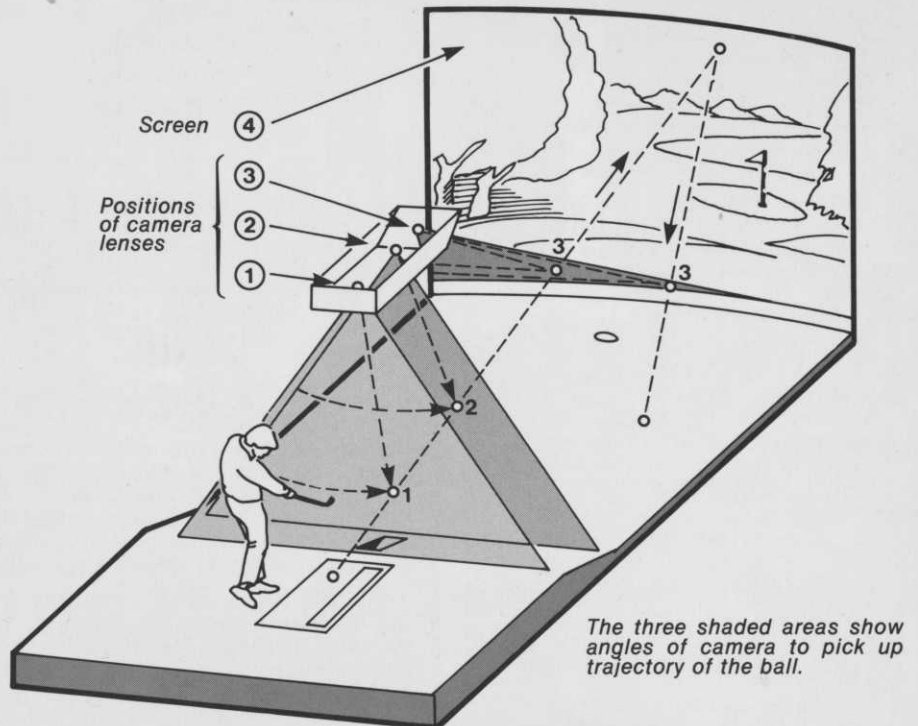
A Micro Computer

Perhaps the most incredible feature of PAR-T-GOLF is its new micro-computer. PAR-T-GOLF'S three

As the rain lashes across the golf course turning the bunkers into ponds, the biting east wind howls in the eaves of the clubhouse roof, what would be your reaction if your partner said "How would you fancy a round at Pebble Beach or Spyglass Hill today rather than fight our way round this lot", - indicating with a pointed finger to the inhospitable cold, wet, fairways, outside the warmth of the lounge bar.

Probably you would think he had an option on two free seats for Concorde or senile dementure was contributing to flights of fancy.

But, incredibly, a new to Britain, golf simulator, Par - T - Golf can provide a round of golf at either one of these famous courses. Using advanced micro-computer technology and a superior optical projection system, each hole of your chosen course is projected in colour onto the giant screen, approximately 20 feet away from the tee position.



miniature single-scan television cameras read the speed of the ball, the angle of the trajectory and the hook or slice, sending this information to the micro-computer which enables it to calculate the ball's position to the nearest yard.

When all players have reached the green, the micro-computer turns off the projector. Putting may be made from as far as 6 metres away on 21 different positions. The display panel will instruct the player "by name" of the appropriate spot to putt from. He then putts out and the display panel will ask for the "number of putts", the player will then enter the number of putts he has taken and his score will be displayed on the panel. The display panel will then instruct the next player.

The Par-T-Golf simulator will fit easily into the space occupied by a squash court.

It has the advantage of being set up within the premises of the golf club, adjacent to the bar and usual comforts. A round of nine holes with four players takes about 75 minutes, which would compare favourably with three frames of snooker.

Two complete systems have already been sold privately to individuals who will no doubt be providing golfing parties for their friends, within the confines of their mansions.

Two more systems have been installed in Leisure Centres. The first at the John Murray Sports Centre in Glasgow, the second will open during the first week in March, at the Harrow Leisure Centre.

The complete cost of the system is around £30,000, but leasing arrangements are also possible.

It does not take too much of a mathematical brain to calculate what the income for a busy club or leisure centre would be at an hourly charge of £10.00. Or what the cost is to a four-ball. Certainly a mere fraction of travelling to California for the real thing.

Further details can be provided by contacting the Editor of,

GOLF GREENKEEPING,
P.O. Box 12,
Wetherby,
West Yorkshire
LS22 4SR.

MAJOR INVESTMENT BY VITAX

The Company bought out by a consortium headed by Trevor Martin, fertiliser specialists Vitax Limited, is to build a new £¼ million multi-purpose headquarters at Southport on Merseyside.

The 20,000 square feet complex will contain a new manufacturing and production facility, packing plant, warehouse, laboratories, trials unit, offices and showrooms.

Trevor Martin has announced this major expansion programme to meet the increasing demand for Vitax products from their specialist users: the professional recreation and amenity market.

Two new extended release fertilisers for the sports and amenity market, KEY N and SR 2, have been introduced and will be available shortly.

Key N is a nitrogenous fertiliser (20%N) for use where reserves of both phosphate and potash are high, or where these two nutrients are made either annually or bi-annually. The nitrogen is included in three forms to provide quick-, medium- and slow-release and to ensure the continuous supply of plant food needed by the turf. Key N also contains magnesium (2.7%MgO) to promote lush green turf.

Recommended application rate: 35g per sq. m. (1 oz. per sq. yd).

SR2 is a 10:7:20 compound for application in the autumn or earlier part of the year when soil temperatures are 10°C or below, holding the nitrogen content until growth commences in the spring.

For clay constructed areas SR2 should be applied in the autumn or the earlier part of the year before top dressing, and on sand and free-draining areas it should be applied in the earlier part of the year before mid-March.

Recommended application rate: 35g per sq. m. (10 oz. per sq. yd.).

Vitax have also announced the third annual greenkeeper golf tournament will take place this year at the Ferndown Golf Club in Dorset on Thursday 21st May 1987.

Six teams of greenkeepers representing the Midlands, Mid-Anglia, Wales, the South-West, Devon and Cornwall, and the South Coast are to take part. Details from the Section Secretaries.

HUXLEYS TO STAGE TURF EQUIPMENT DEMONSTRATION

Huxleys Grass Machinery will be staging an impressive working display of professional grass and turf maintenance equipment at Stratfield Saye House, near Basingstoke, on Thursday 21st May 1987, the splendid country home of the Duke and Duchess of Wellington.

The grounds around the house feature a wide variety of grassed areas on which the full range of professional equipment will be put through its paces.

Entry will be by personal invitation card only. These should be obtained in advance from:

Michael Bird,
Huxleys Grass Machinery,
The Dean, New Alresford,
Hants. SO24 9BL.
Telephone: 0962 73 3222.

LA MANGA CLUB TO DEVELOP SECOND MAJOR RESORT IN SPAIN

Inmogolf SA, the developer of the leisure resort at La Manga in southern Spain, is to develop its second major site at San Roque, near Sotogrande, covering an area of 340 acres.

They plan to build a total of 640 properties, including villas and hotel units, with the first phase of construction beginning in March 1987.

The San Roque estate is ideally suited for championship golf, being undulating and extensively covered with mature cork trees. The new course has been designed by golf course architect, Dave Thomas.

Construction of the 18-hole championship course was scheduled to begin in February 1987, with the course opening for play 15 months later. The Club house will be based around the existing Domecq mansion.

All golf activity at San Roque will be the responsibility of Tony Jacklin, who will be resident at the club.

'MOVE TO FRESH PASTURES'

INTURF LTD, the York based turf growers, started by ex-Rolawn Managing Director, Derek Edwards have moved to new offices at Pocklington.

They can be contacted at 11b Regent Street, Pocklington, York YO4 2KN, Telephone: 07592-4101.

Derek's turf nurseries on the Yorkshire Wolds have already supplied a number of prestigious championship courses.

NEW SMOOTH STALK MEADOW GRASS

British Seed Houses Ltd. have been appointed main distributors for the new Smooth Stalk Meadow Grass called JULIA.

The Sports Turf Research Institute at Bingley have made JULIA the highest rated poa pratense in their latest 1987 Seed Guide. Independent trials carried out at the Institute showed that Julia is a compact hard wearing poa which withstands regular mowing down to 20mm and has a good resistance to fungal disease.

The Company intend to introduce JULIA in several of their fine turf mixtures for the forthcoming season.

Principle uses of JULIA are for golf tees and fairways. A 20% addition is recommended for tees and 10% on fairways.

In their new 1987 Catalogue, BSH Ltd. have announced that they are launching a new low maintenance grass seed mixture called A22, which contains LOGRO Slender Creeping Red Fescue and LORINA Perennial Ryegrass.

In the early 1970's British Seed Houses started a research and development programme in an attempt to obtain some short growing, high quality grasses and as a result of this comprehensive work the Company are now able to offer two of the shortest growing grass varieties available within their respective species, showing a considerable saving on mowing costs.

A free revised leaflet has also been issued giving details of ten wild flora conservation mixtures. The leaflet gives clear and concise cultivation and management information which is so important when sowing wild flora.



Attention!

Landscape architects, parks managers, landscape contractors, golf greenkeepers, groundsmen and turf producers . . .

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Literary Review and Educational Supplement

(Part 1)

...by Fred Hawtree



I am sure they meant well but I have only just finished the book they gave me for Christmas - *A Walk with a White Bushman* by Sir Laurens van der Post. It is meaty stuff but I invented a new reading system to cope with the tough stretches and to forestall brain damage. I would open the book at random and beaver away until the mind boggled. Then I'd let it unboggle for a time before diving in somewhere else.

Eventually, I began to recognise familiar sections and finally string them together. This is unusual when I am dealing with heavy stuff because my memory tends to be fluffy and, like the filling of a superior *duvet*, non-absorbent and easily washable.

But not only grit and invention drove me on finally to Page 318. I also became deeply anxious that in reminiscing about meetings with such as Admiral Patterson, General Wavell and Lord Louis Mountbatten, other memories might be stirred and the author would point the finger at me because, in 1943 at Bandoeng, I dropped out of his Japanese class after only three lessons.

At the time, I could not believe that I should ever make it through to any sort of conversation and, B.T.C. (British Theatre Company) had just commissioned from me a new Act IV for 'Cinderella' with Sergeant Argent in the title role. Weakly, I settled for the easy way out.

Sir Laurens obviously has no memory problems. For example, he once travelled widely through Russia* after waiting eight weeks for a visa in London. On his first flight out of Moscow, a Russian sitting next to him rattled off the following useful data, which I condense for convenience.

RUSSIA

Size of:	2½ times bigger than continental United States. 1/3 smaller than Africa 3 times bigger than Australia 6,000 miles east to west 3,000 miles north to south 800 miles from southernmost point to the equator
Rivers:	Volga 2,300 miles long Yenesei 2,700 miles long
Tides:	Baltic, difference between high and low: A few inches Sea of Okhotsk, difference between high and low: 34 feet
Mountains:	Mount Stalin, 24,390 feet Narodnaya (Urals), 5,000 feet
Volcanoes:	200; 60 are active
Population:	In millions:- Ukrainians, 160; Byelo, 8; Uzbeks, 6; Tartars, 5; Khazaks, 4; Azerbaijanians, 3; Armenians, 3; Georgians, 3; Jews, 2½; Lithuanians, 2½; Moldavians, 2¼; Volga Germans, 2; Turkoman, 1; Kirghiz, 1; Chuwash, 1½; plus two villages of Russian negroes.

See what I mean? Nothing fluffy there at all! The man who can memorise all that and a lot more in the middle of the night can call up several more megabytes than my home computer. He will also know exactly which pockets contain his tickets, passport, wallet, traveller's cheques and could reel off their serial numbers if put to it. I have never managed to do any of those things.

In the near future, Sir Laurens is off to Africa with Prince Charles who also sounds pretty sharp. I can imagine the conversation round the camp fire.

Scene: *The Kalahari Desert*

The Biltong sandwiches and chips, washed down by a bottle of Tweejongezellen and followed by Kendal Mint Cake, have produced that pleasant sense of well-being after a day's march which obliges men to talk ruminatively of their inner selves before turning in.

Prince C: Nice bit of biltong that.

Sir L: You can't beat the Takatokwane take-away. Looks like it might be fine tomorrow though, from the size of the Bushmen's bottoms. They're like camels' humps you know.

Prince C: (*Wearily*) Yes. You've mentioned it before (*Pause*) Not too tired?

Sir L: Not a bit. Wouldn't mind a bit of fireside reminiscence as a matter of fact.

Prince C: That's good (*Then, remembering a Wogan interview long ago*) Sir Laurens! You've had a long, happy and successful career. Have you any regrets?

Sir L: (*After reviewing the past 50 years*) Maybe, just two!

Prince C: And they are.....?

Sir L: For starters, I reckon those Russians played me for a sucker way back in the Sixties.

Prince C: How come?

Sir L: It took me eight weeks to get a visa which I should have had in a fortnight. I now suspect they were making time for that chap on the aeroplane to mug up his facts in the *Soviet Geographic*. (Actually, I mugged them up as well when I got home). Then they let me in and put him in the next seat on my very first internal flight. I was being programmed.

Prince C: Could be right. Any other pointers?

Sir L: Yes. I was in and out of Tashkent Airport six times and each time, I met someone I knew - An Aussie ex-soldier, a fan of a TV series of mine, a West African envoy, a Cape Coloured boy, a Japanese friend and an Indian official.

Prince C: Sounds a mixed bag, especially in Tashkent. Not exactly the hub of the universe is it? And rather a poor Duty-Free if I remember rightly. I bet they were set up to report back to the KGB. But what's the other regret?

Sir L: Well, there was young Hawtree in Java. Dropped out of my Japanese class when he had just got as far as saying 'Good morning' with the third degree of politeness. I've always felt I failed him somehow.

Prince C: You can't win 'em all. He's an ungrateful cuss in any case. We had him to tea at Buckingham Palace a while back; he never even dropped a line to thank us for the cucumber sandwiches. Come to think of it, neither did any of the other 2,499 punters we'd invited.

**Journey into Russia*, Hogarth Press, London.1964)

(He spots a lioness creeping up to a tin of Corned Eland and throws a branch from the fire to scare her off. Unfortunately it lands on a reporter's note book and that sets light to all the sound recorder's and T.V. cameras which are essential equipment on safari these days. Pretty soon the Kalahari, too, is no more than a smoking ruin).

* * * * *

A likely tale, I hear you saying; and what has all this got to do with golf greenkeeping? My lucky lads, you have been distracted by the coating on the pill. We have been talking about education, which today's head greenkeeper has to consider with all this apprenticeship training and job experience grafted on to his other duties. The raw recruit should think about it too because if he is to progress in an increasingly competitive environment, he cannot learn too much. BIGGA will provide him with lectures and discussions, the Greenkeeper Training Committee will guide his progress, the STRI and some agricultural colleges will provide him with educational courses. But the influence of his head greenkeeper will be paramount in shaping his attitude to a potentially rewarding job.

You will have to wait impatiently until next month before I give you the low-down on education in Part II. Meanwhile you might like to think about how you are teaching your job or how you are learning it. You'll find a few clues in the preceding scenario.

There is a lot of greenkeeping lore which you will not find in the text-books. Watch this space next month to find out how to sock it to them and how to soak it up.

Last month's Word Power Test

Robert Dickson from Wanstead has written to tell me that 'Baffy' is also a Northern Scot's name for his slippers. Thank you Robert, that was news to me. Chambers' Dictionary of Scots Dialect says "Baffy" (adj) = chubby: The Oxford (Shorter) Dictionary only gives Baffy - 'short wooden club for lofting'. Chambers' Etymological Dictionary doesn't give it at all.



Reach for it...

with a Beaver P9 hydraulic flail cutter. Reach up banks, down ditches, over fences, under trees and shrubs to leave a smooth, even finish. Hooks up easily to any 13-30 hp compact diesel tractor. Cuts up to one years growth in areas inaccessible to ordinary mowers. Quick change flail or sicklebar heads keep the P9 paying its way on golf courses, parks, sports fields and general landscapes.



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 Artex Avenue · Rustington
 Littlehampton · West Sussex
 ENGLAND BN16 3LN
 Telephone: (0903) 783155
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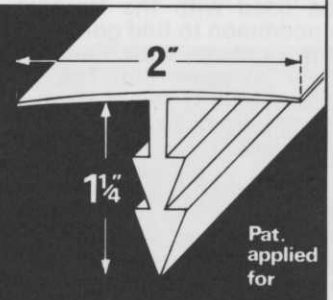
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Two new off road vehicles from Suzuki



GOLF COURSE TRACTORS ARE IN THE VINTAGE CLASS

The majority of tractors used on British golf courses have been purchased second hand and many are over twenty years old according to a survey conducted with over a thousand greenkeepers by Golf Greenkeeping.

The trend is to replace the second hand agricultural tractor with one of the new generation of compacts, though the higher horse power models are still favoured for fairway mowing.

Few club committees appear to budget for the renewal of equipment, preferring to wait until the machinery breaks down and is non repairable before it is replaced.

The age of machinery is also reflected in a survey of implements to be used with the tractors. It is not uncommon to find golf courses cutting the fairways with Ransome 5 gangs over 20 years old. The best to date however is a set of Pennsylvania five gangs from Lloyds still cutting after 42 years.

Next month Golf Greenkeeping will be examining the current state of the tractor market as it affects golf clubs. As well as a detailed report on tractor use and buying trends for the future as supplied through the survey, we will also be publishing a list of the current models and prices, together with mechanical and technical details.

The Editor would like to thank all greenkeepers who completed the survey forms and supplied such valuable information. It is by such co-operation that we at Golf Greenkeeping are able in turn to give you that vital knowledge so you may make better buying decisions.

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June 1986

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Two special Suzuki Santana models with exclusively designed body stripes and interiors for the British market are being introduced this month. The all white Santana and all black Santana "Sport". Both retain all the main characteristics of the outstanding SJ410 models and are powered by the same well proven 1 litre engine, but the newcomers boast a host of special features as standard.

These include a 5-speed gearbox, special colour co-ordinated deluxe cloth interior, split rear seats, servo-assisted brakes and softer suspension for improved on road ride. In addition, each of the two models have their own distinctive styling features:

The all white Suzuki Santana has colour co-ordinated white wheelarch trims and bumpers as well as coloured keyed headlights and indicator guards. The deluxe white hood is standard. Grey and yellow graphics on the car's exterior are complimented by a matching grey and yellow flecked cloth interior treatment.

On the all black Suzuki Santana "Sport", the wheelarch trims, bumpers and lightguards are colour-keyed black to match the body. The exterior graphics are grey and red, matching the grey and red pinstripe interior of the vehicle.

The Suzuki Santana is the Spanish built version of the "go-anywhere" rugged SJ410 series. It is the result of a joint venture between Suzuki Motor Company and the Land Rover Santana Factory at Linares - in which Suzuki now has a 20% holding - to build SJ models in Europe.

The 4 stroke 970cc engine runs on 2 star petrol from an 8.8 gallon tank. The price inclusive of VAT is £6,499.

LETTERS

Dear Sir,

With regard to your comment last month 'SNOW BOUND', page 8, I would like to let you know that apart from two days mid-week our course remained open all winter, and our Saturday and Sunday Winter League competitions have been completed to date.

Yours sincerely,
S. J. PHILIPS,
Greenkeeper St. David's City G.C.
Haverfordwest, Dyfed.

Preamble . . . *by James A. Wyllie, C.G.C.S.*

On a recent trip to Britain I visited with Mr. Fred Hawtree, a golf course architect of world renown. While we were at his home Fred showed me his incredible golf museum and library. It was one of the best private collections of golf memorabilia I have ever seen. During my perusal, I came across a copy of the National Association of Greenkeepers of America's official magazine. It was the National Greenkeeper, Oct. 1931, and it cost 25 cents.

It was a great surprise to open the book and lo and behold the headline staring at me said, "Toronto Hit by Hot Weather", by Wm. J. Sansom, Greenkeeper, Toronto Golf Club, Toronto, Ontario.

Mr. Hawtree was kind enough to copy the article for me. It is an interesting article, especially as it talks about "scald" and Poa Annua. Interestingly, he was recommending a 5-12-2 fertilizer, a complete opposite of what is recommended today.

Fred Hawtree is a very interesting gentleman, and a superb host. He and his son Martin operate a very successful firm called Hawtree and Son, Golf Course Architects. They are located in Woodstock, a very beautiful town, quite close to Oxford. Fred is a regular and witty writer of articles for Golf Greenkeeping and Course Maintenance.

Spotted in the February edition of Greenmaster the magazine for the Canadian Superintendents

A round in one at St. Andrews



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At St Andrews they've found that it also does a great job on the fairways too, where its floating head cutting units make a superb finish.

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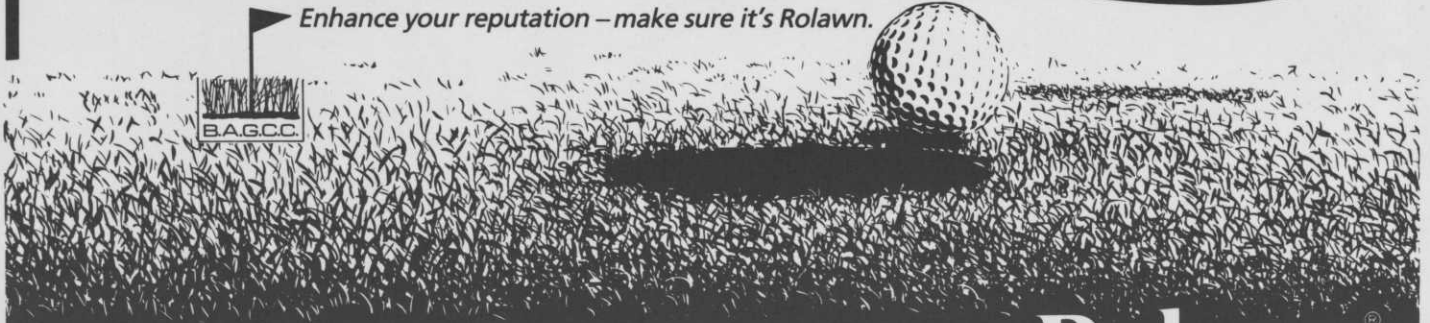
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Encouraging Wildlife on golf courses



WETLANDS

Many golf courses exhibit some water feature, natural or artificial. This section will deal with the management of these features for wildlife.

PONDS need careful management to ensure the continuation of a balanced community. Older ponds are more likely to have established communities of amphibians: frogs, toads and newts. The Great Crested Newt is protected by law: advice on this creature can be obtained from local wildlife organisations or the Flora and Fauna Preservation Society, or British Herpetological Society

Plants which are attractive to all types of wildlife are yellow and white waterlilies, water crowfoot in the pond, reedmace (generally known as bullrush) and bogbean, yellow flag, and water forget-me-not. In the marshy surrounds plants such as marsh marigold, bugle and meadowsweet will flourish. Dragonflies and damselflies will be attracted to a healthy pond and add a great deal to the visual interest.

POND CREATION and management is a relatively simple business as long as the following are borne in mind:

- do not allow water from fertilized areas to drain into the pond. This will create an imbalance in the nutrient levels in the water and will lead to excessive algal growth. The pond will soon look like pea-soup and will be of little value.
 - do not allow trees to overshadow the pond. This prevents light reaching the pond and prevents water plants from producing the oxygen which is vital to the health of the water. Falling leaves are also a problem as they can cause serious silting.
 - do remove tall trees from the south edge of the pond. This will allow light to reach the plants. Do leave trees, shrubs, and grass on the other edges. This provides cover for young amphibians and other creatures. It is best to leave an unmown area around the pond edge.
 - do not spray chemicals nearby if the wind will carry the "drift" towards a pond. Wind blown chemicals can have a disastrous effect on the pond life.
 - do remove excess silt from the pond but only in the autumn. At this time of year amphibians are not breeding or hibernating and so damage is minimised.
 - do refer to the diagram of suitable plants. Planting of ponds must be planned to include various plants for different levels.
- A great variety of insects live and breed in the pond: dragonflies, and damselflies spend their larval stage in the pond but also require emergent vegetation when they leave the pond to take to the air. These and other insects are snapped up by swooping housemartins and bats.

DITCHES, STREAMS AND RIVERS support a different, more hardy vegetation as conditions fluctuate from season to season. Rushes, mosses, liverworts, ferns, and various flowering plants, frogs and toads, grass snakes and even eels are all common in these environments. Management of the vegetation should be planned to remove excessive growth but is best done by implementing a rotation, so that certain areas are left growing while others are cut back.

This extract from a report by the London Wildlife Trust is part of a survey aimed at encouraging wildlife on golf courses.

The Trust formed in 1981 is among the country's leading nature conservation groups.

The results of the work by Maureen Fordham and the Director of the London Wildlife Trust, Jeremy Iles is worthy of far greater distribution than confined to the areas around London.

Copies of the full report can be obtained price £1.25 from London Wildlife Trust, 80 York Way, London N19AG or by telephoning 01 278 6612.

Golf Greenkeepers are grateful to the Trust for their permission to print extracts from their survey. Golfers and Greenkeepers alike have a common interest in encouraging wildlife to their courses.

It is part of the pleasure in golf to see and hear Britain's indigenous birds and animals in their natural habitat.

This section of the report deals with ponds, ditches and streams. In later issues of the magazine other natural habitats will be examined.

The Editor would also like to hear from Greenkeepers about their own efforts to encourage wildlife on their courses.

Editor's note - The green construction article will be held over for a future date.

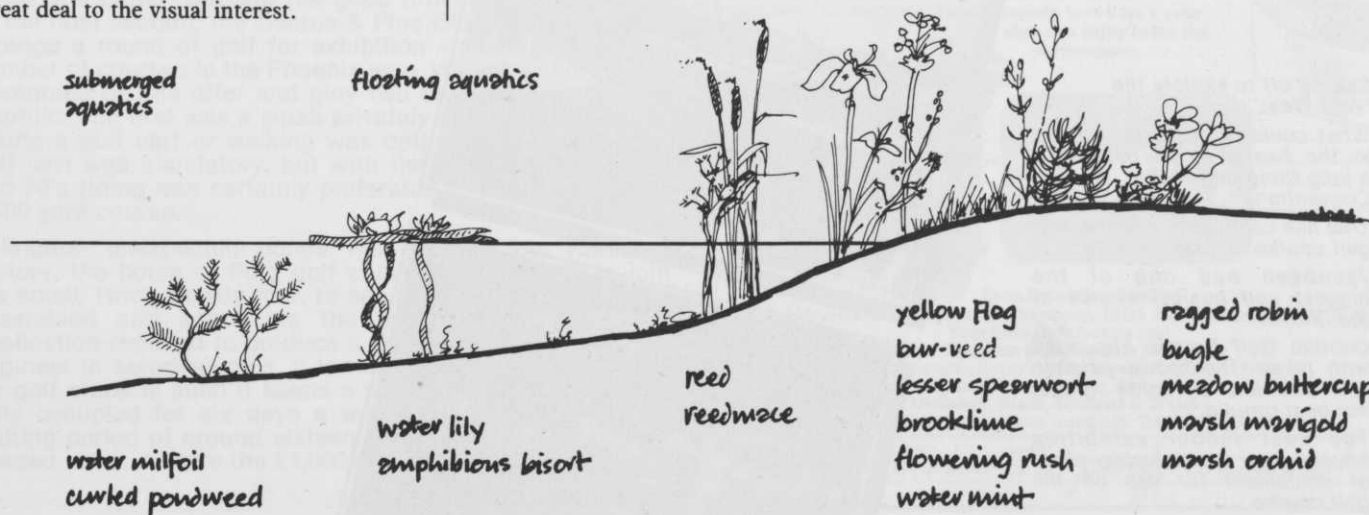
marginal plants

emergent plants

marsh plants

submerged
aquatics

floating
aquatics



water milfoil
curled pondweed

water lily
amphibious bistort

reed
reedmace

yellow flag
bur-reed
lesser spearwort
brooklime
flowering rush
water mint

ragged robin
bugle
meadow buttercup
marsh marigold
marsh orchid

PHOENIX, ARIZONA

*John Lelean reports on the
GCSAA Convention and Show*

Why is it that a business trip abroad invariably produces the comment around the bar of the 19th - 'Have you had a good holiday?' The eight day trip to Phoenix to visit the GCSAA Annual Convention was certainly enjoyable, interesting, educational, informative, well worth the effort - but holiday!

Our party who included the Jacobsen Tournament winners, Peter Shaw from Preston and Adrian Stiff, Tracey Park, left Heathrow by TWA an hour late due to snow problems across the Atlantic. Despite an early arrival at Heathrow to book adjacent seats, on boarding the Jumbo 747, we found the aircraft already half full with passengers from a previous flight, whose plane had failed to arrive.

It seemed for a time it was to be either standing room only or those without a seat proceed to Gatwick.

The first leg to New York took about six hours where incoming passengers went through the usual immigration procedures. 'Stand on the white line and don't move until you are told'. However on this occasion the queue did move reasonably quickly.

Baggage was checked by customs and then it was a short walk through the John F. Kennedy airport to the domestic flight departure to Phoenix - Sky Harbor.

This flight was considerably more civilised, with a great deal more room to stretch out and curl up for a much needed sleep. There was also the opportunity to spot the odd familiar face, such as Christine Smith from the IOG, Jonathan Franks from British Seed Houses and Sunningdale's Jack McMillan.

On arrival at Phoenix, quite an exciting experience as one descends over the mountain ranges into the vast valleys alive with flickering lights, we telephoned to our chosen hotel for transport. Imagine our surprise when what should arrive but a shining white London Taxi-Cab! Certainly a tight squeeze but we made it.

1. Setting off to explore the 'Wild West'.
2. What could be nicer than a dip in the heated hotel pool after a long tiring day at the Convention!
3. Tree like cacti dominate the new golf course at Troon Village.
4. Jacobsen had one of the biggest and busiest stands at the Show.
5. Ocotillo Golf Course abounded with lakes. The brown patches are dormant bermuda grass, not bear ground.
6. The vast indoor exhibition housed ever conceivable piece of equipment for use on the golf course.

The Ultimate in 'One Upmanship'



Golf carts are very big business for American Golf Courses.

A 27 hole complex would have around 180, many making two trips a day.

For the golfer looking for the touch extra this mini 'Roller' has colour T.V. above the driver, video camera for recording the putt that sinks, a built in bar with ice-box and mobile telephone to keep in touch with the office.

It is surprising how the tiredness lifts after such a trip and after an exploratory tour of the Westcourt in the Buttes hotel, certainly the best appointed most of us have ever seen, it was 'down-town' to an all-night diner to experience a real hamburger with all the trimmings. If one wants to eat well in clean, neat surroundings, with friendly helpful staff, the roadside diners take a great deal of beating.

Our main objective was to visit the American Golf Course Superintendents Convention and Exhibition, attend some of the seminars and if time permitted, see a few golf courses.

Outstanding Hospitality

It should be said from the outset, the GCSAA hospitality to the British contingent was outstanding. Through their newly appointed public relations man, Bob Still, they did everything possible to make our visit memorable. We congratulate him on his appointment and thank him for his kindness and concern.

As far as visiting golf courses was concerned we managed to go one better, through the good offices of Abe Hughes of the host section, the Cactus & Pine GCSA. He offered to arrange a round of golf for exhibition visitors at one of a number of courses in the Phoenix area. We were able to take advantage of this offer and play two courses, El Caro and Ocotillo. The first was a small privately owned par 60 where taking a golf cart or walking was optional. At Ocotillo the golf cart was mandatory, but with the temperatures in the mid 70's riding was certainly preferable to walking over the 6,600 yard course.

Another unexpected bonus visit was to the Karstang factory, the home of Ping golf clubs. We managed to join the small, twice weekly tour, to see the world famous clubs assembled and appreciate the precision and technical application required to produce a golf club developed by an engineer in aerodynamics. It is hard to believe the demand for golf clubs is such it keeps a workforce of around 1,500 fully occupied for six days a week. Even then there is a waiting period of around sixteen weeks for the new copper headed irons, despite the £1,000 price tag.

continued on p.20

£ For £

TORO SPRINKLERS GIVE YOU AND YOUR CLUB TWICE THE PERFORMANCE!

Sprinklers, the sharp end of a golf course watering system are vitally important to the economics, efficiency and long term viability of your club's investment!

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Consider these important points: -

1. CORROSION & DAMAGE

Unlike sprinklers containing corrosive metal working parts, Toro Sprinklers are engineered with hi-tech plastics such as 'Cyclocac'® and 'Delrin'®. This eliminates corrosion whilst making each sprinkler highly resistant to impact damage. (It also saves expensive mower blades from accidental damage!)

2. EFFECTIVE COVERAGE

Being gear driven each Toro Sprinkler provides a smooth, uninterrupted working action which enhances water distribution.

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4. WET SPOTS

Check Valves also eliminate the problems of 'low head drainage' and the need for gravel sumps on low lying areas.

5. INDIVIDUAL CONTROL

The valves also enable greens staff to use sprinklers individually - applying larger or smaller amounts of water on selected parts of the course...

6. EASE OF MAINTENANCE

Toro Sprinklers are designed to make servicing simple. Repairs can be carried out on the spot - no need to take the sprinkler away to a workbench!

7. IMPROVED WARRANTIES

Toro now offer increased Warranty protection for large size sprinklers - in some instances these have been given twice the length of validity - there's confidence!

8. WHO USES TORO SPRINKLERS?

St. Andrews, the All England Lawn Tennis & Croquet Club, Wimbledon and Wembley Stadium - three good examples!

Consider these points then ask your nearest Toro distributor for the facts. He will explain how £ for £ your club can enjoy twice the performance.



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Turf Irrigation Services, Sandbach. Tel: 04775-255

Enjoy twice the performance!

The Bunton 22 inch greens-mower is probably the most expensive pedestrian mower ever made. It retails at £2,950. Although sold under the Bunton name the machine is manufactured in Japan.

A GUIDE TO 1987 GREEN MOWERS

E. P. Barrus Limited have formed a new division within the Company to handle professional grass care machinery and now represent Bunton, who manufacture both in the U.S.A. and Denmark.

The Bunton Company is well known to north American golf superintendents and have been building commercial mowers for over thirty five years and has always prided itself on developing equipment that satisfies the particular needs of professional greenkeepers and groundsman.

The Bunton special 22" pedestrian greens mower manufactured for them in Japan is of particular interest to greenkeepers.

The machine has a powered rotary brush mounted between the front roller and the reel, the brush rotates in the opposite direction to raise the grass before it is cut. The brush is easily adjusted to suit the pitch of the bottom blade and can be raised to reduce the amount of pressure on the grass, or disengaged for mowing without the brush. It can be replaced with a verticut attachment for thatching.

Equal power is supplied to both sides of the heavy gauge aluminium alloy drive roller to ensure a straight blade cut. The nine-blade, cutting reel is highly resilient and resistant to wear.

Quick release wheels are fitted with pneumatic transport tyres to give good adhesion on uphill ground: it has an all gear drive train and a 3.5hp Robin engine. Other features include a plastic grass box specially designed to catch all the cuttings and hold them.

The 20" Zephyr from Greens of Arbroath is distributed by Claymore Grass Machinery.

It has a 10 bladed cutting cylinder and a superfine bottom blade, giving 140 cuts per metre.

There is a choice of three engines, the Honda, Villiers and Briggs and Stratton and the cut can be adjusted from 1" down to 3/32".

A number of improvements have been made in the past year including powered transport wheels. Retailing at £898.00 plus VAT, it is one of the more competitively priced machines for cutting golf greens.

Lloyds of Letchworth manufacture the Paladin self propelled greens mower, still regarded by many greenkeepers as the machine to obtain the finest finish.

The height of cut is adjusted by a single knob which calibrates in one thousandth of an inch. The cylinder is eight bladed operating at a faster speed than other pedestrian machines. The additional stress is overcome by fitting tapered roller bearings instead of the usual ball bearings. This prolongs the life of the machine.

Priced at well over £1,000 the Lloyds Paladin is not a cheap greens mower but it does have a reputation for reliability.

The Atco Club range starts at around £600 rising to £1,000 for the B20 Special. The top of the range has a 12 bladed cylinder giving 134 cuts per yard with an adjustment from 1/16" to 1 3/4" on cutting height. The cutting width is 20".

The Club B20 Special also has transport wheels and an adjustable comb attachment.

There is a trend for greenkeepers to return to the use of lighter pedestrian mowers for cutting greens. Many believe it reduces the problems of compaction and build-up of thatch.



The 'Turf Groomer'TM, the green conditioner first introduced last year for the Greens King IV, has now been adapted to fit onto the Jacobsen pedestrian range of greensmowers.

Ransomes' range of greens mowers are three basic machines. The new GT Greens Triple launched last year, the widely used Triplex 171 and an old favourite, the pedestrian controlled Auto Certes.

The GT Greens Triple with 127mm (5in.) diameter 9-knife cutting cylinders can also be supplied with cutting units for tees as well as verticut and vibra spiker units. Hydraulically driven, each unit is interchanged without the use of tools.

Powered by a 8.9kw (12hp) twin cylinder Kubota water cooled diesel engine mounted on rubber mounts to keep vibration to a minimum, the new GT Greens Triple has an uncut turning diameter of 1m (40in) with power steering.

GT Modifications Power Steering Added

Since the prototype was demonstrated last August, modifications have taken place at Ransomes Nacton Works to improve the steering geometry. At the same time power steering has been added. This has improved the turning circle according to Brian Mitchell the Ransomes Technical Manager.

The GT Greens Triple is now in production and the first batch due to be delivered to dealers by the end of February has already been sold out.

from revolving and the cutting units from either rising or lowering the engine will continue running when he dismounts. But as a safety measure if the foot pedal controlling ground speed is touched by anything, at any time, the engine stops automatically.

Still a firm favourite, the Auto Certes 10-knife cutting cylinder with a choice of 4 stroke engines gives 148 cuts per metre (135 cuts per yard). Height of cut is adjustable from 3 to 19mm ($\frac{1}{8}$ " to $\frac{3}{4}$ ").

An important feature of the Ransomes Auto Certes is its two-part fully machined smooth cast aluminium landroll with tapered ends which incorporates a differential, to make for easy turning without marking the fine turf.



The operator's platform on Ransomes new all-hydraulic GT Triple Greens Mower can be raised in seconds for easy access to the centre cutting unit and to empty the grasscatcher.

Priority for dealer delivery has been given to those outlets who have obtained firm sales from golf courses.

To maintain the same quality of finish on every green a digital readout, calibrated in cuts per metre, enables the required cutting ratio to be selected and then set for mowing speeds up to 8km/h (5mph). Transporting the mower between greens at speeds of up to 12km/h (7½mph) does not disturb the setting.

Interlock System Incorporated

During prototype trials on golf courses the engine needed to be stopped and restarted every time the grass catchers needed emptying. To overcome this an interlock system has been incorporated. Provided the operator leaves the controls in the correct position to prevent the cylinders

The Toro 300 Triplex is still one of the most popular greens machines world wide, but with their two main competitors, Jacobsen and Ransomes introducing the diesel engine it is surprising Toro have not followed along similar lines.

It was fully expected that Toro would have unveiled a diesel version of their Triplex at this year's Phoenix Exhibition but instead, as far as greens machines are concerned they produced a prototype version of the 'turf groomer'.

Naturally Jacobsen, who have patented the invention by a Californian Golf Course Superintendent were somewhat upset and it is understood some hard words were exchanged between the executives of the two companies. Threats of writs were in the air and unless Toro can show their groomer is not a violation of patent it is doubtful whether it will ever make the production lines.

PRICE COMPARISON for pedestrian mowers

Atco Club B20 Special	£1,004
Bunton 22 inch Greensmower (including all extras)	£2,950
Greens Zephyrs Superfine 20 inch	£898.00
Jacobsen 22 inch Walk Behind	£1,490.00
Turf Groomer Attachment	£680.00
(including all optional extras)	£2,100.00
Lloyds Paladine 21 inch	£1,125.00
(optional extras add)	£139.00
Ransomes Auto Certes 20 inch Briggs & Stratton	£1,062.00
Villiers Engine	£1,130.00
(optional extras add)	£146.00

All prices exclusive of VAT

The late Lawrence L. Lloyd, past member of the GCSAA and inventor of the Turf Groomer™ greens conditioner, was honoured at a reception in Phoenix by the Jacobsen Division of Textron Inc.

At the reception, John R. Dwyer, Jr. President of Jacobsen, presented Mrs. Barbara Lloyd with a plaque commemorating her husband's contributions to modern turf care equipment design.

Lawrence Lloyd the Superintendent of a Californian Golf Course developed and tested the Turf Groomer™ over a period of two years. His primary goal was to combat fast thatch build-up on putting greens, but his invention proved to be beneficial in a number of ways. Improved green consistency, increased green speed without lowering cutting height, and improved control of broadleaf weeds and Bermuda creepage on green fringes were just a few of these additional benefits.

Lloyd who died tragically last year of a massive heart attack was vice president and superintendent at the Rancho Canada Golf Club in Carmel. Jacobsen purchased his patent in 1985. As part of the patent purchase agreement, the Lloyd estate receives income from the sale of each Turf Groomer™.

ARIZONA GOLF COURSES

John Lelean visits the new type of desert courses.



Arizona can almost be described as the State of 'instant golf courses'. The homeland of the Navajo and Hopi Indians, has now been transformed from the stark desert terrain so familiar to viewers of western films by the engineering miracles of irrigation. First by the construction of the Roosevelt Dam and then, in 1936, by the building of the mammoth Hoover Dam on the Colorado River.

The raw inhospitable desert where only sage bushes and cacti flourish would seem to be about the last place to produce lush fairways and billiard table greens, but a combination of the right grass seed and an abundance of water has transformed Phoenix Valley into one of the fastest growing cities in the United States.

The climate in Arizona, hot in Summer, pleasantly warm in Winter, with a low humidity, is attracting vast numbers of people from all over the United States. Many come to escape the harsh winters further north, others to live and work in this developing and thriving tourist area.

There are currently over one hundred golf courses in the Valley with around twenty more under construction to cater for a population of about a million people. A fair proportion are municipal, but the majority have been developed by real estate property companies, where the financial return is achieved by selling and renting what is known in the USA as condominiums. Flats, houses and maisonettes adjacent to the course, which invariably includes the right to membership of the club.

Watermation

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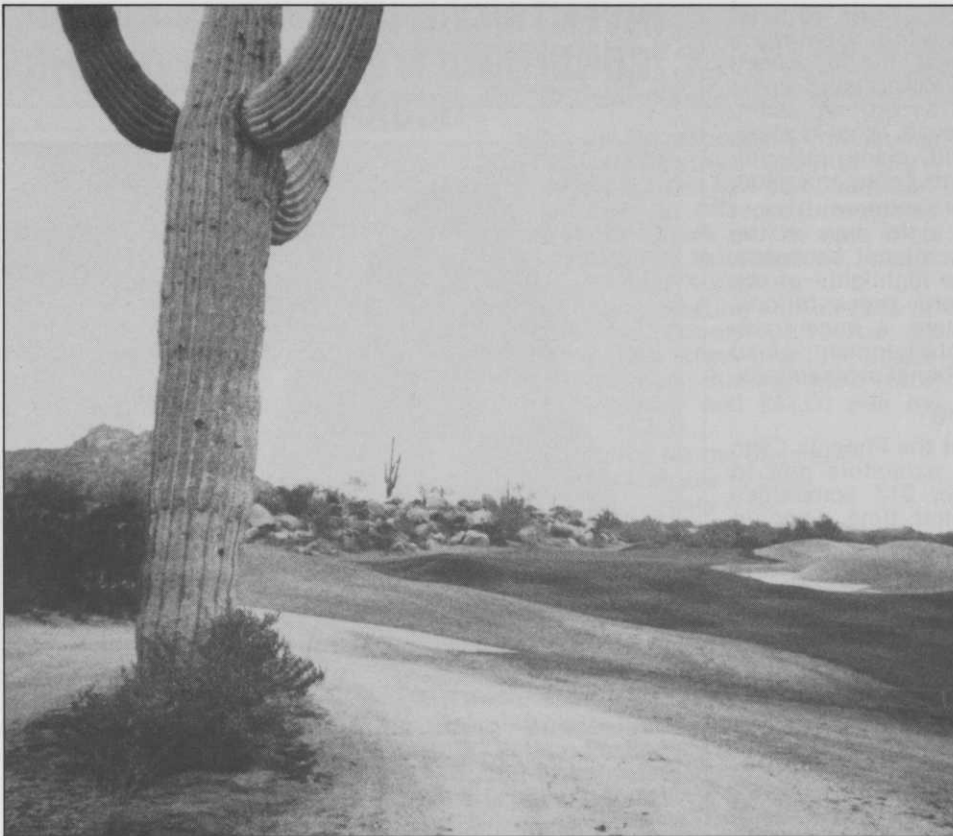
So if you have a golf course, tennis court, bowling green, running track, football pitch . . . or even a whole town to be irrigated and monitored in the Middle East, we can offer you irrigation equipment which is specially designed and suitable for the needs of those areas.

Naturally, we can still supply you with all our usual range of equipment and spares and in fact we now have the most comprehensive range of irrigation equipment in the Country. THE CHOICE IS YOURS.

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The seventh at Troon Village showing the differing shades of ryegrass winter fairway and bermuda grass collars.

Two of Arizona's finest championship golf courses have been built 25 miles to the north of Phoenix at Scottsdale under the mountain known as Pinnacle Peak. Desert Highlands, the first to be constructed, was to a design by Jack Nicklaus, the second a few yards across the highway, the newest of the two, Troon Village designed by Tom Weiskopf and architect Jay Morrish.

“We didn't even use any drawings - it was already there”

The par three, fifteenth hole, 'Troon Mountain' was recently included in the 100 greatest holes on all American golf courses by the Golf magazine. "This was a natural", said Tom Weiskopf. "I saw that hole in my mind right away. We didn't even use any drawings - it was already there".

Troon Village is a truly desert course, where the lush velvet fairways wind through the giant cacti. Lakes abound, a strange sight in a landscape more associated with the wild west and bands of marauding Indians.

Domestic water for the valley is brought down from the Colorado River by concrete lined canals. The water to irrigate the ever increasing number of golf courses is provided by reclaiming and purifying the sewage effluent. A double use of one supply.

It is said to be completely uncontaminated, though dead fish were seen around the edges of the lakes at both Troon, the Tournament Players Club at Scottsdale and further south at Ocotillo, a course built on rejected farming land. In all probability it is unlikely to be the water, but possibly a fish fungal disease or mis-placed herbicide.

The greens at most courses are sown with Pennncross, providing a firm true and fast putting surface. Certainly at the four courses already mentioned and another par 60 called El Caro all had firm greens despite the need for constant irrigation.

The drainage system under the sand construction destroyed the myth that all American golf courses have wet, soggy, target type greens. To stop the ball on the green requires just as much golfing skill as it does on Britain's championship links.

Playing Ocotillo, what was believed to be a fine second shot to the green across the lake with a fairway wood failed to hold and bounced through. What is more the pitch mark was scarcely discernible.

Tees are mainly sown with Pennncross Eagle and the fairways and rough, if one could insult the fairway collars as rough, are seeded with Bermuda grass.

Bermuda grass dies off during the winter months to show a two to three inch depth of thick dead light brown coloured matting. Not difficult to play from but requiring a firm wrist action to regain the cut grass area.

To provide the dense velvet fairways during the winter months the course is oversown with rye grass. This in turn dies out in the summer heat when the Bermuda grass grows through.

Several courses allowed the bunker surrounds to be framed by the dead Bermuda grass, which made them look as if the collars had been sprayed with a herbicide but it did bring the sand traps into focus and they were visually very attractive from the tee positions.

The small party of British Greenkeepers who visited the Troon Village and the T.P.C. at Scottsdale were made most welcome by the course management and were given every facility to walk the course and see the construction and maintenance techniques employed.

Much of the equipment is similar to that used in Britain. Greens are cut with a triplex, mainly Jacobsen and Toro; fairways with the 350D or similar machines.

At Troon Village we were all impressed with the ultra tidiness of the course. There was nothing out of place. Even the recent cut divots on the fairways had been freshly repaired with a sand and seed mixture.

Every two or three holes a large container of fresh water, with a column of paper cups was sited by the tee. This was a feature found at all the golf clubs visited. At Ocotillo they went one better when a caddy car with a rear mounted bar arrived driven by a blonde candidate for 'page 3' offering iced beers or something softer.

Staffing levels are considerably higher than in Britain. Again our party were noticeably green with envy while playing Ocotillo to see four Mexican greenstaff raking one bunker with wire sprung rakes. Nearby four more were taking weed from the lake surface using scoops on 20 feet poles. At least four others were seen cutting fairways and approaches with the Jacobsen HF5, a Toro 350 and a Ransomes 180.

Golf in the United States is big business and treated as such by the financiers. Wage rates reflect the importance given to those who manage the golf courses. Not only salaries but status as well is at a premium.

The Course Manager, Superintendent is regarded as the most important person at the club.

He ranks above the professional and often above the administrator of even the most prestigious club house complex. It is recognised that without his abilities to keep the course in perfect order, the other functions such as restaurant, professional's shop and sales of property would not exist.

‘Kings within their own Kingdom’

The standard of the golf course has a direct bearing on the price that can be asked for the surrounding property. With competition so fierce to bring in new property owners, the top superintendents are 'Kings within their own Kingdom'.

Troon Village is a case in point. As the newest of the two courses at Pinnacle Peak there is tremendous competition with Desert Highlands built some two years earlier.

To become a member at Troon, one first has to buy a plot of land, currently selling at 250,000 dollars. Membership of the club then costs 25,000 dollars plus a subscription of about 175 dollars a month.

Potential members at these prices are hardly queueing to join so the standard of the golf is paramount.

We were told Troon has a current membership of 62, but they are hoping to entice some of the Desert Highland members to sell their property and cross the road!

The club rules state - no casual visitors -, but if you can find a member willing to pay a hundred dollars to take you round as a guest then the delights of this magnificent golf course are yours.

Among several invitations, including the GCSAA Banquet on the final day, a number of the UK visitors attended a reception by the Toro Organisation and the Jacobsen International Dinner. Jacobsen's event, comprising some sixty guests, was a truly cosmopolitan affair with representatives from every country where golf is played. What is more, despite the range of nationalities and many differing languages, there seemed to be no bar to communication.

The conference began with educational seminars - almost 400 hours were offered throughout the eight days of the conference - and ended with more educational seminars, sessions and special events. Among the highlights of the conference week activities were award presentations, personal appearances of famous speakers, a huge trade show, a gala banquet with big-name entertainment, allied golf association seminars and more educational programmes.

Record Attendance

The Trade Show opened on Saturday at the Phoenix Civic Plaza. Among the 331 exhibits were 81 exhibitors new to the show. Last year in San Francisco, 317 companies exhibited their products - 74 for the first time - and in Washington, D.C., the year before, 292 exhibits were on display. The attendance record was also broken with 12,588 registering throughout the week. Additional Educational programs were also conducted by the USGA Green Section, the American Society of Golf Course Architects, the National Golf Foundation (NGF) and the Sports Turf Managers Association (STMA).

An international session was also held on the opening day of the Trade Show, with speakers from China, Sweden, Japan, Mexico, the Philippines and Britain.

The Association Vice-Chairman, Jack McMillan, explained the problems besetting the British greenkeepers through their various Associations and the work that had been done to unite the profession under the BIGGA banner.

Howard Swan took the audience through the traditions of the starting point of golf on the Scottish Links and its initial development inland on the heathlands of the home counties.

Our third representative, Jim Arthur, headed his presentation 'Common Sense and Technology', but rather like the Member of Parliament who fell foul to the lashing from the Rt. Hon. Winston Spencer Churchill he was somewhat 'overcome by the exuberance of his own verbosity' and incurred the wrath of at least two members of his audience.

The first, an old protagonist, Jim Wyllie, from the Bay View Golf and Country Club, Toronto and secondly from Richard Fry, a British Marketing Consultant, who at one time headed the Amenity Turf Chemical Sales Division of May & Baker. He took exception to the suggestion that the Agro-Chemical Industry since the banning of DDT had produced chemicals with an even greater degree of toxicity.

However, it was a lively session to end the proceedings, but perhaps unfortunate that the audience was somewhat sparse and dominated by a substantial representation from this side of the Atlantic.

Award for Trent Jones Snr.

The newly elected Association President Donald Hearn told a full house at the annual Banquet, "I am very honoured and humbled to assume the presidency of GCSAA. This is a great time for GCSAA and its membership to grow and expand its services".

Later in the programme, NBC golf commentator Jay Randolph presented GCSAA's highest honour - the Old Tom Morris Award - to Robert Trent Jones, Snr.

He described "Trent Jones as the Beethoven of the golf world, designing one masterpiece after another". Of Ballybunion's new course, also a creation of Trent Jones Jay Randolph quoted Golf World's writer, Peter Dobereiner who wrote - "I have no hesitation in proclaiming this course a masterpiece, the greatest links course in the world, and by a clear margin". Jones accepted the Old Tom Morris Award and then shared personal thoughts and concerns about the future of the game he loves so much. He believed the design of courses will be hurt tremendously if the authorities don't do something about the ball. "It's too hot (long) nowadays. These top guys are driving past the natural and designed obstacles that make skill part of golf".

Following the banquet and award presentation, Marie Osmond and the Osmond Brothers entertained the audience with a blend of pop and country and western tunes.

The next GCSAA's International Golf Course Conference and Show will be held in Houston, Feb. 1-9, 1988.

INVENTOR OF INNOVATIVE GREENS CONDITIONER HONOURED DURING GCSAA SHOW



A plaque picturing the Turf Groomer™ and commemorating its inventor, her late husband Larry, was presented to Mrs. Barbara Lloyd by Jacobsen's President, John R. Dwyer, at a special ceremony in Phoenix.

An accomplished golf course superintendent, Larry Lloyd had identified a need for improvement in his greens, said Dwyer. "He turned this need into a concept for a product and then, through experimentation and hard work over a period of several years, he perfected the idea of the Turf Groomer™ greens conditioner.

Jacobsen have the exclusive manufacturing rights to Lloyd's patented invention, with proceeds from the sale of each Turf Groomer™ going to the Lloyd estate. "It is only fitting and proper that a man's family should benefit from his hard work and ingenuity in creating such a revolutionary new product as the Turf Groomer™", said John Dwyer.

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Applicants must be fully experienced in all aspects of modern greenkeeping, machinery maintenance, staff supervision and turf management techniques

Salary Negotiable

Accommodation available

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STOURBRIDGE GOLF CLUB,
The Club House,
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West Midlands DY8 2RB

SECTIONAL News

SOUTH COAST

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

Our Winter Lecture Programme continued in February with a visit by Mr. Paul Watson of Ransomes.

Mr. Watson gave an illustrated talk on the firm's history, and brought us up to date with Ransomes new equipment aimed at the golf course market. This included Ransomes TMV 20, a three-wheeled dual truck maintenance power unit, and their new diesel GT Triple Greens Machine, first seen last year at the Windsor Show.

For information, full details on these machines were given in the Windsor Show review in the October Journal.

A full list of Section Tournaments for 1987 are listed below:-

Spring Tournament:

Stoneham Golf Club,
Thursday, May 28th, 1987

Vitax Greenkeepers Tournament:

Ferndown Golf Club
Wednesday, May 20th, 1987

Summer Tournament:

Lee-on-Solent Golf Club
Thursday, July 16th, 1987

Annual Match:

South-West - High Post Golf Club
Thursday, September 3rd, 1987

Autumn Invitation Meeting:

Cowdray Park Golf Club
Thursday, September 24th, 1987

Turkey Trot:

Royal Winchester Golf Club
Wednesday, December 9th, 1987

The position of Tournament Organiser, now vacant, should be resolved at the Section's A.G.M. in March. The name of our new organiser will be given in the April notes of the Section, and all applications to play in our tournaments should be directed to the new organiser.

At a recent Committee Meeting, it was agreed that a handicap limit of 22 be placed on all members when playing in our Section Tournaments. Some of us, including your scribe, are still trying to maintain a handicap in excess of this figure!

MID ANGLIA

*Hon. Sec: L. Wakerell,
26 Loxley Road, Berkhamsted,
Herts. HP4 3PS*

The January Lecture at St. Neots Golf Club was well attended when some 50 members came along to hear Jon Albutt, Technical Manager of Synchemicals Limited, give a lengthy talk on the up to date legislation for the use and storage of chemicals on golf courses.

Some clubs give low priority to the safety aspects as required by law, while most give no priority at all.

This could well change in the future as new legislation will require a Certificate of Competence from the user as from 1st January, 1989.

Who will be responsible for issuing these Certificates? Greenkeepers should expect the new administration of B.I.G.G.A. to offer positive guide lines in the future as the new laws are complex and extensive.

1987 FIXTURES

The Spring Meeting will be held at Bedford and County Golf Club on Tuesday, 12th May over 27 holes. Please let Ken Bunting have your Entry, Handicap and £12.00 Fee by 1st May.

Other dates for the diary are:-

A.G.M. and 18 holes:

Arkley G.C.
17th June.

Mid Anglia v. Midlands

Berkhamsted G.C.
Thursday 9th July

Summer Tournament over 36 holes:

Welwyn Garden City G.C.
Monday 13th July

B.I.G.G.A. Annual Tournament:

Verulam Golf Club
Monday 17th, Tuesday 18th,
Wednesday 19th August

Autumn Meeting over 27 holes:

Woodlands Golf Club
Wednesday 23rd September

Christmas Invitation:

South Bedfordshire Golf Club
Thursday 10th December

MIDLANDS

*Hon. Sec: Steve Wood
37 Holford Avenue,
Bescot, Walsall*

Telephone: (0922) 611380

Minutes of Regional Board Meeting held on Monday, 23rd February, 1987, at Lutterworth.

Present: P. McCarron (Chairman), A. Kite, S. Wood, W. Cole, R. W. Willars (Secretary).

Being the first meeting of the newly formed B I G G A, it has been called to discuss any points that the Regional Board felt should be brought up at the next Board of Management Meeting on 2nd March by its representative P. McCarron.

1. Communication. It was felt that Minutes of Board of Management meetings should be sent to all Area Administrators as soon as possible after such meetings.
2. It was reported that E I G G A, East of England section had been contacted and a list of members sent to the Chairman. The Midland section said they had no E I G G A members.
3. It was suggested that Regional Board meeting expenses be paid from Headquarters.
4. Concern was expressed about the 1988 Annual Golf Tournament which was to be held in the Midland section. If this is correct, could a date be determined to enable a venue to be arranged, if this is possible at this later date.
5. Annual Golf Tournament to be arranged by Board of Management.
6. Category of non trade members to be determined.
7. Membership cards, with courtesy of Course, to be given to all members as in the past.

Next Meeting to be arranged by the Chairman

NORTHERN

*Hon. Sec: D. C. Hannam,
12 Moorfield Avenue, Menston,
W. Yorks.
Telephone: (0943) 72008*

Winter is still with us but it seems a kind winter. Kind because in this neck of the woods construction is continuing outside virtually unabated, resulting in some good work being accomplished. Drainage work, which as a rule ends up with you being stuck up to the eyeballs in mud has progressed on a relatively clean level with heavy materials moving about without fuss.

A retrospective view of golf green construction was taken on January 22 when "8th green: Baildon - take two" was successfully screened. Apart from the nostalgia the compelling question was "How the hell did we do it?" All in a winter's work, of course!

On the early morning of St. Valentine's Day, 1987 60-plus people, some still drying tears of mirth from their eyes departed from Oakdale Golf Club after our Annual Dinner. Joining us for the evening were our honoured guests, Mr. W. Coates, President of Oakdale G.C. and his wife. Mr. George Malcolm, current Chairman of the now amalgamated BGGG, and his wife. The man responsible for the merriment was our guest speaker, Mr. Brian Bolus the former Yorks / Notts / Derby and England cricketer who succeeded in having most people in stitches throughout his spot. All in all an excellent evening.

FORTHCOMING FIXTURES:

*Spring Tournament, Keighley G.C.
June 3rd*

*President's Day, Horsforth G.C.
June 16th*

*Roses Match, Saddleworth G.C.
July 22nd*

It is with sadness that we report the death, during January of Mr. A. R. Millar of Skegness.

Mr. Millar was a Northern Section Life Member. Our deepest sympathies to his family.

In order to prevent a break in continuity if you feel like sending your subscription through it will be banked and held safe. Although it is not confirmed, it seems fairly certain that the sub-rate will be £15 for ALL classes. Whatever line is adopted by our new Board of Management, it will take some time for the organisation to function. Please be patient and **do not** become disillusioned. The provincial scene will remain relatively unchanged.

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North Yorkshire HG5 0QQ



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East Leake,
Nr. Loughborough LE12 5RL

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Leeds, Yorkshire

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HEAD GREENKEEPER

commencing 1st March 1988

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There is no accommodation but the salary which is negotiable will be commensurate with a Club of this standing

For further details and application form apply to:-

The Chairman,
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Appointments



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— For the attention of Hugh Brown —

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Donald Harradine
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Telephone: 091-711561

Fred Hawtree, Martin Hawtree
Hawtree & Son,
5 Oxford Street, Woodstock,
Oxford OX7 1TQ
Telephone: 0993-811976

Donald Steel
Cotton Pennink Steel & Partners
Miller House, Corporation Street,
Rugby, Warwick CV21 2DW
Telephone: 0788-77191

Tom McAuley
38 Moira Drive, Bangor, Co. Down,
N. Ireland BT20 4RW
Telephone: 0247-465953

Peter Harradine,
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United Arab Emirates
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PROVISIONAL
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Cameron Sinclair
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Telephone: 0788-77191

Simon Gidman
Hawtree & Son
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Telephone: 0993-811976

OVERSEAS (Full)

Eddie Hackett
28 Ailesbury Drive, Dublin 4, Eire
Telephone: Dublin 691592

Joan Dudok Van Heel
Benkenlaan 4, 1640 St. Genesius,
Rode, Nr. Brussels, Belgium
Telephone: 358-5518

Pier Mancinelli
21 Via Achille Papa 00195, Rome, Italy
Telephone: 06-36036-35

Jan Sederholm,
S. 252 34 Helsingborg, K. Kristoffersg 3A,
Sweden
Telephone: 042-371-84

OVERSEAS (Provisional)

Kurt Roßknecht,
Dennermoos 5a, 8990 Lindau-Bad,
Schachen, Germany
Telephone: 08382-230-05

R. Berthet
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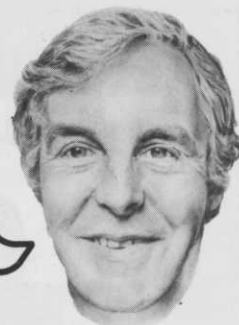
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NORTH WEST

Hon. Sec: David F. Golding,
38 The Grove, Flixton,
Manchester M31 3JH
Telephone: 061-748-8592

As we look forward to a new season, already our golf committee have several confirmed dates for your diaries:

Thursday April 30th
Moor Allerton Golf Club - Northern Region
Rufford Top Dress' Invitation Day
Thursday May 21st
Bury Golf Club - Spring Tournament
Wednesday July 22 - Saddleworth Golf Club
Battle of the Roses
Date to be confirmed - Heswall Golf Club
Autumn Tournament
To be arranged - Match v. North West
Stewards Association

Seminar 1987 - Sell out!

At the time of writing we are just over a week away from our third one day Seminar at Mere and I must

apologise to those whose applications had to be returned due to the demand for tickets.

The 180 tickets were sold out by mid-February which makes all the hard work put in by our seminar sub-committee well worthwhile.

I trust that the new idea of the brochures went down well and that they will be useful when ordering time comes round.

We are already considering holding another one day seminar possibly in the Autumn.

It is seen as a good indicator that members prefer one day seminars as opposed to the winter series of evening lectures held previously. Therefore we trust that all members will soon be supporting these days as I think everybody who attends agrees that they really are value for money.

Committee 1987-88

We will shortly confirm a date and venue for an Annual General Meeting when the officers will be nominated and elected by the members.

Already confirmed is the unity between the two past committees of B.G.G.A. and E.I.G.G.A. With a blend of youth and experience the future of the North-West B.I.G.G.A. committee looks set for years to come.

Mr. Bill, awson (Heswall G.C.) will continue to represent the section on the National Board of Management. I am sure members will be wanting to know about subscription rates, wage scales, ties, etc. but unfortunately we are not yet aware of decisions and a period of patience is required.

The appointment of the Administrator is imminent and we can then expect confirmation on many points.

We will endeavour to keep you informed with developments.

FORTHCOMING GOLF TOURNAMENTS

APRIL	16	St. Mellion G.C. (Welsh)	JULY	1	Ladbrook Park G.C. (Mid)
	30	Moor Allerton G.C. (Rufford Top Dress Invitation)		9	Berkhampstead G.C. (Mid Anglia versus Midlands)
MAY	14	Robin Hood G.C. (Mid).		13	Welwyn Garden City G.C. (Mid Anglia)
	20	Vitax Tournament Ferndown G.C.		16	Lee on Solent G.C. (S.C.)
	21	Bury G.C. (N.W.)		22	Saddleworth G.C. (Roses Match)
	28	Stoneham G.C. (S.C.)	AUGUST		NATIONAL TOURNAMENT
JUNE	3	Keighley G.C. (Northern)	17-18-19		Verulam Golf Club
	16	Horsforth G.C. (Northern)	SEPT.	3	High Post G.C. (S.C.)
	17	Arkley G.C. (Mid Anglia)		21	Brocton G.C. (Mid)
	18	Southerndown G.C. (Welsh)		23	Woodlands G.C. (Mid Anglia)
				24	Cowdray Park G.C. (S.C.)

Contact Sectional Secretaries for entry forms

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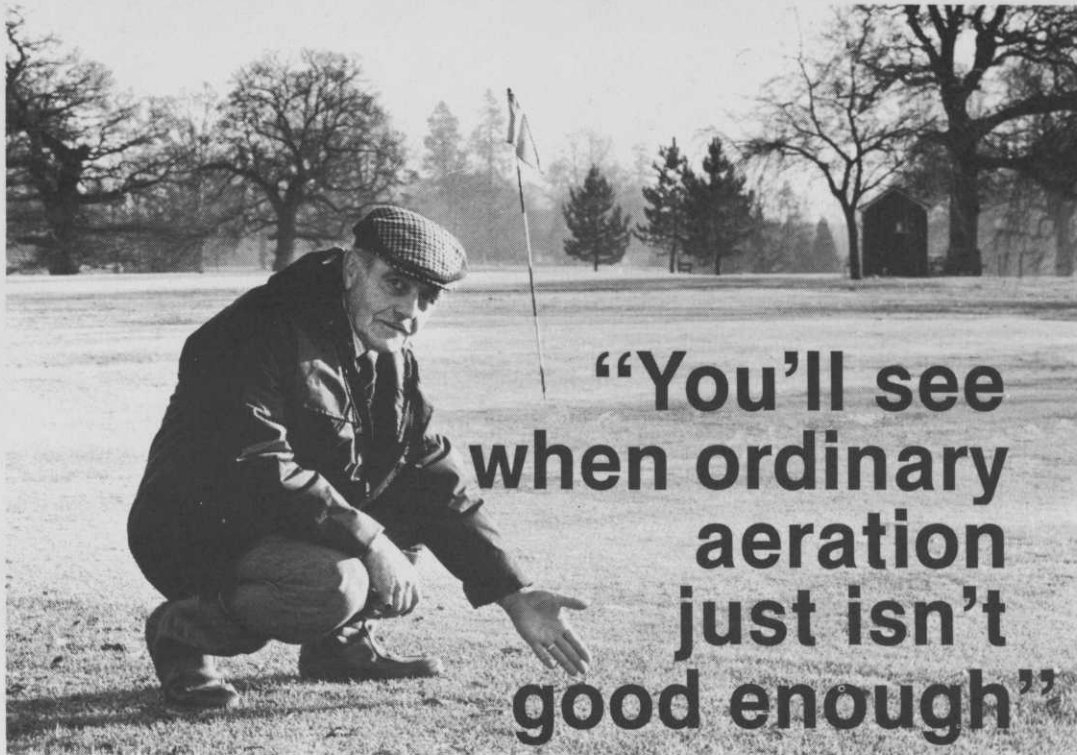
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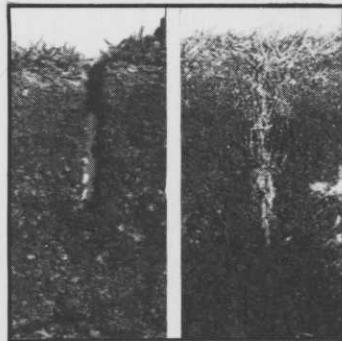
“In fact, I reckon that for most heavily used sports areas, Core Cultivation should be a routine part of any turf maintenance programme. Not just a problem solver. Obviously, how often you use hollow tining varies according to different soil conditions. I find once in the Spring and Autumn is about right.

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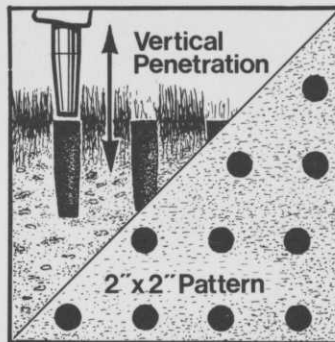


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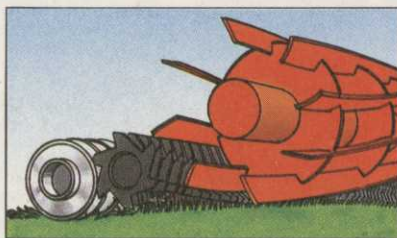


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