



Greenkeeper

*The Official Magazine of the Scottish and
International Golf Greenkeepers' Association*

SEPTEMBER 1982



Supaturf

GREEN AND PL

RIGBY TAYLOR-NO.1 DISTRIBUTORS OF TU

We're first for turf care products countrywide! First, because our products are the finest available to our industry. First, because our service is second to none. First, because our customers have come to recognise that our

standards of dependability and excellence are unequalled.

Now, for Autumn and Winter, Rigby Taylor offers a complete range of Fertilizers and Top Dressings for fine turf care.

NO. 1 FOR AUTUMN TURF CARE

FERTILIZERS

TAYLOR'S SUPER AND SUPREME FERTILIZERS AUTUMN/WINTER GRADE

Carefully prepared Autumn fertilizer dressings for fine turf application. Taylor's Super and Supreme fertilizers Autumn/Winter grade, will provide all the food elements necessary for the development of a good healthy sward and root system and at the same time discourage undesirable top growth, which is so conducive to attacks of such fungus diseases as Fusarium. Packed in 50kg bags.

TAYLOR'S ORGANIC MINI GRANULAR AW.1

An Autumn and Winter Fine Turf Fertilizer in mini-granular form with slow release Nitrogen and organic Bone Meal. Recommended to be applied from September onwards to all areas of fine turf. Packed in 28kg bags.

S.A.I. TURF FOOD MINI-CRUM 2

An Autumn and Winter fine turf fertilizer from Scottish Agricultural Industries, S.A.I. Mini-Crum 2 is recommended for all fine turf areas including golf, bowling and putting greens, tennis courts, etc. Packed in 25kg bags.

NO. 1 FOR TOP DRESSING

HUMISOL

An Autumn dressing for Greens containing a bulky organic base, consisting of fine granulated peat at the same time supplying those nutrients necessary to promote root growth, leading to a healthy vigorous sward the following spring. Packed in 50kg bags.

FENDRESS

A fine blend of Fenland Peat/Soil and Lime free Bedfordshire Silica Sand, carefully mixed, shredded and sieved. Available in 25kg bags or in bulk loads of 15, 18 and 20 tonnes.

CHASE ORGANICS C.S.M.

A powdered soil conditioner, made solely from specially selected and blended seaweeds. Can be applied direct to the turf or mixed with bulky top dressings to aid distribution. Packed in 25kg bags.

LYTHAM

TURFACE-SOIL SUPPLEMENT

A granulated, inorganic, calcined mineral earth product, Turface will not disintegrate, crumble or cake whilst in the soil. Retains moisture at root level, gives superb drainage and aeration, stimulates deep root growth and reduces danger of disease. Packed in 50lb bags.



EASANT LAND

RF CARE PRODUCTS NORTH AND SOUTH



**REMEMBER - RIGBY TAYLOR NOW
NORTH AND SOUTH - TO SERVE YOU**

**I.O.G. 5-6th Stand
Show October A-10**

**WINDSOR I.O.G. 21-22-23rd Stand
Show September P20-23**

Rigby Taylor

A CUT ABOVE THE REST

NORTH - Rigby Taylor Ltd, Victoria Works, Garside Street, Bolton, Lancashire, BL1 4AE. Tel: (0204) 389888. Telex: 635687.

SOUTH - Rigby Taylor (South) Ltd, Unit 7, The Riverway Estate, Peasmarsh, Guildford, Surrey, GU3 1LZ. Tel: (0483) 35657. Telex: 859407 RTSG.



who's at the No.1 spot?

At the heart of a successful golfer is an unending drive to improve performance. At the heart of our Grass Machinery Range is similar philosophy.

Take the **New Motor 180**. This small, lightweight ride-on is tailor-made for golf tees and surrounds, large private and public lawns. High manoeuvrability, a low profile that gives stability on steep slopes and responsive controls, give an outstanding performance over its 71" cut.

The **Motor 180** is just one of five major new models added to our range—the widest in the field that keeps us at the number one spot.

Ransomes—150 years ahead
a great tradition in grasscutting 1832-1982

Ransomes Sims & Jefferies PLC
Ipswich IP3 9QG. Telephone: Ipswich (0473) 712222. Telex: 98174



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MANUFACTURERS OF AGRICULTURAL
& HORTICULTURAL MACHINERY
RANSOMES SIMS & JEFFERIES PLC
IPSWICH

RANSOMES

Greenkeeper

SEPTEMBER 1982

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Eddie Park, Frank Pennink, Donald Steel, John Stobbs.

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Borough of Southend-on-Sea — Sport and Recreation Department

HEAD GREENKEEPER (SUPERNUMERARY)

BELFAIRS GOLF COURSE

Technical Grade 4/5 (£6,501-£7,875) (Pay award pending)

Due to sickness the present Officer is on extended leave but is due to retire in September 1983. The person appointed to be responsible for the day-to-day management and supervision of the greenkeeping staff for an 18-hole Golf Course, 9-hole Pitch and Putt, adjacent sports facilities including Bowling Greens, Football, Rugby and Hockey Pitches and Cricket Wickets.

Considerable practical experience is required as the Golf Course is very busy and is maintained to a high standard.

Housing accommodation available on service tenancy or mortgage facilities, removal expenses payable.

Further details and application forms available and returnable to: Director of Sport and Recreation, Civic Centre, Southend-on-Sea, Essex SS2 6ER, within fourteen days of the appearance of this advertisement.



The SCOTTISH and INTERNATIONAL
GOLF GREENKEEPERS ASSOCIATION

strongly recommends that

Golf Clubs and Local Authorities employ only

REGISTERED

Greenkeepers on their Greenkeeping Staff.

Names on the Register are available from:

The General Secretary,
**SCOTTISH and INTERNATIONAL
GOLF GREENKEEPERS ASSOCIATION**

J. D. McKean,
Gleninver,
84 Neilston Road,
Uplawmoor, G78 4AF.
Tel. Uplawmoor 217

HEAD GREENKEEPER

Applications are invited from suitably qualified and experienced greenkeepers to fill the post of Head Greenkeeper at the new private 18 hole golf course at:-

BALBIRNIE PARK, GLENROTHES, FIFE

The successful applicant will assist the landscaping department of Glenrothes Development Corporation during the final stages of course completion, and be involved in the selection of greenkeeping assistants and greenkeeping machinery.

This is a unique opportunity for someone with flair and imagination to take up the challenge of a new golf course which is set in some of the most picturesque countryside in Fife.

Assistance with housing will be provided.

Applications for this appointment should be sent to:-

The Secretary, Mr. Charles Nash,
"Copperfield" Guthrie Crescent,
Markinch, Fife, Scotland

HEAD GREENKEEPER

LYTHAM ST. ANNES

LYTHAM GREEN DRIVE GOLF CLUB is seeking an experienced Head Greenkeeper capable of taking full responsibility for the management of the course, greens staff, and equipment to maintain the long-established course in first class condition.

The ideal candidate will be in the 30-45 age range with experience in managing a parkland course and modern greens machinery.

An attractive salary will be offered, plus free housing and assistance with removal costs.

Applications in writing giving details of career and qualifications should be sent to:-

The Secretary,
Lytham Green Drive Golf Club,
Ballam Road,
Lytham St. Annes,
Lancs.

HAMPSTEAD GOLF CLUB HEAD GREENKEEPER

required

Applicants must possess a sound knowledge of turf management and maintenance of machinery.

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

The Secretary,
Hampstead Golf Club,
Winnington Road,
London, N2 0TU

Tel: 01-455 0203

HAREWOOD DOWNS GOLF CLUB

invite applications for the position of

HEAD GREENKEEPER

Must have a sound knowledge of modern machinery.

Excellent salary.

Please apply in writing, giving full details of age and experience.

The Secretary,
Harewood Downs Golf Club Ltd.,
Cokes Lane, Chalfont St. Giles, Bucks.

International Exhibition highlights new greenkeeping techniques

PROFESSIONAL greenkeepers from the UK and Europe, America, Japan and Australasia will be at the most important specialist exhibition of its type in the world—the 37th annual international exhibition organised by the Institute of Groundsmanship.

The exhibition will take place at the Royal Windsor Racecourse, Maidenhead Road, Windsor, Berkshire on September 21st, 22nd and 23rd and will be open from 10 am till 5 pm daily.

The opening ceremony will be performed by the Lord Lieutenant of the Royal County of Berkshire, Colonel the Honorable Gordon W. N. Palmer OBE TD JP MA DLitt, at noon on the Tuesday.

Supporting a full programme of practical demonstrations and educational displays will be more than 270 trade and technical exhibitors.

Greenkeeper's stands are numbered Q18 and 19 and all visitors are welcome.

Golf club officials will find much to interest them including displays on golf-course design, maintenance and management, pavilions, outdoor furnishings, and even plants, shrubs and trees.

The exhibition has been especially designed to be of interest to greenkeepers and groundsmen. And emphasis is placed on the vital educational aspects of groundsmanship with practical demonstrations of new techniques, lectures and film shows.

Members of the BGGa have been mailed a complimentary admission ticket, permitting entrance for the greenkeeper and a colleague. Catalogues, priced £1, will be available at the racecourse.

See Them At The Show

ALGINURE—U31 AND 32

The company will be displaying a range of soil structures showing the effective use of Alginure as a soil improver. Full information will be available on products for soil restructuring, tree planting, turf management and associated aspects of parkland management, as well as Alginure Root Dip, together with detailed case histories.

FARMURA—N26

Farmura of Ashford, Kent is showing its Liquid Organic Fertiliser. The successful product of research, which has converted farmyard manure into a product easily used with modern equipment and techniques, it is applied in areas as varied as greenkeeping and land reclamation.

Farmura is used by championship golf courses, top football league clubs and racecourses. Farmura is being used increasingly by local authorities, in land reclamation and, due to its safety, in ecologically sensitive areas where chemical fertilisers have adverse effects. Farmura encourages tillering and a deep, hard-wearing turf with a thick sward and deep roots, rather than a quick flush of growth.

Farmura is economical in use as a product and, by not encouraging excessive top growth, mowing costs are also reduced. Farmura increases resistance to stress, can be mixed with chemicals and is quick and simple to apply using standard spray-equipment.

GREEN'S POWER MOWERS—E51 TO 57

This Scottish company will introduce its new combination of hydraulically-operated motor mowers with Hinomoto tractors. This range of diesel tractors will include the 15hp, 20hp, 35hp and 41hp, 2 and 4 wheel drive tractors. The machines on display will include the new Green's Hinomoto mid-mounted motor mowers consisting of one front-mounted gang unit covering the front wheels and two mid-mounted gang units, hydraulically driven from the tractor-front PTO. All gang units are independently raised and lowered by fingertip hydraulic control.

Green's Moto Wood Chipper, for crushing arm-sized branches into chips and compost, will also be intro-

duced. The Chipper is tractor-mounted with PTO drive and is especially suitable for use with Green's Hinomoto tractors, as well as other 15hp to 30hp tractors.

The one-day Scotsturf 82 exhibition, at the Royal Highland Exhibition Hall, Inghliston, near Edinburgh on November 18th has been organised by the Scottish zone of the IOG. The event promises to be of immense benefit to schools and colleges and the organising committee intends to run a health and safety symposium, tickets for which will be available from the organisers. The exhibition secretary is: W. Elwood, Inverleith Cottage, 525 Ferry Road, Edinburgh EH5 2DM. Tel: 031-552 6943.

The KEY conditioner for greens and tees

KEYTOP with lignite

Comprising the finest sedge peat, lignite and selected lime-free sand, KEYTOP is recommended especially for golf greens and tees.

Just one of the KEY products for Britain's golf course superintendents - and now there are KEY grass seed mixtures too!

STEETLEY MINERALS LIMITED
Liverpool Road North, Burscough, Nr. Ormskirk, Lancashire L40 0SB
Telephone: Burscough (0704) 893311 Telex: 677124



See Them At The Show

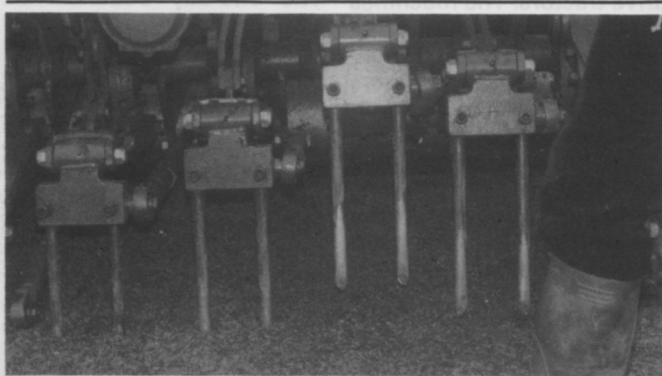
HUXLEYS—U1 TO 7 AND 16 TO 22



The New Cushman Front Line now has a full range of interchangeable front implements for mowing, sweeping and snow clearing.

Huxleys will feature the New Cushman Turf Truckster (3 wheeled and 4 wheeled versions) with a full range of turf-care implements and the Cushman Front Line Mower in petrol and diesel engined versions. Imple-

ments for Royer Shredders and Powerscreens, Huxleys Truck Dresser, Huxleys Red Rider, Little David Stump Remover, Yankee Recreational Products and the Fox Valley Marking System will also be on show.



The new Verti-Drain can improve drainage, relieve compaction and break up hard pans under the surface to a depth of 16in.

MARSHALL CONCESSIONAIRES—O1 TO 23

Two new machines will complement the company's extensive range.

The JL Multi-Trac is a Danish-manufactured, front-mounted, seven cylinder, hydraulically powered mower, mounted on a Multi-Trac JL Tractor. The machine can mow a width of 16ft and folds into a transport width of 8ft. The weight of the tractor and the gangs can be transferred either on to the gangs or the front drive wheels of the tractor. This reduces the wear of the equipment, avoids tracking in wet conditions and gives maximum weight on the drive wheels to ensure good

adhesion. A Dutch machine, the Verti-Drain is designed to reduce compaction and improve drainage in recreation areas and golf-course fairways.

This machine has 14 tines at approximately 4in centres, 1in in diameter, penetrating to a depth of 16in and maximum working width of 98in.

The Verti-Drain has an axle mounted with pegs that penetrate alternatively in the soil at a particular angle, which allows a back-and-forth movement to loosen compacted soil beneath the surface without disturbing the turf.



The new JL Multi-Trac equipped with a seven gang, hydraulically-driven gang unit.

The KEY granular for all close-mown turf MICRO-GRAN 2

Carefully-balanced nitrogen (4%), phosphate (16%) and potash (8%) makes MICRO-GRAN 2 the KEY fertiliser for autumn/winter use - and an excellent pre-seed base. It can be applied direct to the surface following routine raking and aeration or incorporated with your own top dressing.

Just one of the KEY products for Britain's golf course superintendents - and now there are KEY grass seed mixtures too!

STEETLEY MINERALS LIMITED
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KEY
RANGE



See Them At The Show

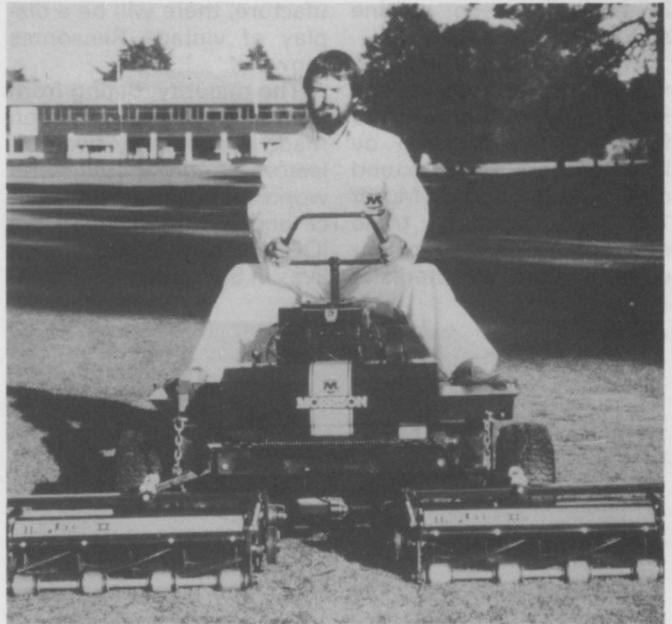
MAY & BAKER—K35 TO 46
M&B's commitment to develop specialised chemicals for the amenity and industrial market is evident with five new major products on display launched within the past 18 months.

Main attraction is Ringmaster, M&B's fungicide for fairy ring control which, along with Clearway, the residual herbicide, was launched in the spring. Of no lesser importance are Clout—the selective grassweed killer; Rovral Turf—the immediate fungicide answer to turf disease; Spasor for total weed control, and Supertox 30—Britain's leading herbicide for weed control in turf.

Visitors will have the opportunity to purchase a small trial pack of Ringmaster at an introductory price of £1.50. Supplied in a 50ml plastic bottle—sufficient to treat five square metres—purchasers will be able to redeem the £1.50 on subsequent orders of the stan-

dard one litre Easy-Measure-Dispenser pack of Ringmaster. The trial sample is obtainable through May & Baker distributors at the exhibition.

MORRISON—D54 TO 60
Morrison Precision Lawnmowers, manufacturer of the successful Triplex 1800, is to introduce a new model at the exhibition. The Triplex Series II incorporates fully floating cutter heads to eliminate scalping, three forward speeds and reverse and has a 71in cut giving 107 cut/metre. Cutterheads, driven by single V belts, can be removed at the flick of a lever. Grass catchers are an optional extra. Price and further details will be available from the Morrison stand.



From Morrison, the Triplex Series II.

RANSOMES—N1 TO 10 AND 16 TO 25

The company's all-hydraulic, self-propelled Motor 213 triple mower, with a diesel engine and high visibility operator's cab, will be

seen for the first time in public. Successfully launched at last year's exhibition with a twin cylinder 21hp petrol engine, a 21hp three cylinder

water-cooled diesel engine will be available as an option. The manufacturers state the diesel engine gives more cost-effective fuel con-

MOMMERSTEEG INTERNATIONAL—N27 TO 30

For more than half a century, Mommersteeg's plant-breeding programme has developed superior varieties of every major species. Varieties such as Grandstand, Majestic and Royal perennial ryegrass; Biljart hard fescue; Koket chewings fescue; Manoir Moncorde and Novorubra creeping red fescue and Ramona timothy

were all bred and introduced by Mommersteeg. Next spring, the new Scarlet chewings fescue will feature in some of its special fine-turf mixtures. International plant breeder Mommersteeg is also the exclusive producer of the celebrated MM seed mixtures for the sports, recreational and leisure industries.

At this year's exhibition, the company will be unveiling its new range of blends for 1983, which will be available through its nationwide distributive network. A team of professional groundsmen will be offering practical help and advice. They are Danny Godfrey, David Bates and the company's head of amenity services Michael

Perkins. All visitors to the Mommersteeg stand will be invited to play a hole of golf on the company's putting green, with a top prize of an expenses-paid visit to Holland in October. There will be a nominal entrance fee of 20p with all proceeds donated to the institute's Milton Keynes development fund.

The KEY feed for greens and tees

A/W FEED

An organic-based powder fertiliser for autumn/winter application to all fine turf areas containing 2% nitrogen, 14% phosphate and 6% potash.

Just one of the KEY products for Britain's golf course superintendents - and now there are KEY grass seed mixtures too!

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Liverpool Road North, Burscough, Nr. Ormskirk, Lancashire L400SB
Telephone: Burscough (0704) 893311 Telex: 677124



See Them At The Show

sumption, lower noise and vibration levels and longer intervals between routine servicing.

The Hydraulic 5/7 Magna mower, introduced to cut large areas of longer grass following the decision by local authorities to extend cutting cycles, and the Motor 180 self-propelled triple mower are expected to generate considerable interest.

In recognition of the company's 150 years of manufacture, there will be a display of vintage Ransomes mowers.

The majority, dating from the 1840s to 1935, have been made available by two collectors—Andrew Hall, who works for the Sheffield council and is a member of the IOG, and Michael Duck, who lives in Somerset.

The IOG will again present awards for outstanding stand design and layout at Windsor. There will be three main awards—gold, silver and bronze—in each of four categories of stand size. In addition, the institute will make highly commended awards in each of these groups.

The panel of judges will be drawn from professional

groundsmen in membership of the IOG and will also include Christine Smith, Julie Hough, Kostas Georgiadis and Anthony Steel as independent judges.

William Mills, editor of *The Groundsman* and chairman of the judging panel, will make the presentation of awards in the institute pavilion on the Wednesday at 10 am.



To be seen for the first time in public, a Ransomes Motor 213 fitted with a diesel engine and cab.



There will be another run out for this 1908 24in Ransomes motor mower, pictured working at an NAG exhibition in the grounds of Motpur Park during 1961.

Over 70 trade exhibitors will be taking part in the fourth annual exhibition organised by the joint north-west branches of the IOG. It will be held at the Fylde Rugby Ground, Lytham St Anne's, Lancashire, on October 5th and 6th.

A central feature of the exhibition will be the IOG pavilion, which will serve as

an administrative centre, membership desk, book shop and educational and training programme bureau.

The exhibition will open daily at 10am and admission and car parking are free. Full details from the exhibition secretary, who is P. Phillips, 12 Brereton Close, Crewe, Cheshire CW2 8PR. Tel: Crewe 663420.

SEAMAC AGRICULTURAL—H79

Greater interest in the use of seaweed extract in the care of sports turf has been shown during the past year, which has caused Seamac to introduce double-shift working in its existing factory to cope with the demand. A £120,000 factory extension will come into production in

October of this year.

Seamac will have on its stand information, field-test reports and evidence of the success of Seamac 600. Seamac is used on many championship golf courses and was used this year for the first time at Wimbledon. It has been shown to stimulate

The KEY granular for turf recovery CF3

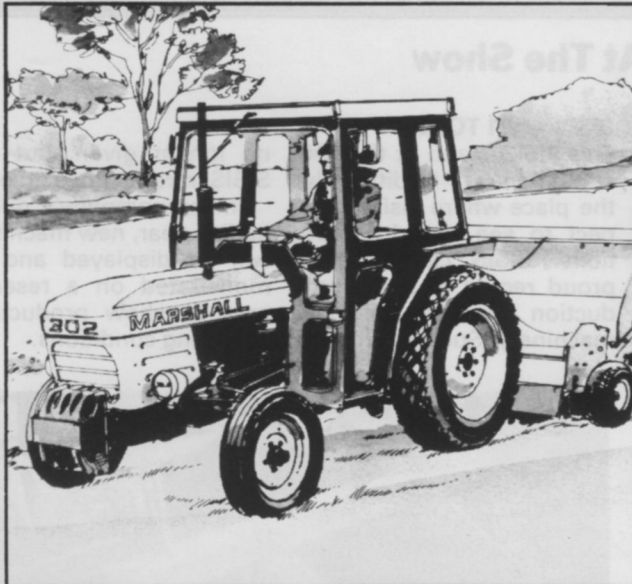
Containing 5% nitrogen, 15% phosphate and 15% potash to ensure healthy root growth, CF3 is the economic autumn/winter granular fertiliser for those areas subject to heavy wear.

Just one of the KEY products for Britain's golf course superintendents - and now there are KEY grass seed mixtures too!

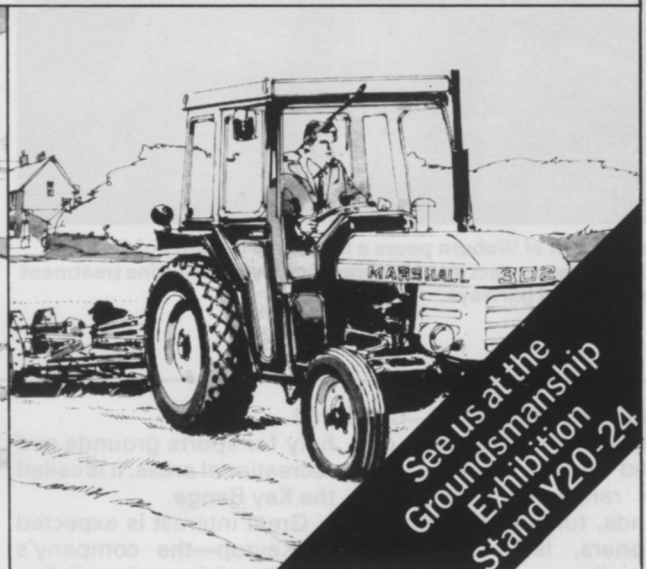
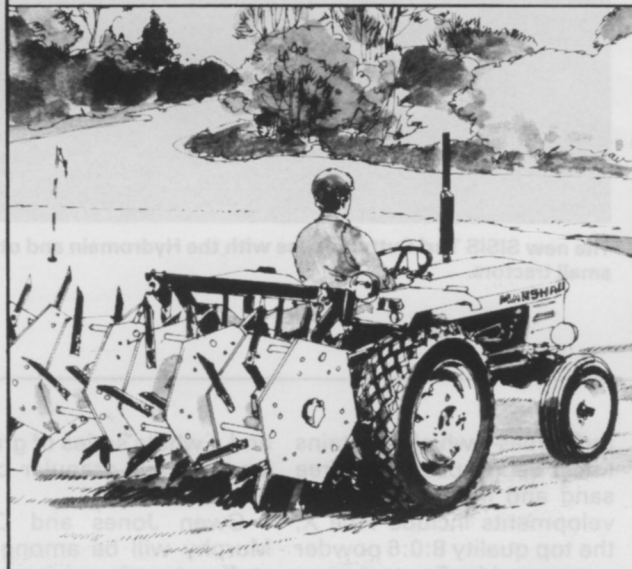
STEELEY MINERALS LIMITED
Liverpool Road North, Burscough, Nr. Ormskirk, Lancashire L40OSB
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KEY RANGE





***The only thing it won't do
is plough up grass.***



See us at the
Groundsmanship
Exhibition
Stand Y20-24

Don't be fooled by the 302's size.

Because apart from 9 forward and 3 reverse gears, that compact cowling also houses a 30 bhp engine, behind which there's a two speed PTO and a fully live hydraulic system capable of lifting 1500 lbs.

So it'll do anything from picking up leaves to putting down pipelines.

Considering such versatility, the 302 is remarkably inexpensive—both to buy and to run.

However, since it's so much lighter than a conventional farm tractor, there is something which it won't do, on any kind of grass.

Plough it up.

MARSHALL
TRACTORS

MARSHALL LIMITED, BRITANNIA WORKS, GAINSBOROUGH, LINCOLNSHIRE DN21 2EP TELEPHONE: GAINSBOROUGH (0427) 2301. TELEX: 56415.

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root growth and increase protein storage in grass by wholly natural means, resulting in better resistance to stress conditions, such as frost and drought. Every

batch of Seamac 600 is guaranteed to conform to standard specifications regarding the all-important cytokinin content.

SISIS—A21 TO 25

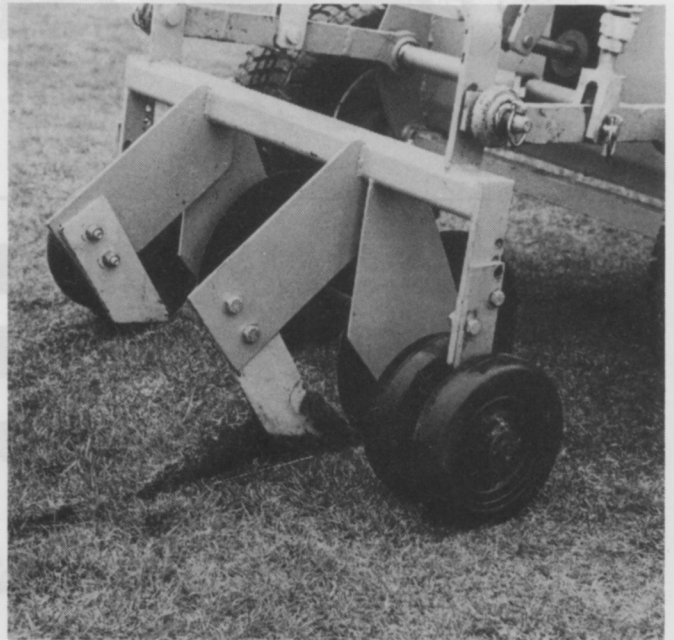
The SISIS stand at the IOG exhibition is, traditionally, the place where visitors expect to see new introductions. SISIS can boast a proud record of best introduction awards for new machinery. Such awards are

no longer given, but new SISIS introductions go on.

In the company's golden jubilee year, new machinery will be displayed and demonstrated on a reserved area to show products in operating conditions.



Derek Green of Woburn pours a measured quantity of Seamac 600 seaweed extract into his sprayer ready for a routine treatment of greens and fairways.



The new SISIS Turf Cutter for use with the Hydromain and other small tractors.

STEETLEY MINERALS—C61 TO 64

Steetley Minerals has devised and developed an entire range of grass seed blends, turf feeds, soil conditioners, lawn sand and speciality products purpose-

fully for sports grounds and recreational areas. It is called the Key Range.

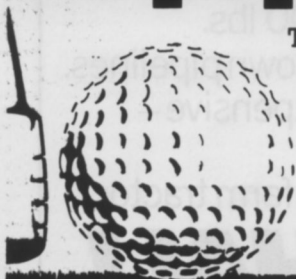
Great interest is expected in Keytop—the company's new conditioner for all fine

turf areas—which contains finest sedge peat, lime-free sand and lignite. Other developments include Fine X, the top quality 8:0:6 powder compound for fine turf areas

and a whole series of granular and mini-granular compounds.

Owen Jones and Colin Murphy will be among the staff welcoming visitors.

We pop up in all the best places



The installation of watering systems on more than 200 golf courses throughout the U.K. and in eight other countries, has given Cameron a wealth of experience and expertise. Whether it's pop-up sprinklers 'wall to wall', or a simple manual system, no job is too large or too small.

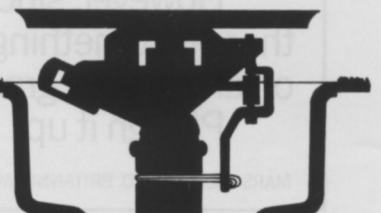
Cameron know-how is backed by a major international irrigation company. So if you are considering a new watering installation, or an extension to your existing system, do it right, and call on Cameron.

Write or ring today for details.



CAMERON

RIS Cameron Irrigation Limited
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Tel: Littlehampton (09064) 3985 Telex: 877483



Tree Surgery is a job for professionals



Honey Brothers are the professionals

(users of the only British Standard Tree Harness in the UK)

25 YEARS EXPERIENCE is at your disposal. A properly trained and equipped team is essential if surgery is to be confined to trees!

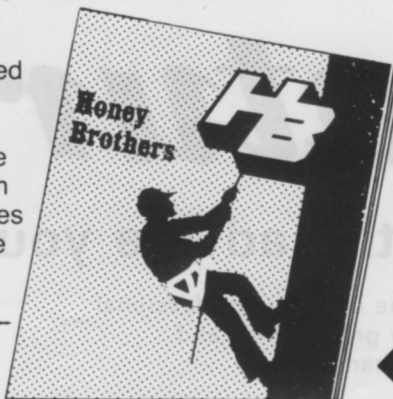
Honey Bros. know how to minimize the risk of injury and possible claims. And in so doing create a work force that operates smoothly because it has the confidence that training brings.

Honey Bros. organize regular

See us on **STAND H82 and 83**

I.o.G. Exhibition

"See you at the A.P.F. Edinburgh".



arboricultural Safety Training Courses on site in Guildford or with owners on their own land. Our latest Catalogue of equipment for sale includes over a thousand items. Remember equipment is only sold after we have proved its worth for ourselves in use! The picture shows only some equipment. To illustrate the complete range would occupy many pages! View it all in our Showrooms or . . .

Send for your **FREE** copy of our catalogue

HB Honey Brothers (Sales) Limited, New Pond Road, Peasmarsh, Guildford, Surrey GU3 1JR. Tel: Guildford (STD 0483) 61362

See Them At The Show

SUPATURF—A38 TO 41

Two new products for improved turf management—a soil wetting agent and a high-quality top dressing—will be launched by Supaturf Products.

Supaturf has been ap-

pointed UK distributor for the wetting agent Aqua-Gro L—a blended, non-ionic liquid concentrate, which is widely used in the United States where it is manufactured.

The wetting agent helps water to move freely and uniformly into the soil profile, resulting in healthier plant growth and improved use of nutrients and reducing the need for watering.

mended a month before the main season, washed in with ten to 15 minutes of watering.

The treatment remains effective for three to four months and, in many cases,

STEWARTS OF EDINBURGH—H45 AND 46

Golf-course accessories—and particularly flags for which Stewarts has an international reputation—will be featured on the company's stand.

Examples of many flags supplied for some of the world's most prestigious events will be seen.

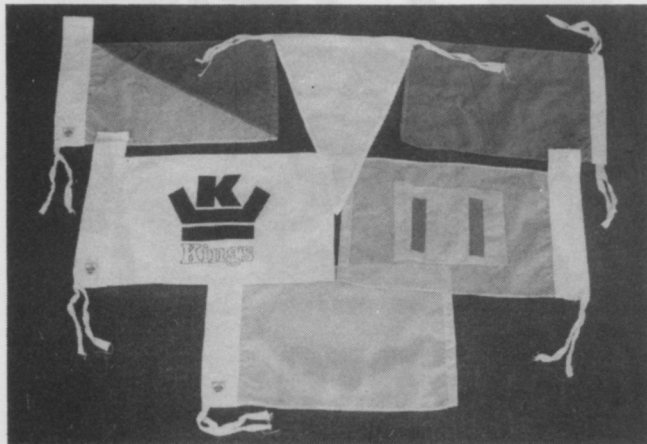
Manufactured from heavy-duty 6oz nylon, the flags are cut by hand and dyed with long-lasting colours. They are available in varying sizes and designs, both sleeved and unsleeved, and in a combination of col-

ours. Stewarts also manufactures larger flags not only for golf tournaments but for more general use by sports clubs and other organisations. These flags are available single or double, roped and toggled, and in any colour.

The full range of golf-course accessories and many other products is described in the 24-page 1982 catalogue, which has been completely redesigned and extended to include more illustrations and detailed information.



A new soil wetting agent, Aqua-Gro L, is being introduced on the Supaturf stand at Windsor.



These and many other flags are supplied by Stewarts for club use and tournaments.

On greens and tees, an early spring application of 16oz/1000sq ft is recommended in two 8oz doses about a week apart. A minimum of one gallon of water with each 1oz of Aqua-Gro L should be used. The treatment should be repeated during the summer and autumn, using in total an average of 56oz/1000sq ft during the year on greens and an average of 32oz/1000sq ft on tees.

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one dose is sufficient for the season.

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A38-41
AT
WINDSOR

Jim Arthur gives his opinion on...

The speed of putting surfaces

IN greenkeeping, there are few more difficult things to achieve than consistently fast putting surfaces. Yet speed is a major criterion of quality and essential for major golfing events.

Speed is determined by a number of factors, though in the end the weather has the last word. If it rains for weeks on end before a championship, putting surfaces are bound to be slower than under arid conditions, when irrigation can be controlled. Gone are the days when no watering at all was permitted during a championship and greens become more fiery and faster each day.

But the almost universal installation of pop-ups—often on fairways as well as greens and approaches on major courses—means that irrigation can be controlled in drought but we cannot, however, control it when it comes from the skies.

Wet weather

Furthermore, in wet weather there is a disproportionate effect from rainfall levels equivalent to fairly intensive irrigation, since the atmosphere is moist and losses by evaporation greatly reduced.

What are we supposed to do in a wet summer? Put covers on the greens?

We do not want to emulate the frankly rather ridiculous state of affairs at Augusta earlier this year for the US Masters, when Stimpmeter readings of 13 were obtained on greens so slick that on even the slightest slope it was impossible to stop an uphill putt from rolling back, let alone deal with a downhill putt.

We all know the reasons—a change in grass from Bermuda to bent, but no change in a technique designed to speed up basically slow Bermuda greens—which proves, if anything, that it is possible to get greens too fast.

In practice, with our unpredictable weather, whilst we are aiming at speeds relating to Stimpmeter readings of 8 and 9 on close-mown greens, we may not achieve this if we get heavy rain in the week before the championship.

Speed is related to many factors, some long term and some short. The weather is the most significant!

Grass type is a major factor. Fine fescue and Agrostis greens *must* be faster than annual meadow grass greens, however well presented and prepared.

The aim on all courses hosting championships and tournaments is to

produce greens as free from annual meadow grass as is reasonably attainable. Uniformity is, of course, vital—since different grasses produce turf of different textures and so speeds.

The mower is a major influence—as much, or more, in frequency of cut than in height. Many, many clubs are now mowing greens seven days a week, most six days if they have any pretensions to top quality presentation. For championships, greens are usually mown three times a day; two cuts in the evening and a final polish in the early morning. In the States, even more frequent mowing is practised.

Height of cut is important—literally shaving greens to $\frac{1}{8}$ of an inch or less with specially ground-down sole plates, though harmful if persisted in for long periods, must produce slick surfaces. One problem with triplex mowers is that it is difficult, if not impossible, to mow as closely as with 'hand' machines—even with specially ground down thin sole plates.

We hear from people, who should know better, that greens should be rolled, quoting the fact that this was done 50 years and more ago. This is obvious heresy, since rolling can never level and merely consolidates.

Those who advocate it forget that, when it was done, greens were often mown once or twice a week with light hand-pushed mowers, certainly not daily, and there was vastly less play. Rolling is advised "to remove worm casts"!

All the polishing we need is provided by frequent (motor) mowing, and rolling is an anachronism based on totally different conditions.

Watering must be very carefully controlled—limited to a light dampening down, and certainly not to even the modest levels of normal, sensible, routine irrigation.

Needless to say, all this final presentation is possible only if good greens have been produced well ahead of the event, which is why planning for the Open Championship starts years ahead of the date. Indeed, literally the moment that the last Open Championship finishes and the tidying up begins, we are all planning for the next one on that course.

Greens must also be firm yet resilient (this is not incompatible) and this depends on intensive regular aeration and top dressing with traditional sandy composts. Root development must be encouraged, which is where seaweed extracts have proved so valuable. Jim MacDonald at Royal Lytham and St Annes feels it is the

most important single factor in the improved root development of his (well aerated) greens.

Fertiliser treatment must (if I dare bore readers by constant repetition) be kept to the absolute minimum if fescues are to dominate annual meadow grass. One of the basics of greenkeeping is not only to create conditions favourable to deep-rooting, poverty-tolerant, fine-textured bents and fescues, but to poison annual meadow grass (by virtue of salinity on sands, or released aluminium salts, on heavy soils).

We can, however, rarely please ourselves let alone everyone. With wet weather before each Open of recent years, the pace of greens has been easy.

It must madden our experienced Head Greenkeepers to listen to facile commentaries on the condition of courses, which express surprise at slow greens.

What is far worse is that when we do produce fast greens they are criticised for being "bare and sparse although they putted well"! Superb, fast, true surfaces, such as were produced at Lindrick with absolutely no help from the weather (May was a winter month this year!) were condemned because they "looked starved", when we were half-way through a programme designed to restore the fescue dominance of greens from annual meadow grass invasion.

Peter Alliss said in *Golf World* (August) that he begins to mourn the state of British greenkeeping, committees and so on, though he accepts he is "a rather lone voice in the wilderness, certainly among the powers that be".

New system

He says he "does not understand the new system". It is not a new system—merely the basis of sound greenkeeping, all this century, until abused by the over-feeding and over-watering school, which produced thatchy bogs, on which it is not only impossible to produce slick greens, but equally impossible to play on them all winter. Hence the all-too-common anathema of temporary greens on so many courses.

Mr Alliss says he "does not know of many things that look well by being starved". I have never advised 'no water and no fertilisers'—only restricted levels of both and the elimination of all but

Continued on page 17

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Jim Arthur Continued...

nitrogen, since phosphates are proven to bring in annual meadow grass and potash inhibits fescues.

I really do feel that there should be more support for the old basic principles of greenkeeping from all parties and an end to snide television commentaries about courses needing more fertiliser and water just to make them look green and pretty on the box.

We have seen some courses in pretty poor condition for tournaments this year. It seems sad for Lindrick to be criticised when other courses in poor condition received no comments. Yet Lindrick suited not only the PGA European Tour, as George O'Grady's interview in *Greenkeeper* (August) demonstrated, but all the competitors and certainly the majority of members who appreciate the return to the old Lindrick, nearly lost by gross over-feeding with agricultural granular fertilisers.

I can do no better than quote Pat Ward-Thomas who said of the Martini that "a welcome measure of coaxing and delicate judgement was essential for good scoring. Given these qualities, the beautifully true greens, swift though they were, gave every hope that putts would fall".

And fall they did for those who could read the greens. As one professional said, "you could not go wrong on those true greens and, until you missed the first putt, you were sure they would all go in. Then it was a different story!"

We must go for faster greens—away with annual meadow grass dominated slow surfaces, where only speed and direction is needed to get the ball in; no finesse in reading greens, just a fast speed and go straight for three feet past the back of the hole.

Greenkeepers must accept some set back to their precious charges for tournaments and use their skills to get the maximum speed on putting surfaces. The game is won on the greens and those who can putt best should lead.

The age of the 'sock it and see' brigade, far and wide off the tee and playing it from where it lies, but expecting a perfect lie, must yield to more finesse and skill and with the best golfers having the most influence on greenkeeping standards.

I resent intensely the suggestion that I produce courses that professionals and ordinary golfers have little desire to play. Unless we produce better courses we can never expect standards of play to improve. As with the architecture of a course, it is quite possible to produce both a challenging test of golf for the best players, yet quite satisfactory conditions for the poorest.

No one, however, is going to persuade me that we should produce courses that flatter high-handicap golfers—especially as this usually means greens are closed for months on end in winter, if they are fat and slow in summer.



Peter Alliss—mourning the state of British greenkeeping, committees and so on...

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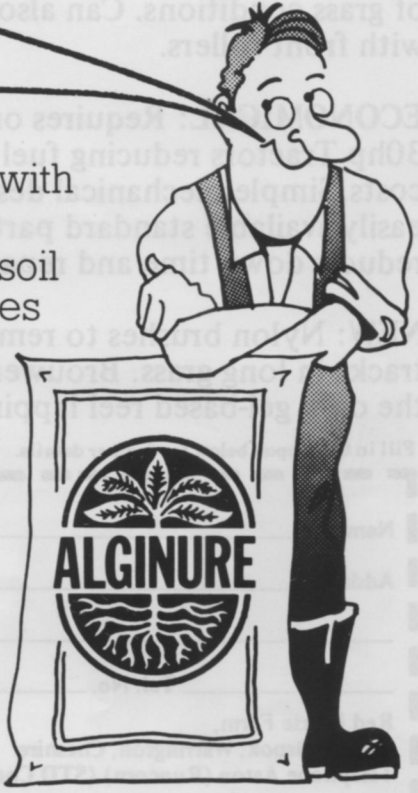
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The Way The Wind Blows



John Stobbs travels to St Andrews.

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When it comes to running golf courses and getting the best possible results for the minimum possible expenditure, there's not another people in the world who start in the same league as the Scots.

You may ask yourself why similar towns in other parts of these islands seem unable to provide even more mediocre courses at such a bargain rate. The answer is that, though there's nothing at all to stop any of them setting to work on St Andrews' lines, many have never wanted to know how it's done or just don't realise that anything like it can be done.

It is not just the world-wide fame of St Andrews, nor the horde of visitors who pilgrimage there every day that pays for the town's splendid golf. On the contrary, this is the gilt on the golfing gingerbread, generating also a huge income to hotels, boarding houses and all other kinds of business.

What pays for the golf at St Andrews is enthusiastic, all-year-round support by local players and others living close enough to be members of the golf clubs there, plus day fees paid all year round by those who do not play enough to justify an annual season ticket.

St Andrews' annual season ticket rates are currently £90 for non-club members not resident in St Andrews, £52 for club members not resident and £30 for St Andrews. Students at St Andrews University play for £30, St Andrews pensioners for £20, and residents' children aged from 16 to 18, St Andrews school-children under 18 and children under 16 of holders of £52 tickets all for £12. Residents' children under 16 get their golf free.

In general, non-residents' fees are three times those of residents, as are their day green fees, with local club members not resident in St Andrews lying roughly half way in between.

Of course, none of St Andrews' golf clubs owns the links or the courses. They are all represented, though, directly or indirectly, in the management of the links and the golf upon them. Therefore, in broad terms, what applies to members of the Royal and Ancient Golf Club of St Andrews, also applies to members of the New Club, St Andrews Club, St Rule's Club, St Regulus Ladies Golf Club, University Golf Clubs and the Thistle Club, which claims to be the oldest golf-associated club in St Andrews.

Only the R&A, the New, the St Andrews and the St Rule's have clubrooms alongside the Old Course's 18th. But all St Andrews' golf clubs are accepted by the Scottish Golf Union for handicapping purposes and, in general terms, share equal rights of play over the courses. The only advantage R&A members have, in exchange for paying one lump subscription a year between

them towards the management of the links, is some prior right to certain starting times over the Old Course.

There is nothing to stop any town from taking a leaf out of St Andrews' book, creating for itself a first-class course and allowing local enthusiasts to form four or five golf clubs and to each build its own clubhouse adjacent to the course. Do that and it would have the beginning of sound golf economics, as well as representative and fully-effective golfing management, too.

It could then also give itself, as St Andrews does, an extra income from booking fees charged to any match wanting to be guaranteed a starting time in advance.

(At St Andrews, booking fees are about a quarter of an individual green fee for any round on any course—a quite useful source of extra revenue.)

The history of the links and golf at St Andrews is long and complicated, some details of which are well-known. To recap briefly, golf had been played over the linksland there for at least some hundred years before John Hamilton, Archbishop of St Andrews, granted its townspeople in 1552 a charter giving them rights in perpetuity to graze their animals, bleach their linen and generally use and enjoy the linksland there.

So things were until some 90 years or so ago when the title to the links came up for sale and the Royal and Ancient Golf Club bought it. The sale was subject to the traditional rights of the townspeople, but that was not enough for them.

They were not at all happy to see the

The Way The Wind Blows

ownership of the links, with all the golf upon it, go entirely into the control of the R&A.

The town council, accordingly, stirred itself, took the matter to the House of Lords and was finally granted the Act of Parliament of 1894 by which an agreement was reached that more or less satisfied everybody. The ownership of the Old Course came back to the town. The Royal and Ancient agreed to build a new course and the council another new course.

Both were completed within five years, the R&A providing the New Course in 1894 and the council the Jubilee Course (Queen Victoria's) in 1899.

In 1913, the council felt confident enough to add the Eden Course and finally completed it in 1919.

In 1971, the little Balgove Course, ideal for children and beginners, was added.

Everything seemed settled, until the local government reorganisation of the mid 1970s loomed black upon the far-off Westminster horizon! At first, it looked as if Fife would be split into two districts, east and west, and that Dundee, across the Tay in Angus, would, in effect, take over control of all St Andrews courses! Once

more, St Andrews council reacted resolutely to what it saw as a threat to the control of its own links. Once more, it succeeded in getting what it wanted.

By the St Andrews Links Order Confirmation Act of 1974, an entirely new system was set up for controlling and running the links and the golf upon them. Under it, the ownership remains with the local authority, but control of the links is now vested in the charitable-status St Andrews Links Trust.

This consists of three representatives of the new North East Fife District Council (which operates from nearby Cupar in Fife), three representatives of the Royal and Ancient Golf Club, one nominee of the Secretary of State for Scotland and the sitting Member of Parliament for East Fife.

The entire links, from the town right out to the far point, where seals bask beside the Eden estuary, is designated a public park.

The management of the links and greens and the golf upon them is delegated by the trust to the links management committee, all of whose members 'shall be persons having close connections with the

town of St Andrews and its golfing community'. Four committee members are appointed by the Royal and Ancient and four by the district council. None of them may be members of the trust itself.

The district council has since set a precedent that, through its four appointments, St Andrews' next-leading golf clubs—the New and the St Andrews—are also directly represented upon the management committee. Both these clubs propose two members for consideration for appointment to the committee—the choice of which one rests with the district council.

Links management committee members serve for four years, but are eligible for re-election. Continuity and local representation in all policies and decisions to do with the management of the links and golf are, therefore, assured.

The act also preserves the rights of the owner of the estate of Straththyrum, abutting the links on the inland side, to exercise traditional rights to dig loads of shell from banks under the golf courses (making good after any such excavations), to lay drains and sewers under the links and to play golf upon any course there,

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SEPTEMBER 1982

Dear S.I.G.G.A. Member,

It gives me great pleasure to start off this issue by offering on behalf of S.I.G.G.A. the heartiest congratulations to one of our members. Campbell Elliott, Assistant Greenkeeper at Dumbarton Golf Club has been chosen to represent Scotland in the Senior International Golf team. This is a great honour for our young member and we wish him every success in his international career.

This will be the second issue of S.I.G.G.A. *Greenkeeper* and by the time that you read this most of you will have had holidays and will be fighting fit ready for a hard-working Autumn and Winter. You will also at this time start receiving information from your Section Secretaries telling you of plans for a Winter programme. Hopefully this winter will be a full one as far as Section activities go. It is not always an easy task for your section committees to provide new and varied programmes, especially the long established sections like the East, North and West. Therefore I would ask you to give your full support at all times to your section committees by attending the lectures, outings, film shows or any other organised event. Let your committees know what kind of event you prefer, if you have an idea for something different tell them, they are always looking for new ideas.

James Kidd pointed out in the Editorial Comment of the first issue that, and I quote "it is the duty of every member of the association to take an active part in the construction of a more professional body committed to improving the communication between the greenkeeper and his employers, the members of each club in the land". Now we must point out that not every club in the land has greenkeepers who are members of S.I.G.G.A. There are over 400 golf courses in Scotland and quite a number of these have staff who are not members of S.I.G.G.A. Is it not our duty also to have a look around us and if we know of a club in our area whose greenkeepers are not members of our association, then we should go and have a chat with them about the advantages of being a member of S.I.G.G.A.

We now have our own 'Magazine' albeit a supplement of *Greenkeeper*. First indications are that our supplement will be as successful as *Greenkeeper* itself and reports we have had so far have been most encouraging. The response from the trade sponsors through the advertising space has been very good. BUT for this supplement to be a complete success it needs you, the ordinary member of S.I.G.G.A. to give us your views, comments and ideas on all subjects. Your Section Secretaries will provide Section News but as they are not in a position to be in touch with everyone you can keep them up to date with any of your local news. The appointment of a new member of staff, promotion to another post at another club, these are just a couple of news items that greenkeepers like to keep in touch with. Put pen to paper, let us make the S.I.G.G.A. supplement as educational and newsworthy and every bit as successful as the parent magazine *Greenkeeper*.

Yours sincerely,

ELLIOTT SMALL,
Co-Editor, S.I.G.G.A. Supplement.

The addresses of the joint editorial staff of the supplement are as follows:

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Course Manager — Kilmacolm G.C.

ELLIOTT SMALL,
2 Castlepark, Kincardine on Forth, Nr. Alloa.
Tel. Kincardine 30780
Head Greenkeeper — Tulliallan G.C.

a new slant on aeration

MINUTES OF THE EDUCATION SUB-COMMITTEE

Present: W. Woods (Chairman), J. W. Neilson, T. Kermack, J. D. McKean (General Secretary).

Apologies: D. Gray, A. R. Connell.

The Chairman opened the meeting and gave a full report on the management course at Elmwood College in February 1982. He thought it had been a success and plans were in hand for a repeat course in 1983, probably February once again. He suggested that on this occasion a simple written examination should be held and the results sent to the clubs by the college.

More of the course should be relevant to practical Greenkeeping. The S.G.U. had carried a report on the course in a subsequent Newsletter. The cost of the course was considered to be reasonable.

He then spoke of the One-Day Seminar, the third of its kind at Elmwood College on the 24th March, 1982, saying that the attendance of 170 was very satisfactory. The panel of speakers for next year was discussed and it was thought that greater involvement by Greenkeepers themselves was essential. The trade demonstration was thought to require a new angle to the benefit of both parties. The Seminar should, with the assistance of the college, remain an annual event. Popular topics for the future were aeration, bunker design and machinery maintenance.

The General Secretary was to contact all colleges so that all information on courses, application forms, etc., could be channelled through the Association.

An advertisement was to be inserted in *Greenkeeper* encouraging clubs to employ only qualified, registered S.I.G.G.A. members as Greens Staff.

A letter to be sent to Manpower Services Commission deploring the Y.O.P. scheme as it refers to golf clubs cutting as it does the number of apprentices.

The question of admission to Scotec Courses was raised and the S.I.G.G.A. policy remains the same — Part I must be obtained before proceeding to Part II — no short cuts permitted. College principals to be informed accordingly.

Mention was made of the number of students taking part in the Scotec Syllabus at other colleges. T. Kermack spoke of the good facilities available at Kingsway Technical College for practical greenkeeping training. J. Neilson reported on the Oatridge facilities and was enthusiastic about the development at Gogar, saying that a fair amount of money was available for future expansion the purchase of additional machinery. Land at Roddingham was available for further expansion. The General Secretary expressed concern about the lack of facilities at Woodburn House, although the West Section Educational Convenor has plans to upgrade the quality of Greenkeeper Training there with the assistance of the college tutors.

The next meeting of the G.T.C. (Greenkeepers' Training Committee) was at York on the 16th June and was to be attended by A. R. Connell for S.I.G.G.A. The revision of the log book was to be discussed at this meeting and Mr. Connell was to inform the G.T.C. that we would give our decision on the revision at the next meeting in November, as we need more time to fully discuss this very important matter.

J. D. McKEAN, General Secretary,
S.I.G.G.A., 1/8/82.



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Aims and Objectives for the Association

J. D. McKean, General Secretary of the Scottish and International Golf Greenkeepers Association

1. 100% membership of greenkeepers in Scotland.
2. Through intensive educational programme, build a professional and influential Association. All greenkeepers to be qualified to the highest level possible.
3. Give consideration to establishing ONE single Scottish School of Greengeeping. Greater control of entrants and a greater contribution to the training syllabus is possible when dealing with one college only.
4. Set up a strong financial base for the Association. We need money to be available for lawyers acting on members' behalf. A pension scheme for members is desirable. We would hope to extend our trade membership beyond the 20 companies sponsoring us at present.
5. Communication with golf clubs, Scottish Golf Union and especially the Royal and Ancient is absolutely vital. We must get our message across to them.
6. Wage scales. We must adopt a realistic approach when talking about wages. It is sad to hear that some clubs are sacking their trained apprentices as soon as they become journeymen, because they cannot afford to pay them at the journeyman's rate. It makes a nonsense of our determination to be professional! We must take positive steps to protect our professional standing, without becoming embroiled in political and trade union arguments. Clubs generally are experiencing a decided drop in revenue. Greenkeepers must not be made to bear the full brunt of this loss of club income.
7. If members find that the Youth Employment Scheme is being abused by their club, let me know immediately. We have already written to the Manpower Services Commission deploring the Scheme.

JOE McKEAN — S.I.G.G.A.'s General Secretary, was a World War Gunnery Officer and recently retired as a school master. He is a past Captain of Hags Castle Golf Club and former President of the Glasgow Golf Union as well as being Greens Convenor at Hags Castle on five occasions during the last 25 years.



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NEWS AND VIEWS

CENTRAL SECTION NEWS

WITH everyone busy trying to keep their club members happy, and it has been much harder than usual this year, Section activities have been at a standstill recently. However we kick off the Autumn and Winter season with our Autumn Golf Tournament which will be held this year at Tulliallan Golf Club on Tuesday, 28th September. Members are requested to return their entry forms as quickly as possible.

Congratulations to Douglas Mackison — second year apprentice at Braehead Golf Club, who became the youngest-ever club champion at Braehead.

Frank Walters, Head Greenkeeper at Grangemouth Golf Club has resigned and he hopes to return to his old love Horticulture.

—o—

I am pleased to be able to say that even after the introduction of the new membership fees our membership has held up fairly steady and only a few have fallen by the wayside.

ELLIOTT SMALL, Secretary.

WEST SECTION NEWS

THE Autumn Tournament of the Section will be held by courtesy of KILMACOLM GOLF CLUB on Thursday, 14th October. The cost will be £7.50 per head and any member wishing to send on his cheque to the Secretary immediately will be entered for the competition. Members should note that no member will be allowed to compete or attend unless the Secretary has received their cheque seven days before the competition.

Many members of the Section have received subscription notices within the last month or so, and feel that they are not due to pay. The due date for all Association subscriptions is the 1st April, thus if you paid on the 31st of March, 1982, you were technically due to pay again on the 1st April, 1982; but as some members are used in the West Section to paying at the Autumn Tournament the final date for payment in the West Section is the date of the Tournament. After this the new list of members will be drawn up and sent to the General Secretary and the postal computer for the magazine.

JAMES KIDD, Secretary.

NEW ADDITION TO S.I.G.G.A. SPONSORSHIP

A NEW name has been added to the list of companies sponsoring S.I.G.G.A. for 1982. The Edinburgh company of A. M. Russell, Scottish distributors of TORO EQUIPMENT, and Scottish Agents for AUTOTURFCARE.

Mr. Norman Schofield of Autoturfcare Ltd., made the trip north to the West Section Spring Tournament and the National Tournament at Hilton Park and was suitably impressed with the Association and discussed the subject of sponsorship of S.I.G.G.A. with Mac Anderson of A. M. Russell and subsequently a new name has been added to the sponsors board. The Association welcomes this latest addition and trust as our sponsors that we have a long and profitable relationship.

AMERICAN VISITORS

A LARGE party of our American counterparts, members of the G.C.S.A.A. (the Golf Course Superintendents Association of America) will be visiting these shores to play in the B.G.G.A./Ransomes International Tournament on the 3rd, 4th and 5th October; they will then travel north to the Old Course, St. Andrew's on the 7th and play against a team of S.I.G.G.A. representatives and members of the party that went to the States in 1981 for the S.I.G.G.A. Trophy which they presented on the Association's behalf on that trip. The match on that occasion was won by the Americans. The party will stay at the Golf Hotel, St. Andrew's for the four days and then tour some of the courses in Scotland.

" PUBLISHER'S PROMPT "

GREENKEEPER has been very disappointed by the lack of response to the request made by James Kidd in the first S.I.G.G.A. Supplement that all S.I.G.G.A. Head Greenkeepers should approach their Club to subscribe for its own copy of *Greenkeeper* as this was to be an important part of spreading the 'message'. It has been suggested that the clubs concerned would be keen to receive S.I.G.G.A. news and information so, with the Editors' approval, we will happily put any one of the subscribing clubs on the S.I.G.G.A. Supplement mailing list. So please do your bit — get your Club to subscribe NOW!!, stating specifically if they want to receive the S.I.G.G.A. Supplement.

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“Write Down the Middle”

S.I.G.G.A. LETTER COLUMN — OPEN TO ALL MEMBERS

Dear James Kidd,

Re your article in *Greenkeeper* headlined ‘Dictate Your Own Future’. The ideas you have put forward all seem fine except it doesn’t always work out as easy as that. Yes, it would be good if all greenkeepers were articulate, forthright and able to speak their mind in front of committees who would listen in all fairness and treat him as an equal and as a professional who has the interests of the golf course at heart.

A greenkeeper has to remember he is not in a union of any sort who will give him some backing over conditions, wages, etc.

He can, of course, refer to S.I.G.G.A. where the Committee will then point out that this body only lays down guidelines, and they can take it or leave it.

I feel very strongly that greenkeeping cannot offer

a fair deal to workers if we do not have power to demand our rights. The wage scale printed in *Greenkeeper* is nowhere near mine and I feel perhaps my college training may have been a waste of time as I am becoming disillusioned not with the job but the wages, and will have to look for employment elsewhere.

If you forgive me for saying, Jimmy, your attitude in the article (though well-intentioned) came over as looking after No. 1, and I’m all right Jack!

I wonder if other members of S.I.G.G.A. would be interested in joining a union?

Yours sincerely,

ANON, Glasgow.

P.S. — Forgive my anonymity, but such is the price of free speech.

APPRENTICE QUIZ

- The best conditions to apply a top-dressing would involve:
 - Wet surface followed by dry weather
 - Dry surface followed by wet weather
 - Wet surface followed by wet weather
 - Dry surface using damp compost
- A favourite soil ameliorant is peat which is used to:
 - Help drainage
 - Firm the surface
 - Break down to provide nitrogen
 - Hold moisture
- A drainage ‘carpet’ uses large quantities of porous material which is:
 - Laid over the soil to assist the surface to drain
 - Laid immediately below the level of the pipes
 - Laid just above the pipe and below the backfilling
 - Laid over the backfilling and below the soil
- A useful weedkiller to clean up a seed bed prior to sowing, would be:
 - Paraquet
 - Sodium chlorate
 - Sulphate of iron
 - Simazine
- Heel treading on a seed bed is meant to:
 - Make the surface hard
 - Make the soil even
 - Make the soil level
 - Evenly firm the surface
- Good design would involve:
 - Manholes above the surface and spaced out trees
 - Steep slopes with manholes below the surface
 - Shallow slopes with manholes below the surface
 - Trees planted closely on a steep slope

Answers: 1. B; 2. D; 3. D; 4. A; 5. D; 6. C.

S.I.G.G.A. AT THE OPEN

Chris Kennedy, National Chairman, pictured with *Greenkeeper's* Kay Moss and Anthea Coffey on the magazine’s stand which proved a popular rendezvous for Members.



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HOW DO YOU BECOME A S.I.G.G.A. MEMBER?

MEMBERSHIP of this Association is based on the March 31st-1st April fiscal year. The full annual subscription of £12.00 ALL MEMBERS is due immediately you decide to join, whenever.

To apply for membership in S.I.G.G.A. complete this membership application form and return it with the relevant subscription to General Secretary, J. D. McKean, 'Gleninver', Neilston Road, Uplawmoor, Renfrewshire. Tel. Uplawmoor 217.

APPLICATION FORM FOR MEMBERSHIP OF S.I.G.G.A.

Name of Applicant

Home Address

..... P.O. Code Tel. No.

Club or Company name

Address

..... P.O. Code

Preferred mailing address: Club Home

Designation within Organisation

Registered Greenkeeper or otherwise Certificates

I hereby make application to join the Scottish and International Golf Greenkeepers' Association and attach herewith my dues for one year in the amount of £12 ALL MEMBERS. I promise to adhere to the code of ethics as laid down in the constitution of this Association.

This magazine and membership form is only received by paid-up members of S.I.G.G.A. This membership form, therefore, as suggested by Co-Editor Mr. ELLIOTT SMALL in his editorial comment, should be passed to non-members of S.I.G.G.A. at the club up the road so that they may be encouraged to apply for membership.

There are established ground rules to follow.

Whether your responsibility is for fine turf or general amenity areas, SAI have the turf foods to meet the special need. They provide the necessary nutrients in readily available, slowly soluble form. Making fewer applications necessary. They ensure the development and maintenance of good, healthy root systems. Providing good colour and quick recovery from wear. And they come in the best possible form—'Mini-Crum'—for easy and accurate application. Simply name your turf and take your pick.

How to tackle fine turf
 Golf greens/tees/fairways/sandy soils
 of coastal courses: bowling greens:
 tennis courts: cricket squares: high
 quality/ornamental lawns

Spring & summer application: Longlife
 'Mini-Crum' 1
 'Mini-Crum' 5
 Autumn & winter application: 'Mini-Crum' 2

Playing fields, outfields, amenity areas
 Especially those which have ryegrass in the sward
 Spring & summer application:
 GreenGold
 'Mini-Crum' 3
 (to weed and feed) 'Mini-Crum' 6
 Autumn & winter application:
 'Mini-Crum' 4

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The Way The Wind Blows

together with 'his family and guests' at Strathclyde.

(Since 1974, the estate has only exercised its shell-mining right twice—once down through the 13th fairway of Eden.)

The administration of both trust and management committee is in the hands of joint secretary Bob Buchanan, a man with Fifa associations who took over from the beginning of the new arrangements.

In offices on the Bruce Embankment opposite the Royal and Ancient clubhouse, he has collected a gallery of portraits of almost every Open and Amateur champion over the links there. In spare moments, he is currently preparing a short history of the links. He has an assistant secretary, one full-time and three part-time secretaries and shares his facilities with links superintendent Walter Woods.

By an informal arrangement, starters man their posts at the changing rooms of the New, Jubilee and Eden and at the starter's box on the Old from 8am daily, all year round, for as long as time remains to complete a round. This can vary from 12.30pm in winter to 8.30pm in summer.

Rangers patrol the courses from dawn till dusk and collect fees from early and late starters.

Because a high proportion of those early and late starters are local golfers, paying season tickets, it is impossible to calculate precisely how many rounds are played each year over St Andrews, or over each course individually.

But recorded starts, plus green fees paid to rangers out of hours, suggest that the Old Course takes about 45,000 rounds a year, despite being rested for a month each winter; the Eden about the same and the New and the Jubilee not less than 35,000 each.

Clearly, the Old Course still takes more of a bashing than is desirable. Even its no-trolleys rule is a mixed blessing, since it automatically increases the number of caddies, thus doubling the weight of bodies tramping over it. Since 1980, however, the committee has stretched its starting drill to eight-minute intervals, thereby reducing the number of matches going out while starters are on duty.

Annual turnover for all courses last year came to some £330,000, of which £205,500 was spent on everything to do with the golf

itself, including starters' boxes, etc, and to do with the upkeep of the courses, under immediate supervision by a green sub-committee of the management committee, delegated to look after details of maintaining the courses to an annual budget worked out by Bob Buchanan and Walter Woods. Of that, some £45,000 was devoted to the maintenance of the Old Course.

The links management committee run the changing rooms for the Eden, New and Jubilee. The car park for the Old is still run by the district council. The links trust has plans, however, to provide first-class main clubrooms and services for golfers in some 4,000 square feet of the Rusacks Hotel, which it has bought and vested in a subsidiary company. Since it also comes under the trust, this company will eventually be able to feed any profits back into the running of the golf.

Therefore, the one defect visitors bewail at St Andrews—nowhere specific to sit, have a drink and chat together as golfers after enjoying a round over the Old Course—will, most likely, soon be made good. The Old Course will have its own 19th at last!

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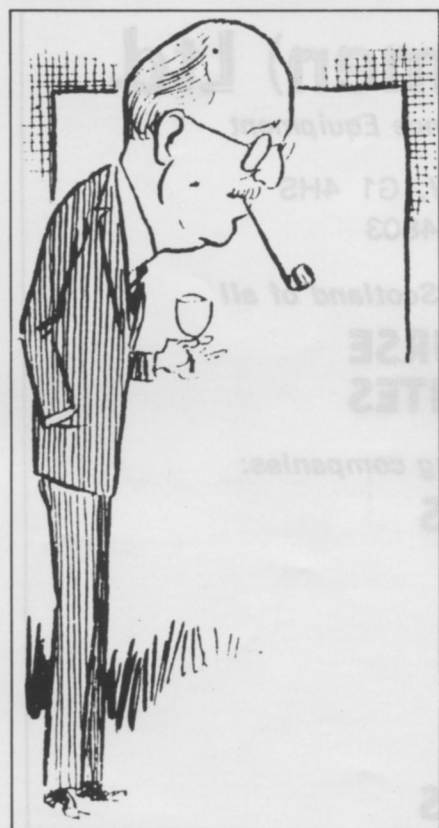
Bingley in the beginning



With the kind co-operation of Dr Peter Hayes, *Greenkeeper* looks at the early days of The Sports Turf

Research Institute, Bingley, West Yorkshire, then known as the Board of Greenkeeping Research.

An historical foreword—from the Journal Of The Board Of Greenkeeping Research.



A cartoon of R. B. Dawson ('Mr Bingley') that appeared in the *Yorkshire Post*.

Dr Hayes spent some time delving into the archives and discovered rare pictorial matter. He writes: "They give some idea of the machinery, dress and personalities who were involved in the early days of the institute's work. R.B. Dawson, who was director of research at the station, is present in a number of the photographs and he can always be picked out by his size (he was 6ft 6in.)

"I have looked through most of the articles written by Mr Dawson and his colleagues up until the war and very few of them mention machinery as this did not seem to be a problem in those days," Dr Hayes added. "Most of the articles were to do with weed control and pest control and the general maintenance of good playing surfaces. Mechanisation, with the exception of mowing, was given little thought."

● The Sports Turf Research Institute operates an advisory service for the maintenance of golf courses and a consultancy service on drainage and the reconstruction of golf courses.

THE Board of Research into Greenkeeping Problems was constituted at a Meeting of the British Golf Unions' Joint Advisory Committee held in Liverpool on Tuesday, 26th February, 1929, when a resolution in the following terms was adopted:

"That a Board of Research for Golf Greenkeeping in The British Isles be, and is hereby established to be elected annually by the Joint Advisory Committee, and that the control and management financial and otherwise of Research be vested in the Joint Advisory Committee."

This resolution followed on the preliminary work carried out by the National Unions during the previous year when they explained to their constituent clubs the full nature of the proposal. Subsequently promises were received from the four National Unions for a sum of approximately £2,000 per annum for a minimum period of 5 years.

It will be recalled that in 1924 the Green Committee of the Royal and Ancient Golf Club of St. Andrews endeavoured to establish a similar scheme but abandoned their effort owing to the lack of necessary financial support. Following their difficulties in obtaining a full measure of support from the Clubs in the country, the Green Committee of the

Royal and Ancient Golf Club asked the Joint Advisory Committee to undertake the direct management of the project, to organise the work and generally to develop the scheme. With the consent of previous subscribers, the Royal and Ancient Golf Club handed over to the J.A.C. a sum of £303 13s 6d, which they had previously collected from them for research purposes.

The Joint Advisory Committee invited and have received, in connection with the work of the Board of Research, the hearty and active co-operation of the Scientific Advisory Committee originally appointed by the Royal and Ancient Golf Club and also of Mr. W. Norman Boase, Chairman of the Green Committee of that Club. Both Sir Robert Greig and Mr. Boase have been appointed members of the new Board. The interest shown by these gentlemen in the aims of the Board of Research has been of an active nature, and the Board desires to place on record its deep gratitude for the advice and help which they have gratuitously given in arranging the many details requiring settlement before the work of research could be commenced.

Early in March, 1929, the Board of Research, after careful deliberation and with the guidance of a special report by Sir Robert Greig (which was approved by his colleagues on the Scientific Advisory

Committee), agreed upon the site for the principal research station on the St. Ives Estate, near Bingley, Yorkshire. This station is central, convenient of access, has several types of soil available for experimental purposes, and is generally suitable for investigations under average conditions of soil and climate.

The Board then appointed Mr. R.B. Dawson, M.Sc., to be Director of Research. Mr. Dawson was previously at the famous Rothamsted Experimental Station, and his qualifications satisfied the Board that the work of investigation into the problems which beset greenkeepers and Green Committees will be effected with thoroughness and benefit to the great community of golfers.

Although this first article in "The Journal" of the Board of Research is headed "Historical" it really only represents a foreword with the principal object of continuing to interest all concerned in the management of golf courses. On more than one occasion members of the Scientific Committee have declared that in the knowledge of the cultivation of finer grasses, as yet only the mere surface has been scratched. Research, particularly when it is concerned with living organisms, requires endless patience and perseverance; and the Board is

determined that these will be their watch words. But the aims of the Board cannot be realised unless this determination is backed by the encouragement and financial support of the Golf Clubs in the country. So far that encouragement has been generously granted, but the Board, knowing that each Golf Club has its own problems, will not be satisfied until every Club is associated financially with the Scheme to such an extent as its individual finance may permit.

In conclusion it may be remarked that the Appeals which were issued to every Club in October, 1928, asking for the support of Research, contain a full record of the origin and development of the Scheme up to the date of its inauguration. Any Golfer who is interested will gladly be given a copy of that Appeal if he will write to the Secretary of his National Union. It is intended to keep the subscribing Clubs advised of the progress of the work from time to time and to deal with some of the questions actually raised by Clubs. This will be done through the medium of The Journal of the Board of Research, of which this publication constitutes the first issue. "The Journal" will be published at intervals while the research work is in progress for the purpose of disseminating definite information on various points of interest.

This extract of the first paper by Mr R.B. Dawson M.Sc. was published in full in Volume 1 No 1 of the Journal Of The Board Of Greenkeeping Research, dated November, 1929.

IT IS generally agreed that modern greenkeeping owes its birth to the invention of the rotary mower, which made its appearance some 50 years ago. But for this, we should still be dependent upon the uncertain appetites of rabbits and sheep, or the variable effects of scything, in keeping the greens sufficiently close.

Under these conditions, the results were not always of the best—but then the golfer of those days must have been less particular than he is now-a-days. In these 50 years, many changes have been effected. Mowers cut more closely; they are of improved design and do not leave ridges. Cutting moreover is more



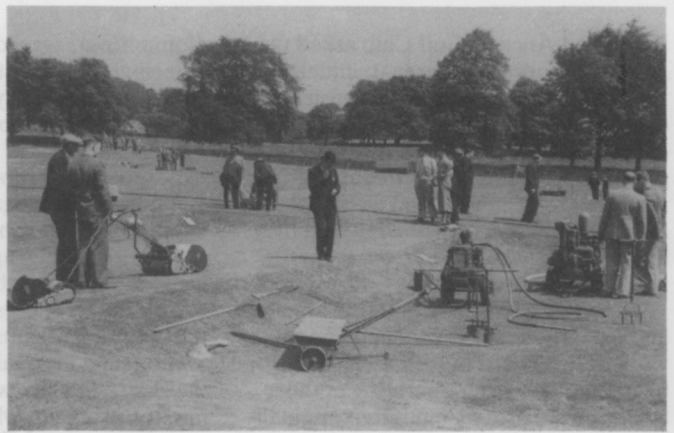
In a reservoir field, turf is being stripped prior to cultivation. The photo, taken in 1930 before the St Ives course was constructed, shows the board's founder Norman Hackett (left).



The unmistakably tall figure of Bingley's first director of research R. B. Dawson (centre) and delegates to a conference in 1933 examine a distributor.



A group of north-section members.



Pattisson's Distributor Lister Pump.

frequent. The use of the tractor dragging multiple mowers has made cutting fairways a comparatively rapid and consequently less expensive performance.

Heavy rolling has been relegated to the past and has been superseded by the new system of top dressing, now generally accepted. By this method small depressions are levelled by the compost and aeration is preserved. The old practice of rolling sought to obtain a level surface by flattening out, so resulting in a hard hide-bound surface impossible for the proper growth of grass. Light rolling with a wooden roller is generally all that is required when greens are regularly composted. Again, on many courses water is now laid to the greens and many clubs can even afford the high pressure pumps driven by a small petrol engine now on the market for fine sprinkling in dry weather.

In the early days there used to be relatively few fertilisers, such being for example bone meal, nitrate of soda, or that good old-fashioned material, farmyard manure. Now there is a veritable host of chemical fertilisers, fungicides and insecticides. New fertilisers and proprietary compounds of unknown or questionable effect are constantly being produced. Almost without exception their

composition is based on agricultural requirements and it cannot be too constantly stressed that for greens we require quality of turf rather than quantity. Often the greenkeeper is the victim of good salesmanship. Farmers have passed through this stage and as a result one finds advisory departments scattered throughout the country to whom they may turn in time of doubt. In this respect greenkeepers have good cause for complaint.

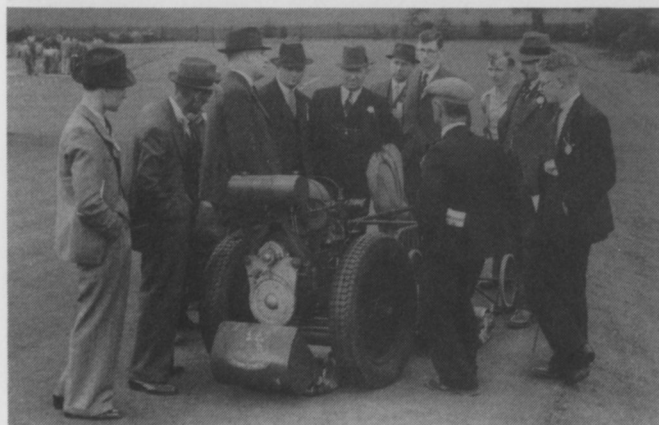
These few details of changes in method have been recorded for a purpose. Surely they illustrate quite plainly that greenkeeping has passed through a steady evolution but at the same time its complexity has increased. But the really important point to be brought out is—that this evolution, or sequence of changes, has been largely the results of trial and error, hit or miss. Perhaps only ten per cent of the ingenuity lavished upon golf course problems is fruitful, but with a little advice, based on scientific principles there is no reason why this figure should not be raised to say 75 per cent or even more. Applied science, in general, may be said to aim at increasing the "hits" at the expense of the "misses".

As a result of this empiricism there is little precise information available.

Sometimes a desired condition can be brought about but the reasons for it are unknown. If a beneficial result is brought about, often it may be due to one of several factors acting simultaneously. But there is no means of elucidation. Properly controlled experiments can only be conducted by trained persons with requisite equipment.

The mechanism of growth and simple ideas on plant nutrition are not always given the consideration they might when dealing with lawns or greens. Vague anthropomorphic theories about the life and metabolism of the plant circulate freely. In all these mysteries it is desirable that the greenkeeper and those associated with him should be given help.

One cannot too often stress the point that both green committees and greenkeepers often go astray in their eagerness to apply an agricultural method of treatment to the golf course. Usually this is the result of an appeal to some member with a certain amount of farming knowledge. It is true that much of the farmer's knowledge can be adapted—but why should one treatment be the cure for two illnesses? A doctor does not give the same medicine for biliousness and small-pox. Certain basic principles may however underlie each treatment.



A Ransomes machine attracts the attention of greenkeepers during a 1938 show.



'Joggle boxes' were the familiar names for these old SISIS rake scarifiers.



A Patisson tractor and spiker of the 1930s.

The use of lime for example is traditional in agriculture, but that is no reason why it should be employed on golf courses. Indeed, many clubs are at the present regretting the day they spread lime on the greens and fairways. Perhaps it is hardly necessary to say that there are almost endless problems confronting the "live" greensman. A great many of them can only be solved by a careful study of soil and other factors.

Many people are of the opinion that particular grasses are alone associated with clay, or, perhaps sandy soil; but chemical factors (for instance, amount of nutrient materials or degree of acidity or alkalinity) have often a dominant influence. For instance, the turf on many old seaside courses is today composed of coarser grasses than a decade ago.

Further problems one might mention, are to find better methods to eradicate a wide range of weed pests; to more cheaply and effectively control worms; to keep down the depredations of the leather jacket pest, and to combat certain fungal diseases. In addition, there are three distinct problems relative to the grass cultivation on golf courses, namely, on the greens, fairways and tees.

It is the ambition of every club to possess the best possible turf on greens

and fairways—and it will be convenient at this point briefly to summarise those conditions generally considered to be most desirable.

Firstly many golfers are possessed of a keen aesthetic sense, and the greens in particular should satisfy this. There should be no bands or blotches of darker colour; the grass should form one homogeneous whole. A good green should be such that whatever the distance from the hole to the ball, if the latter is struck correctly, it should find its way into the hole.

To permit this, the green should be free from weeds, coarse grass and worm casts. Such weeds as plantain (several species), yarrow, clover, daisies and pearlwort, moss, and so on, are the usual causes of trouble, while many grasses, for example rye grass, do not lend themselves to satisfactory cutting.

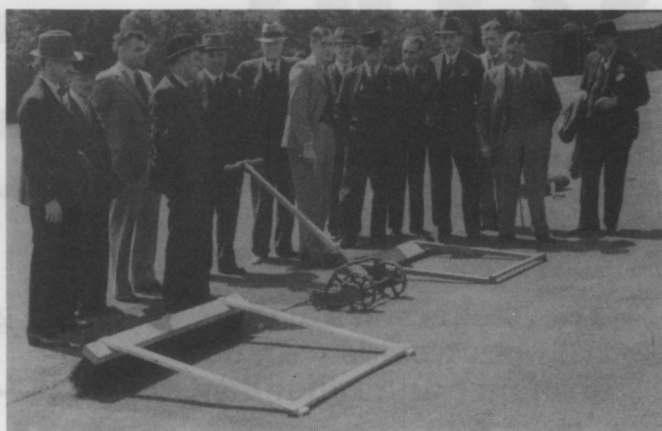
The fine-leaved grasses, notably the bents and fescues are generally acknowledged the most desirable for all purposes on the golf course; on greens, because they will cut to a good, fine surface, wear well, and do not rub up; on fairways, a bent-fescue turf is pleasing and in supporting the ball gives a good lie.

It is not possible to discuss the relative merits of the species of fescue and bent

here—but it should be the aim to encourage these grasses as a whole by some system of selective fertilisation.

The majority of our greens are at present largely composed of annual meadow grass or *Poa annua*, and many clubs formerly possessing fine bent or fescue greens have had the misfortune to see a gradual invasion by this grass, in consequence of the treatment applied. It is a relatively coarse grass and its propensity for seeding is phenomenal. Although comparatively good greens can be made from it, it is only as a result of much trouble, and the grass can only be regarded as a help in time of need. Most greenkeepers would eliminate it if they could. In the early spring its fine shoots are difficult to distinguish from bents or fescue.

There seems little doubt that *Poa annua* is an annual under normal conditions, but repeated removal of panicles may be instrumental in making it perennial. Readers who are familiar with moorland and upland pastures will remember that here fine-leaved grasses predominate, and moreover the turf in these places is entirely free from worms and from all common pernicious weeds. The artificial imitation of such conditions may form the solution to many greenkeeping problems.



The Refell Rejuvenator with drag brushes.



An old Morris is used for cultivating before spaced grass plants are put in.



Early models of Patisson and SISIS spikers, and the E. Smith turf renovator, which was not used widely.

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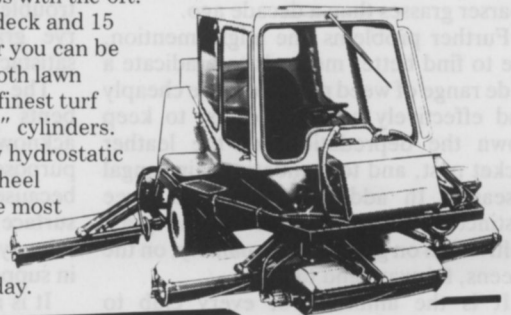
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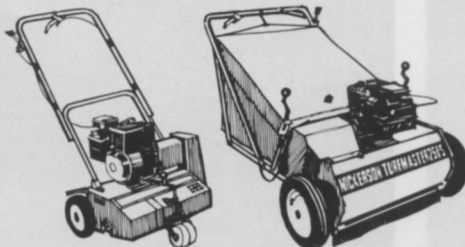


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Out On The Course



John Stobbs enjoys a round of golf at St Andrews with Walter Woods (pictured above).

AT 47, Walter Woods is still a darned good golfer, with an impeccably simple orthodox swing. He has a pair of very powerful and crafty hands, with which he can play every shot in the game. And he belts the ball a fair long way.

It was a pleasure to watch him. A perfect six iron at the 8th bit through the breeze, dead on the flag all the way. "That could be in the hole," Walter said. It was, too! He wasn't sure whether it was his 11th or 12th ace.

That made him out in about 34. Had we not been held up in an increasingly nippy breeze at the later holes, no doubt he would have finished well under 70. He doesn't enjoy waiting between shots and, in any case, we were giving more attention to what he and his staff have been doing on the course. He pointed out something at every hole—either some major work or detail of sward or surface that caught his attention.

"Wind and weather affect everything at St Andrews, as does everything associated with it. It only takes two days of cold north-east wind here to take all the green off the fairways and turn them yellow. The fescues and bents have an inbuilt

thermostat, and draw themselves in against the cold. Then with the first little rain and warmth, the place just blossoms out and comes alive again.

"The earlier part of this year was difficult. Cold. No rain. Everybody appeared to be worried, but I was completely confident that we'd have excellent greens this year. If I had forced them with water and fertilisers, people would have been saying how good they were and slapping me on the back but, in fact, I would have reversed all the hard work we've been doing on them!

The tradition

"I've been here eight years now and I'm just beginning to know St Andrews and get the feel of the place—the tradition and everything associated with its history.

"Study the Old Course however you like. Whoever laid it out or however it evolved, it is going to stand the test of time. Meanwhile, you have to study its fluctuations, how the course changes. Some days it will treat you kindly and some days it will oppose you.

"In 1978, before my first Open, I was afraid the excessive rain we'd had was going to make the greens too slow. But a few days prior to the actual event, strong winds made the course fiery instead. It got fierier the more the championship went on and Nicklaus commented how good it was to come back to a course where the greens were firm and fast!"

Bob Buchanan, secretary to the links management committee, had told me that the policy at St Andrews was one of minimum fertiliser, minimum water (getting it into the right places) and using the new fairway watering system only to stop the turf burning right out under today's constant wear and occasional hot spells with drying winds. He revealed how its installation caused uproar among local traditionalists, until they were assured the policy would be only to have the system in reserve for times of real need.

I asked Walter how far he agreed with the links committee's consultant Jim Arthur and how closely he worked to his policies. "I've known Jim since he came here and think he's doing an excellent job up and down the country. He tells golf committees what we all did years ago.

Out On The Course

He's the man who stood up to everybody and got them back on the right tracks. He's had opposition from lots of people, including greenkeepers, and come through it with flying colours.

"In fact, he's a great friend to greenkeepers. As a greenkeeper, you might think you know everything. Jim understands your feelings. I think, strangely, that it was partly the fact that most greenkeepers knew he was right that made the situation more difficult for him! Yes, Jim and I do fall out and argue like mad. But we usually agree to try out the point at issue somehow. I've been wrong as often as Jim has been wrong!"

One handicap

Born in the village of Tillicoultry, some 50 miles away in Clackmannanshire, he got himself down to one handicap on the local hilly nine-hole course, then took over as the greenkeeper. Next he went as head greenkeeper to semi-heathland Braehead, Alloa. There, with the then green chairman Jimmy Cram, he designed an extra nine holes. He built them himself, laying all the greens with turf from the existing fairways. Within three years, the club hosted the county championship. Next he went to a parkland course in Stanton-on-the-Wolds, nine miles south of Nottingham and then to Hollinwell.

Hollinwell played a great part in forming his character as a man in charge. He played for Clackmannan and Notts counties for some 20 years successively. He found Hollinwell behind him all the way. Looking back, he's frank in praise of the club. "I regard Hollinwell as the finest club and course in the world. The kind of members at Hollinwell are the kind of members any greenkeeper wants to know. Mainly Nottinghamshire professional people, they appreciate a job you do and allow you to get on with it for them. You felt wanted in that club and, therefore, gave them that loyalty back.

"It was the happiest time of my life, especially as they encouraged me with my golf as well, which I played as a member of nearby Coxmoor, living only a mile and a half from either club. I would not have left Hollinwell for anywhere but here. "Its layout is excellent, with 18 individual holes, rolling fairways, nice types of tree and grass and beautifully architected greens. Last year, I played a number of courses in California, including Pebble Beach, and then I went to Hollinwell in July. I thought Hollinwell's greens were better than anything I saw in America.

"St Andrews is a very, very difficult place to work. The responsibilities here are enormous. Outside demands upon you are very heavy, too. It all needs careful handling, if you are to keep on top of everything you're here for. As I said, the courses fluctuate greatly. In summer, you've just got to be here every day of the week. Let me give you a simple example. I have an excellent greenstaff here. Nevertheless, some of them, in changing holes, were spreading ryegrass about the greens as they transferred hole plugs. I had to make sure they all know what is fescue, what is bent, what is poa annua and what is ryegrass.

"The rye probably arrived during one of those periods when it became fashionable for repair work. It takes only one chap picking a thick plug of rye when replacing a hole for it to get into any green.

"Since last autumn, we have removed most of the ryegrass that was in the Old Course greens by plugging and patching it out all over and also by completely removing large areas and replacing them with fescue turf, mainly from the Jubilee greens. The Jubilee, being the course least trouble has been taken with in the past, now has the best greens of them all!

"As you can see on the Old Course, we have completely replaced most of the 11th/7th green." (The Old has four single greens and seven double ones.) "This green was badly compacted, too, so we pegged it for levels, all over, then rotavated it to let some air in.

"Taking a straight section out first, we could see in section the history of previous greenkeeping. Long ago, when that green had been refashioned, they had blinkered it with a two-inch layer of mixed soil and charcoal. (Charcoal is of great value in greenkeeping. Among other things, it keeps ground temperature up in cold winters.) Above that, we could see year after year of different sands and soils and top dressing mixes.

"We finally mixed Turface into the top levels then trued it up to the pegs again to keep the lie of the green as it was before we turfed it. We have also done much the same to large areas of the 4th/14th and 5th/13th greens. There's still ryegrass left in several greens, but nothing we can't hope to patch out steadily from now on.

"The other big job here nowadays is aeration. With the amount of play we get and the compaction that comes from it, it's most important that we aerate greens, tees and fairways continually throughout the autumn, winter and spring and as often as we can manage in summer, as well, when a

little bit of irrigation will close up the slits if necessary.

"We use a Cushman, with deep blades. I'm not a believer in hollow tining on a links course—unless it's for overseeding, when the Ryan Greensaire is an excellent machine for the job. Hollow tining makes a links course too soft. I don't like solid tining, either, because it can create more compaction in the holes themselves. I prefer slitting.

"You can get a hard pan develop underneath, so, to compensate for that last winter, we used the Subaire twice with the 7in tines. I thought the Old Course greens were probably developing hard pans and needed it. We had been getting quite a bit of poa annua in them. We always will here, of course, with all the tracks and paths around the place and players carrying the seed about on their shoes, particularly on to the Old Course. But we are steadily getting rid of it.

"Compost is my main item of feeding. At the beginning of the season, I give the greens a light dressing of sulphate of ammonia, iron and blood. I did try superphosphate and potash, but I didn't see any improvement from that. I'm now getting just as good results without them. Our greens are improving rapidly. In fact, we're in danger of getting them too fast!

In advance

"We work four years in advance, to give compost time to mature. We use 400 to 600 tons a year on all four courses, mixed two parts beach sand to one part compost. We make our heaps originally from cuttings, divots, seaweed off the beach and whatever good soil I can get. I would use manure if the cost was right and it did not contain mostly straw. But the seaweed seems to act as a substitute well enough for me to feel that I don't need manure out there. The fescues and bents don't need it. They get along all right without it.

"I have tried Farmura on them, too, particularly to help things along when I have to deal with early-year outbreaks of mouse-ear chickweed.

"For the fairways, I just use fenpeat mainly, plus regular aeration. Fenpeat is a good material. It retains moisture when you most need it. It did my fairways a lot of good. I put it on fairly thick, after hollow and slit tining the fairways, so we can dragmat the peat into the holes.

"The great problem I have here with the Old Course fairways is the continual divotting from the many rounds of golf over them. The last few years, to get a bit

Out On The Course



Not a trolley in sight on the Old Course.

more mat into them, I have been overseeding the worst-worn patches with creeping red fescue—you'll notice it's well established here and there—and then spreading it by plugs and patches whenever we have a moment to spare.

"We treat tees and greens exactly the same way here. During the previous Open here, Nicklaus asked on the Tuesday evening whether competitors might use part of the 1st tee for practice putting. By Wednesday morning, he had it. All we had to do was rope off a patch and cut holes in it!

"As for mowing, we use triplex all the year round, but for tournament periods hand mowers only, taking the cut down from 3/16ths to 5/32nds. Much of the time, the turf here grows so slowly that we only need to cut three times a week. For the eight or nine weeks of tournament play each summer, we cut daily, of course.

"We use a variety of machinery. Manufacturers are continually sending us their latest machines to test, knowing that if they come to St Andrews they've got to work because of the ground we have to maintain here. We find out their weak spots and where they're liable to breakages and report back upon them.

"I'm in the fortunate position of having a genius of a mechanic in George McLaren, a local man who has been here 14 years now. George can usually see the weakness in any machine at once and modify it to make it work better."

The other recent campaign Walter Woods, his first assistant John Philp and his four 'charge-hands' (head greenkeepers in charge of the Old, New, Jubilee and Eden courses) have been engaged in has been retailoring the Old Course to fit the increasing traffic over it.

At present, trolleys are banned over the Old. "We feel the Old Course is not a place for white lines and, in any case, the course having evolved from just 11 holes in the ground where players putted out and beside which they also teed up for the next hole, there isn't room for effective trolley-control provisions.

Teeing space

"Everything's a concentrated bottleneck," Walter said. So, it is far more a matter of providing additional teeing space and simultaneously extending putting surfaces as well, so as to allow for as much tactical control of walk-off wear, over and alongside each putting area, as can practically be managed.

Most of the traditionally huge putting surfaces have already been increased by up to a quarter, simply by mowing them out, of course, the fairway turf being exactly what's wanted in the greens, the subsoil free-draining naturally and the natural contours as much part of the Old Course's putting areas as its fairways.

Some of these new sections of putting

surface are already looking very good. And by taking them around little pots and hollows already in the old approaches or surrounds, these extensions can help make playing the Old an even more subtle test of golf than ever!

I asked Walter what his summer plans included. "From May to September, general course maintenance, particularly cutting, occupies the greenstaffs' time, together with routine upkeep at the four and a half golf courses. Local golf club fixture commitments, plus regular major tournaments, compel us to provide the highest possible playing standards.

"Our manpower—23 men, including seven apprentices—is separated into two categories. One forms a skilled cutting team, who have most of the greens and tees cut before the majority of golfers arrive to play. Then there's a back-up team, who arrive later and complete general duties, such as bunker raking, divot filling and the hundred and one tasks that greenkeepers have to do.

"There is nothing easy at St Andrews. The volume of golfers can enlarge the simplest tasks. Low rainfall and skin-scorching winds can make grass growing difficult. But where we do produce the conditions associated with a fast-running, fiery links, it can also provide a lot of satisfaction."

In all, a round with Walter proved one of the most interesting expositions of intelligent greenkeeping anyone could wish for. What it all amounts to is applying practical common sense and realism to the challenge of continuous over-play conditions.

The New, Jubilee and Eden courses are treated exactly the same way as the Old. And Walter recently had the satisfaction of adding a complete new 9th hole to the Jubilee out at the far end where the duneland has built up over the years at the sea end of the Eden estuary, while it still tries to cut in only a quarter mile inlandwards behind the 11/7th green of the Old. He also rejigged half a dozen adjacent Jubilee holes to make more space and scope for them.

The continued success of St Andrews is also a matter of hard work, good planning, continual thinking ahead and not a little nerve, too, for the challenge of great occasions, as well the annual barrage of less crucial tournaments and amateur events.

If greenkeepers and golfers regard being links superintendent at St Andrews as the top job of its kind in the world, they are perfectly right to—today as ever.

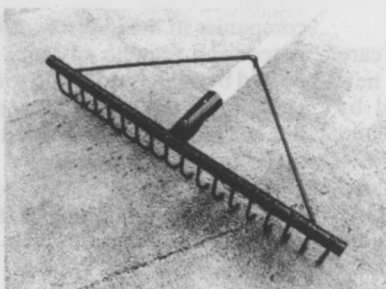
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Notebook

Greenkeeper reports the news from trade manufacturers and within the industry.

Walter Wins

Toro Irrigation has decided to make an annual award to the person who, in its opinion, has done the most in the preceding year to further the interest of the irrigation industry.

This year, the company made the award to Walter Woods, links supervisor at St Andrews. An inscribed plaque was presented on Toro's stand at this year's Open.

Toro's managing director Philip York said: "As a user of irrigation equipment, Walter's advice to the trade on the 'in field' use of irrigation equipment has been invaluable, playing a part in the formation by the BTIA of standard recommendations for the design and installation of irrigation systems.

"Furthermore, as SIGGA's east regional education officer, Walter has played an important part in the advocacy of the irrigation systems as a management tool for teaching younger greens staff how a properly designed system can be effectively utilized to maintain uniform and consistent surfaces without detriment to grasses or soil structure."



Walter (left) with Philip York and SIGGA chairman Chris Kennedy.

NTC Convenes

Papers delivered at the first conference of the National Turfgrass Council outlined the present state of the playing surfaces industry and the developments that can be hoped for over the next few years.

Although the council's name emphasises grass surfaces, it is a national organisation concerned with all amenity grass and non-grass surfaces.

Both types of surface were considered in a paper by Dick Jeeps, chairman of the Sports Council. He gave a broad view of Sports Council policy, which can now be read in conjunction with the recently-issued strategy document *Sport In The Community—The Next Ten Years*.

An explanation of the policy of the NTC by its chairman Michael Chance was followed by far-reaching reviews of education and research by Professors Leonard Broadbent and Tony Bradshaw.

The remaining six papers gave more detailed technical comments on aspects of playing surface use and management—five dealing principally with grass surfaces

Meet Mr Supaturf

Mr Supaturf is the expert to solve turf care and maintenance problems... This new consultancy image will be launched by Supaturf Products of Peterborough, Cambridgeshire at the IOG exhibition.

Supaturf, leading suppliers of fertiliser, grass seed, chemicals, maintenance equipment and accessories for sports and amenity turf, is also one of the few specialist

and the last dealing with synthetic-surface developments.

The conference summary by Arthur Dye showed the direction of the council's future work, some of which will no doubt be reported at the next conference, at Keele University in September, 1983.

This year's conference proceedings should help anyone concerned with the playing surfaces industry who wishes to predict and assess developments over the next few years. A report is available at £1.50 from the Secretary, NTC, 3 Ferrands Park Way, Harden, Bingley, West Yorkshire BD16 1HZ.

companies in the industry offering a competent and reliable advisory service supported by a laboratory and soil testing service. And now Mr Supaturf (shown below) has been introduced to develop this image still further.

Further information from: David Palmer on Peterborough 68384.



Notebook

Turfland Attraction

More than 130 grassland experts from all over the world visited Watmore's Turfland, the 200-acre turf farm at Preston Brook, near Warrington recently. The owner Chris Watmore, Britain's first specialist turf farmer, declared the visit a great success.

"There was a great deal of interest in what we are doing here and the visitors were full of questions about the machinery and techniques we use to grow top-quality turf," Chris said.

The visit was part of the 1982 summer tour of the British Grassland Society, organised by the Cheshire Grassland Society. The visitors were shown cultivating, reseeding and turf harvesting machinery in action and were able to put questions to Chris on the feasibility of turf as a farm crop. "It is done quite extensively in America," Chris said, "but over here we are the first. We chose to set up in Cheshire because it is close to a good market as well as being ideal land for grass cultivation."

After a tour of the farm, Chris was



A specialist Brouwer turf harvester from Canada in action at Watmore's Turfland during a visit by the British Grassland Society.

thanked on behalf of the visitors by Allen Charles, a member of the British Grassland Society for many years.

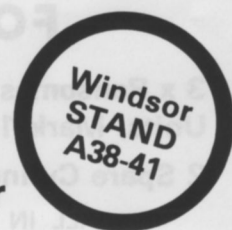
Also present on the tour was Dr John Brockman, president of the British Grassland Society and David Applegarth of the Cheshire Grassland Society, who organised the visit. He said, "Our foreign

visitors were greatly impressed. Amenity crops such as turf are much bigger business abroad than they are here, but I think Turfland has shown us that this is changing."

For more information, contact Ruth Elliott-Smith on Sandiway 888307.

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Notebook

IOG Exam Results

Here are the results of four examinations in the science and practice of turfcare and sportsground management.

National Diploma (there were three passes from 22 entrants): D.Bielawski, Hyde, Cheshire; P. Crawshaw, Guildford, Surrey; F. Seaward, Basingstoke, Hampshire.

Success in the national diploma exam entitles students to use the initials NDT (national diploma in turf culture) after their name.

Intermediate Diploma (out of 39 entrants, there were eight passes): D.Evans, T.Jackson, D.Smith, J.Grimwood, G.Jones, R.Street, B.Harris, O.Sandberg.

The Frank Goddard Memorial Award went to R.Street of Nottingham.

National Technical Certificate

There were 233 entrants and 87 passes. In addition, there were 75 passes in the national technical (practical) certificate. The Frank Goddard Memorial Award went to J.Hedger of London SE2.

National Practical Certificate

There were 158 entrants and 141 passes.

The recipient of the Frank Goddard Memorial Award was R.Brading, Ryde, Isle of Wight.

BP Takes Toro

The BP central sports club complex in Kent has replaced all its old watering systems with fully automatic Toro equipment. BP's groundsman Dai Rees, and chairman of the IOG exhibition committee, said: "The availability of the automatic watering system incorporating Toro 640 pop-up sprinklers persuaded us not to replace existing tennis hard courts with artificial surfaces.

"The maintenance of porous surfaces was becoming an overdemanding and expensive chore, but the new watering system has enabled the hard courts to be viable once again, since the labour required for watering them is now virtually nil."

The Toro area distributor British Overhead Irrigation was responsible for the installation of the new BP systems. A total of six hard courts, four grass courts and a full-size bowling green were completed.

New Group Set Up By BAA

The British Agrochemicals Association, the UK trade association representing pesticide manufacturers and formulators, has set up a new expert committee to advise the association on matters relating to the use of chemicals in amenity and professional horticulture, industrial and aquatic weed control, turf maintenance and forestry.

The chairman of the new committee is C.L. Stitt of Chipman. Other companies represented on the committee are BP Oil, Diamond Shamrock Agrochemicals, Fisons, ICI Plant Protection Division, May & Baker, Midox, Murphy Chemical, Pan Britannica Industries and Rohm & Haas (UK).

The new committee will study all aspects of the supply and use of herbicides, fungicides, insecticides and growth regulators in the above areas. It will be responsible for representing the industry's views to government departments and providing information to the trade press, interested organisations and users of its products.

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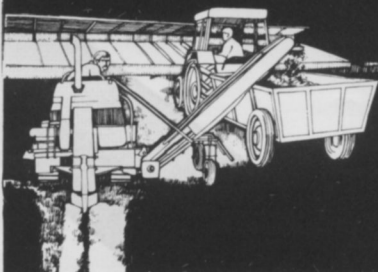
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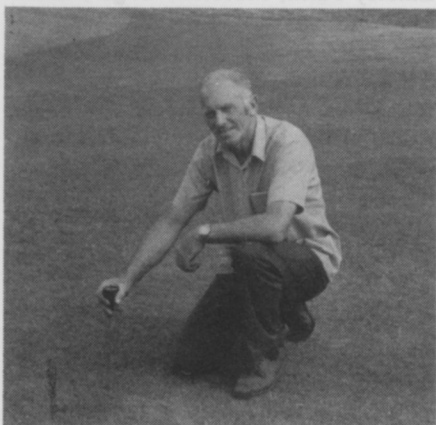
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Notebook

Ringmaster Revitalises Ayrshire Links Courses

As the cameras filmed Tom Watson nearing victory on the 17th green at Royal Troon to win this year's Open, one thing they did not pick up was an established fairy ring, moving from the fairway towards the green.



Norman Fergusson, Royal Troon's head greenkeeper, inspects moisture levels.

Head greenkeeper Norman Fergusson had ensured neither competitors nor the viewing public would see what had, until this year, been an established eyesore.

After hearing about the launch of May & Baker's Ringmaster from his distributor Richard Aitken of Glasgow, Norman applied the fungicide to the 17th fairway four weeks before the Open. At the time of application, the fairy ring was active, displaying a typical lush green growth interspersed with puff-balls all the way round.

The immediate effect of applying Ringmaster was to eradicate the puff-balls within a day or two—the fungicide killing the mycelium on the turf surface and working well into the soil to attack the main body of mycelium some 12 inches below the surface.

Inspection of the fairy ring just after the Open showed complete inactivity, partially attributable to a drought that had stemmed most fungus action throughout the course.

Although the fairy ring had been present on the 17th fairway for years, its advance, at a slow-moving pace, was a clear threat to the fescues and bents on the green. So much so that Norman had resigned himself to the fact that he would have to undertake the laborious task of digging it out.

Ringmaster saved all that, though. A simple forking of the affected ground to assist percolation and the subsequent application of the fungicide by watering can save many hours, possibly days, of trenching the affected area, removing the diseased soil and mycelium and replacing with clean, fresh soil.

While Norman wants to wait until the damp autumn weather before committing himself to the success of Ringmaster, he admits that it appears the life of that particular fairy ring is over.

Further south on the Ayrshire coast at Turnberry, James McCubbin, course supervisor to the Turnberry Hotel and Golf Courses, has also tried Ringmaster after hearing about the fungicide from Jim Arthur. Once again, Richard Aitken was the supplier.

Managing two 18-hole courses, the championship Ailsa Course and the Arran Course, James McCubbin applied Ringmaster as a trial on a section of the Ailsa's 18th green during the second week of July.

As at Royal Troon, the fairy ring was demonstrating typical vigorous green growth.

James had dug a fairy ring from behind the 6th Ailsa green a couple of years ago. "At the time we had to dig some 18 to 20

inches of soil out and, quite frankly, I think you can keep digging forever to try and remove fairy rings by such technique.

"In all probability, some of the unextracted mycelium will cause that particular fairy ring to re-emerge within the next 20 years."

Once again, the turf was systematically forked to ensure that the chemical would attack the main body of mycelium. Ringmaster was then applied to the surface with a knapsack sprayer.

Inspection three weeks later showed that the treated fairy ring had disappeared. James said the trial had proved an unqualified success and that he would be treating all the other greens at Turnberry with Ringmaster as soon as the drought was over. Ringmaster requires soil dampness to achieve full effect.

James was also full of praise for the easy-measure dispenser in which Ringmaster is packed. "A superb idea allowing the correct dosage of chemical and minimal mistakes," he said.



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Notebook

Parker's Play Day

There was a fine day at Sunningdale for the annual Parker tournament for greenkeepers. A field of nearly 70 produced a tight finish. John Cowen

(Addington Palace GC) was the winner with 37 points and this was decided on the last nine holes.



From left to right: J. Teixeira, D. McIndoe, Mr and Mrs G. Parker, J. Cowen, E. Holland, B. Payne and R. Claydon.

For A Good Grounding In Turf Management...

Greenkeeping is the title of a recently published volume written by John Campbell, a regular contributor to *Greenkeeper* magazine.

John has a wealth of experience of the industry, starting his career at Hilton Park Golf Club and progressing, via war service and Royal North Devon GC, to Longniddry and the pinnacle of his career, St Andrews—where he became the first links supervisor.

Greenkeeping includes chapters on bunkers, automatic irrigation, top-

dressing, mowing, golf-course architecture, weeds, thatch and seasonal maintenance work.

The book will prove an invaluable reference work for any student of fine-turf management and, being semi-autobiographical, an interesting read for any head greenkeeper, too.

Available direct from the publishers: A. Quick & Co. 121-123 High Street, Dovercourt, Harwich, Essex, at £3.50, + 40p postage and packing.

New Distributor For Steetley

Steetley Minerals, manufacturers of the Key Range of fertilisers and specialist turf-care products, has appointed a new distributor to cover Essex, Hertfordshire and north London. It is C.H. Binder, Embley Farm, Moreton, Ongar, Essex. Tel: Moreton 246 and 320.

All Change

The business of Wrightson NMA (including Morrison Precision Lawnmowers) in the UK has been transferred to its parent company Fletcher Challenge.

Existing contracts will be performed by Fletcher Challenge on behalf of Wrightson NMA.

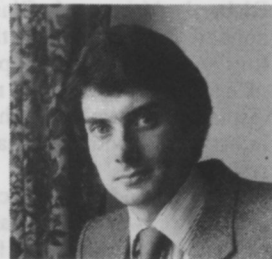
Appointments

Paul Hogg, 23, is the new east of England area rep for Nickerson Turfmaster.

Paul has worked with horticultural machinery since leaving school. He joins the company from GSS of Colchester.

He lives at 110 Mumford Road, West Bergholt, Essex.

British Seed Houses' amenity grass division has appointed Mark Radford as its technical advisor for the Midlands and South Wales.



Mark Radford.

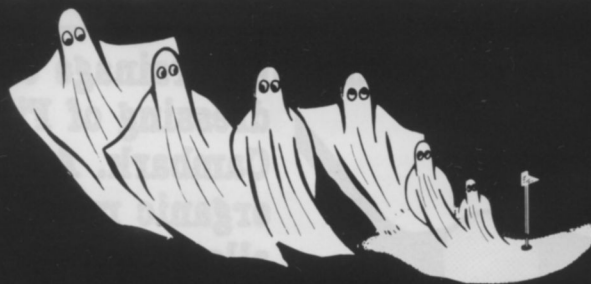


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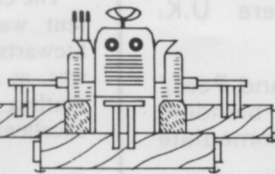
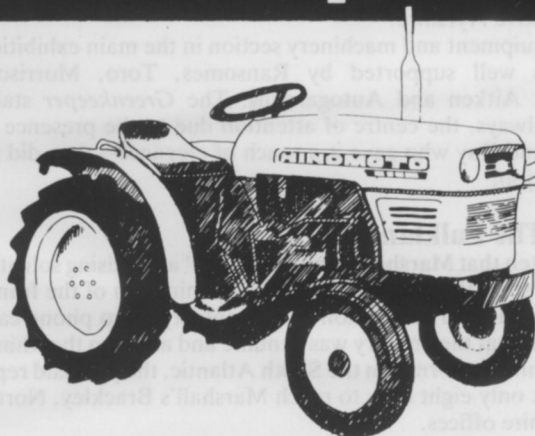
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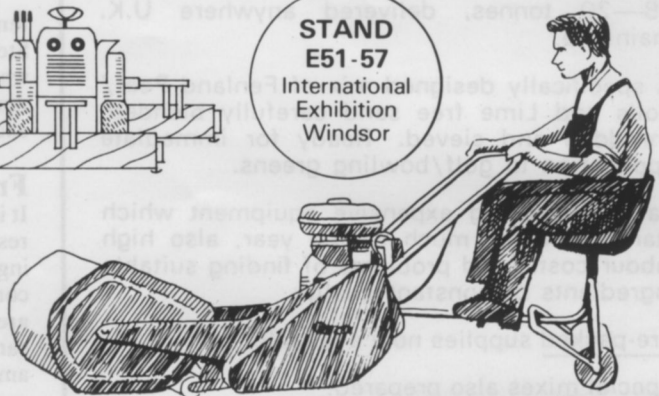
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Notebook

BGGA Section News

The **Surrey** section defeated the Surrey secretaries by 6½ points to 5½ in a match at Royal Mid-Surrey recently. The greenkeepers wish to thank the secretaries for a most enjoyable day and look forward to it being an annual event.

The July meeting was played on the Old Course at Walton Heath. Winner of the MacGillivray Shield was **Doug Fernie** of Effingham with 42 points; runner-up was **Alan Morton** of West Byfleet with 41 points and **Stewart McKay** was third with 39 points.

The autumn tournament on September 16th is at Foxhills. Members should find a guest and enter as soon as possible. The day should cost about £10 a head.

Frank Brittin, Secretary.

The **Southern** section's autumn tournament will be held at Woodcote Park GC, Meadow Hill, Coulsdon, Surrey, on October 11th. Send £10 deposit to G. Brown, 19 Foxearth Road, Selsdon, Surrey, by September 30th, please.

With all notes for August sent to the association magazine, I cannot inform readers of any results or obituaries. My apologies to all those concerned.

Brian Newcombe, Secretary.

Next year's Institute of Groundsmanship annual conference will be held at the University of Dundee, Angus, Scotland, from April 4th to the 6th. For further information, contact Richard Frost on 01-352 8384.

What's Going On... By John Campbell

September is always a busy month at **St Andrews** when the R & A holds its autumn meeting, which is attended by members from all over the world. It is also the month when the new captain of the club plays himself into office accompanied by the firing of a 250-year-old cannon at a special ceremonial occasion.

For many years, the firing of the cannon was performed by Andrew Nicol (pictured), a retired member of the links staff who charged it with gunpowder and pulled the lanyard attached to the detonator. Andrew used to stuff a couple of buckets of turf divots down the muzzle to make it look more spectacular when it was fired!



I thought the course at **Royal Troon** was in good nick for the Open and it was obvious the green staff had put in a lot of hard work to provide an excellent test of golf.

During the Open, I had the pleasure of meeting many green-keeping friends from north and south of the border. I enjoyed having a beer with my old chum Hugh Brown of Home Park Golf Club, Surrey, who dropped in to watch the golf while visiting his native Ayrshire.

The equipment and machinery section in the main exhibition tent was well supported by Ransomes, Toro, Morrison, Stewarts, Aitken and Autogardens. The *Greenkeeper* stand was, as always, the centre of attention due to the presence of Anthea and Kay who gave it a touch of elegance—they did an excellent job!

From The Falklands

It isn't often that **Marshall Concessionaires'** advertising solicits a response from the Falkland Islands. Examination of the franking stamp gave an impression of authenticity. Two phone calls confirmed that the enquiry was genuine and as a sign that things are returning to normal in the South Atlantic, the pre-paid reply card took only eight days to reach Marshall's Brackley, Northamptonshire offices.

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

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