What A Water Container!

Progress in water containment has, in recent years, come to a standstill, with only two types of sealing systems available (clay admixes and synthetic liners). Now Rawell Marketing has launched Rawmat, a bentonite waterproofing membrane.

Rawmat is a triple layer carpet of consistent thickness, comprising a tough woven polypropylene fabric base similar to Terram, a top layer of biodegradable scrim and a fill of high Wyoming swelling sodium bentonite—a water-absorbent and expanding non-toxic, natural clay.

This format incorporates the benefits of synthetic liners and bentonite admixes, while eliminating the drawbacks.

The key to the system lies in the uniform layer of sodium bentonite contained in the centre of the sandwich. It has the capacity to swell to a volume of between ten and 15 times its dried bulk, a process that is reversible an infinite number of times, enabling it to create not only a comprehensive seal, but one with self-healing properties able to cope with settlement, expansion and contraction, as well as vent volatile

These features, coupled with ease of installation (the waterproof membrane is simply rolled out, butted and stapled or nailed in position), make it suitable for reservoirs, ponds. landfill sites, foundations, basements. underpasses, cut and cover tunnels. general tanking and roof gardens.

Despite its simplicity, Rawmat membrane waterproof innovation that combines 25 years of geo-technical experience with high swelling sodium bentonite clay, which has existed in raw form for some 20 million years, offering a permanent waterproof membrane with the added ability to self-seal.

Full details from Rawell Marketing, Carr Lane, Hoylake, Merseyside L47 4AX. Ø 051-632 5771-4.

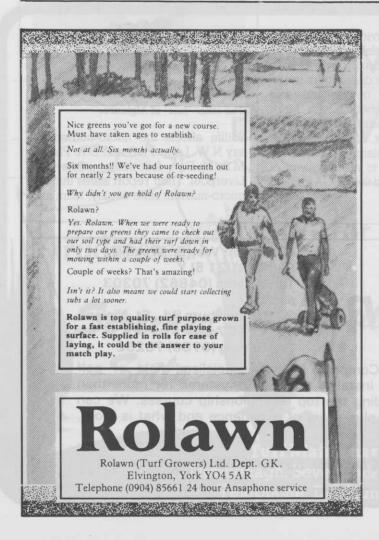
Wettern Brothers (Southern) has a new leaflet detailing special sands and gravels. The company has developed a range of sands and aggregates that have proved to be ideal for the preparation and treatment of soils and artificial surfaces.

Full details from R.Baldock, Wettern Brothers (Southern), Aylesford Sand Pit, Rochester Road, Aylesford, Nr. Maidstone, Kent ME20 7DX. Ø 0622 70431.

Mowchem In Easy-Measure Dispenser From May & Baker

Mowchem, the grass regulator, completes the range of products packed in May & Baker's one-litre, easy-measure dispensers. allowing users to safely and accurately measure small amounts of mefluidide when treating limited areas of amenity turf.







People, Places, Products

Gordon White, with 11 years as a demonstrator/promotions organiser for Lely Import and, most recently, Leli Iseki Tractors, is the new sales manager for the central region. Other moves within the company involve Bill Fisher, based in York, who will now only cover Iseki Tractors for the Midlands, N. Wales and the north and Bob Bevan, who is also based in York, but will handle TORO only in the Midlands and north.



Gordon White.

R.S. Bird has appointed Mike Taylor. 34, general manager of its west of England operation, Birds-Veals of Bristol. Mike joined the company in 1977 and became service manager soon after and sales manager in 1981. Now he takes charge of all activities from the new centre at Willsbridge near Kevnsham.



Mike Taylor.

Over 1,000 entries are expected for two national events sponsored by Marshall Concessionaires of Romsey, Hants. The Young Groundsman of the Year competition, run by the IOG, and Marshall's golf greenkeepers' golf tournament, run jointly by the BGGA and SIGGA. Both events carry the same top prize—an all-expenses-paid visit to the United States next February to attend the American Golf Course Superintendents' convention in Washington.

A film production company will attend the IOG exhibition next month to make a feature documentary.

It is intended to show the film in America and other selected overseas markets.

Next year's IOG exhibition will incorporate a series of closed pavilions.

A tournament organised by Steetley Minerals, manufacturer and distributor of the Key Range of fertilisers. took place at Clevedon GC recently. Greenkeeper teams from Devon and Cornwall, the south coast, south west and Wales competed. The Stableford competition was won by Devon and Cornwall.

Best scoring individual was Graham Cox of the Welsh section who received a prize from Brown and Sons Seeds, Key Range distributors in the south west. The competition was arranged in conjunction with Mark White, secretary, and Harry Reeves, head greenkeeper, of Clevedon GC. Steetley is now planning a national tournament open to all members of EIGGA. SIGGA and the BGGA for next Earlier this year, Alginure Products was asked to produce demonstration examples—especially in the context of establishing growth in difficult and hostile soils-for a display at the International Garden Festival.

Apart from demonstration travs of sand, clay soils and similarly difficult growing media, the company was looking for 'something completely different' and decided to try and establish grass on a pure chalk rock. Several chalk boulders were obtained, but one in particular was chosen because of its similarity to a mask.

The result—after some sculpture by Nick Simpson, a director of Alginure—was a lifelike resemblance of a face. Five weeks later, the finished result shows the powerful effects of alginure in establishing vegetative growth in the most unlikely and inhospitable conditions.



The other 'face' of Alginure.

Soilife affects the micro-nutrientssay N.W. Lepp Ph.D and D.A. Phipps M.Sc.Ph.D. following tests Liverpool. Their report states that the micro-nutrient state of clay, loam and



Monument Way E., Woking Surrey GU21 5LY Tel: Woking (04862) 70303 30 Bannockburn Rd., St. Ninians,

Stirling FK7 6BP

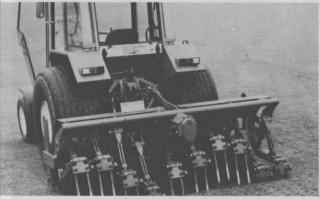
Tel: Stirling (0786) 70252

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"MAJOR"



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The VERTI DRAIN "MAJOR" is best used under normal conditions, and does not foul or damage the surface. It will most certainly overcome acute problems during the playing season. Compaction will be relieved up to a depth of 16 feet which greatly assists drainage, and because of being fitted with full flotation tyres no markings are left. The "MAJOR" is ideal for football pitches and large out field areas, and like the "CAPTAIN" is a safe modern machine giving a very high work rate.

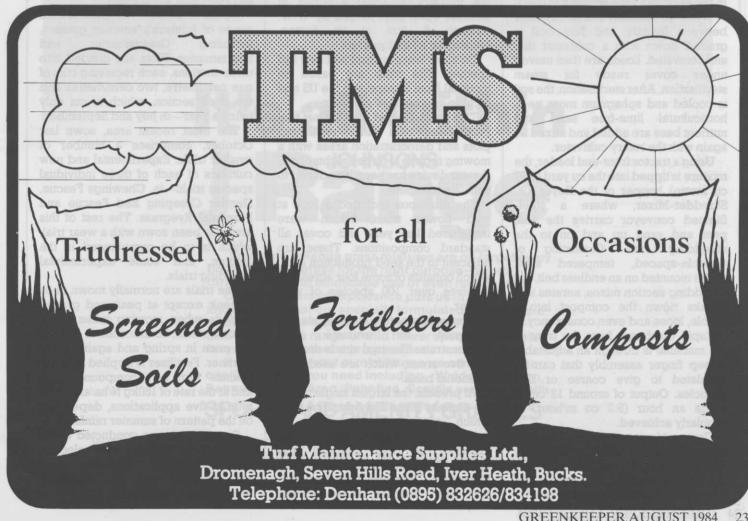
The "CAPTAIN" is suitable for the fine turf areas i.e. golf greens, tennis courts, lawns and is in constant hire demand.

These efficient workers plus the new "GREENSAIRE MARK 2 are only some of the many machines available.

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Royer Shredder-Mixer Helps Contain Cost Of Compost

Savings on the price of top-quality potting compost attract many visitors to the two nurseries run by Vic Fairhead and his son Roger close to London Heathrow Airport.

Yet, there are few well-known brands on sale. Virtually all compost at the Bulldog Nurseries, Staines and Greenfield Nurseries, Laleham has been processed, mixed and bagged on site by the Fairhead family business. Produced to the John Innes formula since 1938, up to 30,000 sacks of compost are bagged each year.

For many years, the mixing of sterilised soil, peat and sand to the correct ratio and consistency was carried out by shovel with a team of men taking two days to process 22 cubic yards, which is the same quantity that can be produced today by two men in 21/2 hours. Roger Fairhead explained that efficiency came with the arrival of a Royer Superintendent 120 Shredder-Mixer, purchased from Huxleys of Egham, the UK distributor for Rover. five years ago.

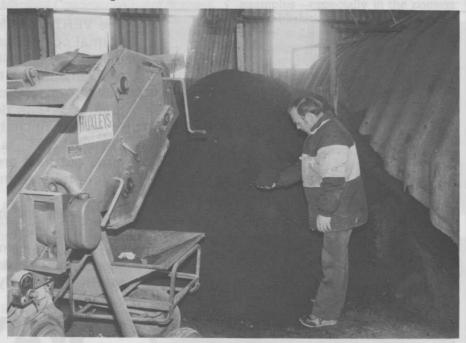
Originally equipped with a petrol engine, the machine was fitted with a Lombardini diesel by Huxleys, proving more economical and quieter in the enclosed area where it is used.

When production starts, normally between January and July, soil is graded down with a cultivator tine and rotovated. Loads are then moved under cover ready for steam sterilisation. After sterilisation, the soil is cooled and sphagnum moss peat, horticultural lime-free sand and nutrient base are added and mixed in, again with the rotary cultivator.

Using a tractor front-end loader, the mixture is tipped into the cu yard (0.57 cu metre) hopper of the Royer 120 Shredder-Mixer, where a steel-flighted conveyor carries the soil, peat and sand up and on to the shredding belt. Consisting of variable-spaced, tempered steel cleats mounted on an endless belt, the shredding section mixes, aerates and breaks down the compost into a friable, loose and even consistency.

Rapid discharge from the front of the machine is through an adjustable sweep finger assembly that can be regulated to give coarse or fine particles. Output of around 12 cubic yards an hour (9.2 cu m/hour) is regularly achieved.

Compost is stored under cover until more bagged supplies are needed when it is moved by the tractor loader to a bagger-weigher. Two people can 'bag-up' and seal 200 sacks an hour.



Roger Fairhead inspects the consistency of compost mix produced by the Royer Shredder.

Joining Johnsons For A Jaunt

Over 100 visitors from all aspects of the industry attended a series of summer open days staged by W.W. Johnson & Son at its Boston, Lincolnshire headquarters.

On show were current and new turf species. The trials are based on material from Europe and the US and include competitors' cultivars.

This was followed by a look at trial procedures with small replicated plots and demonstration areas with a mowing regime at three heights of cut. A wear device has been introduced to simulate trampling.

The afternoon included a look at wild flower trials, which were introduced last year and cover all standard compositions. These are adjacent to the seed production area, which consists of some four acres and involves over 100 species of wild flower.

Johnson's amenity grass trials are designed to evaluate and demonstrate. The trial site is divided into five areas, which are used on a rotational basis.

At present, the largest single trial is the amenity grass demonstration trial, which comprises a number of cultivars in a range of species and mixtures of both cultivars and species. Various bentgrasses include Browntop; Chewings, Creeping Red and Hard Fescues; Meadowgrass:

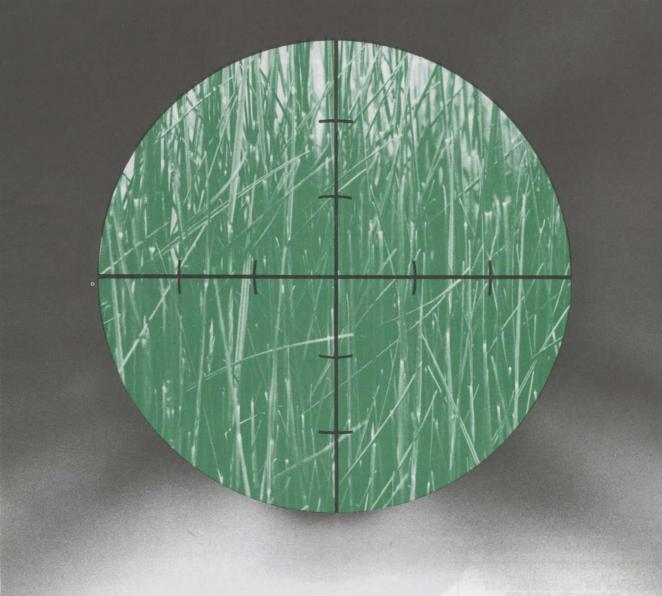
Timothys and both dual-purpose and turf Perennial Ryegrasses.

Mixtures include the professional range of Johnson's amenity grasses, including Greensmaster and Sportsmaster. Plots are divided into three sections, each receiving cuts of one centimetre, two centimetres and the third section, which is cut only twice a year—in July and September.

The most recent area, sown last October, comprises a number of smaller trials. Experimental and new cultivars of each of three individual species trials—ie. Chewings Fescue, Slender Creeping Red Fescue and Perennial Ryegrass. The rest of this area has been sown with a wear trial, which is to be commenced in the autumn, and some experimental breeding trials.

The trials are normally mown once a week except at peak and growth periods when mowing takes place twice a week. Scarification is carried out once in spring and again in late summer. Fertiliser is applied in 'minigranule' form as a compound 11:6:6 and at the rate of 160kg N/ha/annum in four or five applications, depending on the pattern of summer rainfall.

Special trials are conducted on an ad hoc basis, involving new selective herbicides, seed treatments, novel turf products and innovations in management techniques.



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Johnsons J-Range grass mixtures are on target every time! The right grass for the right purpose – sports, turf, amenity and landscape use or even reclamation.

Over 160 years of experience puts us in the lead and full details of our specially formulated mixtures are given in our new leaflet which is available now! We also have a wide range of wild flower species available for your environmental programmes.

If you prepare your own mixtures we can supply the quality varieties you need including – Waldorf, Dawson, Banner, Parade, Arno, Pennfine, Scaldis and new Merlin.

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New From Marathon Mowers



The Marathon pedestrian controlled cylinder mower is robust and durable being contructed from heavy gauge high quality material.

The four bladed cylinder, 23cm dia (9") 90cm wide (35.4"), will produce a good, clean finish (64 cuts/yard at 2 mph) and will also cut long, rough grass if required.

The cutting cylinder is spring loaded off the bottom blade so that in the event of striking a solid object, the cylinder can move on impact thus minimising blade damage. This is just one of the many features that has been put together to combine new and well tried systems to produce a machine that offers:

-greater productivity for less operator fatigue

-less maintenance and down time

-lower fuel costs

with an added bonus of the choice of paraffin operation which is 50% cheaper than petrol, thus fuel costs could be as low as £1.50 per day!

For more information, contact:

Ian D. Goodall Marathon Mowers Alcester Road Portway Birmingham B48 7JA Telephone: (0564) 824343

Rotary Slasher For Use With Compact Tractor

Suitable for compact tractors of up to 30hp, the new Rotoslasher from Gallagher Agricultural (Europe) of Coventry has a 44in working width.

The Rotoslasher is tractor linkage mounted and driven from the pto. It comprises an all-welded plate-steel frame with a width and length of 47in and 53in. The linkage lifting system includes springs to prevent damage during transport and allow a floating action over undulating ground.

Drive from the pto is transferred via a bevel-type gearbox to a central vertical shaft. There are four reversible cutting blades that are pivot mounted to prevent damage from immovable objects—shear bolt drive protection is also provided. Two blades can be removed to alter mulching action.

Reversible solid bar type skids are adjustable for cutting heights from 3/4in to 3in. The nearside skid can also be adjusted up to 8in horizontally to provide windrowing of cut material. A rear hinged safety flap can be raised on to the main frame to allow for reverse direction mowing where required. Optional linkage attachment points provide for central or offset working. Total weight is 320lb.

Recommended retail price of the Gallagher Rotoslasher is £795 (plus VAT). Further information from Gallagher Agricultural (Europe), Curriers Close, Canley, Coventry CV4 8AW. © Coventry (0203) 470141.



The robust Gallagher Rotoslasher offers a choice of settings.

The Latest From Lister

A trike or similar vehicle is all that is required to tow a new low ground pressure spreader from R.A. Lister Farm Equipment, Cirencester, Gloucestershire. The LGP Mk5 ground-driven machine is fitted with 22 x 11 x 8 tyres and can be used to spread a variety of materials including fertiliser, sand, grit and salt. It can be calibrated to spread between 56 and 1,120lb/acre and has a maximum spread width with granular material of 18ft.

Other features include a corrosion-proof plastic hopper with a 6.5cu ft capacity; spring-loaded feed control with shut-off operated from the seat of the towing vehicle; matched pairs of long and short spinner blades for even spread; a control ring to automatically prevent heavy discharge of material on starting; a reservoir that holds material for spreading immediately the towing vehicle starts and a guard to keep material away from the towing vehicle.

The machine can be mounted on a tractor's three-point linkage and measures 41in long by 44in wide by 54in high and has a net weight of 216lb. The price is £687 (plus VAT) exworks.

For further information, contact Brian Hunter on Halifax (0422) 823787 or Craig Cable on Cirencester (0285)



The new low ground pressure spreader.

All From Allen

A new 38cm petrol-engined air cushion mower has been introduced by Allen Power Equipment. Based on its electric model-the E38-the Allen 215 is powered by a Tecumseh 98.5cc two-stroke engine. This, coupled with a new fan design, ensures an air flow of over 540 cu ft min, allowing for an air-cushioning effect and easy grass-cutting.

mower The 215 deck manufactured from high-impact, Cycolac ABS Thermoplastic, offering excellent mechanical, thermal and environmental properties. As with all petrol-engined Allen air cushion mowers, fingertip throttle control and snorkel air cleaners are standard.

Retail price is £159.50 (plus VAT). Allen now also has two new 21in air cushion mowers. Mower decks are of a similar construction to the 215.

Supplied complete with heavy-duty transport wheels, which can also be used to give exceptional performance in long-grass conditions, they are powered by a two-stroke Technamotor 125 engine or a Briggs & Stratton 187cc engine. Prices are £229.50 and £239.50 respectively.

Full details on these and other Allen machines from Allen Power Equipment, The Broadway, Didcot, Berkshire OX11 8ES.

Greenkeeper has a new phone number 0255 507526

For Hire In The South



Brian Pierson of Brian D. Pierson (Contractors), golf course and landscape specialist of Verwood, Wimborne, Dorset, discusses his new Verti-Drain with the head greenkeeper of Meon Valley GC. All greens were Verti-Drained recently without disruption to play. The machine is available for hire throughout the south.



An example of Allen's style and efficiency...

The Liquid Organic Fertiliser

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If you want an inexpensive natural fertiliser that will:

- Encourage a deep hard-wearing turf
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- Will not scorch
- Is safe and non-toxic
- Does not produce a flush of growth (and so cuts mowing costs)
- Is low cost
- As used by many courses including championship

sandy soils were all affected by Soilife treatment. An increase in the extractable fraction for all nutrients except 2n was noted. Not only was there an increase, particularly in Mn, Fe and Cu, but there was a noticeable improvement in the soil drainage properties, particularly with clay.

So, Soilife not only improves the drainage in clay soil and compacted ground, but releases valuable nutrients, which may be locked in. These properties should not be confused with wetting agents which, the report states, only temporarily alter soil structure by covering soil particles with a greasy film.

This report is good news for struggling greenkeepers overcome compaction and drainage problems.

It is available in five litre and 25 litre containers—one litre is sufficient to treat 100 sq m. Full details from the manufacturers W.H. Groves or Farrant Chemicals, PO Box 26, Guildford, Surrey. @ Guildford (0483) 36327/574562.

Morrison has launched its new range of mowers. The lightweight electric 14in rotary mower for small lawns and the new 3ft N1 2-stroke and 4-stroke rotary mower (discharge, catcher and mulcher with a recommended retail price of £236 plus VAT) are handled by the sole concessionaire for Morrison in the UK-Precision Lawnmowers (UK), an associated company of CNS Mowers (Norfolk). "Some may feel our timing is late," Chris Smith, managing director of CNS Mowers, said. "However, we only officially took over the distributorship for Morrison in the UK on January 1. We were determined to build up stocks of machines for full distribution plus a complement of spares to provide a total back-up service before relaunching on a nationwide scale.

"In conjunction with Morrison, we have added to the range to ensure a wide selection of highly specified mowers at competitive prices. We can now offer immediate delivery nationally—within 36



Chris Smith.

extreme cases. The same applies to spares."

The complete range of Morrison machines includes the Electro 35 14in electric rotary mower, the 3ft N1 rotary mower, the Olympic series of 16in, 20in and 24in cylinder mowers, the Golfmaster 500 and Triplex Series II. There is also a new Mini Hoe cultivator.

Full details from Chris Smith, Precision Lawnmowers (UK), Main Road, Thornham, Hunstanton, Norfolk PE36 6LX. Ø Thornham (048 526) 234.

Bob Andrews of the Pontiac Works, Fernbank Road, Ascot, Berks (Ø 0344 885575) recently had a surprise return on an advert placed way back in the September 1981 Greenkeeper. "It was sent in from the Royal Golf Club of Belgium, together with a postal draft for £70. Although the price has since increased a little, we honoured the order at the price advertised," managing director Ken Salt said. "It has shown us just how much the magazine is retained."



Warley Park GC students on a product familiarisation course at the Ford Tractor and Equipment Training Centre, Boreham House, near Chelmsford, Essex. The lads are under the watchful eye of Ford instructor Tony Hellier.

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(PAY AWARD PENDING)

Applications are invited for the above post in the Technical Services Department. This is a new position at the Council's public golf course situated at Cobtree Manor and the course is due to open in late August 1984.

The successful applicant will be expected to be fully experienced in all aspects of turf management and also have a sound knowledge of all modern machinery and watering systems.

In appropriate cases, housing accommodation may be available, together with assistance regarding relocation expenses.

Application forms and job description can be obtained from the Technical Officer, 13, Tonbridge Rod, Maidstone, Kent. Telephone (0622) 57261, extension 65, to whom completed forms should be returned no later than 20 August 1984.

SOUTHPORT & AINSDALE GOLF CLUB LTD.

Due to an impending retirement, applications are invited for a

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with proven expertise and experience in maintaining an 18 hole links course to Championship standard.

Salary negotiable.

No accommodation available.

Apply in writing to:

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Merseyside. PR8 3LG

HEAD GREENKEEPER

required by

RADCLIFFE ON TRENT GOLF CLUB

Applications are invited for the above position from persons of proven ability and experience in golf course maintainence.
Salary negotiable.

No accommodation available.

Apply in writing stating age and experience to:

The Secretary
Radcliffe on Trent Golf Club
Dewberry Lane
Cropwell Road
Radcliffe on Trent
Notts.

GOLF AND COUNTRY CLUB Requires

HEAD GREENKEEPER

For Clay based 18 hole course, soon to be extended to 36 holes.

Salary negotiable.

Apply to: The Secretary,

Edenbridge Golf & Country Club,

Crouch House Road,

Edenbridge,

Kent. Tel: Edenbridge 865097

16 year old wishing to make greenkeeping a career seeks an appointment as an assistant greenkeeper. Has had some experience and is keen to learn, plays golf to six handicap. References available.

Enquiries to:

Richard Rawson 14, Bowbridge Gardens

> Bottesford Notts

NG. 13 OAZ

Telephone 0949 42296