answer and it is a costly exercise that often produces minimal long-term improvements in sward quality. Intensive and timely aeration at suitable depths with appropriate tines, regular verticutting and the use of wetting agents and processed seaweed products will figure prominently in the greens maintenance programme, as will frequent light applications of sandy top-dressings.

"Greens on the championship and Burnside courses were vertidrained for the first time last autumn and the soil ameliorant Terra-Green brushed into the holes in local wet areas. Subsequent hollow-tining in these areas was followed by further treatment with Terra-Green. With regard to the vastly improved drainage of surface water, the combined results of this work have been excellent. This type of maintenance will be repeated as the occasion arises.

"We use Ransomes triplex mowers for greens mowing in conjunction with the Auto-Certes and have recently purchased a new Toro Greensmaster 3 with verti-cutting reels to assist in thatch control. We have six Ransomes Auto-Certes, which are used whenever possible, particularly for major events and other periods when soft surface conditions preclude the use of triplex mowers."

Maximum support

How, I wondered, does John view the future of greenkeeping associations? "It is essential that we have strong national associations with maximum support from greenkeepers employed in the trade. I would like to see a situation similar to that in Sweden where membership of the national association is obligatory for all greenkeeping employees. This type of commitment can only improve the greenkeeper's employment situation and general well-being.

"At the moment, there seems to be dissension in the ranks of greenkeepers, but I am convinced that it is only a matter of time before we get together with a united national body. We can still have separate identities, but it is important that we should all get under one UK banner to gain both credibility in the eyes of the golfing world and the recognition we deserve. Only in this way, can



A heavy-duty spiker with 9in tines works the fairways.

uniformity in greenkeeping training, for instance, come about.

"There was some talk about a possible merger, if that's the correct word, with the PGA, but I don't agree with that at all. I think we should be seen to be able to stand as a united and independent group."

John closed by discussing the advancement of greenkeeping methods and equipment. "All turf managers are interested in any machinery developments. Much has been done in the field of aeration to relieve compaction at lower levels and to break through any existing pan immediately below shallower (3in to 6in) spik-

ing depths. Greens are mowed much more frequently than in the past and the compaction from trafficking is vastly increased, so effective aeration is the priority on modern golf courses to afford the opportunity for healthy plant development."

John would be the first to admit that he has a major task ahead of him to restore true links conditions to Carnoustie. His associates know that he is the right type, with the experience, grit and determination, to accomplish the job.

I predict the Open Championship will return to this famous links in the not-too-distant future.



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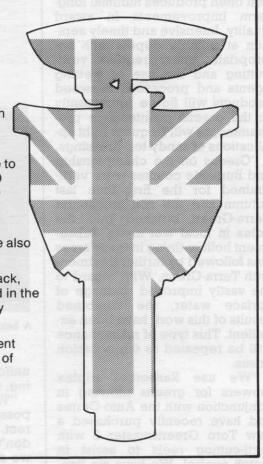
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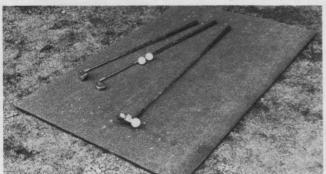
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New National Sales Manager makes history at Supaturf!

For the first time in the 25 year history of Supaturf Products Limited, they have appointed a National Sales Manager for England and Wales following the nationwide expansion of the depots. The man appointed to the post is Frank Crookson, previously Supaturf's Northern Area Manager, who has worked for the company for the past 6 years.

Frank, who is 52 and has a 23 year old daughter, lives with his wife Joan in Birdwell, not far from the Normanton depot for which he is responsible. He is interested in football and motor sports - particularly Grand Prix and says, "I am looking forward to working with the Supaturf sales staff — I feel we represent an excellent mixture of youth and experience, and it will be my responsibility to blend these qualities into a first class team"

It's all in the good bo

Supaturf have now produced a product guide, setting out in sections all the products supplied by Supaturf, Northern Area from fertilisers and chemicals to sports equipment — together with prices and details of delivery etc.



For your copy contact your nearest Supaturf depot:

Unit 2, Ripley Close, Normanton, Wakefield, W. Yorks WF6 1TB. Tel: (0924) 891000.

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Dromenagh Farm, Seven Hills Road, Iver Heath, Bucks. Tel: (0895) 832626/834198.

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D. O. Hunt Limited, 14 Fairfax Road, Heathfield, Newton Abbot TQ12 6UD. Tel: (0626) 834499.

West Midlands & South Wales Area Unit 104B, Hartlebury Trading Estate, Kidderminster, Worcs. Tel: (0299) 250087.

Head Office Oxney Rd, Peterborough, PE1 5YZ. Tel: (0733) 68384.



Supaturf help pave the way in weed control

New cda (controlled droplet application) CLEARWAY from May & Baker can be used anywhere that total long-lasting weed control is required — e.g. footpaths, along fence lines and around the base of established trees. Clearway controls most annual and perennial broadleaved and grass weeds in amenity and industrial non-cropped land.

cda VERDONE from ICI controls all common broad-leaved weeds in turf within two to four weeks. Verdone is absorbed by leaves and roots and interferes with the normal growth regulation process - as a result, weed growth becomes abnormally stimulated and distorted before the

These products now available from Supaturf.

Spring

Supaturf fertilisers are made from a mixture of carefully selected organic materials and mineral fertilisers in such a way that the plant food is released in a controlled pattern similar to the normal growth pattern of plants to ensure that the plant has food available during the whole seasons' growth.

Unlike some chemical fertilisers, Supaturf's are safe to sow with seeds and do not inhibit germination. Supaturf SS/A, SS/D, SS/P and all pelleted fertilisers such as PS/OP are available from your local depot.

NEW BASF SLOW RELEASE **FERTILISER**

The recently introduced range of BASF Compo Floranid slow release fertilisers is meeting with approval and good results are being obtained throughout the UK. Available in 25 kilogram bags -

contact your local depot, today.



Supaturf Products Limited, Peterborough, PE1 5YZ. Tel: (0733) 68384.

The Latest From Lely

Lely Beaver's two new hydraulic gang mowers are light and versatile for operation in almost any conditions.

The Lely Beaver TM380 combines the simplicity of tow-behind gang mowers with the all-weather performance of hydraulic drive. The pto-driven hydraulic system includes filtration and overload protection, with automatic cut-off for all units when raised. Six-blade cylinders are fitted as standard, with full width rear rollers and skids, which are adjustable for cutting height.

The working width is 84in, height of cut is from $\frac{1}{2}$ in to $2\frac{3}{8}$ in and the transport width is 76in. Options include external service spool valves, four-blade or eightblade cylinders and floating cutterheads.

The drive system to the Lely Beaver TM508 hydraulic gang mower incorporates overload protection and full-flow filtration. There is independent cut-off for the wing units when raised and the three centre units have a master cut-off valve, giving a choice of cutting widths.

Six-blade cylinders are standard, with full width rear rollers and skids, also adjustable. Full articulation allows each cutterhead to follow undulations.

The working width of the TM508 is 142in. It has the same height of cut options as the TM380, while its transport width is 91in. Extras include external service spool valves, four-blade or eight-blade cylinders and floating cutterheads.

Full details of both models can be obtained from Lely Iseki Tractors, Station Road, St Neots, Cambridgeshire.



Fuel For Thought

Another source of power at King's Norton Golf Club.



King's Norton Golf Club in Worcestershire has achieved savings on fuel costs for its mowers by switching from petrol to propane.

With 250 acres of grass to maintain, course manager Peter Bailey decided to convert his six biggest mowers to propane last March. As he keeps accurate fuel records, he was able to calculate the exact benefits of the changeover.

"When we switched to propane, the cost of two-star petrol was 36.5p per litre. We had been buying a total of 11,000 litres each year, of which 8,000 litres, costing £2,920, went on the six mowers - 8,000 litres of propane cost £1,288, a big saving, even taking into account the cost of converting the machines plus the tank rental."

The mower conversions were carried out by Turfgoods, which operates in conjunction with propane supplier Flogas. "Turfgoods took just a day to convert each mower, with a mechanic working in our workshop," Peter added.

A one tonne storage tank, equipped with a hand pump, was installed by Flogas. This is topped up when necessary.

Peter was advised that he would probably use more pro-

pane than petrol. So far, he has not found this to be the case perhaps because the mowers are kept in tip-top condition.

"The performance of the mowers following the conversion has been excellent with no loss of power. In fact, they now seem much smoother, which may be due to the fact that propane is lead free."

As propane is an unvaporised fuel, it cannot be introduced into the engine, so there is less wear and tear. This means that spark plug and oil filter life are increased and oil can be used up to 400 per cent more.

"I am also impressed by the environmental benefits of propane. There are practically no fumes, filling the mowers' tanks is easier and cleaner and if a leak did occur, the grass would not be damaged, as with petrol." Peter also pointed out that pilfering was impossible.

For further information, contact Glynn Harby at Flogas. Tel: 053021 352/416.

• At the time of going to Press, petrol prices were falling. Peter Bailey's story was told prior to this trend, therefore the examples quoted should only be treated as such. Ed.

A UK First

Golf Landscapes designed and installed a new Toro irrigation system for the greens, tees and approaches at Royal Berkshire last year.

A feature of the system, which uses Grundfos CR vertical multistage in-line pumps, is that each of the 36 greens is watered by four pop-up sprinklers, controlled individually to maximise efficiency.

Most irrigation systems in the UK are of a block design, where all sprinklers on a green are activated at the same time and, so, apply equal amounts of water to each part of the green. The single head system at the Royal Berkshire club adds flexibility to

the irrigation programme.

Tees and approaches on the two courses are watered by Toro sprinklers, which give full circle, adjustable part circle and two speed heads as each location demands. Certain fairways are watered with quick coupling hose points and Toro's new travelling sprinkler.

Three Grundfos CR 16-18 and one CR 4-120 vertical multi-stage in-line centrifugal pumps provide the boosted water for the pop-up sprinklers. The CR 4 acts as a jockey pump, monitoring the system requirements. When flow is insufficient, one or more of the CR 16s is activated by a solenoid.

The system installed at Royal Berkshire includes computerised control, as well as some 800 individual sprinkler stations.

The concept could pave the way for single head control irrigation systems at many more British golf courses and full details can be obtained from Grundfos Pumps, Grovebury Road, Leighton Buzzard, Beds. Tel: 0525 374876.

Help With Planting Time Traumas

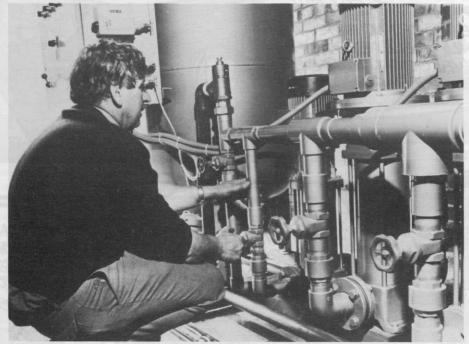
Since Maxwell Hart launched the Broadleaf P4 polymer soil additive in 1984, the benefits of moisture retentive materials have been put to widespread use. But the company emphasises that users should ensure such materials are functional, too.

Maxwell Hart has no doubts about the abilities of Broadleaf P4. It was given immediate acceptance and has since proven its worth – particularly in the planting of trees and shrubs. Afterwards, in the battle to establish root systems, P4 releases moisture 'reservoirs' to the root system as required.

Broadleaf P4 can absorb up to 400 times its weight in water and, with unlimited dry-out and rehydration capacity during its lifespan of about five years, it is a long-term solution to soil conditioning.

The additive reduces evaporation, inhibits leaching and limits the build-up of harmful salts and also upgrades the structure, hydration capacity and aeration of any soil, sand or compost.

Full details from Richard Tigwell, Maxwell Hart, Winnersh, Wokingham, Berkshire RG11 5HF. Tel: 0734 785655.



Royal Berkshire's Grundfos CR vertical multi-stage pumps.



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People, Places, Products

The summer of 1984 nearly caused disaster at the Liverpool Garden Festival - the ornamental turf dried out and consultant Iim Arthur recommended spraying with Farmura Green, which proved successful. So, Farmura approached the organisers of the 1986 Stoke Garden Festival and James Wilson, the horticultural co-ordinator, agreed that treatment with Farmura would benefit the fine turf areas. As the seeded areas were too 'young' to have developed the normal loadbearing characteristics, a SISIS Hydromain Seventeen with a sprayer unit was used to apply Farmura Sportsturf. The organisers are pleased with the results so far and confident of long-term benefits.

A revamped range of amenity grass seed mixtures has been introduced by Hunters of Chester. Supreme lawn seed, suitable for golf and bowling greens and cricket squares, now contains 70 per cent Waldorf chewings fescue and 30 per cent Highland brown top bent.

Sports lawn seed, for tennis courts, hockey fields, golf tees and cricket outfields, is now made up of 40 per cent smooth stalk meadow grass, 25 per cent Waldorf chewings fescue, 25 per cent Ensylva creeping red fescue and ten per cent Highland brown top bent.

Other reformulated mixtures include Outfields, a general purpose playing fields mixture, and Sportsfield renovation mixture.

The only mixture to remain unchanged is Sovereign lawn seed, which can be used for the same purposes as Supreme, but is claimed to be more cost effective.

For further information, contact Peter Hunter on Chester (0244) 47574 or Brian Hunter on Halifax (0422) 823787.

The SISIS Auto-Rotorake heavy duty, powered scarifier now has an adjustable front flap, which can be lowered for safety when being used without the grassbox. Depth controls are located on the righthand side of the machine



The SISIS Hydromain Seventeen spraying Farmura Green at the Stoke site.

and operate through a shrouded universal joint. It is also now fitted with a 5.2hp Villiers-MAG petrol engine.

Cameron has named Mark Stanley retail sales manager for the south east.

With over ten years experience in horticultural irrigation, Mark joined the company via Glen Heat and Irrigation, TTS Baggaley and Wilco Industries, all of which are Cameron distributors and agents. During this time, he gained experience in the latest techniques of water application, such as rockwool culture NFT, mist and fog propagation, glasshouse gantry use and flood bench watering.

John Penny, a Cameron rep for 14 years, has been promoted to product manager.

Dabro International recently acquired the Eurotec product range and has embarked upon an intensive development programme.

The company's original approach to new concepts can be seen in an effective control over tines, blades and knives in the turf slitter range – the degree of penetration being controlled by the operator from the driver's seat.

For further information on the new Dabro machinery, contact the company at Mill House, Mill Street, Prees, Whitchurch, Shropshire SY13 2DL. Tel: 0948 840162.



Innovation from Dabro International.



Frank Crookson.

Supaturf has appointed Frank Crookson its first national sales manager.

Frank, 52, joined Supaturf six years ago as northern area manager.

Palmers horticultural and amenity division has made Ivan Hubbard, 38, sales rep for Cambridgeshire, Norfolk, Suffolk, Lincolnshire, Essex, Nottinghamshire and Hertfordshire. Palmers' products include the new BASF Compo Floranid, Aqua-Gro, Supagro and the compost ranges.



Ivan Hubbard.

CDC Landscapes of the Chapel Works, Waldringfield, Woodbridge, Suffolk IP12 4PT (Tel: 047 336 733/4) has designed and is now constructing a nine-hole course at Priory Park, Nacton, Essex for Peter Little, who owns the site, part of a caravan park on the banks of the River Orwell.

Greens and fairways have been seeded and the course is due to open early next year at the latest.

It will be run on similar lines to the Heath Farm course at Waldringfield, which is owned by the chairman of CDC Landscapes, Mr A. Clarke, and was designed and built by his company.

A clubhouse is already established in the Old Priory, where changing rooms will be provided. Membership for between 250 and 300 will be created, while visitors will be welcome to play the compact course well-populated with mature trees.

Last summer, Richard Adam left Melton Mowbray Golf Club in Leicestershire to join Maldon GC, Essex as head greenkeeper. His wife Diane (24 handicap) was already a playing member at the new club when Richard (18 handicap) partnered her while making his competitive debut on New Year's Day. The couple won the competition thanks, in part, to Richard's ace at the 166-yard 14th. A jubilant Richard said: "What a start! The first day of 1986, my first competition and my first hole in one. Not bad, eh?" Not bad at all!

farmura

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farmura Sportsturf

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Uses-Golf Greens, Bowling Greens, Tennis Courts, Lawns etc. Formulated for fine turf, Farmura Green is also available in a formulation for more extensive areas to special order — for example Golf Fairways, Racecourses.

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Where a specification or programme calls for low inputs of major nutrients, these can be supplied ready mixed with Farmura to produce a semi-organic liquid fertiliser. Available to your specific requirements by quotation, only one application need to be made, so saving time and equipment. For example, Farmura with six units of nitrogen per acre or 1 cwt. 5-6-6 per acre,

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For detailed information, contact your distributor or

Farmura Ltd, Stone Hill, Egerton, Kent. Tel: Egerton (023376) 241

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