

fairway. Indeed the bunkers were so large and intrusive that the cart paths ran through the middle of them. I don't think there are any courses in the UK where you can drive a buggy through the bunkers. Conditions were pretty similar to East Lake, with very wet fairways and tight greens. They did however have a problem with *Poa annua* which was invading all greens. Unfortunately the Superintendent and his Deputy were not available so we did not discover why there was such a difference between the two courses. Other differences were apparent. East Lake had been truly awesome in its facilities. The equipment stores, staff rooms and organisational policy were all first rate. In comparison, Atlanta National was some years behind. It was comforting to see that not all US courses are way ahead of us in this regard. Indeed it was quite apparent that in many ways, particularly health and safety, we are far in advance of our American counterparts.

We soon discovered a quaint American custom which we all agreed should be introduced back home immediately. The courses closed for one day a week so that essential maintenance could be done. That was a luxury we all wanted a part of. Quote of the day was from Tony Mears, who, while passing the 15th tee at East Lake, turned to me and in his bluff northern accent said, quite seriously, 'The trouble with these courses is that they are all American. You know what I mean?' Funny thing was, it sounded quite sensible at the time.

This interesting day was rounded off by a cracking night at Joe's Bar on Juniper. We entered the team pop quiz as 'Class on Grass' and with a little assistance from our waitress, managed to get second prize, \$25 between all of us, it was soon consumed. We would recommend Joe's, but don't go alone. There was strong evidence that some of the local guys were 'batting for the other side' so to speak.

Day 2 was taken up by a full day seminar on communication. Much of the time we worked in groups of 15 or so greenkeepers. We were expecting the Americans to be very extravert and open but were surprised to find that they were generally quite reticent, quiet and unassuming. We found that we had to break the ice but once we got going our

communication problems were remarkably similar. Course closure, trolley bans and aeration formed the major topics. During the session I had to do a very brief talk on the communication problems identified by my group, but Jeremy Hughes drew the short straw and had to do a full job interview while being quizzed by the audience. Jeremy performed admirably, doing an excellent job of flying the flag for BIGGA.

While the content of the seminar was excellent, we urge BIGGA not to implement the format of 8am to 5pm. This distressingly early start to such a long day would not go down too well with the Harrogate hangover. We thought it was very uncivilised.

The next day we joined fellow greenkeepers from across the world on a full-day field trip to investigate the use of recycled sewage water as an irrigation source for golf courses. We stopped at two golf courses and two sewage treatment plants. Being Southern states there is a big demand for water, every house seemed to have a sprinkler system in the lawn. Weather pattern predictions have shown that there is going to be a big water shortage so innovative solutions such as re-use of sewage water are given high priority. The systems were fairly simple in concept. Pipe the town's sewage to the treatment plant, use physical and chemical processes to purify the water content, pump it into storage lakes and then sell it by licence to the end users.

As you can imagine, this was a particularly pungent day. One of the highlights was our lunch break at a Hebron Baptist church. The size of the building was enormous, as was the size of the lunch. Half a chicken and half a leg of prime pig was piled on every plate. Sewage plant or no sewage plant the boys tore in.

The church had served to remind us that we were in Bible belt country and this was reinforced that evening when we all attended the GCSAA opening ceremony. The Keynote Speaker was a tub-thumping, Bible-pushing former Ohio Congressman, Mr John R. Kasich. In an extraordinary display of political haranguing he explained how Ronald Reagan had single-handedly torn down the Berlin Wall and how Mr Bush was an angel of mercy about to rid the world of all evil. The audience seemed to love it

## We test where others guess



### Don't gamble with your top dressing

Is your top dressing compatible with your rootzone? We can take the guesswork out of choosing the right top dressing by taking core samples from your existing profile and analysing them at our laboratory. Using our custom designed software we can then identify the most suitable top dressing for your green.

**To find out more call us on 01477 572462 or visit our website at [www.rufford.com](http://www.rufford.com)**

**Rufford**  
sports surface technology



The scale of the GCSAA Show is quite breathtaking

and gave him a standing ovation.

We all found it rather worrying but in our usual reserved British way declared it slightly inappropriate. We could not have imagined Willie Whitelaw addressing BTME with an impassioned plea to support British policy in the Falklands or Northern Ireland. It's just not cricket.

In Atlanta, politics was never very far from the surface. Despite the outward signs of integration of the black and white communities, it was obvious to outsiders that some clear divisions still remain. This was perfectly illustrated by an incident on our journey back to our hotel on the MARTA underground system. We witnessed a very loud argument between two black youths about the status of negroes (that's not the word they used) in Atlanta society. This debate raged while the rest of the 'mixed' passengers giggled with embarrassment. There was a final cutting remark from the youth who felt disenfranchised. "What about the Hispanics?" he declared. "I suppose you gonna tell me they have equal rights too?" The silence that followed was crushing.

Next day saw the opening of the show. Having been warned how enormous the show was going to be we were slightly surprised that it did not appear to be much bigger than BTME. The fact that it was all in one hall and that there was lots of space between stands made it appear bigger than it actually was. We searched the stands for freebies and bumped into quite a few British greenkeepers. I particularly appreciated the opportunity to talk directly to Penn State and Michigan State Universities to discuss the latest developments in greenkeeper education.

In the evening we attended the Prestige Club Dinner at the invitation of our hosts, Bernhard & Co. Apologies to all dignitaries involved but the highlight of the evening had to be the lift ride in the Marriot Marquis Hotel. This is a truly stunning building and we all piled on to fly up to the 47th floor in the glass-panelled lift. Some of us could not resist a second and third trip. Others, with white knuckles and pale faces, looked on.

On return to our hotel we caught the news that a grenade had been found in a suitcase at Gatwick. Rumours also abounded that terrorists were trying to knock an aeroplane out of the sky with missiles and the army had been called in and sealed off the airport. With the usual British aplomb we decided to turn to the golf channel and have another beer.

Our last full day was a Show day. Right next door to the Show was the CNN news building. Having come all this way some of us decided we would like to see something a little different and so we did the 45 minute tour. It was very interesting to see the news desk which had brought us

the story on Gatwick the night before, live from Atlanta. At 3pm we sat down with representative greenkeepers from the GCSAA Georgia Chapter. The one hour exchange of views was one of the most interesting sessions of the week, we all wished it had gone on longer. The Americans seemed mystified by our greenkeeper training scheme. Their reliance on the unqualified, largely Hispanic labour force was total. We were equally non-plussed by their complete and unwavering obsession with green speed. Although admitting it gave them severe agronomic problems, they simply said that if someone down the road gets 11 feet then you have to get 11 feet or you are out of a job. Admittedly, their Georgia climate, their budgets and their staffing levels make it much easier to achieve than we could but the logic in producing greens which the average golfer would find a tad frustrating simply passed us by. Our thanks to the Georgia Chapter for a frank exchange of views.

Our last morning was a mixture of show, shop and sight-seeing. A group of us did a brief tour of the headquarters of Coca-Cola. It was good fun sampling other flavours from around the world but we don't recommend the Italian style. We had great difficulty in getting Kevin Hodges out of the souvenir shop. Getting Kevin out of shops was a recurring problem.

Finally it was time to make our way to the airport. We had all had a great time and enjoyed each other's company. Relationships were cemented which will no doubt be of value to us all in the future. Meeting greenkeepers from Miami to Canada had also been a unique opportunity and a great learning experience. I must take this opportunity to thank all at Bernhard's who organised and made our trip such a memorable one. Thanks especially to the upfront team of Kim, Janet, Maureen, Bob and Sam and to all of those who worked so hard behind the scenes.

As the oldest member of the team I was, paradoxically, probably the least streetwise. I would just like to thank the two Tonies, Gordon, Kevin, Jeremy, Alex, Mark, Colin and my roommate, Duncan, for chaperoning me in the big city. When I flew out I had a healthy scepticism about corporate America. For me, much was confirmed. As I touched down at Gatwick, I had to admit, however, that as a group we had benefited enormously from the experience. As an individual, my horizons had been broadened. I had gone forward and learned some things about greenkeeping and some things about myself. In anyone's terms that means that the trip was a success.

So it's 'So long Atlanta – thanks for the ride!'

# A hole lot faster

## ...15 minutes floor to floor

SHARPER SOLUTIONS...with **BERNHARD**



A sharper cutting cylinder produces healthier,  
stronger and more attractive grass...

To find out how Express Dual and Anglemaster,  
the world's fastest mower grinders,  
dramatically improve your golf course,  
cut costs and save time...

Call **01788 811600** today!

**BERNHARD AND COMPANY LTD**

Rugby England CV22 7DT email: [info@bernhard.co.uk](mailto:info@bernhard.co.uk)

[www.bernhard.co.uk](http://www.bernhard.co.uk)

# Looking After Your Sand

## Alistair Beggs gives some outstanding advice on looking after your bunkers

Some of the most common complaints from golfers up and down the country relate to the condition and performance of sand bunkers on their course. Higher handicap players can't get out of them at all – better players can't get out of them consistently well enough to maintain their handicaps. Many complaints are justifiable and often relate to poor drainage of a bunker in wet weather and its effect on the sand or the poor floor/base angle of the hazard which can in some circumstances make a visually tame bunker very difficult.

However, what is often overlooked is the maintenance and condition of the sand in a hazard and it is this which, in my opinion, is responsible for the poor performance of many bunkers. This article is concerned with the maintenance of the sand, assuming that other factors are sound. If you do have problems with the construction and/or form of your hazards or they do not drain sufficiently then the first step must be to contact a golf course architect so that collectively your bunkers can be made fairer and more visually appealing.

The modern attitude to bunkers is very different from that of our forefathers who invented the game. In those days, hazards were hazards and with sand pits untended and trampled by sheep, you approached them with trepidation and often exited them with your reputation as a good bunker player in tatters. With the majority of golf being match play in those days, the penal effects were less dramatic than they are upon the modern game which is dominated, of course, by stroke play. The loss of a hole as a result of a debacle in a sand pit was eminently more digestible than a tattered scorecard. However, the move towards stroke play did not stop Henry Fownes, the autocratic benefactor and designer of Oakmont Country Club, from developing the furrowed rake. Each bunker, and in those days there were 220, was raked with it to create furrows two inches deep. This made the consistent extrication of golf balls very difficult and, according to Fownes, was part and parcel of the game of golf. Jimmy Demaret, who was one of the premier exponents of the time, was quoted as saying, "You could have combed North Africa with it and Rommel wouldn't have got past Casablanca".

The rakes were used for many years to maintain Oakmont's fearsome reputation and to perpetuate the myth that this was the toughest golf course in the world.

The development of stroke play signalled the end of the truly penal bunker and the widespread use of methods to make extrication more difficult. Over the last 30 years the effect of the bunker on the game of golf has been sequentially diluted. We are now in the ludicrous situation of having Tour pros preferring to miss greens in a hazard rather than missing greens in the rough. Discussing the pros and cons of this argument is not a subject for this article but surely, even when hazards are well maintained, they should retain some degree of penalty to the good player?

The modern perception is that sand hazards on the golf course should be consistent in terms of the sand they contain and the way it performs. It is the job of the greenkeeping staff to ensure this is so given the disruptive effects of climatic extremes and modern playing levels.

All bunkers, whether fairway or greenside, should offer a degree of risk and reward thereby allowing skill and expertise to be shown by those who judge and execute accordingly.

The floor of the bunker must be designed to collect the ball - it should be concave without excesses of sand build up at any point. This is dependent to some degree upon surround contouring but also the correct maintenance of the sand which should be moulded appropriately.

The upper surface must be firm with no more than the top 12-17 mm (1/2-3/4 in.) raked to allow passage of a sand wedge under the ball. Excesses of

loose sand, either applied or raked up, are unsatisfactory and lead to the development of plugged balls. This is the most common complaint and is more often due to the poor application/ maintenance of the sand than the physical characteristics of the sand itself.

As intimated earlier, the shape and depth of the bunker must be appropriate and the base must drain. This latter point is less to do with the sand and more to do with what it sits on top of. We must never lose sight of the fact that bunkers are seaside features that were transported inland with the development of the game. If acceptable conditions are to be consistently provided by inland bunkers, then regular thought needs to be given to their maintenance.

While there are many examples of bunkers around the country whose performance is flawed by poor drainage, poor shaping of the hazard floor or poor sand selection, I am convinced that there are equally as many whose performance could be positively influenced by adhering to the following points.

1. Maintaining bunkers and the sand within them features relatively low on the priority list of many course managers. It is my opinion that a greater time allocation must be given to the management of bunkers and particular the sand within them.
2. While ideally rakes shall be left for golfers to use, the assumption must be made that they alone cannot maintain good sand/floor characteristics. Over time, sand is inevitably dragged/pulled towards the rear lip leading to excessive amounts of material in this area and often a dearth of it in the hitting area. Consequently, the shape of the bunker floor is changed and extrication made much more difficult by trying to explode balls from what become downhill lies.
3. Rakes should be shallow toothed to a depth of no more than approximately one inch. Deep-toothed rakes disturb too much sand and can result in a very soft top surface which is prone to plugging. Furthermore, they increase the rate at which golfer-induced sand displacement occurs.
4. Topping up of bunkers should be carried out regularly to ensure there is sufficient sand over the whole base of the bunker. When new material is applied, it should, of course, be identical to that already in the hazard and furthermore it should be applied moist. Thereafter, the applied material should be thoroughly heeled and/or rolled to consolidate it prior to light shallow raking.

The above points are simple and, for the most part, relatively straightforward to execute. When implemented alongside sound fundamentals, e.g. adequate drainage, appropriate shaping and correct sand selection, there is no excuse for poor bunker performance.

**Alistair Beggs is STRI Regional Agronomist for the North West and North Wales**

# STRESS

- TURF DISEASE
- WEAR AND TEAR
- DROUGHT CONDITIONS
- TEMPERATURE EXTREMES
- EXCESSIVE SHADE
- WATERLOGGING

... **RELIEF**



Amino-Sorb R (root uptake) and Amino-Sorb F (foliar uptake) are unique supplements that give turf maximum protection and recovery from stress. Under such adverse conditions there is a greater demand for vital amino acids than the plant is able to meet. Amino-Sorb overcomes this problem. The 18 amino acids in each solution are all specifically involved with turf health, helping restore the nutritional balance. Use Amino-Sorb R in the spring and autumn, Amino-Sorb F throughout the summer.

**RT**  
r i g b y t a y l o r

**Amino-Sorb R • Amino-Sorb F**

Rigby Taylor Limited, Rigby Taylor House, Garside Street, Bolton, Lancashire BL1 4AE. Tel: (01204) 377777. Further details FREEFONE 0800 424 919.

Amino-Sorb R and Amino-Sorb F are registered trade marks and products of Bioiberica S.V.



# A Change for the Better

## Scott MacCallum travelled to Ipswich to meet the team charged with taking Ransomes Jacobsen forward

**RANSOMES  
JACOBSEN<sup>LTD</sup>**  
A Textron Company

Contact any large company and be put on hold while you wait for someone to become available and the chances are you will be treated to a snatch of Vivaldi's "Four Seasons" or "Green Sleeves", whose composition is amazingly attributed to King Henry VIII. You're left hanging on until the other person picks up the line, more often than not, embarrassingly, just when your whistling has reached a tuneless crescendo.

For much of the last five years at Ransomes Jacobsen it wouldn't have been too much of a surprise if the music they chose to keep callers entertained was a version of David Bowie's "Chi...Chi...Chi...Changes". In the last year, however, that might have been replaced by "Zip A Dee Doo Dah" or, in these difficult times, Billy Ocean's "When the Going Gets Tough the Tough Get Going".

An unusual way to start an article but in many ways it does encapsulate the recent history of Ransomes Jacobsen, previously known as various names under the Textron banner.

Since the giant multinational Textron purchased Ransomes in 1998 to bolster an already strong golf and turf stable, which included the Jacobsen and E-Z-GO brands, the company has been synonymous with change. It has only been in the recent past that all the complicated and sometimes difficult decision making has been completed and the Ipswich-based company has been in a position to make real progress once again.

The Managing Director of Ransomes Jacobsen is a man who is well placed to reflect on the roller coaster ride that the company has experienced over the last five years.

Steve Chicken, who spent 20 years as an engineer in the RAF, joined Ransomes as an Engineering Manager the day before it was purchased by Textron and enjoyed a steady climb up the promotion ladder before being appointed Managing Director 12 months ago.

"Many of the changes we've made over the last four years have been painful and some have been quite confusing to people in the market place but the end result leaves us well placed to cope in these times of economic uncertainty," said Steve, from an office which overlooks the vast manufacturing plant.

"Looking back I don't think anyone would have chosen to do what we've done in the way that we've done it, but with good core products, and underlying good management, I think we now have a very strong business under the two brands which are our focal point, Ransomes and Jacobsen."

In the last year the company has been making positive strides again and have taken confidence from statistics which show that they are gaining increased market share.

"We are a much simpler company today with far less complexity," explained Steve.

"This has been a deliberate decision to become more simple, both internally and externally. It touches just about everything. In the past we were doing things differently in the US to over here but now we have common processes and where we had two separate product lines we now have one, or are moving towards one.

"This all makes the company a lot more nimble so we can react to things a lot quicker but it also gives a much more robust front to the company as people can see a common purpose.

"We've gone from being a British company and an American company bolted together to being a truly global company and by maintaining locations here, in America and in the Pacific Rim we have retained our local knowledge which allows us to define our market place. By having European and American manufacturing plants and design houses we can ensure that we have suitable products for the



Steve Chicken



David Withers

different environments and customer needs," said Steve who, prior to returning to Ipswich was Vice President of Engineering for the whole group, based in Charlotte, North Carolina.

Among the changes which were made along the way in addition to that of the man at the top, was the aforementioned name changes; a definitive reappraisal of the roles of both the Ransomes and Jacobsen products; a revamping of the entire dealer network, and a series of personnel changes.

Listening to both Steve and Sales and Marketing Director, David Withers, you can appreciate the thinking behind each of the changes and how they came to be made.

"At the time of the purchase there was a lot of puzzlement," said David, another man who has risen to his present position in the last 12 months.

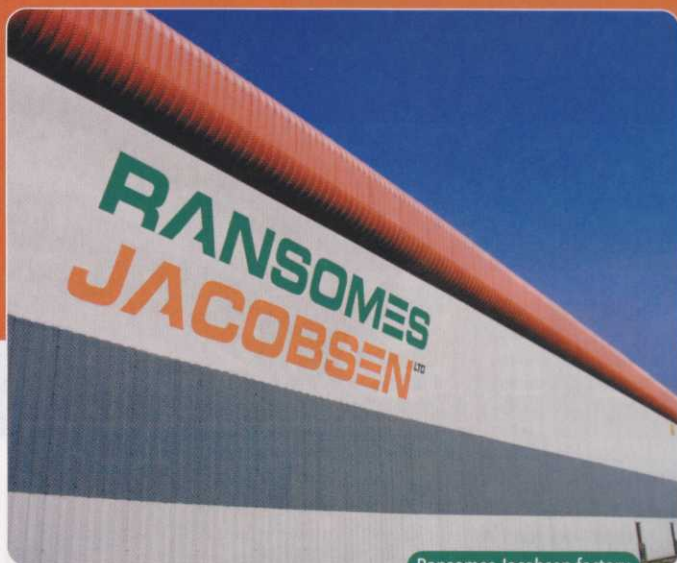
"In Ransomes and Jacobsen we'd brought together two previously competing brands and teams of people, both within the company and customers, with emotional ties to both Ransomes and Jacobsen. It was felt that we needed a name that we could all rally round and felt that should be Textron. We never envisaged changing the brand or having blue machines with a Textron logo but we felt we needed to get the Textron name known," said David, who also acknowledged the benefits of being seen to be owned by such a huge company.

"We wanted to focus on the fact that we were owned by a very very secure multi national and that the finance would be there for long term stability."

The downside was that the strong brand names of Ransomes and Jacobsen were diluted somewhat but the feeling within Ipswich was that it was the correct move to make at that time. The Textron name was replaced by the current Ransomes Jacobsen name at SALTEX last year.

Another major issue which had been tackled towards the beginning of the process was that of organising a dealer network to cope with such a wide product range. On the mainland 10 companies were handed the account, from Scottish Grass Machinery in the north to PJ Flegg in the south.

"We changed distribution throughout the world in a nine month time frame and that is a tough thing to do because if you ask customers when they buy machines it is 50% because of the machine and 50% because of the company selling to them and with a lot of dealership changes we did lose market share," admitted David.



Ransomes Jacobsen factory



Steve astride a Jacobsen triple mower

However, with that situation settling down and a further change involving the move to two Regional Sales Managers instead of four and three staff who look after the key accounts they are beginning to reap the rewards.

"We currently have a fantastic order book. The best in many years. We are focusing on customers and giving them what they want."

To that end a large party of customers and potential customers was taken to Atlanta so the Course Managers and Head Greenkeepers could assess the new products and give honest appraisals of what they saw.

"They are very open and frank and some of what they say is brutal but that is what we want as it allows us to produce what they want," said David.

Another of the major changes occurred in July 2000 when the announcement was made that from that point onward orange Jacobsen machinery would be earmarked for the golf market and the green Ransomes machinery would be aimed at the municipal market.

"Prior to this change in essence we still had Ransomes and Jacobsen product competing on the golf course market and it wasn't until we made the change that we could move away from being seen as two competitive companies to being one consolidated company with different products in the golf and municipal markets."

That process is now virtually complete with the more rounded in style Jacobsen products going into golf clubs and the squarer, robust looking, Ransomes products being sold to the local authority parks and gardens market.

"We still have one machine - a T Plex 185 - which has yet to be re-styled into the Jacobsen family, but all the others have been changed and there is a true family resemblance within the ranges," said Steve.

Looking back Steve is proud of the way the company has handled such a complex situation over the last five years.

"Bringing together two huge companies is not an easy task and in hindsight we probably wouldn't have supported every decision but the end product has been pretty good," said Steve, adding that other companies with whom they compete might one day have to go through similar processes.

"We've done ours," he smiled.

"I don't think any company ever stops changing but we are as near as damn it where we want to be."

So, looking ahead, what can we expect from Ransomes Jacobsen?

Well the company is, to Steve's knowledge, the only machinery manufacturer in the industry which has achieved ISO 14001, the environmental quality standard, and they are pushing the fact that they are the environmental friendly manufacturer.

"We've based our decision on the fact that more and more environmental issues will come to the forefront. At the moment people like the idea of being environmentally friendly but they wouldn't make it key or a defining reason for doing something. I think that will change," said David, who has spoken to both the Audebon Society and Committed to Green about the need to build into their scoring criteria the machinery which is being used on the golf course.

"Let's face it, there are now very good electric mowers and if there are 100 petrol golf cars on a golf course that's a 100 little polluting machines whereas an option would be electric or LPG, an E-Z-GO version of which was launched at Harrogate this year."

Although rightfully cagey about giving too much away they do hint at some new additions to the product range which will be revealed in due course.

The company has long been a staunch supporter of BIGGA and has recently launched the Ransomes Jacobsen Scholarship Awards which give greenkeepers funding toward further educational courses thus giving them the opportunity to better themselves when a lack of finance might have otherwise prevented them.

"We feel the financial contributions we can make is going towards the future of the industry and as BIGGA is the main body within that industry we want to be seen to be helping the top Course Managers and Head Greenkeepers of the future," said Selina Flynn, Communications and Promotions Manager.

Having spent so much of the last five years in changeable mode the Ransomes Jacobsen team will be no doubt be pleased to have a period of normality over the next few years.

You never know that might stretch to making you listen to "Four Seasons" or "Green Sleeves" when you call them up.



# NEW PRODUCTS



## McCORMICK

Grounds care tractor drivers wanting more comfort and protection from the elements can now have a cab fitted to McCormick G30R and GX/GXH series models.

Providing spacious accommodation despite the compact size of the tractors, both cab designs feature large doors and plenty of headroom to make it easy for the tallest drivers to get on and off easily, and large windows for clear all-round visibility.

They also have top-specification work lights front and rear for early

starts and late finishes during the winter months, and are homologated to comply fully with noise level requirements for both private and municipal operations.

"The cabs make a stylish and highly practical addition to these performance tractors," says Ray Spinks, McCormick Sales Director.

"They create a more comfortable environment for drivers who spend long hours in the open, but without hindering the practicality of their machines."

The G30R's cab is designed to ensure that this feature can still be used: the pedals are folded back, then a lever pulled to release the turntable seat and steering wheel, which are then rotated through 180deg to face either forwards or backwards.

The cab is upholstered inside, heated and prepared for fitting a radio. It also has a pull-down sunblind for the windscreen, which can be opened for extra ventilation.

There are three models from 27-36kW / 37-49hp in McCormick's GX/GXH compact tractor range, and each comes with a choice of mechanical or hydrostatic drive, as well as two- or four-wheel drive.

The roomy cab for these tractors also has an opening windscreen, plus air vents in the roof, and the GX/GXH 45 and 50 models have the added attraction of optional air conditioning to keep the driver cool on hot days.

Windscreen wiper and light switches are located on the right-hand cab pillar, while curved rear three-quarter windows either side of an opening central rear window ensure drivers have a clear over-the-shoulder view of their implements.

For further information Tel: 01302 366631

## TECHNI TURF

This year sees further advancements in mixture formulation for the Techni Turf seed range, together with the introduction of many new cultivars with improved turf characteristics.

True Green offers a new option for seeding or oversowing golf and bowling greens. This mixture features the creeping bluegrass True Putt and is ideal for problem areas including shady areas.

Green Carpet features cultivars selected for their dark green colour. This mixture provides a fine dense, hardwearing sward while improving low maintenance capabilities. It is ideal for tees, fairways and outfield use.

Supported by the largest grass seed breeding and production programme in the world, DLF Trifolium A/S, the Techni Turf range of Amenity Grass and Wild Flower Seed, offers a package of product, service and technical advice for Greenkeepers, Groundsmen and Landscapers.

For further information Tel: 01279 653251

## NORDICK TYRES (UK) LTD

A simple, low-cost tyre pressure loss indicator has been introduced by Nordic Tyres (UK) Ltd, the distributor of Nokian agricultural, industrial and forestry tyres in the United Kingdom and Ireland.

Able to provide an instant visual warning of a pressure loss as small as 0.138bar (2psi), the indicator is available in versions to suit most tyres running at any pressure between 1.4 bar and 4.8 bar (20psi - 70psi). It is now being fitted as standard to all Nokian trailer tyres supplied on wheels, both as original equipment and as replacements.

Following inflation of a cold tyre to its recommended pressure/the indicator is screwed fully onto the valve in place of the normal dust cap. Green and red bands within the indicator will then rise until they are exactly level. Any loss of pressure will cause the green band to drop below the red, giving operators a clear visual warning that the tyre needs to be inspected for possible damage, such as a puncture, before being re-inflated to the correct pressure.

Priced at £11 (plus VAT) for a set of four, the Nordic Tyres' pressure loss indicator is available direct from the company and its authorised dealers.

For further information Tel: 01228 792677



## HAYTER

The Hayter Harrier 56 has a reputation for coping with long grass yet still leaving a finish as good as many a cylinder mower. Used mainly by commercial customers from grounds maintenance organisations, the Harrier is now used more and more for the maintenance of golf tees as well as other areas around the course.

With a 56 cm width of cut, the ability to cut as low as 13mm and height of cut adjustment without the need for tools, the Harrier can maintain a wide variety of areas around the course. The split rear roller allows the Harrier to be used easily in the most confined areas and will also stripe the turf if required. Being a rotary, divots present no problem to the machine. The deck has built in fins to improve grass flow and this feature, along with the design of the deck, ensures an extremely high standard of finish, not normally associated with a rotary. The large capacity grassbag means that time spent emptying it is reduced to a minimum.

The Hayter Harrier 56 is the ideal machine for any golf course requiring a machine that is capable of cutting a wide variety of areas yet still leaving the grass to the high standards demanded by golf club members.

For further information Tel: 01279 723444





## C-DAX EUROPE

C-Dax Europe has developed new versions of its Sprayrider ATV mounted spraying system. Retaining the Sow centre of gravity anti-surge baffle and total tank evacuation features of the existing units, the second generation G2 Sprayrider will now fit a wider range of ATV models and also has a number of developments.

Offered in 50 and 80 litre capacities, the newly designed rear tank has attractive curved styling, with a higher proportion of its contents carried in the outer wing sections. This reduces a full tanks centre of gravity and can dramatically improve stability when working across steep terrain. Safety and stability is further enhanced by an internal baffle that prevents liquid within the tank suddenly moving from side to side on hilly ground.

Full tank evacuation on uneven terrain is an established C-Dax Sprayrider feature, and this is further enhanced on the G2 Sprayrider. Each of the tank's lower wing sections has its own patented valve fitted to ensure liquid will always flow to the spray pump. This ensures spraying is not interrupted across difficult terrain. The new valves also eliminate the need for an underbody balance hose. This makes fitting and removing the rear tank easier.

The Rate Rite digital spray rate controller system is also available.

This can automatically alter application rates according to forward speed for optimum accuracy and efficient use of chemical.

Retail prices for G2 Sprayrider systems start at £450 + VAT for a 50 litre tank, which may be front or rear mounted. Rear 80 litre units are priced from £485 + VAT.

**For further information Tel: 01472 240869**



## HUNTER GRINDERS LTD

The new Amazon bottom blade grinder from Hunter Grinders Ltd is a first in the market place. The Amazon is a major development in bottom blade grinding, designed to save time without compromising performance. It is the only bottom blade grinder that will grind both edges of the bottom blade simultaneously. The automatic traverse and most importantly automatic in-feed on both grinding heads, allow the grinder to run independently.

Once set up, which takes as little as three minutes on the first blade and even less on subsequent blades, the machine can be left to complete the task with no further input required from the operator.

The Amazon is a rugged, machine engineered and designed to deliver fast, accurate sharpening finish. Fully enclosed and fitted with water coolant as standard there is no dust, no mess and no heat distortion. It is easy to operate and will accommodate 36" blade capacity when grinding both edges and up to 42" on individual heads. The Amazon retails at £8450 ex VAT including installation and training.

**For further information Tel: 01207 270316**

## CLAYMORE GRASS MACHINERY

For the forthcoming 2003 mowing season, Claymore Grass Machinery has announced significant new features on their range of Simplicity lawn and garden tractors.

The Grand Baron model is now also available fitted with a 16hp Honda 530cc twin cylinder engine and has a new collection system with improved emptying lever. The collector also opens higher for more efficient emptying and has increased air flow for improved performance on heavy wet grass.

The new collector can also be removed without the need for tools.

The 40in Hydro drive Regent is also available with the same powerful 16hp Honda engine with super quiet muffler.

The outfront cut Lancer rider mower has a new 17hp Briggs and Stratton engine for increased power and performance and 18in (45cm) Multi Trac tyres for improved traction.

Wheel weights are now standard equipment giving extra traction on uneven terrain and redesigned transport brackets offers additional cutting positions with better traction.

All Baron, Regent, Lancer and Broadmoor models have new mower drive systems with a quieter pulley design on 40in (102cm) decks.

**For further information Tel: 01865 820731**

## JOHN DEERE

John Deere's new 5020 Series tractors are the first of the company's lower horsepower machines to be based on the award winning full frame design.

Designed and built at John Deere's Mannheim tractor factory, the 72hp 5620, 80hp 5720 and 88hp 5820 fit into the range between the existing 5010 Series standard and narrow models from 53 to 80hp, and the 6020SE range from 75 to 110hp.

The new 5020 Series tractors incorporate John Deere PowerTech four cylinder constant power engines with maximum power ratings of 74, 83 and 91 hp respectively, and up to 34 per cent torque reserve. They also meet the requirements of the latest Tier 2 emission levels legislation.

The full-frame design on these tractors combines a low overall weight of 3.7 tonnes and compact dimensions with a high payload capacity. This allows larger, heavier implements to be carried without placing extra stress on the engine and drivetrain components, which can therefore concentrate on transmitting the power.

This approach has led to the development of lighter, stronger, more versatile tractors with better weight distribution; this is 40 per cent on the front axle and 60 per cent on the rear as standard, which is ideal for front loader work. The design also means there is no need to fit expensive sub-frames for the loader, which is bolted directly to the steel frame, and is fully compatible with the optional front hitch and pto.

John Deere's PowrQuad 40kph 16-speed transmission with Perma Clutch II is fitted as standard, and includes four powershiftable speed ranges and a left hand power reverser with neutral, for easy shifting under load without clutching.

Automatic speed matching on the optional PowrQuad Plus transmission, which features single lever shifting, allows the correct gear to be chosen when shifting through the fully synchronised ranges. An additional 16 speeds are optionally available for both transmissions, giving a minimum speed of 1.5kph (less than 1mph).

The flat floor 5020 Series cab is the most spacious in this class, and provides excellent all-round vision, especially for loader applications, with a glass roof hatch, curved rear corner window and rear implement window.



Additional advanced technology features on the new 5020 Series tractors include a high capacity pressure compensated hydraulic system with load sensing, and a 56 or optional 65 litre/min pump.

Standard specification also includes electro-hydraulic on the move engagement of four wheel drive, a 131 litre fuel tank and a 500 hour engine service interval for reduced maintenance costs.

**For further information Tel: 01949 860491**

## Royal Portrush Golf Club

I would like to congratulate you on the March edition of Greenkeeper International. In particular the excellent articles by Chris Haspell and Henry Bechelet. In support of both these articles I have put together some notes on how we manage our greens at Royal Portrush GC in order to encourage the development of fescue, at the expense of undesirable grasses like poa annua. Granted, it may not be appropriate for all courses, but keeping Greenkeeping simple really does work.

As a Greenkeeper of over 30 years experience, on parkland, heathland, and links courses, I have lived through the time when high levels of nutrients and water, combined with preventative applications of fungicide, were advocated by "advisors". This resulted in poa dominated soggy bogs.

Alarm bells started ringing in my head when at a meeting with other Greenkeepers, myself, and Alan Strachan, Course Manager of Royal County Down, found ourselves defending our policy of trying to grow fescue and bent greens, as opposed to Poa greens.

Another alarm call was when one of my young trainees was told at college, that invasion by poa annua was inevitable, and to "just live with it!"

In general what follows has, and is working for us. Yes we do still have some poa in our greens, but it is our declared intention to rid ourselves of this pernicious weed, and not just "live with it". Our STRI agronomist visits in the autumn, and has seen a continuous improvement in the botanical composition, in favour of fescue and at the expense of poa annua. We play on our main greens all year round, (we don't have temporary greens, only frost holes on the fairway)

### FERTILITY

We have a sandy mineral soil, with a p.h. of 7.4 which although free draining, has good nutrient retaining capacity.

This relatively high p.h. (as far as bent grass is concerned) is very conducive to micro-organism and bacterial activity. This helps to convert organic matter into nutrients, and helps to keep the dreaded thatch at bay.

In general I would regard 5 grams of N per sq metre per season as being fine for us. (Last year we only applied 4 grams of N per sq metre) This is normally applied at 2-3 grams per metre in the spring. The nutrient source is split between sulphate of ammonia, and an organic source. The remaining 2 grams of N is spread over the rest of the season, generally in half a gram per sq metre applications or less.

We also apply 5 grams of K per sq metre. This is divided between spring and autumn, prior to our overseeding operations.

In addition, we apply 10 lts of liquid seaweed per hectare mixed with 10 kg iron sulphate at about six week intervals winter and summer.

### MOWING EQUIPMENT

We use both triplex and pedestrian mowers. For the most part the triplex mowers are used on our Valley Links, the pedestrian mowers on the Dunluce. The ideal would be to use pedestrian mowers on both courses, however our present staffing level prevents this. (15 men, including myself and a mechanic, for 45 holes plus putting green's and practice areas).

Our height of cut is 5-mm during summer and 6-mm during the winter. Frequency of cut is seven days a week during summer, and as required during the winter.

My feeling is that this 5-mm minimum height of cut is of paramount importance in the development of fescue. If fescue is cut below this height, it does not have sufficient leaf area to photosynthesise effectively and therefore dies. The resulting bare/thin areas are then colonised by poa annua, with all of its faults and failings.

Our green speed would normally be around 9 ft during the summer. Speeds of 10-12 ft are produced for competitions by double cutting and or light rolling.

We have changed our pedestrian mowers from units that had a clip rate of 120 clips per yard, to units that have a clip rate of 225 clips per yard. These units have increased our green speed without having to lower the height of cut.

### AERATION AND OVERSEEDING

We use a variety of aeration methods, which include the VertiDrain, Toro ProCore, Toro Hydroject, sorrel rollers, and a ProSeed.

We hollow core at the beginning of September, using the ProCore fitted with 6-mm tines, to a depth of about 60-mm at 30-mm centres. This is combined with our autumn overseed operation, as follows: Hollow core, remove cores from putting surface, overseed and top-dress, using the ProSeed. (This machine has a spiked roller, followed by a seed hopper, followed by a top-dressing hopper, followed by a contra rotating brush.) The ProSeed machine is then used in two more directions without applying any seed or top-dressing. This makes thousands more holes, and brushes the seed and top-dressing well into the surface. We have found this method gives a great initial strike and long term establishment. The putting surface following this is quite good and has not as yet resulted in any complaints from our membership. The seed mixture we use is as follows: 50% Barcrown, 30% Bargreen, and either 20% Lance or Heriot, at 15 grams per sq metre.

Deep aeration of greens and aprons is carried out in December/January using the VertiDrain, to a depth of 250-mm at 55-mm centres with 12-mm tines.

The greens and aprons are then solid tined with our ProCore unit fitted with 6-mm tines, during January/February. The next aeration is again with the ProCore fitted with the 6-mm solid tines, prior to our spring over-seed. This is the same procedure as in the autumn but without the core collection.

The Hydroject is used about six times during the spring and summer. More if the weather is dry!

### VERTICUTTING AND TOP-DRESSING

Verticutting takes place about every two weeks, depending on the weather conditions. Light grooming about once or twice a week, again depending on the weather. Caution is required with these operations, as over use can adversely affect the fescue. We have very little thatch anyway.

During this coming season I will do more brushing as opposed to grooming and Verticutting, as I think this is less damaging to the fescue.

Top-dressing is carried out about 5 or 6 times during the year, at about 750 grams per sq metre, slightly more when hollow-coring. We use a mixture of our own dune sand and an anaerobically digested compost at a ratio of 8 sand 1 compost, we also add 10-15 kg of composted seaweed meal per cubic metre of top-dressing.

### IRRIGATION

My aim is to encourage deeper root development, in order to improve drought resistance. The Hydroject has been a great help in this.

Our low nitrogen inputs also reduces the grass plants requirement for water, and has the added benefit of producing a harder wearing turf.

I also feel that the use of liquid seaweed helps with this, by stimulating root development, and by toughening the grass plant.

During the last five years we have only watered our Dunluce greens on three occasions. Our Valley links has manual take off points behind the greens, and has not been watered.

This said I would not let the greens die through lack of water, as I have a wife, three children and a dog to support!

### DISEASE MANAGEMENT

We have very little disease. However, any we do have is very minor and does not require any fungicide. We have not used any for at least the last five years.

We occasionally get the odd bit of corticum, this is because of the low nitrogen input. This generally occurs in late summer if the rainfall has been high (Nitrogen being leached). Increasing the aeration gets rid of this without recourse to fungicides.

Fusarium is not a problem as again this is due to the low nitrogen inputs, and the very low percentage of poa annua in the sward.

### WEED MANAGEMENT

We don't use any weed-killer on our greens or aprons, as these chemicals will kill or at the very least stunt the developing seedling grasses. Weed control on greens is by hand weeding, apart from spot treatment of the odd bit of clover.

### PUBLIC RELATIONS

We have the full support of our Links Committee and keep them informed about what we are doing, and rely on them to pass on the information to the membership. I also encourage my staff to talk to our Members and Visitors, informing them of our policy, and what they are doing.

Fight the good fight.

Sorry about this being so long winded but I felt the above mentioned contributors deserved some support for their opinions.

Joe Findlay, Head Greenkeeper, Royal Portrush GC

## Thanks

May I take this opportunity to thank all the Bernhard representatives for the excellent organisation and friendly welcome to us all on this excellent trip to the GCSAA show in Atlanta. The week was very hard mentally and physically but it was well worth it for all the new friends and associates that we made individually and as a group.

I would like to thank BIGGA also who assisted Bernhards in the selection process and also the planning of the week's programme.

Ten greenkeepers from different courses, locations and different backgrounds all came together as one team and I thank you lads for making it a very enjoyable and successful week.

Jeremy Hughes, Course Manager, Vale of Llangollen GC

## Thanks 2

I would like to thank all concerned with the recent trip to the GCSAA Show in Atlanta. A big thanks to Stephen Bernhard for his kind sponsorship of the trip which is very much appreciated, to all Bernhards staff Kim, Janet, Bob and Sam who were absolutely fantastic and your hospitality was second to none.

The trip was very well organised and very informative and which every greenkeeper should try and participate in at some time in their career, I would highly recommend any greenkeeper to attend GCSAA at sometime in the future.

A worthwhile experience!

Many, many thanks.

Gordon McKie, St Andrews

## Thanks 3

I would like to thank Bernhard's for the great experience I had while representing BIGGA at the GCSAA show in Atlanta.

The Bernard's staff were very helpful and sociable even though they had an extremely busy week with other work commitments. I would also like to thank the other greenkeepers who were also chosen to go. The group got on well together and I think did our association proud.

I would finally like to thank those who chose me to be part of the delegation, allowing me to experience such a great event, I got much out of the experience and gained some friends along the way.

Colin Mackay, Head Greenkeeper, Vejle Golf Club, Denmark

## Work Plea

I send this letter to you with the purpose of requesting you if you can to consider the possibility to accept me as internship or scholarship holder at the maintenance department in some golf course into your association. I suppose that you will know many golf course managers, all superintendents or some person and related company (desing, construction, services, etc) who can I contact.

I am an Argentinean technical professional and I went to Europe to specialize in management and maintenance of golf courses.

I have been carried out a master in Golf Courses Management and Maintenance, and I have just concluded also a salaried internship during two years in the Golf Club Valderrama, in Spain. I possess the certifications and respective written recommendations. I'm qualified, but I must learning more your language, so important in the world golf. To achieve this, I consider necessary to work in a golf course in your country.

I wait and I yearn an affirmative answer to my application, so if that is possible.

PABLO RODRIGUEZ VARELA, Pabitorv@hotmail.com