

JACOBSEN WINS OVER WORTHING GOLF CLUB

New turf maintenance equipment, supplied by local Ransomes Jacobsen dealer Harper & Eede of Albourne, has been delivered to Worthing Golf Club.

The Club, which features two 18 hole golf courses, is probably the finest downland course in England and occupies a commanding position on the slopes of the South Downs, immediately below the site of the Roman fort at Cissbury Ring.

Course Manager, George Barr, has been refreshing his turf maintenance fleet over the past couple of years and has returned to Harper & Eede to purchase two Jacobsen TR3 tees mowers, an HR3300T out-front rotary, an AR250 semi-rough mower and a Jacobsen LF fairway mower.



TWO TOP CLUBS SIGN DEAL

In testament to Toro's top-quality turf machinery and customer care, two leading golf clubs have cemented their long-term relationships with the company by signing exclusivity deals.

Scotland's Kingsbarns Golf Links, in Fife, and Peterborough Milton Golf Club in Cambridgeshire are long-standing Toro machinery customers – with Kingsbarns also an irrigation customer since it opened in 2000 – but both have now chosen to commit to Toro on a five-year exclusive basis.



From left: Kingsbarns Course Manager, Innes Knight, Scott McNeil from machinery supplier Hendersons, and Lely's Key Accounts Manager, Trevor Chard, seal the Toro exclusivity deal.

EQUIPMENT LENDS FINISHING TOUCH TO US OPEN COURSE

With the right support, you can do anything. Just ask Mark J Woodward, CGCS, the golf operations manager responsible for elevating a tournament quality municipal golf course to one worthy of hosting the 2008 US Open.

Only the second public and first city owned course to host the Open, Torrey Pines Golf Course in San Diego looked as good as its predecessors thanks to Woodward's management, his support team and grooming from a fleet that includes John Deere equipment.

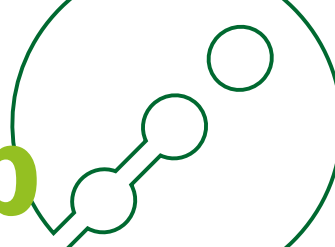
When Woodward first came to San Diego three years ago, the city was dedicated to improving the South Course at Torrey Pines, having completed a full renovation by Rees Jones in 2001. But even for a man with more than three decades of experience, nurturing the course to championship condition was a challenge. He credits the course's successful transformation to the support of his team: Jon Maddern, the city's assistant golf operations manager, who also served as GCSAA president in 2003; Candice Combs, superintendent of the South Course; and the rest of the staff at Torrey Pines.

Support for the turf has also come from Woodward's John Deere fairway mowers. "We spent years working on the course from an agronomic perspective, so ensuring that the turf was shaped perfectly for the US Open was vital," said Woodward. "Both my team and the players were very pleased with the cut quality our John Deere fairway mowers have delivered."



From left: Lee Cochrane from machinery supplier Lambes Lawnmowers, Lely's Julian Copping, and Peterborough Milton Golf Club's Course Manager, Allan Walker, together with the club's greenkeeping team.

Membership



MEMBERSHIP

By the time you read this article we hope the rain has stopped for us all and that you will be enjoying the sun and planning your visit to the BIGGA stand (C20) at Saltex. We are very much looking forward to getting the opportunity to meet members in person. We will be there to join new members, renew existing members and to listen and advise you on any issues concerning your membership and your professional development. If you wish to renew your membership at Saltex or anytime in September you will automatically be entered in our free prize draw to win a Nokia 6233 mobile! New Members will also have the opportunity to win a new ipod. Please read the terms and conditions on the BIGGA website www.bigga.org.uk in the members area.



Affinity Car Leasing

We are also pleased to be able to offer an addition to our car leasing. The scheme is exclusive to people working in sports environment and offers substantial reductions on Saab, Vauxhall and Chevrolet car leasing. For further details please see the leaflet included in this month's Greenkeeper International or telephone: 0870 737 0471 email: info@affinityprogramme.co.uk quoting your BIGGA membership and membership number.

Membership Contact Details

If you have any issues regarding membership please contact one of the membership team, Justine, Brad or Tracey, contact details below:

By Telephone –
01347 833800 option 1 for membership

By Email –
Justine (justine@bigga.co.uk)
Brad (brad@bigga.co.uk)
Tracey (traceymaddison@bigga.co.uk)

Useful Telephone Numbers (for Greenkeepers)

Regional Administrators Telephone Contact Details:

Scotland and Northern Ireland
Peter Boyd - 07776 242120

Northern and Midland
Peter Larter- 07866 366966

South East
Clive Osgood- 07841 948410
South West and Wales
Jane Jones- 07841 948110

Personal Accident Line 020 7560 3013
Legal Helpline 0800 177 7891

This month BIGGA welcomes the following new members...

Scottish Region

Derek Bond, North
Philip Kirkwood, West
Paul Macarthur, Ayrshire
Allan MacDonald, North
Donald McCandless, West
Paul Ross, North
John Steel, Central
Stephen Still, North
Congshan Zhang, East

Northern Region

Matthew Bulmer, Northern
Peter Cooper, North West
Jonathan Crofton, North Wales
Luke Ellis, North West
Peter Hipkiss, Cleveland
Matthew Hodgkinson, Northern
Jack Hoppins, North Wales
Anthony Morse, Northern
Jonathan Thompson, Northern
Paul Walton, North East

Midland Region

Peter Billings, East Midland
Sean Borrett, Berks/Bucks & Oxon
Martin Brown, Mid Anglia
Stephen Calvert, East of England
Steven Cullen, Midland
Andrew Dawson, East Midland
Magnus Ehrnrooth, Berks/Bucks & Oxon
James Flecknell, Mid Anglia
John Francis, Berks/Bucks & Oxon
Matthew Ginley, Midland
Samuel Harlow, East Midland
Robert Lang, Midland
Matthew Lewis, Berks/Bucks & Oxon
Patrick Michel, Midland
Timothy Mutimer, East Midland
James Simpson, Berks/Bucks & Oxon
Kenneth Threadgill, Berks/Bucks & Oxon

South East Region

Samuel Anderson, Essex
Ron Curtis, London
Jason Dobbe, Surrey
Chris Eggleston, Surrey
Thomas Farr, Sussex
Matthew Frost, Surrey
Kenneth Macphail, Surrey
Martyn McEnroy, Surrey
Matt Middleton, Surrey
Stephen Millsom, Kent
Kyle Milton, Surrey
Steven Morgans, London
Lee Relf, Kent
Adrian Simm, London
Stephen Willcox, Sussex
Michael Worsfold, Surrey

S West/S Wales Region

Hayley Beard, South West
David Benger, South Wales
Desmond Bickle, Devon & Cornwall
Will Budd, South West
Tom Connell, South West
Joseph Crawley, South Wales
Christopher Gadsby, Devon & Cornwall
Thomas Glover, Devon & Cornwall
Jamie Greenslade, South West
Lee Hendy, South West
Ashley Hockin, Devon & Cornwall
Paul Jones, Devon & Cornwall
Kevin Piper, Devon & Cornwall
Kevin Tasker, Devon & Cornwall
Adrian West, Devon & Cornwall

International

Yannick Asaf, Switzerland
Dennis Dooley, Canada
Thomas Groß, Germany

Student

Ronan Shorten, Rep of Ireland

Corporate

Anthony Bonnett, Spain
Ruben Canizares, Spain
Nils-Johan Gronholm, Finland
Arsenio Martinez, Spain
Wendy O'Brien, Spain

The new members list can also be found in the members' section at www.bigga.org.uk

Learning & Development

Key Sponsorship:

UNLOCK THE POTENTIAL OF GREENKEEPERS

The funding provided by Gold and Silver Key Sponsors is used to produce training and career aids, DVDs, CD Roms, field guides and provide refunds for training fees and subsidised learning and development courses. The funding also helps support seminars, workshops, courses, the lending library, careers advice, posters and manuals.

Many young greenkeepers owe their career progression to the assistance they've had from the Learning and Development Fund. An equal number of established greenkeepers have also been able to access the fund to continue their professional development thanks to the donations of the Gold and Silver Key Sponsors.

THANK YOU TO THE FOLLOWING KEY SPONSORS



GOLDEN KEY



Golden Key Individual Members

JH Greasley; WJ Rogers; Andy Campbell MG, CGCS; Iain A Macleod; Tom Smith; Frank Newberry; Christopher Lomas MG, Lee Strutt MG.



SILVER KEY



Silver Key Individual Members

Ade Archer; Steven Tierney; Paul Jenkins; Iain Barr; Richard McGlynn; Steve Dixon; Sam Langrick.

Sami Collins, Head of Learning & Development provides a departmental update...



Aged 16 & 17
£3.53 per hour
Aged 18 to 21
£4.77 per hour
Aged 22 and over
£5.73 per hour

There may be other deductions that have to be taken into consideration, for further information call the national minimum wage helpline on 0845 6000 678 or go to www.businesslink.gov.uk/employment.

So much for the summer - here in the North we've had nothing but rain, even the ducks are wearing wellies! By the time you read this, Rachael will have hopefully survived her week at The Open (not drowned!) and have returned to us fit and well.

Toro Student of the Year 2008



The whistle-stop tour of the country is complete and eight finalists have been selected to go forward for the National Final at BIGGA HOUSE on Monday, September 15. My thanks go to the other judges, George MacDonald, Trevor Chard and John Pike from Toro and Iain Macleod, Tony Smith and Les Howkins MG who acted on behalf of BIGGA as the greenkeeping representative. The calibre of the candidates was outstanding this year and we had a difficult job selecting the finalists, but we did in the end! This year's finalists are:

James Canham – Myerscough College
Paul Carella – GOSTA Training Ltd
David Jones – Warwickshire College
Barrie Lewis – Oatridge College
George Pendrich – Elmwood College
Graeme Roberts – Merrist Wood College
Greg Wellings – Reaseheath College
Mathew Wormald – Brooksby College

Full details of the finalists will be featured in next month's magazine.

The R&A Benchmarking Service



Take a look at The R&A benchmarking service, a useful on-line tool that has been developed to help those managing golf courses to assess their level of sustainability, costs, playability and maintenance practices.

The service allows you to track your course's progress from year to year and establish trends or changes that occur, it also allows you to reference your course against similar courses. The information held in the system is completely anonymous. The service is free of charge and can be accessed via www.bestcourseforgolf.org.

National Minimum Wage

The national minimum wage rate is due to increase from 1 October 2008. The new rates will be:

Learning & Development Updates

Lee Strutt MG has passed his examinations with the Canadian Golf Superintendents Association to become an 'Accredited Golf Superintendent'. Lee, who became a Master Greenkeeper in 2001, will soon have more letters after his name than are actually in his name! Congratulations Lee!

BIGGA Library

Several new books have been added to the BIGGA library since last month:

Making Room for Native Pollinators – Matthew Shepard
Building the USGA Green. Tips for Success – James F Moore
2007 Turfgrass and Environmental Research Summary – Jeff L Nus Ph.D
Wildlife Links – Improving Golf's Environmental Game – USGA
Water Quality and Quantity Issues for Turfgrass in Urban Landscapers – James Beard and Michael P. Kenna (donated to the BIGGA Library by James Beard)

Useful Website

You may have seen the adverts on television that the government have produced to promote the opportunities open to adult learners. I scribbled down the website following the last advert I saw and checked it out at www.lsc.gov.uk/inourhands. This site gives information for, and access to a wide range of education opportunities and available funding that is of use for employees and employers. It doesn't only look at key skills such as Maths and English, but also at improving skills related to your career to help you move up the career ladder. If you can't get online, there is a telephone hotline number 0800 011 30 30. It's all there for the taking, so go and get it!

Learning & Development

D-DAY – SEEDING ‘SEASPRAY’ SEASHORE PASPALUM

By Arne van Amerongen

In the second of two articles, golf project manager Arne van Amerongen describes preparations for the golf-build of a new course at The Korineum G&CC – the first 18-hole course in North Cyprus and the first seeded course in the world where Seashore Paspalum was used from tee to green.

It was time to start reseeding the golf course. The teams were briefed and more than 40 people were well aware that we had only one week to seed the entire site.

All the calibrations had been made for the seeding equipment, machinery and attachments. The staff arrived at the site at 4.30am and seeding began at 5am. Critically, there was just enough seed to seed all areas, which meant no room for mistakes or for rainfall washouts.

The procedure followed by the workforce was as follows:

- Group A – seeded the greens and green surrounds
- Group B – seeded the tees and surrounds
- Group C – applied hydro mulch to the greens

Four workers – top-dressed with sand on the tees and surrounds, green surrounds, fairways and semi-roughs

We used six drop spreaders for the greens, tees and surrounds and one tractor with an attachment for the fairways and semi-roughs.

Seeding the greens

Seeding the greens in three different directions with the drop spreaders is shown in Picture 1. Note the red paint used to indicate the size and form of the green.

After seeding the greens, we had to put hydro mulch onto the green surface to obtain better establishment, as shown in Picture 2.

The Penn Mulch was used to keep the seed



Picture 1



Picture 2: Spraying mulch mixed with water.

and green surface moist. The quantity of mulch applied was 1.5 bags per 150m² and 500ltrs of water per 150m².

Seeding the tees and surrounds

Seeding the tees and surrounds was done in two directions with the drop spreaders. After seeding the tees, we used a spring rake attached to a bunker machine to bring the seed into the tee surface better.

In Picture 3 you can see that seeding the surrounds was carried out in two directions with the drop spreaders. Also note the white line (gypsum) employed for marking the edge of the semi-rough areas.



Picture 3: Seeding greens and tees surrounds.

Seeding the fairways and semi-roughs

The seeding of these areas was done with an Einbock agricultural seeder from Austria. It worked perfectly for the lines behind the seeder, mixing the dead grass and the seeded paspalum together while maintaining contact with the topsoil. In my opinion, this was the best way to seed on an established grass surface. After the seeding, carried out in only one direction, we did one more pass at 90 degrees just to scratch the surface only, without seeding, one more time.



Picture 4: Seeding the fairways and semi-roughs.

Top-dressing the seeded areas

Picture 5 shows top-dressing of the fairways and semi-roughs using a Rink Top Dresser.



Picture 5: Top-dressing fairways' semi-rough.

After working from dawn to dusk for a week, the team completed this incredible task. It was a fantastic effort, with an amazing team spirit displayed without which we could never have got the job done.

CUTTING AND MAINTAINING THE NEW TURF

Before we started cutting the grass we had to keep the seed moist, something that is very important in hot countries such as Cyprus.

We had to use an enormous amount of water. We used between 3200m³ to 3500m³ daily, which is exactly the same for germination of every kind of grass seed in areas like Cyprus – Bermuda, creeping bent, rye and fescues, etc.

After 25 days we could see some results. Then, after 58 days, we began to cut all areas, with starting cutting heights as follows: Greens 9mm, tees/aprons 13mm, fairways 15mm and semi-rough 32mm.

Maintenance for seashore paspalum is very similar to creeping bent. It is very sensitive and



Picture 6



Picture 7: Cutting greens without grass box.

do not recover well from scalping.

It is very important for the greens, tees and aprons that the cutting machines have smooth rollers.

We started collecting the clippings on the greens and tees after four weeks of cutting with no box.

For maintenance of the tees, approaches and greens, intensive grooming is needed when the grass surface is well established. The groomer height was the same as the bottom of the front roller.

During establishment, water requirements were decreasing to 1200m³ a day. It was important to use fresh water in the growing-in stage, as paspalum cannot handle bad water quality during germination.

The final cutting heights were introduced when the golf course was in play. They were: Greens 4mm, tees/approaches 9mm, fairways 13mm and semi-roughs 32mm.

Top-dressing is the main issue with paspalum. Initially, this was carried out 'by hand' in four different directions, as can be seen in Picture 8 .

Later, when the green was more mature, two-and-a-half months after seeding, top-dressing was done with a Toro Workman 4300, which is shown here in Picture 9.



Picture 8



Picture 9

We didn't use salt water, but only desalinated water, for the golf course, because, as I can now reveal, paspalum requires less water for its full establishment. This desalinated water cost 1 dollar per m³.

Therefore it soon becomes apparent that, if your daily water consumption is reduced by 1000m³, this results in savings of 1000 dollars a day. This

will determine that paspalum is the right grass for Northern Cyprus in the long-term.

To conclude

Financial advantages of paspalum (prices calculated in Northern Cyprus, using fresh water):

Water savings and electricity, desalination and irrigation pumps(\$320.000)

Less chemicals, fungicides, insecticides

(\$25.000) Total (\$345.000)

Financial disadvantages of paspalum (prices calculated in Northern Cyprus, using freshwater):

4 more staff employed because of high maintenance (\$55.400)

Overseeding ryegrass: Grass seed (\$35.000)

Labour + Machinery (\$32.000) Loss of green fees 1 month (\$49.000)

Extra use of top-dressing, machinery repairs (\$18.000)

Total \$189.400

Therefore it can be seen that using paspalum results in yearly savings of around 150,000 dollars – and that this will ultimately bring the businessman to conclude that it makes financial sense to use it.

In my opinion, in the game of golf, seashore paspalum is a completely different ball game to cool season grass. Personally I prefer the cool season, but to be fair to seashore paspalum it does take some time to get used to.

Head Greenkeeper, Baris Uyaroglu, is now maintaining the seashore paspalum. After three years, my job has ended.



Picture 10: The fine new course.

About the author

Arne van Amerongen is a golf project manager. He can now be contacted at arne-golf@spin.ch

TORO

Count on it.

HAVE YOU TRIED ALL YOUR AERATION AND DE-COMPACTION OPTIONS?

By James de Havilland

The range of aeration and de-compaction kit available has evolved from simple slitters through the baffling armoury of kit that is now available. Here we take a peek at just a few of the machines currently on offer.

Before taking a look at some of the equipment outlined here, it is important to realise just how many suppliers of kit there are. Although a list of suppliers is always handy, there is a risk that a company has been missed. So please consider this when reviewing the suppliers table with apologies to those who are not on the list.

We have not pictured the Charterhouse Verti-Drain simply because it has to be one of the best known deep aeration machines on the market; for some it was the machine that revolutionised de-compaction and allowed winter play on turf that would otherwise have been waterlogged. The items pictured are a reminder of the diversity of kit on offer. Some are ideal for regular use, others for use by a contractor or hired in. The key point is that there is a system that can help with any aspect of aeration or de-compaction.

De-compaction and aeration suppliers include the following. This is not a full and comprehensive guide.

| | |
|------------------------------------|---------------------|
| Campey Turf Care Systems | 01260 224568 |
| Charterhouse Turf Machinery | 01428 661222 |
| Groundsman Industries | 02827 667049 |
| John Deere | 01949 860491 |
| JSM | 08450 260061 |
| Ransomes Jacobsen | 01473 270000 |
| Rytec Industrial Equipment | 01944 768232 |
| SISIS Equipment | 01625 503030 |
| Toro Products | 01480 226800 |
| Wiedenmann | 01418 143366 |



Designed to offer high-speed operation, the pedestrian Toro ProCore 648 greens aerator (left) offers a wide 1220mm working width with the claimed potential to aerate 18 greens in just over seven hours. A key feature of the 648 is that its wheels are located ahead of its tines so that the machine never runs over the cores. Powered by a 23hp petrol engine, it can be fitted with both solid and hollow tines. Coring can be done at variable spacing between 380 to 762mm to a depth up to 1016mm. A TrueCore ground-following system automatically maintains tine depth to match ground undulations. Toro also claim its RotaryLink system ensures the tines enter and exit the ground cleanly and to leave a high quality finish.



Wiedenmann Terra Spike equipment includes the well established XF models pictures. The latest model to join the range is the 1.4m wide Terra Spike GXi (left). Designed for tractors of 25hp plus, this 1.4m wide unit is a smaller brother to the XF, offering a working depth of up to 25cm at an operating speed as high as when working at 12cm, the GSi will take a solid tine of up to 20mm in diameter. Wiedenmann claim to offer a choice of machine to suit not just a wide range of applications but outputs as well. A key feature is smooth operation, this allowing higher work rates when operating big tines at greater depths.



BLEC has long offered the ability to mate its Ground Breaker soil de-compactor to a Sand Master attachment to de-compact and sand slit in one go. The recently introduced Vibra-Tine Sand Master (left) refines this concept to improve operating efficiency. Up front, the Ground Breaker rotary tine de-compactor operates as before. The powered scythe shaped slitting tines are designed to produce minimal surface disturbance but by shuffling the soil laterally relieve compaction down to depths of 26cm (10.5"). The Vibra-Tine Sand Master attachment opens up the slit with a feeder coulter through which sand from its integral hopper fills the void.



Now finished in silver-grey and black, the Imants range of de-compaction and slitting equipment from Campey Turf Care Systems is offered in a broad range of sizes to suit both in-house and contract operations. The pictured Shockwave 2.20m will relieve compaction down to 35cm, its drop forged rotary slicing tines shuffling the soil laterally to relieve compaction across the machines width. Also offered in 1.55 and 2.10m widths.



The latest versions of the John Deere Aercore 800 can be fitted with a verticut attachment to aerate and verticut turf in a single pass. The pedestrian aerator is powered by a 25hp petrol engine and provides deep scarification to encourage growth, remove surface compaction, allow moisture retention and absorption, and remove thatch. The verticut attachment can be used at the same time, on its own or raised out of work. During the combined operation, the cores are pulled first. This is claimed to reduce the surface tension of the turf and allow the verticut attachment to slice cleanly to a maximum depth of 44.5mm, depending on soil conditions. By utilising the Aercore 800's existing electro-hydraulic lift and lower system, the operator may raise the verticut without the engine running. In work, the attachment's dual v-belt drive system engages when the coring head is lowered, and disengages when the coring head is raised.



A probe with integral meter (as above) can be useful in highlighting the need for de-compaction. The pictured Quakemeter is available through Campey Turf Care Systems, a firm, steady push into the ground enabling the user to typically identify the depths at which compaction is present. Although a sharp steel bar an 'T' handle can be easily fabricated to allow you to 'feel' how compacted the ground is, watching the needle on the dial gauge move as the probe is inserted can demonstrate how compaction form in layers. The low needle position pictured is the reading recorded following a pass of an Imants Shockwave.



The Jacobsen Performaire 60 and 80 have respective operating widths of 1.5 and 2.0m and will core or aerate to depths of between 25mm and 450mm, depending on soil conditions. A standard hydraulic top link allows the aeration dept to be adjusted in work. Operation speeds can be as high as 2.25 Km/h at 200mm hole spacing. The allows for rotational adjustment of the tine holders to preserve the correct angle of entry and exit into the turf, which is critical for hole quality. While primarily designed for golf fairways, the Performaire 60 is equally suited for greens applications as it can be operated in close spacing mode. A wide selection of solid and hollow coring times is available. Coring tines range from 12mm x 140mm to 32mm x 305mm with solid tines in the range from 12mm x 254mm up to 25mm x 355mm. Minimum power requirements are 40hp and 50hp respectively.



Based around its established Javelin vertical action aerator, the SISIS Javelin (left) with Aer-Aid system uses compressed air to help relieve compaction in the rootzone. A cam trigger system is used to divert compressed air to individual tines in a fixed sequence. This ensures up to 88 litres of air is evenly 'pumped' into the rootzone every minute. The aim is to enhance the aeration process by forcing air into the soil to improve lateral aeration. SISIS puts its workrate at between 2500 - 3500 sq.m per hour. That equates to the ability to potentially cover 18 greens in a day. In action, this machine is an impressive performer. Suitable for use behind tractors of 25hp plus, the system weighs 503kg.



The Terrain Aeration Airforce Scamper Terralift (left) is the company's lightweight, four-wheeled ride-on model. Fed compressed air via an umbilical air hose, the unit injects compressed air one metre below the surface to create fractures and fissures and relieve compaction panning and water logging. Dried, milled seaweed is injected on the final air blast. This swells when wet, keeping the new air channels open. Working at two metre spacing on a staggered grid pattern, the entire area is treated with minimal disruption to the service. Play can resume immediately and the treatment, combined with normal surface aeration, should last for 10 to 15 years.

There's nothing pedestrian about our latest greens aerator.



Toro ProCore works faster and never runs over the cores.



The ProCore 648. Now with rear roller for faster resumption of play

Toro's fast-working ProCore 648 pedestrian aerator lets you aerate 18 greens in just seven hours. So play is interrupted as little as possible.

What's more, when operated with its optional rear-roller attachment that flattens the turf after coring, surfaces are ready for play again immediately.

The self-powered ProCore 648 vertical corer boasts a large 48-inch working width - up to twice as wide as some competitors.

Fitted with the unique Toro TrueCore ground-following system, it automatically maintains tine depth to match ground undulations and give consistent coring depth.

Easy to operate, and with wheels out in front of the tines so it never runs over the cores, the ProCore leads the field.

So for perfection, fast, just make a quick call to us today.



ProCore 864 and 1298

The same groundbreaking technology that has allowed the ProCore 648 to revolutionise greens aeration is now available for large-area applications in the new ProCore 864 and 1298.

Aerate fairways using efficient 64-inch and 98-inch widths with the smooth operation and precision performance you demand. You've never used a tractor-mounted aerator quite like it.

For a free demonstration, please call 01480 226845 today.

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Count on it.

UISGE BEATHA - THE WATER OF LIFE

By Adrian D Mortram

For many of us a wee dram is a pleasure, to be taken with a little water, no doubt. But for our grass plants water is an essential ingredient in maintaining the quality of the playing surfaces required for our sport. With the notable changes in our weather patterns, the summers of 2003 and 2006 being two of the hottest on record, and legislation in the form of the Water Bill now on the statute books it seems sensible indeed to look at water accountability and consider such topics as:

- Water conservation measures
- Accurate recording of water usage
- The use of modern technology, and
- Water resourcing

A recent report 1 investigated the science behind climate change on water usage. It concluded that both domestic and industrial water use would rise by 2-3% by the year 2020; whereas agricultural use, which includes sportsturf and golf courses,

was predicted to rise by 2-3% per annum due primarily to a longer growing season. In addition this growth in water usage was to be regional specific with the South East and Thames to be the most affected.

A second report 2 although world wide and not specific to agriculture / horticulture was alarmist predicting that:

- In many countries throughout the world there is at present a severe water shortage yet leaders refuse to acknowledge the problem
- There will be a cut of up to one third of the average persons water supply in the next 50 years
- The water crisis will affect between 2-7 billion people world-wide

The fact that this report is alarmist will provoke Western Governments into action and the action will be extended to the easiest targets, you the end user. In response to previous reports the British

Government has introduced the 'Water Bill', much of which revolves around 'sustainability' and 'taking water responsibly'.

The principal areas within the new Water Bill which concern spray irrigation users for sportsturf and golf courses are summarised below. Although most of these are of relevance to England and Wales only, who are governed by the Environmental Agency (EA), it is important that the Scottish Environmental Protection Agency (SEPA) are monitoring the situation carefully with future legislation in Scotland for water resources now a reality.

- Removal of abstraction licensing exemptions currently given on grounds of use,
- Establishing a threshold of 20m³ per day, above which an abstractor needs a license,
- Time limiting of all new and existing abstraction licenses for a duration in the order of 15 years, whereas in the past licenses were granted in perpetuity,
- Streamlining the license application,