The introduction of an Envirozone was new to this year’s exhibition and with environmentalism becoming such an importance for golf courses, it was encouraging to see the area lively with activity over the three days.

Stands from British Climate Services, Golf Environment Organisation, Envisports Ltd, Solarwall Ltd, Vermigrand and British Wild Flower Plants sent out a clear message that the industry is working hard to dispel myths about golf courses not being environmentally friendly or offering bio diversity and sustainability.

In relation to this, BTME 2011 saw Syngenta launch Operation Pollinator, which is a project designed to create new habitats in out of play areas of golf courses, for bumblebees and pollinating insects.

It is well documented that bumblebee numbers have declined by 70% over the past 40 years and Syngenta’s press conference on Wednesday afternoon made the very agreeable statement that the plight of the bumblebee should be reversed.

For the incentive, golf courses are being sought to join a national scheme in which they commit to establishing at least half a hectare of Operation Pollinator seed mix, which is designed to encourage bumblebees and pollinating insects by being rich in pollen and nectar food sources. Simon Elsworth, Turf and Landscape Manager at Syngenta, said that with the correct management, golf courses could provide the perfect habitat for bumblebees and other pollinating insects.

Syngenta’s stand included a platoon of live bees which caught the attention of one young visitor.

The two bodies. It will see them collaborating in promoting sustainability in golf facility management.

The partnership aims to make sustainability easier for greenkeepers and course managers to understand, and provide support for their improvement efforts.

Incoming Chairman at BIGGA, Andrew Mellon said the whole industry needs to pull together and collaboration with like-minded bodies brings more strength to golf's efforts.

On Thursday morning it was great to catch up with a new exhibitor at the show to get his view on the week. Richard Allen, Co-Director of Envisports Ltd, was showcasing its riveted bunker system in the Envirozone and said: “Envisports is a very new company and it’s our first time to Harrogate. We’ve really enjoyed the show, we’ve met a lot of people, especially in our target client list of golf courses and really enjoyed the whole experience of exchanging ideas with other people who have the same passion towards golf that we’ve got.”

After 4pm when the doors closed to visitors, the cleanup began and it was time for assessments of a hectic few days.

Any fears of inclement weather, such as the recent early December freeze, affecting Harrogate Week were quickly appeased as it became apparent we were in for cold but rain and snow free skies for the duration. This, combined with the unquestionable lure of so many industry names under one roof, led the exhibition halls to be crowded with enthusiastic visitors.

The attendance figure of 6019 for the week is higher than in 2010 and shows that despite budget pressures, people are willing to make the effort for something which is worthwhile. The Continue to Learn Education Programme in the Queen’s Suite provided a catalogue of informative, educational seminars and workshops throughout the entire week, while the exhibition halls bustled throughout.

With the success of this year’s show still ringing in their ears, the BIGGA team has already begun preparing for Harrogate Week 2012, which will undoubtedly prove once again to be the ultimate turf management exhibition in Europe.
contamination to the sand, which can create up to 2,400 ml per hour. It also minimises burrowing animals and drains at a rate of sand, if required. 25mm. It is then smoothed by hand to provide and then spread onto a sub-base at a depth of option to reduce bunker maintenance hours. Murray Long, who was looking for a viable bunkers.

The new system is environmentally sound and uses rubber crumb made from recycled tyres mixed with a binding agent to produce a bunker lining that provides a solution to many of the problems associated with maintaining bunkers. Blinder was developed by Course Manager, Murray Long, who was looking for a viable alternative.

Rubber crumb is mixed with a binding agent and then spread onto a sub-base at a depth of 25mm. It is then smoothed by hand to provide the perfect base for the bunker sand. It can then be sprayed to match the colour of the sand, if required. The liner is resistant to club strikes and burrowing animals and drains at a rate up to 2,400 ml per hour. It also minimises contamination to the sand, which can create substantial savings in sand replacement and reduces the possibility of stones on the fine turf areas surrounding the bunkers. It also offers protection to the drainage system, extending the timeframe for drainage replacement programmes.

The new system can be easily installed when renovating existing bunkers or constructing new bunkers. Technical Director, Murray Long, added: “Blinder is suited to all types of bunkers and can be extremely useful in areas of heavy use as an practice bunkers. It is also very effective in chalk and flint soils, especially stopping contamination of stones and other particles into the sand. Bunker maintenance is an issue I’ve been battling with for many years, and I’m confident that I’ve found a solution, not only for me, but also for my peers.”

www.propruner.co.uk MORE NEW PRODUCTS NEXT MONTH...

NEW SCOTTS LAUNCH

Greensmaster Topdress Z is a fine particle-sized topdressing based on Scotts’ Pro-Lite zeolite technology. This gives a particle count of 1,100-2,000 granules per gram. It has an open caged structure with a very high nutrient holding capacity, making it ideal for use as an amendment to new courses or in topdressing. The high Cation Exchange Capacity of Topdress Z helps turf managers with their nutrient management by enabling the soil to hold onto more nutrients. Stewart Staples, International Technical Manager, said that turf managers can save time and money while improving the health of their turf by using controlled-release fertilisers.

Controlled release fertilisers deliver their nutrients over a specified period in a consistent and reliable way. In losses are minimised and nutrient use efficiency greatly improved. While the price per kilogram is greater than conventional fertilisers, the long-lasting effects of the product, reduced nutrient loss and the saving in labour costs compared to repeated applications of a conventional fertiliser, means that multiple savings can be made over the course of a season.”

“In addition, providing a steady supply of nutrients rather than a ‘beat or famine’ approach has been proven to improve turf health and resilience,” he added.

www.scottsprofessional.co.uk

NEW BLEC MULTIVATOR

A unique chassis design with quick hook-up rear attachment system turns the Multivator into a multi-use machine carrying out a wide range of tasks achieved with only one drive unit. Decompacting, soil recyling and topdressing - all in one pass, the Multivator has quick hook-on rear attachments, easy change blade systems and heavy duty reversible drive system.

There are five models available in different widths - three for mulch range tractors and two heavy duty for higher HP tractors. All units are equipped with overload cam clutch and the heavy duty models also feature long life side gear drive with forward and reverse rotation. The heavy duty units also feature a heavy duty gearbox with four shauls to give two speed drive and reverse rotation – mounted on a swivel base for easy drive change. On the heavy duty models a PTO shaft drive is fitted for rear attachments and an extreme duty overload clutch (pre-set).

www.blec.co.uk
contamination to the sand, which can create up to 2,400 ml per hour. It also minimises burrowing animals and drains at a rate of 25mm. It is then smoothed by hand to provide the perfect base for the bunker sand. It can be extremely useful in areas of heavy wear such as practice bunkers. It is also very useful for establishing the timeframe for drainage replacement programmes.

The new system can be easily installed when renovating existing bunkers or constructing new bunkers.

Technical Director, Murray Long, added: “Blinder is suited to all types of bunkers and can be extremely useful in areas of heavy wear such as practice bunkers. It is also very effective in chalk and flint soils, especially stopping contamination of stones and other particles into the sand. Bunker maintenance is an issue I’ve been battling with for many years, and I’m confident that I’ve found a solution, not only for me, but also for my peers.”

Blinder Bunker Liner Ltd launched a new patented bunker lining system, Blinder, at BTME.

The new system is environmentally sound and uses rubber crumb made from recycled tyres mixed with a binding agent to produce a bunker lining that provides a solution to many of the problems associated with maintaining bunkers.

Blinder was developed by Course Manager, Murray Long, who was looking for a viable option to reduce bunker maintenance hours. Rubber crumb is mixed with a binding agent and then spread onto a sub-base at a depth of 25mm. It is then smoothed by hand to provide the perfect base for the bunker sand. It can then be sprayed to match the colour of the sand, if required.

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New Products

The latest products on show at Harrogate Week 2011

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Breaker Bio-Links

It’s Evolution .........

............... not revolution!

The ‘Breaker’ family of turf water management products continues to evolve!

Confirmed in independent trials, Breaker Bio-Links is the proven solution specially developed to solve Dry Patch and water related problems on all turf surfaces. Particularly effective on Links golf courses and other sand based rootzones.

Integrated source of plant growth hormones provides natural moisture retention and stimulates root recovery.

- Prevents and cures Dry Patch
- Stimulates root regeneration
- Balances soil moisture content
- Improves turf health and colour

Preventative & Curative effectiveness confirmed independently by STRI

Rigby Taylor

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As a golf course GIS analyst my mission is to inform and educate golf club personnel the latest technology available as freeware. Most of us now are computer literate to some degree and also we are all aware of downloadable content from the internet.

There are many downloadable programmes available for the public and there are specific ones that could directly benefit golf clubs and I would like to show you how free downloadable GIS technology can be harnessed and applied to your working lives at the golf club and your careers. Indeed many golf club personnel are simply unaware of GIS and the immediate benefit it can bring!

WHAT IS GIS?

GIS stands for (Geographic Information System). Apply this technology and you can view your golf course in great detail.

GIS is based on showing many layers of golf course features.

**Measurements**

- Area measurements to all individual greens, tees, fairways or any other areas.
- Accurate length measurements for planning new drainage.

**Print outs / Job Sheets**

- Ideal for those extra summer staff! It’s an excellent communication/discussion tool for general maintenance tasks as well as “the” on-going working document for the golf club infrastructure.

**Set up for any golf course**

GIS can be set up for 9, 18, 27, 36, 45 holes and in addition cater for leisure and hotel groups with any number of courses worldwide with their correct geo-location coordinates.

In addition it can be set up to specific named courses within the golf club if desired.

**Languages**

As freeware GIS is developed for the international community many languages are available.

**GIS GOLF COURSE FEATURES**

**Main play surfaces**

This is all the main golf playing sports surfaces that make up your golf course. All greens, aprons, tees, bunkers, banks, rough stage-1, rough stage-2, fairways, semi-rough, tee group banks, and hole zones.

**Drainage and water**

Start to document your drain information into the GIS. Main drain, sand silt drain, waterfall feature, old clay drain, inspection, carrier drain, stream, rodding eye, gulley pots, vermain traps locations and repair history.

**Irrigation**

The main artery of your course, the main armory against drought; no detail is enough! Each sprinkler with its own unique ID, print out or email give to your irrigation specialist includes greens, tees, aprons, fairways, ornamental, academy, air release valve, pump house, filter, main pipe, valve box, location, span [cast] and repair history.

**GIS for you**

Ian Phythian looks at the benefits that can be derived from turning to your computer for assistance.
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TECHNOLOGY

Projects
This could be any new or proposed feature however large or small, proposed features such as location of new tee and bunker etc. Hand cutting - All those labour intensive jobs that compliment the main cutting programme, which is very labour and time consuming.

Plan and work smarter.
For example, strimming, flymo, bunker maintenance location, frequency, and duration.

Roads, routes and boundaries
Shows all the clubs assets, this could also be split to show land owned by the club ready for a future project as well as the existing established golf course boundary.

Buildings and utilities
Different clubs have many different facilities and utility connections, it is good practice to know where they are.

For example electric transformer, furniture, machines, water locations

ENVIRONMENTAL FEATURES
Spraying
Intensive spraying record archive to keep up to date. For example, location, frequency, zone, treatment, buffer zone and maintenance.

Health and safety
Be up to date with your staff's safety. Includes flash flood, water, risk assessment area and spot location.

Agronomy
Document your course health, follow your agronomist advice update your report view with your consultant. For example, pH test, agronomy report, turf nursery and locations.

Applications
Document your feeding and spraying programme show/print to the proshop to view any course programmes.

For example, machine setting, comments, initial, product applied, date, agronomic guide, application rate for top dressing, fertilizer (liquid and granular) and over seeding.

Nature
Highlights all the natural features that compliment your course. Plan your next tree/shrub planting project with GPS.

Summer golf play
Shows all your playing information inc: the play lines from specific tees or planned tee projects and much more.
Includes tee yard markers, green centre, practice green, yard markers, post or plate, regular pin, weekend position, 50, 100, 150, 200yrd markers or plates, tee markers (all colours), all play lines and custom colours (eg: red tee = red play lines), location and comments.

Winter golf play
Often forgotten not now, you can switch on/off at a click winter course prepared, compared to your summer course and viewed by all.
For example, play lines, stroke index, par, yardage, and sponsor.

Weekend preparation
Highlights the time critical course preparation undertaken by the green staff for most weekends throughout the season very labour and time critical operation get it right, plan it, work smarter, print out for your staff then they know what, when and where they are working ideal for extra summer staff.

Events
Plan your event however big or small, features, planning is everything.
For example, public gallery, advertisement, press HQ, marshals, extra green staff, overflow car parks.

Base maps
Choice of ortho-rectified images in colour, black and white. Contour and topographic mapping can also be added.

Contact
info@systemgip.com
www.systemgip.com

Above: Example fig 2 showing spraying programme marks (purple). Hand cut flymo & spraying (red).

Above: Example fig 8 Public gallery area, tee colours play lines, game markers (eg: red = red play lines), carpark, advert banner position.
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Roads, routes and boundaries
Shows all the clubs assets, this could also be split to show land owned by the club ready for a future project as well as the existing established golf course boundary.

For example traffic flow, trolley line, track, footpath, perimeter fence line, cattle grid, electric fence, green staff track, bridge, buggy path, boundary fence and location.

Buildings and utilities
Different clubs have many different facilities and utility connections, it is good practice to know where they are.

For example, security lodge, machine zones, club house, practice green, group, bowling green, grass court, bridge, buggy park, lawn, parking area, pro shop, and location.

Academy
However big or small shows your academy area. Includes green, tee, fairway, bunker perimeter area and locations.

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Be up to date with your staff's safety. Includes flash flood, water, risk assessment area and spot location.

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Applications
Document your feeding and top dress programme show/print to the pro shop to view any course delays excellent customer service.

For example, machine setting, comments, initial, product applied, date, irrigation, grass staff, track, bridge, irrigation rate, top dressing, fertiliser (liquid and granular) and over seeding.

Nature
Highlights all the natural features that compliment your course. Plan your next tree/shrub planting project with GIS.

For example, perma frost, perma shade, site of Special Scientific Interest (SSSI) or (Triple S) areas, protected wildlife area, heather area, flowerbed, evergreen tree and group, broadleaf tree and group, palm tree, protected tree, maturing tree, hedge and rushes, coppice area, shrubs location, comments and initial database.

Machine zones
Tag a machine type to a specific area. This is also useful for any risk assessment analysis.

GOLF PLAY
Golf hazards
Highlight all your course specific play rules and boundaries includes ground under repair (GUR), out of bounds (OOB), lateral water hazard, drop zone locations, comments and initials database.

Summer golf play
Show all your playing information inc: the play lines from specific tees or planned tee projects and much more.

Includes tee yard markers, green centre, practice green, yard marker post or plate, regular pin, weekend position, 50, 100, 150, 200 yard markers or plates, tee markers (all colours), all play lines and custom colours (eg: red tee = red play lines) location and comments.

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Golf Course GIS Analyst
Ian R Phythian

www.systemgip.com
info@systemgip.com
James de Havilland takes a closer look at the intricacies of current machinery

The anatomy of...

Battery powered kit

These days there seems to be a rush to adopt any green technology. Nothing wrong in that. But sometimes there is a great deal more to ‘green’ options than just cutting down on your carbon footprint.

Step-by-step Analysis...

Battery powered kit

It is tempting to concentrate on the fact that here we are looking at battery powered equipment. But pick up a diminutive Pellenc Selion C20 chainsaw or take a test drive on the Jacobsen Eclipse 322 ride-on greens mower and the chances are the power source will not be the first point of interest.

These tools are well engineered items of equipment that deserve close inspection for what they are as opposed to how they are powered. In short battery driven equipment can now be looked at for reasons other than just its power source.

“A key modern demand is not just to produce a quality mown finish but to deliver it consistently,” says Richard Comely, Ransomes Jacobsen’s Product Manager. “With the battery-powered Eclipse 322 ride-on greens mower, advanced CAN bus digital control enables the mower to be set up so it will deliver a consistent and repeatable frequency of cut every time it is operated. The clip rate will remain constant, adjusting the speed of the cutting cylinder to precisely match variations in forward speed. This cannot be achieved on a hydraulic mower but it is a standard feature of our battery and hybrid powered Eclipse:322 models”.

The important point here is not so much that the battery powered Eclipse draws its top-up energy from the mains but that it just happens to be a pretty decent greens mower. Approach it from this angle first, and by all means compare it to its hybrid and all-hydraulic alternatives, and that is perhaps a better way to consider the mower. Look at it solely because it is the only battery powered model of its type on offer and you run the risk of overlooking what it is designed to do; cut greens to a high standard.

So what? Well it is only when you operate a battery powered tool that you get to know if it will be up to a professional job.

The anatomy of the all-electric Eclipse 322 and look familiar to existing Jacobsen greens mower users. The steering is also electrically assisted, the engine being an electric motor and some

The battery charger is an integral part of the Eclipse 322, as is a centralised electrolyte top-up system. Although lithium-ion and other battery types grab the headlines, modern control systems and intelligent chargers ensure there is still a lot of life left in lead-acid battery technology.

So what? Well it is only when you operate a battery powered tool that you get to know if it will be up to a professional job.

The anatomy of...