The GCSAA Conference and Show in Orlando, Florida is already acknowledged as the biggest event of its kind in the world – and now it's growing bigger. Report and pictures by Michael Bird.

Anyone with a passing interest in statistics would have had a field day at the Golf Course Superintendents Association of America's (GCSAA) 67th International Golf Course Conference and Show, held in Orlando, Florida.

Apart from the biggest ever attendance by overseas visitors, including many British green-keepers and golf course supply companies, the show broke a number of records on other fronts.

With 675 trade exhibitors, the exhibition attracted 35 additional companies over the record 640 who were at San Francisco in 1995. Despite the recent opening of an extension to the massive Orange County Convention Center, this year's record vistor attendance – around 21,500 over three days – produced josling in the aisles at peak morning periods on both the second and third days.

If the trend continues, the organisers are likely to need more than the 210,000 sq ft (2ha) allocated for this year's exhibition when planning the 1997 event, due to be held in Las Vegas from 10 to 12 February.

One exhibit which attracted a steady stream of interested visitors was the BIGGA stand where Association representatives fielded questions about golf greenkeeping on this side of the Atlantic and generally "flew the flag" for turf maintenance professionals in Britain and mainland Europe. A number of membership applications were also received, helping extend our influence still wider.

BIGGA's newly-elected Chairman, Dean Cleaver, was put on the spot shortly after arriving on the stand, being filmed for the GCSAA's television programme, 'Par for the Course'. The main thrust of the questioning by presenter Duke Frye concerned the difference between British and American golf greenkeeping and the state of our industry.

Available to more than 65 million American homes via the cable network, the show is being produced in 25 pre-recorded half hour episodes looking at the world of golf. Each show contains informative industry news and topics and includes a special fea-



IN AMERICA



BIGGA's Chairman, Dean Cleaver, is interviewed for the GSCAA's cable TV programme 'Par for the Course'

ture where top golf course superintendents from tournament courses across the USA give a weekly lawn care tip to viewers. This year's programmes will run every week to 25 August and will also be available via satellite worldwide through the ESPN International network.

Environmental themes were much to the fore at the GCSAA event, with an environmental general discussion session taking place over three and a half hours the evening before the trade exhibition opened. Two main themes were discussed: The use of herbicides and pesticides on courses. And golf course construction together with associated residential developments.

As might be expected in a forum attracting all sides of the industry, including environmen-

talists, there was much heated debate although it was felt generally that golf course staff are as responsible as their farm, industry or domestic neighbours when it comes to environmental issues. As one superintendent pointed out: "Most of the people in this business don't stay around too long if they have dead fish and dead birds on or near their course."

The answer, it was agreed, will come from continuing education and dialogue with all interested parties, and particularly those who are affected by golf course operations or developments.

In addition to the conferences, seminars and workshops which are run along similar lines to those held at BTME under the Learning Experience banner, the GCSAA exhibition had something for everybody involved in golf course design, construction, care and maintenance.

Clever environment-friendlier ideas are not the sole preserve of American companies, yet the sheer size of the US industry (17,000-plus golf courses) means that many new products and techniques tend to appear first on the other side of the Atlantic.

Engine manufacturers, in particular, are being pushed by strict Californian emission regulations



Inside the halls there were 675 trade exhibitors spread over 210,000 sq ft

to produce cleaner, quieter power units. Kubota says that the majority of its diesels built since August 1995 exceed the CARB (California Air Resources Board) regulations. Designated the 'E' Series and rated from 6hp to 57.5hp, they cover virtually the complete machinery power range found within the turf maintenance industry.

Specific features which help the engines run cleaner are combustion chamber design, the angle of fuel injection and improvements to the fuel injection pump, nozzle and cam profile to reduce combustion period while restricting rapid pre-mixed combustion.

Briggs and Stratton point out that about half its engineering team and budget is being directed towards emission control testing, research and design. Senior Engineer, Andy Traxel, said that work was underway on improving carburation, combustion chamber design and oil control, the latter to prevent migration into the combustion chamber.

He believes that some form of exhaust after-treatment is on the way for small petrol engines although this may not necessarily be in the form of a catalytic converter. "Post-engine combustion of gases is an alternative and possibly less expensive way of reducing toxic emissions," he commented.

"As far as actual engine design is concerned, I cannot see any major environmental benefit from developments such as overhead cams. We have overhead valve and pushrod units which work extremely efficiently. In my opinion, Briggs and Stratton will move to fuel injection and electronic engine management systems before introducing OHC engines."

Kohler, on the other hand, was making a big play over its new 16hp V-Twin OHC engine, launched at the show. By moving the camshaft out of the crankcase and away from the sump and crankshaft, Kohler claims that the engine offers longer oil change intervals, lower operating temperatures, quieter operation and reduced oil consumption.

Most of the improvements have been achieved, says Kohler, by eliminating much of the housing above the crankshaft used previously to contain the camshaft and pushrods, allowing improved airflow around the cylinders. Furthermore, the use of advanced "lost-foam" casting technology to engineer oil passages and single piece castings has removed the need for internal gears and a



Cutaway of Kohler's 16hp V-Twin petrol engine with belt-driven overhead camshafts

number of gaskets. Instead, a rugged cam drive belt is used, guaranteed for the life of the engine.

Spilt oil is of major concern to all involved with the care of fine turf and there were a number of solutions on show to visitors. Aabaco Industries produce Aab-Sorboil and Bio-Aab-Sorb designed to clean up and neutralise all types of oil, except synthetic.

The first mentioned product is a non-toxic, biodegradable emulsifier which, when sprayed onto spills, makes both petroleum and oil water soluble so they can be removed quickly and easily from turf using plenty of water. The makers recommend using Bio-Aab-Sorb as a secondary treatment. This is a powder containing live enzymes able to digest hydrocarbons present on grass or soil, converting them principally into carbon dioxide and water. Aabaco guarantees that the product is non-toxic, non-hazardous and non-corrosive although eye and respiratory protection is recommended during application.

An alternative is Simple Green Golf Cleaner, another biodegradable product which can be sprayed directly onto oil spattered turf. Having "broken up" the oil, it is flushed with water into the soil where it is "safely neutralised by natural biological action without harming the turf". The product can also be used to clean carpets, walls and turf equipment.

Having taken the GCSAA exhibition by storm two years ago with its all-electric E-Plex mower, Ransomes maintained its environmental push with the announcement that all Fairway 250 mowers are now filled with Turf Protector hydraulic fluid as standard. A biodegradable plant seed oil, Turf Protector has been developed over three years to provide

Eye-opener

Stuart Green, the very first winner of the Gleneagles Excellence in Golf Award, used part of his £1,650 bursary prize to visit the GCSAA Conference.

Sponsored by Ransomes and Scottish Grass Machinery, the scheme enabled six students to spend 12 months on The Gleneagles Hotel's three championship courses to study and carry out all aspects of golf course design, management and maintenance as part of their three year HND golf management course.

Students went through a rigorous selection process and faced written and practical projects at the end of the year.

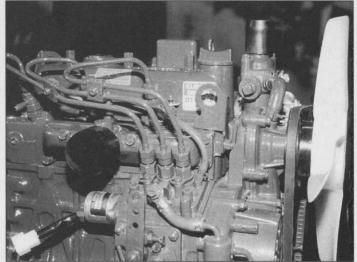
The 1995/96 Gleneagles Excellence in Golf Award scheme now in progress has been extended to include HND students from nine UK colleges as well as one from Australia. Jimmy Kidd, Director of Turf Grass Management with Gleneagles Golf Developments, announced that Gleneagles will be looking for students to apply also from North America for the next award year, commencing in August.

'Many new products and techniques tend to appear first on the other side of the Atlantic'

greatly superior lubricating properties over other vegetable oils, including rapeseed.

Any spills will cause only minimal turf damage and do not harm the roots. As a bonus, it can be mixed with mineral oil without problem in specified machines. Ransomes expects to include Turf Protector as standard on more grass-cutting equipment over the coming months. The principal machine requirements are additional oil cooling and an oil reservoir shaped to prevent possible foaming.

Any method of improving the accuracy of fertiliser, fungicide and pesticide applications must help in reducing potential environmental damage. The Land Pride Material Injection System (MIS) uses water to incorporate dry or liquid materials into the soil, getting down to "the root of the problem" without any surface disruption. As a bonus, the high pressure jets can help alleviate localised dry spots and soil compaction.



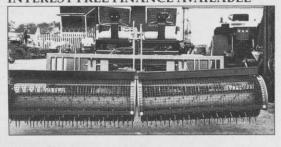
The unit has seven nozzles set 3in apart and can be programmed to inject at spacings from 1.5in up to 6in, adjustable in 1.5in increments.

Maximum injection depth is 8in. To eliminate jet wear, all injected materials are pulled into

the ground by the vacuum created by the rapid movement of the water and do not pass through the nozzle.

At the show, Landpride announced the appointment of Staffs-based Turfmech Machinery as its UK distributor.

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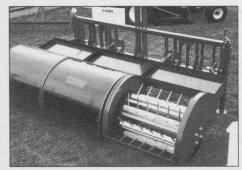


Acrow Pushed/Pulled and Pedestrian

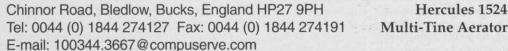


Big Willy Pedestrian Aerator





RISBORO' TURF



Hercules 1524

