Turfgrass Management Books from Management

Management of Turfgrass Diseases 2nd edition

Joseph M Vargas Jr, Michigan State University, East Lansing, USA

Written by a leading international lecturer on turfgrasses, the 2nd edition of *Management of Turfgrass Diseases* has been completely revised and updated, to include the latest information on maintaining a healthy turf and identifying turf diseases. Other topics include cool and warm season grasses, growing conditions and new diseases. With 72 colour photos and over 100 figures, this is an essential handbook for all greenkeepers and superintendents.

1994 • 336pp • Hb • ISBN 1 56670 046 9 • £52.50

Golf Course Management and Construction Environmental Issues

James C Balogh, Spectrum Research Inc., Minnesota, USA; William J Walker, Walsh & Associates Inc., California, USA

This book is an excellent introduction to the concepts of 'non-point source' environmental impacts of turfgrass management. Technical and scientific research on the environmental effects of turfgrass maintenance is summarised. In addition to golf courses, there is also a discussion of turfgrass systems for residential and commercial lawns and parks.

1992 • 976pp • HB • ISBN 0 87371 742 2 • £61.00

Landscape Restoration Handbook Donald Harker, The Earth Fund, Kentucky, USA, et al

Develop a natural landscaping programme for turf as an alternative to intensive management. This book explains how to obtain the following benefits from natural landscaping or ecological restoration:

- water quality improvement
- erosion reduction
- lower maintenance
- chemicals reduction
- · plant and animal species diversity.

1993 • 640pp • Hb • ISBN 0 87371 952 2 • £65.50

ORDER FORM

QTY	Price
1 56670 046 9 Management of Turfgrass Diseases 2nd edition	£52.50
0 87371 742 2 Golf Course Management and Construction	£61.00
0 87371 952 2 Landscape Restoration Handbook	£65.50
Please send your order to:	
BIGGA, Aldwark Manor, Aldwark, Alne, York, YO6 Tel: 0347 838581 Fax: 0347 838864	2NF
Postage and Packing: Please add £1.50	
I enclose a cheque made payable to BIGGA for £	
Cheques will not be cashed until your books are despatched to y	ou.
	GI. 6.94
Name	10114
Job title	
Address	
Postcode Tel:	





STANDARD GOLF WE RAISED THE STANDARD FOR GOLF



Our new Seed & Soil Caddie can be filled in a jiffy, thanks to the 5" screw-on cap at the bottom. The integral handle/spout protects the contents from rain and the large capacity reservoir holds enough mixture to repair lots of divots. The container holder can be moved as quickly and easily as a tee marker. Seed & Soil Caddie in Green or

Seed & Soil Caddie in Green or Black at £30.50 each

The Shur-Way Ball mark Repair Tool (pictured left) is now better than ever with a welded handle. thicker arms and precisionextruded spiders! Just position Shur-Way over a ball mark, make a downward thrust, let up on the handle and tap the area with your foot. You'll be amazed at how quickly you can repair an entire green without crawling around on your hands and knees! Shur-Way Ball mark Repair Tool at £157.45 each



Greenskeeper – for easy, affordable ball mark repair. Why pay more to fix ball marks? Greenskeeper (pictured right) helps you fix them fast and easy – without bending over or crawling around. Greenskeeper is designed to meticulously lift dirt and grass back into place. It's surprisingly affordable too! Greenskeeper at £56.65 each

Ask for our full colour 1994 catalogue, price list and complete details of driving range equipment and mats

Contact Paula or Lisa at: Standard Golf (UK) Limited, The Maxwell Hart Building, 612 Reading Road, Winnersh, Wokingham, Berkshire RG11 5HF. Telephone: 0734 788044. Fax: 0734 785805



AN ASSURANCE OF QUALITY BRUSHCUTTERS FOR THE PROFESSIONAL When the going gets tough

The most challenging work on the roughest terrain holds no fear for the top of the range Echo brushcutters. Their rugged reliability, exceptional power and long lasting durability make them an essential part of the professionals equipment. For roadside, commercial and large scale operations, Echo has the ideal solution in these high performance machines.

All Echo brushcutters run on clean, unleaded petrol stored in their integral fuel tanks. The Echo range covers engine sizes from 21cc. to 45cc. Echos wide range of brushcutters offer greater flexibility and comfortable control.

FOR MORE INFORMATION ON THE ABOVE PRODUCTS RETURN THE COUPON TO THE ADDRESS BELOW OR TELEPHONE US ECHO GB. The Broadway, Didcot, Oxfordshire OX11 8ES Telephone: (0235) · 813936 Fax: (0235) 811491 A DIVISION OF ALLEN POWER EQUIPMENT LIMITED



FOR PRIORITY TREATMENT

TEL: (0235) 813936



Chainsaws - The Cutting Edge Echo chainsaws are quiet, quick starting and have Kioritz 2-stroke engines, 30cc - 50cc. Contact us now for details on our full range of Echo outdoor power equipment.

Name	Gl. 6.94
Company	
Posostion	
Tel No:	
I am interested in	

AD

REF

446

John Crawford's year as chairman of BIGGA came to a close at the National Conference. He told Greenkeeper International what it's like being in the hot seat

End of term report



Being chairman of the British and International Golf Greenkeepers Association was an honour which I did not set out to achieve, but one which I certainly took great pride in.

I see the chairman's role outside board of management meetings as one of being 'PR' or 'front man', attending the various events which are organised in conjunction with our trade sponsors and any section/region events to which he is invited.

It is my opinion that not enough of the sections/regions extend an invitation to the chairman to attend their events, while appreciating that someone who is working full-time would find it difficult to attend them all during his year in office, at least the invitation should be extended.

What were the highlights?

The highlights of my year were too numerous to mention but obviously being chairman during the most successful BTME so far, attending the numerous functions and events to which I was invited and the GCSAA show in Dallas, even though I was somewhat apprehensive about wearing a kilt for the first (and last?) time in my life, are all events of which I will have many fond memories.

What were the worst moments?

There were one or two low points during the year, which I would rather not go into, but hopefully they were not to the detriment of the Association.

What did you learn during your year?

I certainly learnt there are still too many different views amongst the members as to what the Association is about and what the board of management are attempting to achieve on their behalf. This can be changed with the improved communication which is now taking place through Greenkeeper International and with members of the staff from HQ attending more section and region events.

How much time did it take being chairman?

If the past chairman told the incoming chairman how much time was required during his term of office he would probably resign on the spot! It is something you want to do for the Association and are willing to sacrifice your own time freely. I reckon it took between 60-70 days, not counting section and region events in Scotland.

Did it help being out of work?

Being unemployed for part of my year of office made it easier for me to attend more functions/ events than I would have felt comfortable doing if I had still been in employment, but it certainly did nothing for my selfconfidence.

How do you see BIGGA's future?

Although the Association is growing slowly, there are still too many greenkeepers who are not members, which is disappointing as the benefits which can be derived from being a member are numerous. We must also endeavour to get every member to present a more professional image, ie. dress and self presentation.

Improved communication with employers needs to be achieved (a difficult task with some golf clubs) to inform them of what the benefits of their staff being members can mean to the club, ie. better education opportunities.

I feel that in the not too distant future the chairman will not come from within the board of managment, due to the amount of time involved in dealing with Association matters, perhaps he may well be a well known retired greenkeeper or someone associated with the greenkeeping/golf world.

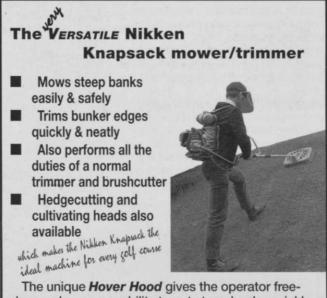
What will you do now?

Hopefully I can find employment which will allow me to return to greenkeeping and try to continue with life as before – if not, who knows what lies ahead? John Crawford has helped promote the status of greenkeepers through 33 years of membership with SGGA/SIGGA and BIGGA. During those years he has held numerous offices:

1981 – appointed to the Central Section committee 1983 – appointed chairman of the Central Section 1984 – appointed secretary of the central section 1989 – appointed to the board of management 1992 – appointed chairman of the Scottish Region 1993 – appointed chairman of

Any final messages?

Yes, I would like to say a special thanks to everyone who gave me their support during my year as chairman – the members, fellow board members, Neil Thomas and all the staff at HQ, every company that gives superb support to the Association and last but most of all Ailsa, without whose whole-hearted support and encouragement it would certainly have been a totally different year altogether.



dom and manœuvrability to cut steep banks quickly and easily. Knapsack design gives him the freedom and balance to mow even the most difficult banks.

With the hood removed and the blade changed the machine quickly becomes an efficient edge trimmer.

Knapsack design effectively removes the engine from flying sand so eliminates a major cause of wear and breakdown.

Dixon & Holliday Ltd, Unit 22, Bassett Down Industrial Estate, Hay Lane, Swindon, Wiltshire, SN4 9QP. Tel - sales: 0462 700547. works: 0793 845199. Fax - 0793 845191

AD



George Brown has been in greenkeeping for 40 years. He started at Princes, Sandwich, straight from school at the age of 15. He was there nine years. "When I went there I was the boy with 11 groundstaff. When I left nine years later I was still the boy...I thought I could do better for myself."

His next job was as the greenkeeper/pro at nine-hole Alton, in Hampshire. "Someone bet I could do it, I didn't think I could, but I applied for the first job that came along, it happened to be Alton and I thoroughly enjoyed it. It was fantastic experience. The members were very kind to me."

He stayed for three years with one tractor and one mower. He'd cut the greens, then go and cut the tees. Then give a lesson.

He went back to Princes as the gaffer and stayed for five years. Then in 1979 he joined Broome Park Golf and Country Club near Canterbury to oversee its construction and stayed on as golf manager – which meant running the whole complex, including the bars and restaurants.

In January '86 he moved to Turnberry to prepare for the Open. Eight years later he is still there and preparing for his second Open.

Having been a pro and Kent amateur champion, we wondered if he'd ever thought about going further on the pro side. "No, I made so much money when I was 24 I decided I'd made enough to pull out of it," he jokes. "No, seriously, I had no training as a pro, I did it as a bet." He now plays off 4. Chris Boiling talks to Turnberry course manager George Brown to find out what's in store for contestants in this year's Open Tournament

ho can forget the 1977 Open, with two of the sport's all-time greats, Tom Watson and Jack Nicklaus, in peak form deciding the championship on the 18th green? Who can forget the 1986 Open, when Greg Norman battled against the wind and

rain to claim his first major title? Turnberry is hoping for an equally memorable tournament this year when it stages its third Open. And course manager George Brown is hoping for conditions and scores somewhere between the two earlier events.

In 1977 when Tom Watson won with a four-round aggregate of 268, it was hot and dry. In '86, Norman shot his level par 280 amid gale-force winds.

George Brown wants Turnberry to be a fair challenge – a stiff breeze and sunshine would be ideal with the top players shooting 67s and 68s. Without a breeze he reckons they could shoot low 60s, like Mark Hayes in '77 and Norman in '86, or even a 59. With too strong a wind many of them will struggle to break 80. Planning to be fair is going to be a problem.

"It's very difficult to set up a links fairly because if they play it how it is today, with no wind, they will shoot low 60s or even something silly like a 59. There's nothing wrong with that. We don't mind them doing that but if it weakens the course too much then some people may say it's not good enough to hold the Open. "It's a question of getting the balance, that's what we're looking for at the moment."

I PH.

That's why there have been a few minor modifications to the course.

"These golfers are so good now, they hit the ball so far, you have to keep making a few changes to keep up with them," explains George, 55, a top amateur player in his younger days.

The main differences from '86 are new bunkers on the opening two holes and 17th and wider fairways.

"After the '86 Open we thought the first fairway was a wee bit too narrow. Some of the top-class players were hitting an iron off the tee, even as low as a 4 iron, which we didn't think was the right way to start a championship. So, after a bit of thought and discussion and professional advice from an architect, we widened the fairway to the left and put two bunkers there to make it a challenging tee shot, and we tightened up the greenside bunkers. You can still lay up short of the bunkers if you have a head wind. If there's no wind or a back wind then you can easily carry them or there's a 20-yard gap if you fancy threading the ball through the middle. So it's a much fairer hole."

There are also two new bunkers on the second. "We thought the second hole was a wee bit weak so we added bunkers left and

right to tighten up the tee shot. Again there's about an 18-20-yard gap if you fancy taking a chance. It'll make the players think for the Open, especially if there's a back

'It's just like when the mother-in-law comes over for it's just that little bit extra effort'



wind, whether to hit a wood or lay-up with an iron."

The bunker that was out in the rough on the par 5 17th – "which no-one ever seemed to go in" – has been filled in and a new one built on the edge of the fairway to catch a slightly wayward tee shot. "I think this will play a major role in the eventual winner of the Open Championship. Again there's 18-20-yards on the left if you fancy driving past it.

"Par 5s on links courses in the summer can play short, but this bunker may make them think."

Wider fairways

All the fairways are a few paces wider. "The criticism from the '86 Open was the width of the fairways. They were too narrow. One of the most vigorous growing seasons we've ever had made the rough very dense and to add salt to the wounds we had horrendous weather for three out of the four days," recalls George.

More obvious differences between Turnberry when Norman first won a major and when he returns in July to defend his Royal St George's triumph are the new £4.5m clubhouse (opened by the Duke of York last June), the new leisure centre annexe to the hotel, and the fact that the 360-acre site, two courses and three-storey hotel have been taken over by a golf-orientated Japanese company.

Preparing for two years

George Brown and his team of 18-20 staff have been preparing for the Open for the last couple of years. But because it is attached to a 132-room, five-star hotel, it has to be kept in tiptop condition 52 weeks of the year anyhow. They have ongoing maintenance programmes so that when the Open comes around "we don't have to do a lot different.

"It's just like when the mother-in-law comes over for tea on Sunday, it's just that little bit extra effort."

They have revetted 90 percent of the 66 bunkers over the last two winters (the other 10 per cent were done three years ago and do not need redoing). They will top-dress more frequently to ensure a smooth surface and step up their divotting programme (using caddies and paying them with free rounds on the Arran course).

"Presentation is the key. We're looking for perfection. But it doesn't matter how many hours we work or what jobs we do, at the end of the day there'll still be a few jobs we'd wish we'd done or hadn't quite got round to. It's like a garden, you never actually finish."

But he has had more time to prepare for the 123rd Open than he did for his first one in '86. He took over as Turnberry's course manager seven months before the championship following the death of Russell Brown. George said he seemed to spend most of his time trying to track down underground services and eliminate damage. But now he has detailed plans to help him.

The condition of the fairways, tees, greens and bunkers was great in '86. "Hopefully it will as good, if not in better, in '94," he says.

But don't expect it to look all green and lush. George does not believe that green is necessarily beautiful. "In early summer and autumn when the fairways and whole golf course is green and striped it does look rather beautiful. But when you have a dry spell for a week or two and the wind gets up off the sea, it can go very dusty and strawy and looks unkept at times. There's nothing wrong with that, links are supposed to be fairly natural and fiery and supposed to have firm fairways. But now we have a new watering system, installed a couple of years ago, and hopefully with proper management we'll be able to strike the balance of not making it too lush and green and not making it too strawy and dusty and looking unkept. I see my role here as trying to keep a balance and keeping it links condition – firm and fast – but presented nicely."

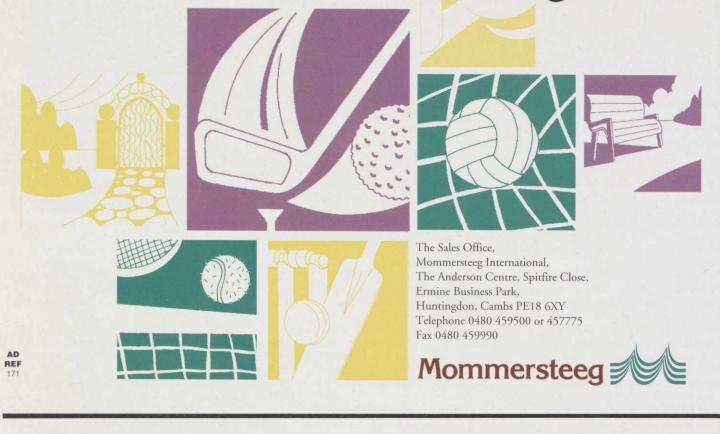
In 1988 Turnberry was taken over by the Japanese company Nitto Kogyo which owns about 30 courses in Japan and several more in America and has just opened The Oxfordshire near London. All of their other courses are green and heavily watered.

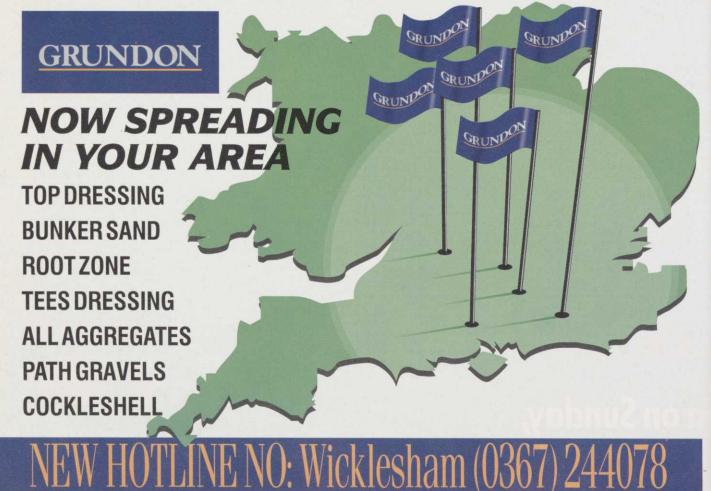
"I see my role here as trying to keep Turnberry traditional," George reassures us. "This is the first links course that Nitto Kogyo have owned and it would be very easy for me with my irrigation computer to press a few buttons and step up the water and I have the budget to pile on the fertiliser to make it green and lush, but I refrain from doing that. We don't want a course like '77 where it is a struggle to keep grasses alive during the drought season, but then we don't want to be like American courses where you play target golf on soft, holding greens. I look at my role as trying to keep it 'down the middle', if you pardon the pun – traditional but well presented."

George says his new bosses have been very supportive. They have renewed most of his machinery and provided a new 10,000 sq ft maintenance facility with spacious 'bothy', showers, drying room, soil bays, purpose-built chemical stores, and a proper workshop with grinders and hydraulic lift for his full-time mechanic.

tea on Sunday,

The best sports and amenity turf starts with Mommersteeg seed





AD



The new clubhouse at Turnberry, officially opened last June by the Duke of York

George Brown on

"If you get in a bunker there

is no written rule that you're

down for two or that you can

hit a 5 iron out. Sometimes

vou will have to hit a sand

60 yards. If you get in a

half to one shots.

for a purpose."

iron and be content with 10-

bunker it should cost you a

"Bunkers are not just

visual things, they're here

supposed to get up and

bunkers

Sand blow

One of the biggest problems in recent years has been sand blow. For four or five years running in January or February ferocious winds from the Atlantic blew sand from the beach up over the 30-40ft dunes protecting the course and upto 50 yards inland. "You couldn't stand anywhere near the sixth green or 7th tees, the sand would almost cut your face to pieces. We've had as much as 2-3ft of sand on the 7th tees." Which, as you can imagine, destroyed the tees, and didn't do much to enhance the 6th and sometimes 5th greens. The greenstaff have wasted a lot of time shovelling and sweeping sand off the

course. "Two years ago the whole squad spent two weeks pushing sand, got it all cleared up, then three weeks later it was back again, which is rather soul destroying." One year they even resorted to using a helicopter which hovered over the 6th green to dry the sand, making it easier to brush off without damaging the greens.

They tried planting marram grasses, but they disappered with high tides. Then last year they installed snow fences (500 yards worth) in

short sections pointing out to sea like groynes. It seems to have done the trick. "This is the first year in six years that we haven't had any sand blow, so we're pleased with that. And we're going into the summer with the 6th green and 7th tees looking quite good for a change. That was my only concern ...

Shaping up

The contractors moved in at the beginning of April and started laving the cables for the tented village which will be sited on the practice area between the two courses. This means the second hole of the Arran course becomes the practice ground with a grandstand and the 18th green on the Arran is used for additional putting practice. Grassy hol-

lows near it are to be turned into practice bunkers and the green extended.

The course closes at the end of June for final preparations - divotting, seeding, topdressing etc.

Between now and then George will be involved in many meetings with the R&A, BBC and various contractors. He will be working closely with the contractors in planning the sites for about 39 static cameras, the routes for the grandstand erectors, the water and electricity pipes and the digging of big holes for septic tanks.

'It makes the day go round and it keeps us all occupied. Greenkeeping is just one part of

it," he says in his usual laidback manner.

During Open week he will be getting up at 3.30am to phone the Met Office at 3.40 - and plan his cutting regime accordingly. If it is going to be hot and windy he may leave the grass on the greens slightly longer, "otherwise it will be like putting on glass."

The week after the Open is more of a problem for George. "When the Open's finished, all the contractors etc want to do is get their material away from here onto the next site. Obviously

they're not so careful taking it down as they were putting it up. That's when most of the damage can be done to the ground, especially if we turn away."

Once the Open is over, George can start planning the other big jobs that need doing, like additional landscaping around the clubhouse and upgrading the Arran course in readiness for the 1996 British Amateur event which will be played over both courses qualifying on the Arran and the finals on Ailsa.

"It's one big merry-go-round," says a contented George, who also has a big personal golfing date to look forward to - his debut in the British Seniors in August, along with St Andrews' Walter Woods.

MAIN MACHINERY AT TURNBERRY

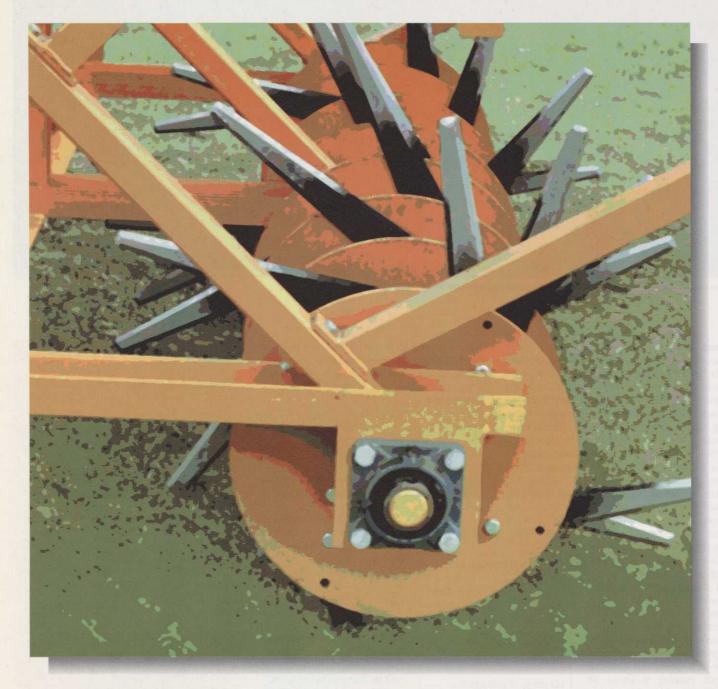
Tractors/vehicles

- Kubota L4150
- Kubota 5450
- Kubota L3250
- 2 Kubota L2850
- (one with front bucket and back hoe) 4 trailers
- Ford 1910
- Cushman (2 diesel, 2 petrol)
- Kawasaki Mule
- Yamaha Buggy
- Daihatsu FourTrak

Mowers

- Toro 300 D Greens Master
- Jacobsen Greens King
- Jacobsen Tri-King
- Jacobsen LF100
- Ransomes Hydraulic 6
- Ransomes Motor 180
- 3 Ransomes Magna
- Ransomes Rota 1
- 3 **Ransomes Marquis**
- 2 **Ransomes Super Certes**
- 6 Lloyds Palladin
- Lloyds Ariel
- Fairway Spikers
- Toro Greens Aerator
- Ryan Mataway Overseeder
- Charterhouse Bulk Fairway Topdresser
- Verti-drain





A NEW SLANT ON AERATORS



SISIS have been producing aerators since the 1930's and can now offer you the widest possible choice from a range of seventeen models.

From the simple hand fork to tractor mounted deep slitters, vertical aerators and the Powadrill, SISIS aerators offer a choice of tines and working depths from 76mm to 305mm.

We've spent 60 years perfecting our craft. If you'd like to know more send for fully illustrated leaflets to.

"All SISIS machines are designed, patented and manufactured in Gt. Britain"

SISIS EQUIPMENT (Macclesfield) LTD:, Hurdsfield, Macclesfield, Cheshire SK10 2LZ. Tel: 0625-503030 Fax: 427426 SISIS Centre In Scotland: The Roundel, Middlefield Ind. Estate, Falkirk FK2 9HG. Tel: 0324-629635 Fax: 0324-632894 SISIS Centre In USA. SISIS Inc, Florida



Constructor is given golf course in settlement of six-figure debt

G olf course constructor Brian D Pierson has opened his own course. Run by eldest son Mark, Hamptworth Golf and Country Club, on the edge of the New Forest, was given to the Piersons to settle a six-figure debt by the original developers, Hamptworth Park Leisure, who had a 125-year lease on the land.

The Piersons started building the course in 1991, then stopped halfway through when the developers' money ran out. Eighteen months of negotiations later the company which has built more than 180 golf courses worldwide took over the whole project, scaling down the plan for a grandiose clubhouse.

Laid out over 175 acres, running in and out of the 700-acre English Nature-managed Langley Wood, Hamptworth has the potential to become one of the best courses in the south-west.

Newly-appointed head greenkeeper Keith Hill-Jones says he wants to make it the best course in the area in the next couple of years.



Hamptworth's double green the 9th and 18th





Mark Pierson, Robert Key MP and Brian Pierson

Based on a Philip Sanders design, it measures 6,500 yards off the back tees and features several intimidating, tree-lined tee shots, some monster bunkers and a par 5 of 582 yards.

Water hazards are provided by the River Blackwater as it meanders through the course, which was opened last month by Salisbury MP Robert Key. Other hazards are natural too - plenty of trees and hedges and only 19 bunkers.

Greens are built to Jim Arthur specifications. The 9th and 18th holes finish on a double green guarded by a massive bunker which one over-enthusiastic writer described as being "as big as the Isle of Wight"

One of the most daunting holes is the 360-yard 14th which doglegs slightly to the right once you have driven through an avenue of trees that may make even the best players consider using a 4 iron.

Construction of a 6,500 sq ft clubhouse is planned for next year.

FLYING DIVOTS

If you want to see an Etesia UK Ltd product in action, for example the new RKE

pedestrian rotary mower with grass collection, then Spencer Southall is the man to contact. The 24-yearold table



tennis champion has been appointed demonstrator for the Ross-on-Wye company. Tel: 0462 490190

More than 220 companies are booked in at the Landscape Industries show June 8/9 at the National Agricultural Centre, Stoneleigh Park, Warwickshire.

The Greenkeeping Supply Company has been set up by Liam Galway. He will be supplying course furniture from Tacit, Pattissons and Standard Golf, as well as clothing and tools Tel/fax: 0245 248880.

DESIGNED FOR THE 90s Slitters/aerators from

Easy choice - 2 models (4ft and 6ft) with working depths to 8in (20cm).

Staggered 8mm (standard) or 5mm triangular shaped blades on big diameter rotor - maximum underground disturbance, minimum surface disturbance.

Tough box section frame - strength with light weight.

Weight transfer system - optimum penetration.

Parking stand - easy one-man coupling and un-coupling. Optional rear roller for a smooth finish.

All the professional needs in a tough, reliable, easy to use slitter/aerator



Where quality matters. Amazone Ground Care - A division of Amazone Ltd. **Administration Centre** Rowse, Pillaton, Saltash, Cornwall PL12 6QU. Tel: (0579) 51155, Fax: (0579) 51057.

Sales, Service and Parts Centre: Cuckoo Copse, Lambourn Woodlands, Newbury, GROUND CARE Berkshire RG16 7TJ. Tel: (0488) 73722, Fax: (0488) 72698. Amazone Ground Care



AD REF

A simple trick of the Hade

For over 100 years we've been designing grinders and we've learnt a few tricks in that time however, they're tricks that benefit you, the user...

...like the simple flat bed of an Atterton, the natural way to grind a cylinder, in the upright position

...like the simple choice of either in-situ grinding with the whole machine up on that convenient flat bed, or separate cylinder grinding when the machine's stripped down

...like the simple single pedal clamping device, perfected by Attertons to provide easy, accurate fixing when grinding the cylinder in-situ

...like the simple method of operation, to accurately and efficiently grind cylinders, either way, with a minimum of operator effort

...like the simple fact that there's nothing quite like the EXPRESS DUAL available today...except its partner, the ANGLEMASTER, Britain's premier bottom blade grinder...together they form a formidable duo for today's modern workshop.

The trick of the blade?... grind with an Atterton and then cut the grass...it's no trick...it's magic!



EXPRESS DUAL

NOW WITH RELIEF GRINDING ATTACHMENT AND LIFTING TABLE



ATTERTON & ELLIS LTD *Manufacturers of fine Grinders for over 100 years* Iron Works, Haverhill, Suffolk CB9 8QH *Tel:* (0440) 702312 Fax: (0440) 712138