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Official publication of the  
British & International Golf Greenkeepers Association  
**OCTOBER 1993**

# GREENKEEPER

International

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# Faces and places

■ The STRI will hold four five-day courses at Bingley in the autumn of '93 and spring of '94, on the theory and practice of turf construction and management. The courses (Monday-Friday) will cover soils, grasses, turf diseases and pests, drainage, watering, fertilisers, machinery, ecology and conservation management.

The 'Golf Only' courses begin on 1 November and 8 November '93, and in '94 on 21 February and 28 February. The cost for '93 is £185 (members) and £230 (non-members) and for '94 will be £195 (members) and £240 (non-members). Prices do not include VAT, accommodation or meals. Details: Mrs M Curran, STRI, Bingley, West Yorkshire, BD16 1AU. Tel: 0274 565131.



■ Allan Stow, left, technical sales advisor at Vitax, was seen sporting a larger than usual grin on his monicker at IoG. When quizzed by editor White he spoke of upcoming wedding bells, or whatever the equivalent tune is played at the 'registry'. So to Nina, the lucky gal, and to 'Stowie', the lucky lad, every happiness and good fortune!



■ What is believed to be Fife's first commercial pay and play golf course, perhaps even the first in all of Scotland, Charlton House is due to open to the public next year. Head greenkeeper David MacOwet is busy putting finishing touches to the parkland course, which overlooks the Forth, hard by a cluster of such famous member clubs as Elie, Leven and Lundin Links.

■ Parker Hart has announced the closure of its Warrington depot, declaring the operation insufficiently profitable. The company will now concentrate its resources in the south, where the appointment of Richard Gooding as sales director of their sister company, Roffey Bros., is seen as strengthening further their selling operation in the south-west.

■ Golf course architect, Martin Gillett, has developed a most distinctive style in his many years of designing courses, with an emphasis placed clearly on strategy.

Not afraid to create something different, Gillett has designed one of the longest holes in the country, the 18th at Crondon Park, Essex. It measures a full 645 yards – though golfers will be pleased to know it's downhill all the way and normally plays with the prevailing wind. An additional feature at this Gillett designed course is a 19th hole, designed as an extra to be incorporated when one hole needs to be taken out of play for maintenance – or simply to change the length and playability of the course.

Martin Gillett's current commissions include the acclaimed pay and play at Little Hadham, Hertfordshire, one of a number of such courses the development of which Martin believes are essential to the future well being of the game. Three Gillett designs have opened in the past year. Details: Tel 0277 231371.



■ David McInnes, 31, has been appointed sales manager for the south of England by turf, amenity and landscape equipment specialist, Turfmech Machinery Ltd, Hixon, Staffs.

Working from Bicester, Oxon, David takes on responsibility for sales of Turfmech machines, including vacuum collectors, tractor-mounted blowers, fine cut rotary mowers, stone buriers

and the recently-introduced trailed top dressers.

■ I don't know if league tables are kept of such things, but I understand from Whitnell Contracts Ltd, the Essex based golf course construction company, that they lay claim to a record by constructing 18 holes (and numerous water features) at Bletchingly GC in just 36 working days. In this period all works up to topsoil return and preparation were completed in readiness for turfing, which was undertaken by another contractor.

■ The first pay and play course to be constructed in the Sheffield region for over 20 years opened for play recently. The

nine hole family course at Bondhay complements the existing driving range and the new 18 hole course, which opens in 1994.



■ Cedric Johns has been appointed by the British Turf & Landscape Irrigation Association as its press officer. Involved in the UK irrigation market since its early days, his knowledge and journalistic skill will be utilised to improve standards of technical awareness – both in the industry and in the education of potential end users responsible for sports turf.

Speaking of CJ's appointment, BTLIA chairman Paul de Rham said "with him on the BTLIA team we plan to step-up our professional presence in the market and broadcast the message that high standards of irrigation design, installation, its use and the conservation of water should be taken seriously by our industry and end-users alike."



■ The Toro Division of Lely (UK) Ltd announced recently a programme of nationwide 'Workman Field Days', where the acclaimed Workman 3000 maintenance vehicle, left, will be demonstrated and made

available for personal test drive; including the use of a wide range of attachments. Full details of the programme may be obtained from Toro dealers. Already well underway (it started on 13 September), the programme is proving most popular with greenkeepers and will continue until 29 October.

■ Driving Force Leisure have appointed David Murphy, latterly with Sta-Brite Supplies, as their rep. for Herts, Beds, Cambs, Northants and Warwicks.

■ The Irish Golf Greenkeepers Association is holding its first Turf Maintenance Exhibition in early November. This will bring together in Dublin suppliers of materials and services, both Irish and international, and will be the essential event for greenkeepers and those who maintain sports and leisure facilities throughout the UK and Ireland. The dates are 4-5 November and the venue is the Royal Dublin Society Showground, Ballsbridge, Dublin, which is easily accessible. Details and invitations from Fairlink Ltd., 58 Clonard Court, Balbriggan, Co Dublin. Tel: + 353 1 8411362. Fax: + 353 1 8412934.



■ Under the by-line 'they don't make 'em like that anymore', it was good to learn from John Phillips at St David's City Golf Club, Pembroke, that he still uses a turf cutter (by Patisson, I believe) which he thinks may first have seen the light of day before World War I. What's more, John tells me it still works perfectly. Does anyone know its history?

■ As a finale to their full time year of study, 15 National Certificate Greenkeeping students from Elmwood recently took a week long study tour to the Rhone – Alp region of France.

Based at the 'Lycee Horticole' they also visited France's oldest course, Golf Aix les Bains founded in 1913, and the six year old layout at Correncon en Vercors, which at over 4000 ft is under snow for four months of the year. (During this time the head greenkeeper works as a ski instructor). The 36 hole Golf Club de Lyon, and the nine hole Golf l' Isle d'Abeau were also visited during the study tour. Aspects of the design and layout and turf maintenance were discussed, and compared to the students studies at Elmwood.

Of course there was also time to relax; two of the clubs visited offered free use of their practice area. A free day enabled a look round Grenoble, then there was the coffee and croissants, warm sunshine, cool beer, alpine scenery... All things considered a successful tour was enjoyed by everyone.



■ A new recruitment consultancy, Golf Personnel UK, has been set up in Horsham, West Sussex, by Jessica Maddin, above. As the name implies, Golf Personnel UK specialises in golf trade related vacancies: club pro's, secretaries, stewards and, of course, greenkeepers – and makes no charge to applicants. Tel: 0403 823828.



■ Congratulations to Alastair Holmes, top, latterly head greenkeeper at Goswick, on his move to course manager at Seahouses GC. Also to Paul Seago, pictured below Alastair, latterly head greenkeeper at Royal West Norfolk, who takes on the exciting task of course management at East Lothian, stage managing those rare beauties – Gullane One, Two and Three. We wish them good fortune.

■ Members in Scotland and throughout the country will be saddened to hear of the passing of Harry Diamond's wife, Greta, after a long and valiant struggle against illness. Our deepest sympathies are with Harry and his family at this time.





# Christmas Gift ideas



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★ Pictured at the IoG exhibition, BIGGA chairman John Crawford presents an award for furtherance of greenkeeper education – the BIGGA Education and Development Fund – to Gold Key supporter, Jonathan Harmer of Farmura Environmental Products. This award brings the total of Gold Key supporters into double figures, the presentation marking the tenth donation to the Fund.

## Countdown has started to BIGGA's main event

Harrogate is now only four months away – so read all about it now, make a note in your diary of the dates and get your place booked!

Included in this issue of Greenkeeper International you will find a copy of the Educational Seminar Programme giving details of the workshops and seminars together with a copy of the BTME Newslite. A booking form is also enclosed and as always, please book early especially if you wish to make use of BIGGA's education and accommodation packages.

At Harrogate, we will be launching the much awaited career video and if it receives as much acclaim as the recent training video, then it is bound to be a success. We have received numerous letters and telephone calls at HQ congratulating us on the professionalism and quality of the video on "Setting the Standards in Spray Application".

The Toro/PGA Student Greenkeeper of the Year Award is reaching its climax. As you will read on Pages 14/15, the eight finalists will meet at Aldwark Manor on 10/11 October to decide the 1993 winner and runners up.

The ICI Greenkeeper of the Year Award has now reached its next stage and the five regional finalists have been selected. They will now receive a visit to their course by Huw Parry, BIGGA's Education Chairman together with Richard Minton from ICI.

The five finalists will be featured in the next edition of Greenkeeper International.

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BIGGA: BUILDING A BRIGHTER FUTURE

DAVID HEMSTOCK on golf course drainage

# MANAGING WATER

It's official! According to figures from the National Environment Research Council, we have had a year of awful weather. Four years of drought conditions, which started at the end of 1988 and resulted in depleted water stocks over much of the country, have been countered by last winter's well above average rainfall and a gloomy summer with slightly above average rain, an awful lot of it falling in one of the wettest July months for 30 years.

The bad weather during the summer and autumn of 1992 was instrumental in the financial hardship felt by some new course development projects, adding to the misery of the trough of recession. Earthworks came to a standstill from June onwards for many, and the windows for proper seed-bed preparation and sowing were few and far between.

Judging by the number of enquiries we've received from existing clubs on drainage problems, many established courses had a wet and soggy time of it over the winter of 1992/93.

It's ironic, of course, that I should have co-written an article for this magazine, ('Too hot to handle', Jan 1992) just before the flood, based on the imponderables of global warming and the implications on drought and water use efficiency. Cue for the weather to hit back; predictably unpredictable in our corner of Europe.

Partly due to this unpredictability, we do have a tendency in the UK to avoid the issue when it comes to long term improvements to water sourcing and storage, drainage and irrigation. We can always be pretty sure that today's problem - drought or flood - is unlikely to last too long, and is quite likely to be solved by one of those characteristic 'mood-swings' in the weather. Install a new drainage system, followed by four years of drought, and you will have members muttering about over-draining (whatever that is) and the essential nature of fairway irrigation.

When dealing with a new course, the opportunity to tackle issues such as water sourcing and storage strat-

egy, the integrated design of drainage and re-contouring, and the efficiency of irrigation really should be grasped as early as possible. We know how important water is, where we need it and where we don't, but it is useful to take a look at the integral system, from cloud or sprinkler to outfall.

In essence, the water which is required in summer for irrigation falls in winter. If the course does not store water in winter for irrigation directly, mother nature does geologically or a water company does for a financial return. If the NRA allows it, and water passes by or through or lies under the course, abstraction and storage is possible. Of less interest to the NRA is the fate of drainage water, the constraints on use of this source are less rigorous than some of the others. Rainwater harvesting is a neat idea, i.e. recycling rainfall, avoiding potential pollution problems, making secondary use of a drainage system, but there are problems.

Firstly, if water percolates freely through the soil profile to groundwater, directing it through pipes may not be possible or may not be very fruitful. The type of course with this problem is also the one most likely to have water sourcing problems, unfortunately.

If this is not the case, but the contours do not naturally lead to a useful outfall, it may be possible to lead water away from a natural catchment, around the nose of a hill for instance, to an artificially extended catchment. This is assuming that infiltration of water into the soil is reasonable or that the soil can be manipulated to absorb water rather than allowing it to go, possibly to waste, as run-off.

The proportion of rain which becomes run-off or infiltration depends on many factors; slope, drainage, soil type and compaction status, rainfall intensity etc. On a compact soil, run-off may constitute virtually all of the fate of rainfall, similarly on a sloping site run-off may predominate in heavy rainfall events; this is the basis of the 'American' style, heavily re-shaped, course with swale and gully-pot drainage system which relies on run-off to work.

Run-off would normally find its way into an open watercourse or more permeable area and hence to drains or groundwater. It is quite easy to collect water as run-off in low spots where it lies, but to transfer it to the ideal position may often require pumping, which is better avoided if there is an alternative.

To increase the amount of water

finding its way into a drainage system, and therefore increasing the control of where it goes to, a more intensive pipe system is needed in conjunction with a permeable topsoil, or some method of intercepting water at the surface is required, by improving soil infiltration or by introducing drains and/or slits, grooves etc. with sand to the surface.

The technique for designing a rainwater harvesting system that I use is based on the contour bund (or grip) method used in Africa against erosion on sloping land and sometimes in forestry and moorland drainage. Drains or slits with a highly permeable surface area follow the contour with a slight grade to act as water interceptors. At calculated intervals the interceptors connect with a carrier system, which may be sealed to prevent 'blow-outs' occurring, which takes the water down the slope to the required place. The flatter the land in question, the easier it is to avoid problems caused by exceptional rainfall events.

I have covered the subject of drainage systems and installation in some detail in another previous article ('Drainage Decisions' Oct. 1992). Basically, purely from a drainage rather than a rainwater harvesting point of view, the system installed initially is usually there to keep the water table below the level of significant root activity as well as to collect areas of water concentration, i.e. hollows, bases of banks, greens, bunkers, springs etc. Operating below the surface layer, this system requires regular aerating or de-compaction treatment on most topsoils. If these treatments cannot effectively keep water infiltrating through the soil then help may be needed from a 'by-pass' system such as sand slitting - to remove water directly from the surface and transfer it to the carrier system. At the same time, the slit system is acting as a close-spaced soil drainage system, absorbing soil water and reducing compactibility potential. This is a key point: pipes and slits may not be there simply to pick up wet spots, a more important role may be to keep soils inherently dryer, thus reducing compaction problems.

If drainage water is being harvested, it is worth directing it to the chosen point with the maximum preservation of 'head', which might be useful. So, having directed water to a particular point, and solving problems on the way, how is it going to be stored?

I am personally very keen on

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# EFFECTIVELY

water features on the golf course, whether or not they come into play. A round of golf is an encounter with nature, and anything which increases the diversity of flora and fauna on the course must be a good thing. However, an area of water designed to store water for future use will require some sort of treatment to disguise the draw-down that is inevitable once irrigation is underway. This could be very expensive, yet still not be particularly attractive or natural in appearance. Protecting banks from fluctuating water levels requires stone, concrete or similar revetment, gabions, mattresses, palisades, plastic reinforcement, or whatever. And the more shapely the edges are made in an attempt to soften the pond or lake appearance, the higher the cost is likely to be. Civil engineering solutions to a problem often prefer straight lines and even grades.

On this subject of water features with engineering implications, an interesting encounter with an NRA official recently revealed what might

be a possible development in their policy towards golf constructions with regard to water storage. Apparently the similarity between a golf course under construction and various mineral extraction sites had not gone unnoticed, particularly the laxity of controls on the former when compared to quarries, opencast sites etc. Very high run-off rates were to be expected on both, particularly the major golf course projects involving large amounts of topsoil strip. Rigorous demands on settling lagoons and balancing ponds common to mineral workings may become essential to golf and other developments soon.

Following construction, the very effective drainage systems of some courses, whether relying on swales and carrier pipes or under drainage and slitting could also cause problems downstream, with immense peak drainage flows compared to previous land uses. These abnormal peak flows could be blamed on over-efficient drainage, changes to catchment characteristics, or even on untreated and widespread com-



Half full or half empty? Optimist or pessimist; the weather makes us one or the other. Look objectively at long term climatic trends

paction on the course.

Perhaps the water feature installed as a combined golfing hazard and wildlife sanctuary might have a further dual role in storing water for future use and in temporary storage of potentially damaging storm flows.

In a true re-circulation system – where water is pumped back up to maintain flow of water through ponds to aid aeration or to occasionally top up water levels in ponds or storage reservoirs – a sizeable pump may be required. I say 'may be' because I have been involved with three new golf course developments where only a small, constant flow was required to maintain water levels, this within the range of the irrigation system itself to supply through a valve arrangement. However, all three systems were

designed to operate with a smallish pump feeding water from the outfall end of the watercourse system to separate from the irrigation main. Inevitably, moving large amounts of water costs a lot of money, but it is not just Kiawah Island clones that can justify total water management.

Managing water effectively in the UK means removing it efficiently from the rooting depth of the turf, applying it only when needed (which is a science rather than an art) and manipulating what passes through to maximum benefit, so long as the course of nature is perverted no more than temporarily and harmlessly.

● The author, David Hemstock BSc, runs his own golf course consultancy, David Hemstock Associates, specialising in aspects of golf course design development and construction.



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**HAYTER CHALLENGE TOURNAMENT 1993**

# THAT'S THE

Three and a half inches of rain dumped on Sand Moor's eighteen holes in twelve hours or less adds up to an awful lot of wet stuff – enough, I fancy, to fill a fair-sized lake. Also, it occurred to me that if the Great Controller In The Sky bore a grudge on Yorkshire, which of course was a ridiculous thought, the spot chosen for His extra irrigation must have been Leeds. Dire warnings predicting floods, pestilence, doom and disaster, in Leeds above all other places, frequently interrupted every radio station as I travelled to Sand Moor, and though I may have swum through deeper rivers, there seemed a distinct possibility that sixty three golfing greenkeepers, along with their team managers and cheer-leaders, would soon be opting for an early bath and a return to base. As it poured and poured, playing the Hayter Challenge Tournament seemed less and less likely.

Thankfully, the deluge abated, at least the heavy stuff, and though players would experience the odd puddle of 'casual water', the stout-hearted green staff of Sand Moor, managed so capably by Bobby Barnes, were able to enact their game-plan according to King Canute, keeping most of the waters at bay on this free-draining golf course. That stated, even Bobby and his crew were powerless to repair all of the damage wrought by such liquid ferocity, for though many bunkers were washed thin of sand, there was no time for replenishment; the game had to continue!

Greenkeepers love the Hayter and Hayter's love greenkeepers. In fact, there is no argument amongst the cognoscenti, the most eagerly anticipated event in the calendar is that which is now titled the Hayter Challenge Tournament. After all, players in the Hayter don't get to compete just by being good guys, rather they earn their spurs the hard way, victorious in examinations of golfing prowess that include both section and regional qualifying events, playing golf to a higher level than their peers. To qualify for the final is a class act in itself, to win is every greenkeepers dream. Ironically, as this event is determined first by handicap, it is not such a crazy dream after all, for winning is within the reach of every golfer, as previous finals have often shown.

Wet weather makes for difficult playing conditions, and whilst Sand Moor's greens remained true, firm and speedy – enough to test any man – there was no measurable run through the green. As a professional golf watcher over the years, I fancy



**Winners all: top, Bill Francis, first in category one; main picture, Chris Hulme, first in category two; and Paul Jackson, first in category three**

## REPORT AND PHOTOGRAPHS BY DAVID WHITE

myself a dab hand at picking winners, kid myself I can spot a champ after a mere dozen shots have been fired. Playing the hunch, I drifted with the first game of the day, green with envy for the fluidity and suppleness of Martin Scothern and his plus one swing, mindful also of the innate talent of Mike Hughes, always a danger off his handicap of five. These two were my first 'bankers' and, bless their hearts, they both paid dividends. It was Martin Scothern who produced the lowest gross score, 111 for a round and a half of glorious golf under trying conditions, certainly acting as the lynchpin for the soon to be victorious Northern team, whilst Mike

Hughes won the premier trophy of the meeting, the Hayter Challenge Cup, with a nett score of 102.5. It was the same golf course for everybody, it just happens that Mike Hughes is the man with the trophy.

I've watched Mike quite a bit over the years, impressed always by his workmanlike approach to the game. The moment he bagged a majestic four at the second, after floating a soft wedge that could so easily have found the green into the greenside bunker, splashing out, and ferreting the putt, I knew this was to be his day. That he went on to fire a cluster of birdies spoke volumes for Mike's power of concentration – even he began to fancy his chances

– whilst Midlands team captain, Dean Cleaver, was often at his side, whispering words of encouragement.

Playing the hunch again, I nipped back a couple of holes to watch Bill Francis, a 'banker' for the South East if ever I saw one, finding him well out of character in shooting the rapids, visiting parts of the course best left to wild beasts. On two holes I watched him poke his tee shot into the boondocks, twice marvelling as he recovered with consummate ease. It says something for Bill that he's not given to panic, but it is not fair for an editor to hover at such moments of stress, so I pushed off elsewhere. Later I learned that my hunch was correct again, Bill's score of 107 in category one leading the class by 4.5 shots from Northern Ireland's Jonathan Guest (nice chap, full of strong, vibrant feelings for the occasion) and five less than Jon Moorhouse, the Midlands cornerstone.

Predicting winners in the second category isn't so easy, even practice rounds make 'em edgy, they're the 'anything might happen' brigade. Well, I'm telling you, when I spotted Chris Hulme early in the round, spied him through a camera lens, I couldn't believe my eyes. He has a ten handicap, swings like a three, hits the ball a country mile and is oh so tidy around the greens. Not surprising, then, that he should romp home, leading second placed Mathew Blake (S.W & S Wales) and the ever grinning Owen O'Connor (Eire), by eight glorious shots.

The seasoned reporter (for that matter, the seasoned golfer) must never write off those dark horses in category three, for with literally handfuls of shots, they often can prove an enormous upset. Whilst it's easy to kid oneself, it's tough to pick a 'banker' from these ranks. Paul Jackson hails from Bournemouth, working and playing at Ferndown, which by anyone's reckoning is a tough old test of nerve. A player holding 19 handicap at Ferndown might easily be a 14 elsewhere, such is its test of severity.

So, was Paul Jackson one of my bankers? I'm sorry to say that he was not, though around the turn at Sand Moor he revealed how lacking my powers of observation had been to miss him – this guy is really hot mustard, he hits the ball with meaningful vigour and must be regarded as a 'soon to be' candidate for category two, his score of 104.5 almost proving the upset of the day. Unlike Mike Hughes or Martin Scothern, I'll bet Paul can look back over his 27 holes and say 'if only I hadn't missed