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Jim Byrne, overall winner in another exciting Iseki Championship. Details and pictures, inside
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Who and what are moving on and moving in, in the greenkeeping industry

Ransomes has announced a key appointment within their sales and marketing department. Christopher McGowan will join the company as divisional sales and marketing director this month. McGowan joins Ransomes from Benford Ltd (BMC Group plc), where he has been the sales and marketing director for three years.

Kubota (UK) Ltd, engines has appointed Glasgow based Duncan Rogers (Engineering) Ltd - DRE Ltd - as its new engine dealer for Central Scotland and Northern England. Diesel engine specialists for 17 years, DRE Ltd will service Central Scotland from their Glasgow depot. The company will be responsible for the sales, service and parts support for Kubota's extensive range of diesel and petrol engines - power output from 3hp - 100hp. In addition, Kubota has appointed Sutton based SES Engine Services Ltd as a replacement engine dealer for the South Eastern region, covering Kent, Sussex and Surrey.

De Vere Hotels, owners of The Belfry, have invested £500,000 in remodelling the world-famous Brabazon Course, venue for next year's premier golf event, the Johnnie Walker Ryder Cup.

The development improves spectator viewing and will offer the players a fresh challenge as 10 of the course's holes have also been transformed by the introduction of new tee positions or remodelled fairway and green bunkering.

Dave Thomas, one of the course's original designers and the man responsible for the alterations, said: 'It is very exciting when you can go back and do some of the things you would have liked to have done originally and I think the results of the latest work are absolutely marvellous.'

Greenkeeper International joins with the many friends of Bill McIntire in wishing him a healthy and happy retirement after 41 years of service at Whitefield GC.

West Country Groundcare of Axbridge have appointed Steve Sheppard to set up their new workshops at Backwell, near Bristol. Steve has spent 21 years as service manager with Garden and Lawn Equipment of Bristol and has specialised in Toro and Wheelhorse equipment.

Course Care, the leisure division of Highspeed, have appointed David Smith as their new agent for East Cornwall, Devon and Somerset. David will provide advice on the well as a diesel fuel treatment to prevent black smoke from exhausts and to protect equipment whilst not in use. Free phone: 0800 590069.

Having started their partnership in July, McMillan-Shiels have succeeded in bringing their first course to the point of opening. The Wildwood in Surrey has 13 holes ready for playing ahead of schedule and the remaining holes will be open in spring 1993. Jack McMillan and George Shiels have overseen the construction and growing-in and will continue to monitor its maintenance in the years ahead.

A second major project at Leek Wootton for the Golf Fund, a 45 hole complex, is almost complete and is scheduled to open in 1993, developed under their watchful eye.

As one course opens the partnership has begun to plan its next major project. Working with Tommy Horton and Bob Dalton, McMillan-Shiels are involved in the specification and project management of an 18 hole complex at Winkleham in Surrey. Work is scheduled to commence in the spring of 1993.

Readers should be suitably impressed by the splendid performances of George Brown (Turnberry) and David Whiffin (Dumfries & County) when representing Scotland in the Ford National Team Championships, held recently at The Belfry. Not only did these players perform with great skill in winning for Scotland, but they are two greenkeepers who won through to the finals from an original field that was whittled down from over 35,000 entrants! How many other professions, I wonder, could produce such a galaxy of golfing talent - well done Scotland, well done greenkeepers.

Jon Allbutt has indicated that plans are afoot for the staging of a refresher course - to be held in Surrey - aimed specifically at head greenkeepers, secretaries and green chairmen. The course will cover PA1 and PA2 training and testing for spraying. Interested parties should call Jon on 0959 575575 for details.

The recent highly successful GA European Open, staged at a gorgeously prepared Sunningdale, was overshadowed by sadness following the accidental death of Zarka Smith in a mysterious motorcycling tragedy, no other vehicle being involved.

Zarka, a young lady student member of the GCSAA, was on placement at Sunningdale under the watchful eye of course manager Lawson Bingham and was a hugely popular member of Lawson's crew. Our deepest sympathy is extended to Zarka's family in their tragic loss.

Five of the country's leading suppliers of turf care equipment and chemicals have joined forces to present a working demonstration designed to show visitors the latest developments in the maintenance of turf. The event, which has been organised by Lloyds of Letchworth in conjunction with Hardi Sprayers, Kubota (UK), Sisis Equipment and Vitax, will be staged at the ICI (North Herts) Sportsground, Letchworth on 21 October from 10.30am until 3pm.

GB Irrigation Ltd has moved into new offices at 20 Market Place, Ringwood, Hants BH24 1AW (Tel: 0425 473329). They are also expanding, and Roger Sunderland, (pictured), has joined the company.

With over 24 years in the irrigation business, Roger brings a wide range of design, service, technical and administrative skills to add to that of the rest of the team.

The company, set up by Gordon Bennington in 1991, has already completed a number of projects. Those completed or in progress include Galashields, Saltburn, Hawkestone Park, Winchester, Bristol, Oxford, Heathrow, Bournemouth, Work- sop, Manchester and Dorchester.

GOLFFOUNTRYATIONAL October 1992 5
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GREENKEEPERS' LIBRARY

by DAVID WHITE

The new STRI publication, *The Care of the Golf Course*, is a compilation of many of the articles written by members of the STRI advisory staff, the vast majority published over the last five years in bulletins and leaflets issued by the Institute. Thus it must be understood that there is nothing entirely new within its pages, though as a source of reference it will certainly find new and appreciative readers, including college students, those of mature understanding and those seeking to grasp the intricacies of greenkeeping.

In truth, the need for such a book is well overdue, for it contains all that the student, greenkeeper or green chairman will need to ensure that practical husbandry is conducted according to accepted and proven practice, leaving nothing to chance.

To quote from the introduction, "Much has appeared in print, but scattered through various books, greenkeeping magazines, scientific journals and conference proceedings. The greenkeeper or chairman of green seeking a comprehensive source of background information on golf course management has therefore so far been deprived of an obvious single publication. This present volume seeks to correct that deficiency and provide a ready reference which can hopefully be relied upon to provide answers to the innumerable questions which arise during the day to day care of the golf course."

"The above should not be taken as implying that no useful book on modern greenkeeping currently exists. A number of invaluable works have indeed been published and to give a comprehensive picture of available literature, an extensive bibliography has been included at the end of the present volume. As an outstanding work on the subject, one might cite as an example Professor James B. Beard's "Turf Management for Golf Courses", published by the USGA in 1982. From a British point of view however, the value of this definitive textbook is limited by the climatic, environmental and managerial differences which exist between the US and UK golf course scenarios, and a specifically British contribution to the literature is therefore an obvious requirement..."

"The editors of the current work, however, feel that a general (and not too technical) book giving reasonably detailed information on the range of greenkeeping problems which arise in British golf course management will be of value to all individuals involved in this exciting and demanding task".

In providing such a splendid compendium of articles - features that prove not only invaluable but offer ammunition that can disprove the many 'crackpot' theories voiced by knowledgeable members - the editors have succeeded in doing just that, and as such the book can be thoroughly recommended.

If I have one major criticism, it is the tiresome (and inconsistent) misapplication of capital letters to place unqualified self importance on certain unnamed persons, eg. Members; Editors; Ladies; Chairmen; Green Committees; Ecologists; Conservations; Architects; Agronomists and the rest, though greenkeepers and assistants (notably not head greenkeepers) apparently warrant no such elevation. I am an editor, you are course managers; head greenkeepers; greenkeepers or assistants, no capital warranted, the use incorrect. This anti-capitalist demands the return of 'capital' punishment.

The Environmental Health Officer (writes Jon Allbutt) is the inspector for golf clubs whose job it is to enforce aspects of environmental health. He/she has been given the power to enforce the Health and Safety at Work Act and COSHH in particular. From April this year he became responsible for enforcing the 'Pesticides Regulations'. This is a very new area of work and to help the inspector prepare for these new duties the Health and Safety Executive have prepared this excellent Open Learning Course.

The course is designed as a self learning package; set out in 17 sections of information with self assessment questions at the end of each section. It becomes a step by step guide to the Act and Regulations and would be ideal for the student, course manager, or indeed anyone who needs a good working knowledge of this important piece of Law.

The course manual contains flow charts, diagrams and charts that help with tricky areas - such as deciding which chemicals are subject to the Regulations; the routes for disposal of chemical waste and empty containers and the options available for the safe storage of pesticides.

The inspector will of course follow the detail of the course 'to the letter' - at least until he/she has enough experience to use judgement when conducting an inspection. This is potentially bad news for the club that is not conforming to the Regulations; has not completed staff training; does not have a sprayer that meets the requirements; no proper pesticides store that meets the criteria set out in guidance note GS19, and has not completed Risk Assessments as required by the COSHH regulations.

This open learning package is not a substitute for the Code of Practice for the use of Approved Pesticides in Amenity Areas, rather it is a practical guide on how to comply with the Regulations.

• The Open Learning Course is available from HMSO bookshops and costs £16.

Many a 19th hole argument will wait to be solved by searching the pages of the new edition of *Golf Rules Illustrated*, which is now updated to cover the new 1992 rules, revised in January.

An official publication of the R&A, this book presents the rules together with over 90 clear illustrations and is designed to provide an easier understanding of the rules. It concentrates in particular on those situations which cause most difficulty for the typical club golfer.

Obstructions, bunkers, out of bounds, lost balls, unplayable lies, water hazards, backspin, casual water - Golf Rules Illustrated will give a visual answer to these and many other problems. Quite simply, every golfer should be aware of the rules - why not carry a copy in your bag?

*Golf Rules Illustrated* is published by Hamlyn at £7.99.

Golf Rules Explained, a highly acclaimed book now in its eighth edition, is widely acknowledged as the definitive work on the explanation and understanding of the rules of golf. This latest update includes commentary on the new 1992 rules.

"There are few games", wrote Country Life of the first edition, 'in which ignorance of the rules is so widespread as in golf. This is an observation on the game by one of its shrewdest observers and most gifted writers. He makes cogent comments and any golfer, however humble or eminent, could profit from reading it.'

The author enlivens his explanations (and warnings) with anecdotes from his long international experience, making 'Golf Rules Explained' an amusing and helpful aid to retain the rules in your memory. In his readable and enlightening clarification of the finer points of the rules of golf, Peter Dobereiner provides enough information to settle any dispute on the course.

Peter Dobereiner is one of our leading golf writers. He is equally well known in America as a correspondent of Golf Digest. In the UK he writes for Golf World. He travels the world reporting on major championship events, seldom hav...
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Jim Thorn, Wimbledon's famous turf specialist, has over 40 years experience in the preparation of grass tennis courts. His interesting little book The Lawns of Wimbledon may well be of interest to head greenkeepers, for it contains much that complements golfing turf.

He writes: 'All the information required for success in turf culture is already available in excellent textbooks, but no book applies itself solely to tennis. Bearing this in mind, I decided to combine information from textbooks with the experience and knowledge I have acquired over the years. I hope this will be of use to any person with a lawn, as well as to groundsmen in general. To produce top quality grass tennis courts you have to understand that grass is a living plant and that the soil which sustains it is far from being inert. The various seasons and the weather, with all its vagaries, will make enough headaches to try your patience to its limits. Then there are the players and officials who will use and sometimes abuse your efforts. At Wimbledon we don't pretend to know everything: but we are professionals who take great pride in producing and presenting grass tennis courts which, in the world at large, are second to none.'

The Laws of Wimbledon by Jim Thorn costs £5.75 including p+p and is available from the Wimbledon Lawn Tennis Museum, Church Rd., Wimbledon SW19 5AE.

Keeping the best until last, the new book The Anatomy of a Golf Course by Tom Doak deserves an honoured place amongst the classics of golf literature. Alongside such architectural masterpieces as Hunter's 'The Links', Simpson and Wethered's 'The Architectural Side of Golf', Cornish and Whitton's 'The Golf Course', and Fred W. Hawtree's The Golf Course. All these are accepted classics in a sector of golf literature miserably lacking in quantity, though thankfully compensated for by works of the utmost quality.

Readers in this country may be forgiven for asking 'who is Tom Doak?'. though we may be assured that he has given his golf course 'apprenticeship' under the watchful gaze of Pete Dye's legendary architectural staff and is now a highly regarded architect in his own right, having designed and built courses throughout the United States.

What is more important, he won a scholarship from Cornell University to study 'the great golf courses of the British Isles' and spent time as a caddie on the Old Course at St Andrews, the better to understand the thinking behind this great layout. Tom visited 172 different courses in Britain all told, photographing and notetaking as he went. To give but one example, a chance conversation with Walter Woods led Tom to visit Holinwell and Walter recalls that the end result, a private showing of Tom's slides, showed every nuance of this fine course. "It was", Walter told me, "a most enlightening demonstration of Tom's ability to see beyond the mere layout, for he had captured the whole strategy and spirit of the place in a single visit".

I will not spoil the reader's pleasure by giving too much away, but as an appetiser consider the following from a chapter titled Fair Play: The most common example of unfairness is the course set up under the assumption that there is some magic distance at which fairway bunkers should be placed, based on the average driving length of the Tour professional or the average golfer of the day. No matter the calibre of player involved, individuals at the same overall level of skill hit the ball different distances off the tee. It is absurd to place fairway bunkers to penalise one player more than the other. The only fair solution to the positioning of fairway bunkers is to avoid any repetition of distances. To illustrate the idea, imagine a best-ball match in which the reader and Jack Nicklaus are pitted against Nancy Lopez and Lee Trevino. In theory, this ought to be a fairly even match; if it was played on a course which required 200-yard carries from every tee, the reader would be at a disadvantage, and if played on a course requiring 240-yard carries, it would be unfair because only Nicklaus could drive that far. Does not the same consideration apply to a course where all the fairway bunkers are 225 yards from the tee? And if our fictitious match were played on a Robert Trent Jones-designed course, with fairway bunkers pinching the landing areas 240-270 yards from every tee, would not the reader cry 'foul' because the course does not allow his partner to use the driver?"

Knowing why a golf course is laid out is critical to how the course should be played. Knowledgeable golfers, would-be architects, indeed anyone who ever sets foot on a golf course should be aware that only Nicklaus could drive that far. Does not the same consideration apply to a course where all the fairway bunkers are 225 yards from the tee? And if our fictitious match were played on a Robert Trent Jones-designed course, with fairway bunkers pinching the landing areas 240-270 yards from every tee, would not the reader cry 'foul' because the course does not allow his partner to use the driver?"

The Anatomy of a Golf Course by Tom Doak is available in Britain from Grant Books, Victoria Sq., Droitwich, Worcs. WR9 8DE, price £18 including p+p.
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GK I 10.92
Britain's greenkeepers are utterly divided. Not by accent; salary differentials; class; creed; religion; or the so-called north-south divide; but by a quirk of geology that splits our great country into 'them that have and them that haven't' – about water resources, that is!

To illustrate this point, early in September I talked to a golf club secretary in Kent, who told me the problems that have bedevilled his part of the south-east throughout the growing season. In his case the club was forced (first by swingeing restrictions, then by a total ban) into a situation of having to purchase an additional tractor and a 1,200 gallon water bowser, at a cost exceeding £28,000, in order to transport final stage effluent (water one stage removed from domestic purity), bought at £5 per thousand gallons. He further explained that his club's location, just three miles from the Mid Kent Water sewage plant, made things somewhat easier in that he was able to employ just one member of the green staff to continually ferry back and forth and to distribute the effluent over the golf course. He pointed out that other clubs in Kent were less fortunate and were forced to rely upon contractors, often spending as much as £1,200 on effluent in a single week. As a result of such expenditure, some clubs have imposed an additional 'water levy' of a pound or two on all green fee paying visitors.

It comes as no consolation to those still banned clubs in the south-east to learn that the British trend is toward a wetter climate, with the 80s decade the wettest so far recorded.

The great water divide is, simply stated, one of distribution. From an imaginary line – say from Hartlepool to Weymouth – the north-west gets most rain, the south-east has more people, demands more water and has fewer suitable sites for reservoirs. It also gets less rain, even in winter.

Of even greater importance, the geological make-up of the north-west – high, hard and rocky ground sweeping down to deep valleys – provides ideal reservoir locations. The poor old south-east has softer rock – mostly chalk – which form the aquifers which absorb the lesser rainfall, storing it and eventually releasing it to rivers, boreholes and the like. About 17% of Britain's water comes from such aquifers, though our clubs in Kent, indeed much of the south and east, depend on aquifers as their only source.

To understand more fully the reasons behind continuing bans, we must set aside the fact that these are not causing problems at the moment just because rainfall has been abundant throughout August and September. Rainfall pattern records reveal that the east gets less rainfall in winter than in summer – period.

Grass and other plants need more moisture during the growing season (April-September) and any rainfall is voraciously absorbed, failing to recharge the aquifers. The drying out which occurs is known in scientific circles as a 'soil moisture deficit' (SMD), i.e. the amount of rain needed to soak the soil to a point where soil absorption is complete and aquifers can replenish.

Greenkeepers know that the SMD cannot increase indefinitely, for as the soil on golf courses dries out it becomes more difficult for turf to extract water and the playing surfaces begin to wither and die. There has been nothing typical in the recent south eastern pattern of SMDs, which in normal times begin to increase in spring, rising to something over 100mm in July, declining through autumn and (usually) ended by November to bring about a recharging of aquifers or reservoirs.

Rains from the Atlantic have of late tended to skip Britain and the west-east shortfall has been added to by a lack of summer thunderstorms, resulting in SMDs that have lasted till early winter or even the following spring. In Kent and East Anglia, the SMDs of 1991 persisted throughout winter and the whole problem began again this spring.

The exceptional rainfall in early July and all of August has eased the problem – temporarily – and there are signs that reservoirs are being replenished.

There have been some unusual irregularities in past droughts, as witness those of 1975/6 and 1984. The first dealt a severe blow to southern England, with Devon, Cornwall and Somerset particularly hard hit as their reservoirs dried up. The latter affected the whole country for a few months, though the usually rain-blessed north and west experienced greater problems than the south and east. It was not until the heavy rains of early autumn that depleted reservoirs were able to replenish, having been down to as low as 30% capacity.

Talking to a National Rivers Authority official recently, I was told that despite the present drought there is more available water in the aquifers than in all of the reservoirs of England and Wales, though its use to supply golf courses and country gardens is decried as being a contributory factor in the decline of wetland areas.

Returning to those unfortunate from the south east, especially Kent and East Anglia, there can be but cold comfort in knowing the tendency for rainfall to increase in winter, for very heavy autumn and winter rainfalls are vital in the next six months to lift the threat of water shortages next year. Clubs in the south east remain defenceless should the forecasters have their sums wrong and the meagre 1991/2 recharge rate is repeated.

If all this sounds unduly pessimistic, there may be a light at the end of the tunnel. One safe and sure solution, always provided access to winter water is available, is winter storage for summer use. This is not without additional cost and should not be undertaken without early consultation with the NRA, who are developing considerable expertise in this field. Coupled with the taking of expert advice on building lakes or other catchment devices, this may well represent the only rescue package available.

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25 November Warwickshire College, Warwickshire

and a date for 1993

Scottish Region
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TRAVEL WITH BIGGA to the Golf Course Superintendents Association of America’s prestigious annual Conference and Show next January — and while you’re there, enjoy the holiday of a lifetime!

If you’re ready to catch the magic, Anaheim, California, is ready for you! BIGGA has this year joined forces with Thomas Cook to transport you to the ‘Magic Kingdom’, with the prestigious annual Conference and Show next January — and while you’re there, option of a four day trip to San Diego after the GCSAA Conference - sun, sand and surf!

We have this year chosen two outstanding luxury hotels:
- The Anaheim Hilton and Towers, a superior first class hotel, is situated 50 feet from the Anaheim Convention Center and two blocks from Disneyland. Guest rooms have climate control, colour cable TV and radio. There is an outdoor heated pool and four jacuzzis, full health club with sauna, massage, tanning beds, steam room, exercise equipment and aerobics, games room, and beauty salon. There’s also a vast range of entertainment and dining facilities - sample Italian, Japanese and of course Californian cuisine.
- The Hyatt Islandia, another superior first class hotel in San Diego, located on Mission Bay. Guest rooms are air-conditioned with private bath, remote-control colour cable TV, radio and phone. The Islandia Bar and Grill offers fine Mediterranean cuisine with bay views at lunch, dinner and Sunday brunch. There is a heated outdoor pool, whirlpool, tennis courts, sail boat rentals, windsurfing, water-skiing, snorkeling, scuba diving and paragliding and whale watching (in season!).

Details of the GCSAA programme will be available from headquarters at a later date.

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Anyone who took a good look at the previous BIGGA Turf Management Exhibitions knows that this annual event is certainly an eyeful.

New equipment, the latest products, service updates, familiar faces and some new ones made BIGGA President Viscount Whitelaw, who opened the exhibition, proudly proclaim that "greenkeeping has come of age".

And for 1993, there's even more to watch out for. Space bookings are already up on this time last year for the record-breaking 1992 exhibition.

With all the names you'd expect plus a few surprises, you'll certainly be wide-eyed at the choice and variety of what's on offer at Britain's premier indoor event for the fine turf industry.

Bookings for stands from all sectors of the industry will continue to be accepted right up until the last minute, depending on space limitations. But to make sure of the best positions, you need to act quickly. Why wait until January to squeeze in your stand when this week you can plump for a prime site?

Debbie Savage has all the details of how BTME can provide you with a window of opportunity. Call Debbie on 03473 581.

This will be an event you won't want to miss - make a note of the dates in your diary!

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Manual on Golf Course Construction, Turf Establishment and Cultural Practices (James Beard) £12.00

Specifications for a Method of Putting Green Construction, written by members of the USGA Green Section and edited by William H Bergeyfield £25.00
Last month Bernard Findlay took Greenkeeper International readers through the planning and preparation stages of the exciting new links construction at Portstewart Golf Club, culminating in the building of a pilot hole. Though much of the experiment was successful, there was to be a bitter learning experience...

Though the tee and fairway on our experimental hole proved a great success, the sand-only pilot green was a failure. This is where our lessons began.

First, a rather late sowing in September—especially in the north—would not allow sufficient time for grass to establish before the rigours of winter. With this in mind, it was deemed essential that further sowing should take place no later than the end of July.

Second, we had not sown the seed to a sufficient depth, which meant that if moisture was not continually available (which in the first several millimetres it wasn't), on emergence of the root hair the seed died. That seed which did germinate and live was 12mm or more below the surface.

Third, the lack of rainfall during the particular September in question meant that it was very difficult to maintain adequate moisture levels, especially with the type of hand-held irrigation we used.

Lesson one, therefore, suggested to us that before embarking on the establishment of any fine turf area—particularly on sand—it is essential that an adequate, preferably automatic, watering system is available, for a number of reasons:

• Obviously, since 15 minutes direct sunlight on a sand growing medium can dry out the surface and produce dire consequences on emerging seedlings, it is necessary to ensure moisture is available continually.
• A regular supply of water imparts physical properties on the sand particles by holding them together, thus preventing the seed bed from being blown away.
• The regular application of irrigation water firms the seed bed and ensures cohesion between the sand particle and seed coat.

Our view in hindsight was crystal clear: Had sufficient rainfall fallen during that fateful September the new green would not have failed. Equally, had the rains been adequate, the pitfalls of sowing into pure sand would not have been realised!

Work schedule for the entire project

With valuable lessons derived from this exercise, confidence was gained to an extent that a full go-ahead began in April 1987, with all construction and sowing completed by the summer of 1989.

Work began on the greens, with extra labour recruited in order that our existing...
Don't try to go one better

15 - course maintenance programme might remain relatively unaffected. Four young men were provided through a Government-run employment scheme known as Enterprise Ulster, the newcomers supplemented by a couple of our green staff to offer local knowledge and essential greenkeeping skills. Financial outlay for these extra men amounted to nothing more than payment of National Insurance contributions in their first year, supplemented by 10% of their total pay during their second year.

Hired machinery requirements amounted to a tracked digger complete with an extremely skilled operator; a 7 tonne tractor with trailer and a tractor-fed soil grading machine. These were further supplemented by our own machinery and included a 4WD 4150 Kubota with front bucket, which proved most valuable.

**Construction**

Ten greens were built, each begun by a digger removing existing vegetation to expose clean dune sand. Nothing was wasted, for all this stripped vegetation was used to cover various less-favoured areas within the dune system. Once stripped, the required green contours were arrived at by constant consideration for the surrounding geography, much the same, I imagine, as our forefathers must have done, with no preconceived ideas for green shapes other than from a maintenance viewpoint.

It may seem simplistic, but if the shape of the green looked right in its setting there was nothing more to be done!

I felt that the STRI suggestion of ameliorant applied at 70gsm² was insufficient for the situation and with this in mind, previously well-composted and friable farmyard manure and black sandy top soil was being shredded and screened to add to the surface to a total depth of 8cms. Granulated Alginure was also applied at 150 gsm². A tractor-mounted rotovator passed in three directions, thoroughly mixing this to a depth of 25cms to provide a sound growing medium. Though this method of rootzone mixing is perhaps not strictly according to Hoyle, in this instance it proved most successful, probably because of the friable nature of the materials used.

Following this, the tracked digger passed over and fro over the green to thoroughly firm up the surface. Any fear of compaction was dismissed certainly it had not been encountered at Portstewart - thanks to the rounded shape of our indigenous sand particles.

Four or five men raked and then rolled the surface prior to fertiliser application and again prior to seeding at 55gsm², this to ensure full cover of the fertiliser. Finally the seed bed was raked and rolled, the seed covered to a depth of 20mm.

Throughout, the seed mixture for our greens was 20% browntop bent, 20% slender creeping red fescue and 60% chevings fescue. As there were no pre-conceived plans regarding green shaping it was difficult to time the introduction of a fully automatic pop-up system, so to begin we had three full circle sprinklers fed by manual take-off points. As I have already written, the wind can destroy a perfectly good seed bed unless it remains moist, thus the temporary irrigation system led to some rather unsociable working hours during darkness.

Before the spring of 1988 the entire course was updated, using impact drive sprinkler heads controlled by a two-wire system. The advantages were clear to see, for a two-wire system allows for additions with minimal disruption at a later date.

Germination at first was a trifle patchy, perhaps as a result of uneven final raking of the seed bed and despite our vigilance in attempting to rake in a uniform manner. To eliminate this human factor in future, final raking should be done by machine to obtain continuity within each site. Notwithstanding that point, with localised overseeding and a lot of patience the end results were well worth waiting for.

**Fairways and tees construction**

As most of the tees were situated on elevations and therefore exposed to the elements, they were all turfed in the manner mentioned earlier. We have made considerable use of railway sleepers in these areas for steps, seats and defining path edges. A D8 bulldozer was added to the list of hired machinery for this second phase, which started in October 1987.

The fairways were sown mainly on a very sandy growing medium, containing small particles of peat and topsoil, again to 'dirty-up' the sand. It would have been far easier to add large quantities of topsoil from an inland source to allow grass to germinate and establish quickly and though this would have been okay in the short term, problems associated with inland conditions would soon have been apparent, eg. poor drainage; invasion by coarse grasses and lush growth. We must remember that an essential for a pure links course is infertility - something not afforded to us by most inland soils and certainly not soil from building sites that hitherto may have been agricultural land.

However, the fact that these new fairways were sown on such impoverished ground did present us with problems, such as bare high spots and bare areas through bottle-necks. To solve this problem in an instant these areas were turfed, the resilient fibre building up through the rest of the new course and causing the bare and stressed areas to become far less frequent.

**Nutrition and other chemical treatments**

I have purposely left nutritional requirements for greens until now because they are worthy of detailed explanation. During their first full season, our greens received a complete fertiliser containing a seasonal total of 125 units of nitrogen per hectare with sulphate of ammonia; 100 units of phosphate with bonemeal and 100 units of potassium with sulphate of potash. This was applied in four separate applications through the growing season. In addition, an organic liquid - Abbeysgrow - and iron sulphate were applied.

Three quarters of the way through the growing season of 1988 the new greens, particularly the fescues, developed a severe attack of corticium, indicating insufficient nitrogen. This situation improved once we applied the last nitrogen application (of the season) to the greens, though the corticium returned once the effects of this had worn off.

The application of Daconil turf fungicide and sulphate of iron kept the disease at bay throughout the winter months, though I was at a loss to know which move to take next regarding nutritional requirements for these new greens. At that time the STRI had published new information regarding nutrition of sand greens, suggesting that between 250/350 units of nitrogen per hectare per season should be applied. I was prepared to use this lower figure as a nutritional bench-mark and during the second growing season of 1989 the regime was changed thus: 250 units of N per hectare using a slow-release fertiliser containing BDU; 100 units of K per hectare using sulphate of potash.

In addition, an organic spray, iron and Turfex were also applied, these in six separate applications throughout the growing cycle.

At the end of the 1989 season the bent grasses still had not made any significant advances. The fescue was still strong and no longer suffered from corticium, but small patches of Poa annua now colonised the greens.

An observation on my part suggested that the use of slow-release fertiliser, progress of which is out of one's control once applied, was doubtless a factor in the Poa annua encroachment, since Poa is able to profit from spring warm-up far earlier than the root systems of fescue or bent, which are still to receive the warmth of spring.

The seasons of 1990 and 1991, with the new course now in play, have seen a return to my using straight materials. If my observations suggested their use - and I stress they were observations - up to 250 units of nitrogen were applied in sulphate of ammonia form, spread over six applications through the season, together with sulphate of potash, sulphate of iron and a 100% organic spray.
The sandy greens quickly became hydrophobic, but for the last two years the use of Turfex wetting agent at every opportunity has ensured this is no longer the case.

Again over the last two years, mechanical treatments have included scarification; verti-cutting and top dressing with 20% organic matter and 80% dune sand, each treatment carried out on all the greens in order that continuity may be established between old and new alike.

To ensure the establishment of the nitrogen cycle on fairways a product developed by Fisons – Sportsmaster Organic 4 – is applied. Acting as nature intended, this is 100% organic and has the advantage over synthetic slow-release formulations in not building up supplies of nutrients over which the greenkeeper has scant awareness and little or no control. Once sufficient nitrogen is within the cycle, the application of this product will cease.

To summarise, and to answer the title question ‘Can you build a seaside links, or is that nature’s job?’, I think the answer must be yes, but with a number of provisos.

First of all, do not attempt to go one better than that which nature provided in these linksland situations. Bear in mind that one hundred years or so ago, man simply did not have the machinery available today and thus could not stray too far from the features provided by nature. Instead, he had to work with those features. Many world-famous links courses have been the happy result.

Links courses cannot be built and brought to maturity in just a few short years – it has taken nature generations to achieve that. The varieties of grass species used on a links construction must be those native to the area, otherwise the characteristics most desirable in links golf will be lost. This point was quite evident at the most recent Ryder Cup venue of Kiawah Island, where the chip and run shot was non-existent because grasses with differing characteristics were used between green and fairway.

Don’t get me wrong, the Ryder Cup at Kiawah was a marvellous spectacle and a great credit to those involved in its staging – but it was not a test of links golf in the traditional form.

Finally, none who are, or may become, managers of links courses should be tempted into prostituting these gifts of nature for a single event, for corny though it may seem; these gifts are part of our national heritage.

The author, Bernard Findlay, (pictured right) is course manager at the Portstewart Golf Club, County Londonderry, Northern Ireland.

The ultimate seal of approval for Bernard’s work on Portstewart’s epic construction and development programme came in August 1992, when the Irish Close Championships were staged over the new links. Players were unanimous in their praise, describing the course as ‘unbelievably mature’ and ‘a new golfing paradise’. The chairman of the Ulster section of the Golf Union of Ireland, Peter O’Hara, wrote: ‘I have not seen a better kept course, such that no rules decisions were called for throughout the tournament. You are to be heartily congratulated’.

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André Woodings - nominated by Reaseheath College

Thirty year old André may well be considered a mature student, for he has been involved in greenkeeping for 14 years, working his way steadily up from humble beginner through assistant greenkeeper to his present task as head greenkeeper at Rothley Park, a position he has held for the past two years. Under his direction, Rothley Park has, in the opinion of members, gone from strength to strength. He considers this his greatest achievement and is proud that his course has been chosen as the venue for the IMS Championships in 1993.

For over 12 years André relied on practical experience alone before the lure of education finally took him to Reaseheath (on block release) and a course in Greenkeeping Management. His future aspirations lean toward achieving Master Greenkeeper Certification. Course tutor, Denis Mortram speaks highly of his practical skills and of his determination to succeed. In summary, Denis is sure that André's nomination will uphold the traditions of previous nominees.

Ian Whitehead - nominated by Askham Bryan College

Twenty two year old Ian has been a greenkeeper for seven years, entering the profession as a YTS trainee and working now as first assistant to the talented Gordon Brammah at Hallamshire Golf Club. His chosen college course, City & Guilds Phase II in Greenkeeping and Sports turf Management, has meant considerable travelling from his home in Sheffield to Askham Bryan, but the discipline has clearly been worth while.

Quite apart from academic successes achieved thus far, Ian is not content to rest on his laurels. His immediate plans include taking supervision and management modules at Askham Bryan, this as part of a planned career path that will lead to his becoming a head greenkeeper.

On the golfing front, Ian is well known in Sheffield circles as a solid nine handicap player who on four occasions has taken top honours in section tournaments. He has twice qualified for the Iseki finals.

Paul Brannan - nominated by Langside College

In telling us about Paul, college tutor Colin Urquhart wrote "Paul has entered greenkeeping after completing a three year craft level apprenticeship and training in Amenity Horticulture. Since Glasgow District Council Leisure and Recreation Services bestowed upon him the honour of helping to care for and maintain the city's municipal golf courses, Paul has returned to the School of Horticulture determined to prove that he is as good a greenkeeper as he is a horticulturalist.

"His diligence and quiet but positive manner brings an assured, competent air to all the challenges of college and superb SNC results prove his genuine abilities in his chosen field. Paul's mature, friendly ways make him a popular student with both college staff and his student greenkeeper peers. Paul intends to further his academic career in our new HNC in Golf Course Management".

On a practical front, Paul has recently spent time learning of the installation and control functions of an automatic irrigation system and is involved in building a new green. Though only twenty, his long term aspirations lean toward managing a championship golf course and at some point becoming involved in course architecture.

Matthew Horton - nominated by the Welsh College of Horticulture

Twenty three year old Matthew has just gained promotion to head greenkeeper at Buiith Wells GC, a well deserved position when one considers his splendid academic achievements. He began his career as an apprentice groundsman, during which he sat C&G Phases I&II in General Horticulture. This was followed with a one year NCH in Amenity and Landscape at Pershore College, resulting in a pass with distinction.

Moving to Buiith Wells in 1984, he became an assistant greenkeeper and attended the Welsh College to sit C&G in Greenkeeping and Sports turf Phase II - he finished as top student in both years! Promoted to head greenkeeper this year, he now plans to sit Phase III Management and, when qualified, would eventually like to work abroad.

His college tutor, Graham Wright, wrote in glowing terms of Matthew's rapid progress, a feeling shared by Matthew's club secretary and chairman of green. Graham is particularly pleased that Buiith Wells are responding to the advances with the golf industry, eager to be in the forefront of golf provision in Wales. As he rightly asserts, should Matthew become Student greenkeeper of the Year, it will make Welsh clubs sit up and take note of 'The Way Forward'.

Mark Anderson - nominated by Sparsholt College

We could tell by the comments of Sparsholt's tutor, Bob Young,
that he holds thirty one year old Mark in high esteem. From a career which began as a young entrant in the Army, one which took him to Central America, Germany and Northern Ireland, Mark had the misfortune to be disabled in a training accident and he was invalided out of the Army in 1985.

New career training began with a spell at St Loyes College for the Disabled, studying horticulture, followed by rewarding work experience on a golf course. Though there were to be other work experience sorties it was in golf that Mark found his forte – and he joined Broadstone GC as a trainee greenkeeper.

Bob Young told Greenkeeper International that Mark meets every criteria for his deserved nomination, which came from both peers and tutors alike. He has worked hard to complete his Phase II Greenkeeping and now plans to progress to Phase III Greenkeeping Supervision.

Mark, now an assistant greenkeeper at Broadstone, is dedicated to his new career and is a highly respected member of the club's professional team. He is a 'dab hand' with a shotgun, having won several trophies for clay pigeon shooting.

Andrew Nice - nominated by Plumpton College

Thirty year old Andrew is now supplementing a wealth of practical experience acquired at three golf clubs with the off-the-job training he is obtaining at Plumpton. His position as first assistant at Fernwell easily allows him to pass on his acquired knowledge to others on the workforce – an experience he is savouring.

Course tutor David Blackmur told us that Andrew has a real thirst for knowledge and that coming straight onto the Phase II option proved no stumbling block whatever. Andrew is looking forward to continuing the learning process next year with the Phase III course and, in David's words, is a thoroughly deserving student to take the mantle as Plumpton's chosen representative.

Andrew joined his present club as first assistant and was delighted when they willingly sponsored his college entry – "to provide me with a solid base to back up my practical experience" – as he put it. Undoubtedly his college course has brought him one step nearer to his ambition of becoming a head greenkeeper.

Andrew enjoys running and has competed in several half marathons – no doubt he will don tracksuit and sneakers for early morning sessions at Aldwark Manor!

Barry Neville – nominated by Oaklands College

Barry began his golf career in 1987 whilst still at school studying for A levels. The golf centre where he now works as an assistant greenkeeper did not exist when he commenced his part time work, though he thoroughly enjoyed the involvement of construction work on land that hitherto had been nothing more than arable farmland.

After gaining eight O levels and two A levels he went to Polytechnic, but soon found the outdoor life more to his liking and began full-time employment at the golf centre, which now boasts a complementary 18 hole golf course.

After just one year at the 25 bay golf centre Barry decided that his particular way forward was to become fully qualified and he wisely opted for a course at Oaklands, where he has just completed Phase II Greenkeeping and Sportsturf Management. Not content to rest on his laurels, he will continue studying next year, taking a Business Management course as the next stage to his ultimate aim, one of becoming a head greenkeeper at a top class golf course.

Barry, now 22, enjoys cricket and golf, as well as being a keen photographer.

Martin O'Rawe – nominated by Elmwood College

Like so many young greenkeepers, T. Martin, began his career as a YTS student. He joined the world famous Royal Dornoch and as a result of his excellent work, both on the course and at Elmwood, was offered an apprenticeship.

Attending Elmwood on block release, he has recently completed his three year National Certificate in Greenkeeping course, gaining all modules with ease and winning the coveted St Andrews Trust Award for Best Practical Work, earned during the years of 1991-92.

Though he is only 20, Martin recently moved on to take up the position of greenkeeper at the South Course at Wentworth, the first stage of his declared ambition: working on a course that stages Tour events. From this base Martin aspires to working around the world, eventually moving into course construction and finally retiring to Scotland as a rich man! Martin is a grand golfer who plays to a handicap of seven – he won the Most Improved Golfer award at Muir of Ord Golf Club and has played to single figures since his teens.

Anthony Gooch – nominated by Cannington College

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Attending Elmwood on block release, he has recently completed his three year National Certificate in Greenkeeping course, gaining all modules with ease and winning the coveted St Andrews Trust Award for Best Practical Work, earned during the years of 1991-92.

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Gary Tusler

James Timmins - nominated by Teagasc National Botanic Gardens, Dublin

Chris Chapman

THE CANDIDATES

James Timmins - nominated by Ostrich College

Twenty one year old Gary began his golfing career as a YTS trainee at Murrayfield GC, remaining for two years before spending a brief spell in the Royal Navy. On his return to terra firma he immediately joined Uphall GC as an assistant greenkeeper, a position he has held for nearly three years.

Attending Ostrich Agricultural College on day release over three years to take Scotvec National Certificate modules in Greenkeeping and Groundsmanship, he has pleased his tutor by consistently giving total commitment and producing very high standards of both written and oral work. These exceptional standards have resulted in his gaining top college honours of Best First Year Student, Best Second Year Student, and Best Overall Greenkeeping Student (practical) in 1992.

In providing Greenkeeper International with observations of Gary's project and assignment work, course tutor Steve Miller had this choice comment to make: "Gary, a very able and diligent student, possesses the necessary attributes to make it to the very top of his chosen profession." Praise indeed.

F LYING DIVOT S

Another Scot strikes lucky

Not all activities at The Open were centred around golf, as witnessed within the extremely 'liquid' marquee manned by members of the Golf Club Stewards Association. One such activity, which raised a splendid sum for the charity SPARKS (Sportsmen Pledged to Aid Research into Crippling Diseases) was the draw organised by Northwood GC steward, Peter Walsh. The good news, notwithstanding the funds raised, was that Willie Blair, senior member of the East of Scotland East of BIGGA, won first prize, a full set of Sunridge carbon shafted golf clubs. This follows the trend set in 1991 by Jim Paton, with yet another lucky Scot leaving The Open better equipped than on arrival.

Your editor shares the concern expressed by members of the British Association of Golf Course Constructors (BAGCC), raised in their recent press release which decried adverse publicity generated in the 'popular' press regarding some golf developments.

'The majority of successful developments,' say BAGCC, 'do not receive the same publicity as that generated by the high profile failures, resulting in the appearance that banks seem unwilling to look at golf as a business'.

The BAGCC membership have indicated their willingness to meet with bankers and discuss the many examples of successful developments with which they have been involved. They issue the challenge to bank financiers to 'consider golf on business grounds rather than on purely emotive terms'.

With the country in deep recession, the BAGCC argues that golf development over the past four years has continued to produce excellent businesses, some so successful that several golfing millionaires have been created. They are deeply upset by rumours that some banks have issued a blanket refusal to lend money on golf projects.

The BAGCC, which employs over 3,000 people in all aspects of golf development, fear this negative attitude may lead to staff cutbacks at a time when the construction industry is severely depressed.

Permitting myself the luxury of theorising on banks and bankers, having personally tried and dismissed all five of the 'High Street Banking Mafia' as ill-equipped to meet even my modest demands, I believe that bankers - especially those at high street level - are lost souls floundering in a sea of their own incompetence. At a higher level, where the idea of demoting or sacking an obvious blunderer just never occurs, one is left to wonder who will eventually pay for such monstrous 'gaffs' as the loaning of irretrievable sums to Third World nations; aiding and abetting Robert Maxwell; the Canary Wharf white elephant, or their abortive and foolhardy stockbroking escapades.

Jon Allbutt has brought my attention to recent reports regarding two chemical substances that could be encountered in some vehicles. Fluorolastomer or Veton is a material used to make some brake and oil seals and is encountered in some vehicles. Another Scot

The substances become highly dangerous after they have been burnt - ie. in a vehicle fire, when they melt and turn into highly corrosive Hydrofluoric acid. If this acid comes into contact with any bare skin it cannot be removed, other than by amputation. It also remains dangerous for a minimum of two years in the environment when dealing with a burnt out vehicle, gloves must be worn.

Electric ignition modules also contain dangerous substances which, when in contact with the skin, could cause cancer. The rule must be not to open ignition modules if a vehicle has been damaged by fire or accident, take great care.

Jon's rider suggests that members should not handle burnt vehicle components without specialist assistance. Such an operation comes directly under COSHH regulations and will require an assessment before any work can be started.

GREENKEEPER INTERNATIONAL October 1992 21
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HISTORICAL TRENDS AND DEVELOPMENTS

History buffs will know that the city of Coventry can boast more than its fair share of power and glory. It is therefore fitting that a city which is immortalised by the escapades of a publicity-seeking Lady Godiva, which continues to revel in the splendour of Jaguar's winning ways at Le Mans a decade or so back and which has always been at the forefront of Britain's technological superiority, should proudly boast the staging of the 1992 Iseki Championships - the favourite championship of BIGGA greenkeepers everywhere.

Fitting too that this final of finals, the last to be staged under the Iseki sponsorship banner, should have been a total rip-roaring success.

We can now cast our minds back over five successful Iseki championships - all held at exquisite courses of undoubted repute and all masterminded (save the final of finals) by the ebullient Colin Gregory, whose vision of a championship incorporated players of every standard of ability competing at all levels (sectional, regional, national) and bringing together in the spirit of competition those whose paths
The drivin

The midrange maestros - the Iseki TU range offers you a choice of manual or hydrostatic drive, with models from 19-27 horsepower all designed for more productivity and performance, whatever the task.

For professional or domestic grass cutting the Iseki Diesel Rider means you can cut and collect in one productive pass. A choice of 13-15 horsepower models with manual or hydrostatic drive.

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The Iseki Trophy and winner on handicap: Jim Byrne, Eire 106.5

Best gross:
Stuart Taylor, Scotland 113

Over 55s:
Owen O'Connor, Eire 111.5

Under 21s:
Stuart Cameron: Scotland 113

Category One:
1st: Alan Carter, South East 109
2nd: Tony Burke, Eire 110
3rd: Michael Gunn, Northern 111 (countback)

Category Two:
1st: Owen O'Connor, Eire 111.5 (countback)
2nd: Mike Coulus, Northern 111.5
3rd: Stuart Cameron, Scotland 113

Category Three:
1st: Jim Cassidy, Midland 113.5
2nd: Kevin McGuire, Scotland 114
3rd Leslie Hallert, SW & S Wales 115

Team Prize:
1st: Midlands 926.5
2nd: SW & S Wales 931.5

Nearest the pin:
Ollie English, Eire

Longest Drive:
Pat Devine, Northern Ireland

'Iseki Championship 1992

RESULTS

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22 might not otherwise cross. For all that this last Iseki event was tinged with sadness, we are certain that the sponsor's original aim - to be identified, recognised and remembered - has been reached and surpassed, and that the Iseki Championship will be recalled with affection for decades to come. Iseki, we salute you!

The cries for rain that echoed through the land must have surely been heard, for during those days leading up to the final the heavens opened - literally - and many parts of England were submerged - roads turned into rivers, golf courses closed, fears of tournament cancellation or curtailment uppermost in many minds.

Finham Park did not escape the deluge but we need not have worried, for John Bayliss and his crew performed minor miracles in removing surface water and the course at Finham Park was looking - and playing - at its best. From the very back medal tees (step back and fall over!) John laid out a challenge that demanded solid striking and length - no run on the ball on damp fairways - and accurate target play to clever pin positions: full marks for this very proper examination!

Space limitations will not allow a ball by ball account of play, but suffice to say that the cream of the crop - including players from Northern Ireland and Eire - were on tenterhooks and fidgeting with putting strokes when Scotland's Stuart Taylor answered the command of starter Bert Cross to "play away." His drive was perfection, followed by 27 holes of immaculate play which brought him the coveted low gross award with a score of 113. It was left to another Scot, Stuart Cameron, to continue a total of 926.5 to win should not be regarded as a walk-over. Runners-up SW and S Wales were a man short when poor Tony King was hauled off to hospital with a collapsed lung (we heard later that he was "comfortable" and would be up and about in a few days) and they are to be congratulated. In fact, the final team scores were the closest for many a year, just 11 strokes separating the first four teams.

The Iseki Championship is also about team performance, and the fact that winning team Midlands produced a total of 926.5 to win should not be regarded as the happiest of men, with Tony Burke also gaining a sound second place in category one.

In any championship there is always the "dark horse", though the Midland's Jim Cassidy proved his rock steady play was no fluke by pulling off a coup with a score of just 113.5 for the 27 holes in category three - bringing jubilation to the Midland camp.

It is left to the low handicap players to produce fireworks, and in Alan Carter the South East team had a winner - he fired off shot after immaculate shot to win the first category, proving Norman Exley's prediction that he was the "main man!"

Let's hear it for the mighty atom - Welshman Les Hallert, who though beaten into third place by Scotland's Kevin McGuire in category three was at one point leading the field - nett 32 for the first nine holes in the afternoon - a spirited performance from the "wee one".

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To end on a really upbeat note, it gladdened my heart to hear Hugh McLaughlin describe this Iseki Championship as "the best four days of my life." He further expanded by saying, "I'm 42 years old, I've never been further than Dublin before now - and I'm having a marvellous time. I hope the spirit of good fellowship in such a competition can continue and that perhaps another sponsor will recognize the potential for such a wonderful way for us to meet - and occasionally beat - our fellow greenkeepers."

A sentiment echoed by us all.
Winners all: Jim Byrne, left, with the Iseki Trophy as overall victor, with Owen O'Connor, winner of Over 55s Category and winner of Category Two.

Left: Our sponsors: Iseki's Ian Pogson and Peter Powell.
Below: Iseki's Bill Murton, left, with Under 21s winner Stuart Cameron and BIGGA Chairman Roy Kates

Les Hallett – the 'mighty atom'

Pat Devine – Longest drive

Ollie English – Nearest the pin
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Looking for a new greensmower, yet overwhelmed by the range on offer? MICHAEL BIRD discusses the facts and highlights some of the latest innovations designed to produce the ultimate finish on your greens.

Greenkeepers need to keep an open mind about the type of machine they select to cut their golf greens, stresses Steve Isaac, agronomist with the Sports Turf Research Institute. "There is little doubt that both the pedestrian and ride-on greens mower have a role to play at the majority of golf clubs in Britain today," he comments. "Experience has shown that those courses which concentrate solely on using just one type of mower usually achieve poorer results than those which adopt a combined approach."

On most new and existing golf courses, time and labour availability have become the major factors dictating the ultimate choice of machine. With increasing constraints on both the quantity and quality of green staff, the ride-on triple mower has taken the lion's share of sales in recent years.

However, there is a growing conflict of interests between those who want to see all 29 LET US GIVE YOU THE EDGE
THESE CLUBS ALREADY HAVE IT!

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- Goring and Streatley
- Haggs Castle Club
- Harpenden Golf Club
- Kinross (Green Hotel)
- Leek Golf Club
- Lingfield Park
- Massereene Golf Club
- Mere Golf & Country Club
- Milltown Golf Club (Dublin)
- Mirfield Golf Club (Guzlote)
- Omonde Fields Golf Club
- Ponteland Golf Club
- Royal Ashdown Forest Golf Club
- Royal Dornoch Golf Club
- Royal Liverpool Golf Club
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- St Andrews
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"It is the best piece of machinery this course has ever invested in, a fine machine that I would recommend to anyone," Mr. John Bashford, Head Greenkeeper of the Green Hotel Golf Course, The Kinross Estate.

"A quality machine that gives a superb finish to our cylinders, and saves money." Mr. Derek Green, Head Greenkeeper of Royal Liverpool Golf Club.

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Bottom blade grinders include the **Anglemaster** – a precision grinder that complements the **Express Dual**.

**Professional Grinders for Professional People** – from the people who have been grinding for over 100 years.
Inadequate instruction is probably the major factor for poor hand mowing results

27 → greens cut in advance of golfers stepping onto the first tee in the morning and those who expect their course to resemble those featured in televised tournaments from around the world. Such is the power of the commentator, camera and satellite dish!

As Steve Isaac points out, there are few courses with sufficient staff and machines available to hand mow every day, and complete the task in good time. "However, working in partnership with a ride-on triple, it is certainly practicable to use pedestrian mowers to give the greens that special finish before an important match or tournament," he says. It is this ability to give greens an "ironed" appearance, enhanced by the narrower roller stripes, that has brought pedestrian mowers back into the limelight over the past few years. In addition, says Mr Isaac, they can help the greenkeeper keep a closer eye on the condition of the whole green, often providing earlier warning of disease, thatch build-up and turf pests than is possible with the more remote ride-on.

There is also a growing reluctance on the part of a number of clubs to pay the price demanded of some ride-on greens mowers – an understandable reaction when one considers that the necessary complement of pedestrian machine for an 18 hole course can be had for as much as £15,000 less than one ride-on triple.

That sum, they reason, will go a long way towards paying the wages of another member of staff who will then be available for work on the whole course when the hand mowing is completed. Steve Isaac comments that there had also been recent problems in the development of the triple mower, with reports of powered grooming attachments and grooved rollers causing damage to the turf when perimeter cutting a green. "Mowing heads appear to have largely overcome this problem, but users should beware of over-compensation when turning at sharp angles, resulting in missed areas."

That stated, Mr Isaac believes that a correctly set ride-on triple is still more likely to give a better overall cut than a walk-behind mower. "There is definitely a greater likelihood of variation in cut across a green from a pedestrian machine which has to cover a far greater area at a single, narrower width," he says. "And one should not forget that the human foot causes more compaction than any mower." For these reasons, Mr Isaac advocates thorough training of all greenkeepers in the correct use and setting of their pedestrian mowers.

"Inadequate instruction is probably the major factor for poor hand mowing results," he points out. "Turning to the ride-on machine, training is also important and the greenkeeper must ensure that the mower provides good visibility, that the grass catchers can be removed easily and that there is sufficient engine power to get round the whole course without labouring."

This last point is particularly important with the increasing availability of all-wheel drive, power steering and attachments such as groomers and verti-reams which have greatly extended the versatility of the triple greens mower.

One company aiming to achieve a similar feat with the pedestrian machine is Dennis, whose new FT510 mower is available with a range of interchangeable cassette head options. Offered with a choice of five-or nine-bladed 20in wide cutting cylinders, light or heavy scarifiers, a verti-cutter and brush, the FT510's cassette heads can be changed in less than a minute without a spanner.

Ian Howard, the company sales director, says the machine was designed and built first and foremost as a mower. "The various cassette options have not compromised its mowing qualities," he points out. "What they have done is extend its versatility to help the greenkeeper with his seasonal turf maintenance programmes in a more cost-effective way."

Available with a 5.5hp Kubota or Honda engine, the FT510 features independent rear roller and cassette head drive, fully floating handle bars and infinitely variable drive speed, giving a cut rate from 150 cuts/yard upwards. It costs from £1,695.

The latest addition to Jacobsen's greens mower range is the walk-behind Greens King 422 offered with the company's Turf Groomer as an option. This tournament standard mower has an 11-bladed reel giving a cutting frequency of 213 cuts per yard down to 5/64in (2mm). An interesting feature of the mower is an adjustable weight system which allows the operator to a remove weight from the frame to maintain a constant balance irrespective of whether the machine is fitted with the Turf Groomer or a solid or grooved front roller.

To reduce wear and down-time, the 422 has an automotive-type clutch assembly which has been bench-tested for more than 700,000 operations – equivalent to 70 years of normal use, according to Jacobsen.

Other components designed to minimise maintenance time include a Kevlar-reinforced three belt drive line, Teflon-lined bearings and a reel, bedknife and traction roller which drop out for service in a couple of minutes.

Powered by a 4hp Honda engine, the Greens King 422 has a 22in cut width, a choice of three different bedknives and safety interlock to prevent start-up if any drives are engaged. It is priced at £3,360. The Turf Groomer option costs £870.

While the user of the walk-behind 422 may have few worries about oil leaks, it is a different story when it comes to an all-hydraulic ride-on. For that reason, Jacobsen now offers its GreenSentry leak detector as a £360 option on the Greens King IV mower. This attachment incorporates a separate tank to allow for the outflow of oil when filling hydraulic rams before the alarm sounds.

Toro fits its Turf Guardian oil loss detector as standard on its latest ride-on triple – the Greensmaster 3100. This mower is said to be the lightest on the market at about 948lbs, as well as having very low noise and vibration levels.

According to David Boothby of distributor Lely UK, these benefits come primarily from the use of a carefully-mounted and designed Vanguard petrol engine which offers remarkable economy at around 0.5gal/hour. "We have not noticed any resistance to the fact that we do not fit a → 31
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There's no doubting the pedestrian mower's ability to produce optimum appearance.

Removable weights on the Jacobsen Greens King 422 walk-behind mower enable the operator to maintain balance when using different front rollers or with the company's Turf Groomer fitted.

29 → diesel engine in this particular mower,” he comments.

On the pedestrian front, Mr Boothby says that there has been an 80% increase in the sales of Toro's Greensmaster 1000 model, led by demand in the USA for greens of the highest quality cut and appearance. "There is no doubting the pedestrian machine's ability to produce the optimum appearance," points out Mr Boothby. "However, I would agree with Steve Isaac that there is a place on many courses for both types of mower.”

John Deere, in common with the other major manufacturers, also offers ride-on and pedestrian machines. Having stolen the limelight with the launch of its offset cut 2243 model with steerable cutting units, the company has now made available a kit which increases by 1.5in the transport height of the two front cutting units.

Designed to reduce the risk of grounding or scuffing in transport and when turning off the green, the £250 kit has been developed by John Deere dealer, Groundcare (Lincoln).

With demand growing for increasingly lower cut heights, new low cut bedknife support has been introduced for the John Deere 22in walk-behind greensmower. The support enables cutting heights down to 3/32in to be achieved without scuffing the turf, says Deere.

Minimising turf wear and compaction is the principal aim of a new floating roller-carrier assembly for the grass collectors on Huxleys' 358 ride-on greensmower. Positioned ahead of the existing front roller, the carrier removes the weight of the grass boxes from the cutting units and ensures that each box remains at both a constant height above the ground in work and level when the units are raised.

Huxleys have also introduced as options a headlamp, towbar, flag holder and steering wheel extension.

Three-wheel drive has been available on the Huxley 358 since 1989. Now, Jacobsen is evaluating the system in prototype form on its Greens King while Lesco, distributed in the UK by CDC, launched its 300D Three Wheel Drive Greensmower at the IoG Exhibition, Peterborough.

Powered by a Kubota 16.5hp diesel, the machine has constant drive to all three wheels and transmission braking to prevent over-run on down slopes. The unit includes an electronic differential lock system, applied by a foot or hand switch, to prevent the backflow of oil from any wheel motor and thereby eliminate slip on steep or wet surfaces. The new mower costs £12,318 and, in common with the other two machines in the Lesco range, can be equipped with a redesigned grooming attachment, verti-cut units, powered rear roller brush and choice of solid or grooved front rollers.

Also built in the USA, the Beaver T92 triple greens mower from Hayter is receiving a major push to gain attention in the UK with a massive price cut of → 32
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The Nikken fitted with its unique hover hood gives total flexibility and freedom of movement, giving a very neat finish to your bunker slopes and banks. The operator can either mow from inside the bunker mowing uphill or mow from the top reaching down into the bunker, both achieved with total ease.

Flying sand is no problem with Nikken due to all sensitive components being protected and out of harm's way on operator's back, which only weighs 12lbs. Edges can be quickly and neatly trimmed by removing the hood, attaching a small 4-tooth blade and finally rotating the handle through 90 degrees.

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'Extra blade on the greens cylinder produces 31 = almost £3,000. Robin Bayes of Hayter says that the diesel-powered mower, which now costs £12,000, incorporates many of the best features of the competition and deserves a closer look by greenkeepers. It has individual lock-up of the three cutting units and independently-mounted grass boxes. A demonstration revealed that the T92's centre box is certainly one of the easiest on the market to remove and replace.

The latest pedestrian greens-mowers from Ransomes, the Greenspro 51 and 56 (20in and 22in), have a cradle-mounted grassbox for simple handling with the cradle frame acting as a carrier for an out-front dew brush. Both cutting height and cylinder to bottom blade adjustments are by spannerless hand wheels and the mowers can be supplied with Ransomes' Verti-groom attachment.

To help eliminate any risk of scuffing on perimeter cuts, steering arms are now fitted as standard on the cutting units of the company's two ride-on triple mowers – the GT Champion and GT Classic. These mowers also have hand adjusters on the cutting units.

Improved grass flow into the collector and convenient compensation for cylinder wear are the aims behind an extended polyethylene deflector plate with aerofils now used on the Allett Supershaver and Tournament pedestrian mowers. The material, which can be formed by hand to mirror the curve of the cylinder, is bolted in position and is said to resist grass sticking.

Both mowers have a cut frequency of 180 per yard down to 3/32in. The principal difference between them is the fitting of a powered spiral brush between the cylinder and front roller on the Tournament. Apart from helping to keep the front roller clean for a constant height of cut, the brush can be moved up and down to alter the action on the turf and promote the lifting of horizontal growth for a more thorough cut.

CUTS, COLLECTS, CLIMBS, CARRIES, PULLS AND LEAVES OTHER 'RIDE-ONS' STANDING

The Allen Mustang is a go-anywhere, rugged 42 inch ride-on rotary mower. It is especially suited to bank mowing having a low centre of gravity and wide, low pressure flotation tyres with hydrostatic drive.

The Mustang is purpose made to cope with all manner of garden duties, whilst offering the operator a totally safe, effortless and practical way to tour the land. Powered by a Briggs & Stratton Vanguard 16hp twin 4-stroke engine, other features include a differential lock and electric lift to cutter deck for precise, easy operation. The adjustment for height of cut can be set to any height between 3/4 (2cm) and 4" (10cm) at the touch of a button. A powered collection system is also available.

For FREE brochure complete the coupon or phone 0235 813936 NOW!

To: Allen Power Equipment Ltd, Dept GI, The Broadway, Didcot, Oxon OX11 9ES.
Please send FREE Allen Mustang details.
Name...GI.10.92
Address..........................................................
Postcode..
The 20in Tournament costs £1,995, while the Allett Super Shaver (20in or 24in) costs from £1,450.

Lloyd's first introduced its Paladin pedestrian mower in 1961. The 1993 version has an up-rated welded construction for its new pensate for wear in its support bushes and the bottom bar.

Clive Nottingham of Lloyds comments that the change to the use of steel with added boron had enabled the company to adopt a welded construction for its new cylinder. "The hardness of the material is unaffected by welding," he explained. "In addition, the extra blade on the greens cylinder, giving 16 more cuts per yard, has produced a noticeable improvement in cut quality," he points out.

Options for the 1993 Paladin include transport wheels, comb and verti-rake attachments and a grassbox cover.

Developed from the Zephyr pedestrian mower, the new walk-behind machine from Greens has had extensive surgery to its roller and cylinder drive system to enable the roller to roller distance to be reduced by 2in. The result? Improved contour following and better balance, according to Greens.

The 10 bladed cylinder gives a consistent cut frequency at 165 per yard irrespective of drive roller speed and minimum height of cut is 1/16in with knife blade.

Priced at "around £1,600", the mower has a Honda engine and optional brush and comb set and powered transport wheels.

Above: An extended polyethylene grass deflector plate now used on the Allett Supershaver and Tournament pedestrian mowers can be shaped by hand and gives improved grass flow into the collector.

Below: New for 1993 is an all-wheel drive version of Lesco's diesel-engined greens mower. Priced at £12,316, the mower has a fan-assisted oil cooler and features the company's electronic diff lock system to maintain full traction at each wheel.

New health and safety regulations affect all golf course employees

Regulations to implement the European Community (EC) Framework Directive on the introduction of measures to improve the health and safety of workers at work were laid before Parliament in September.

The Management of Health and Safety at Work Regulations 1992, will come into force on 1 January 1993, following wide consultation.

The new regulations are the first in a series to implement six EC directives. Other regulations on workplace conditions, safe use of work equipment, manual handling of loads, personal protective equipment and display screen equipment will follow.

The Framework Directive sets out general principles of EC health and safety law. Some provisions in the directive are already implemented through existing health and safety legislation, notably the Health and Safety at Work etc Act 1974. The Management Regulations introduce those additional health and safety measures required by the directive.

The new regulations set out broad general duties which apply to almost all work activities and are aimed mainly at improving health and safety management. They make more explicit what is required of employers under the Health and Safety at Work Act.

The main requirements are on employers:
• To assess risks to the health and safety of their employees and others who may be affected in order to identify the measures needed to comply with relevant health and safety law. Employers with five or more employees will need to record the significant findings of the risk assessment.
• To make arrangements for implementing the health and safety measures identified as being required by the risk assessment. Arrangements for planning, organisation, control, monitoring and review will need to be covered. Again, employers with five or more employees will have to record arrangements.
• To appoint competent people (either from inside the organisation or from outside) to help with the implementation of the health and safety arrangements.
• To set up emergency procedures.
• To provide information to employees which can be understood, as well as adequate training and instruction.
• To work together with other employers sharing the same workplace.

Some of these duties, such as the duty to assess risks, also apply to the self-employed. There are also specific duties on employers to use equipment only in accordance with the training received, and to report dangerous situations and any shortcomings in their employers' health and safety arrangements.

Copies of 'Management of Health and Safety at Work Regulations 1992' are available from HMSO and booksellers. price £2.50. An Approved Code of Practice to accompany the regulations will be launched at a press conference later this year. Details will appear in Greenkeeper International as soon as this is made available.
RANSOMES - no one offers you a wider range of turf care machinery. We manufacture machinery to match a precise application. That’s why it does a better job, more efficiently and more cost effectively. For mowing a fine lawn or cutting a large park there’s a RANSOMES machine to fit the task. If you’re maintaining fine greens there are aerators, spikers and top dressers too. There’s even a range of cylinder grinders to maintain a fine edge. Check out RANSOMES first - you will be amazed how we can meet your needs exactly.

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Two pages of trade news including the latest announcements from last month's IOG Show

Top dressing firm puts £350,000 into its future

A top dressing supplier is bucking the recessionary trend and making a major investment in its future. Abcon North East Ltd, based in Blaydon, Tyne & Wear, have been trading since the early 1960s, supplying the construction industry with sands and gravels. With expansion and diversification, Abcon are now also supplying the greenkeeping industry. They have what they believe to be a unique and fully computerised and sterilised blending and mixing plant.

Drawing on more than 20 years of experience, Trilo Manufacturing of Holland have produced the SG 700 Grass Collector. Launched at IoG, the new SG 700 – especially designed with the golf course application in mind – drew wide approval from greenkeepers. The combination of the powerful vacuum and a 2m brush unit inside a free floating head means that leaves and grass cuttings can be easily collected.

In addition the machine has options such as a 2m tripartite scarifier which enables greenkeepers to scarify and collect in one pass, and a 2m wand hose to enable those difficult to reach areas, such as ditches, to be cleared. Additional uses include the collection of litter and clearing hollow cores (a service already offered by D&E Turf Maintenance Ltd using the Mini Sweep). Although multi-functional and with an enormous 7m³ capacity, the SG700 weighs in at under 1300kgs. It can be supplied with extra wide 19x17 Tyres. Phone: 0223 335 3577.

Shelton Trenching Systems, specialists in sportsturf drainage machinery, and Boral Lytag, the aggregates manufacturer, have joined forces to launch a leaflet on machinery and materials for efficient and effective sportsturf drainage. Information is given on the various techniques that may be used to improve drainage where ground has become waterlogged or where water is perched on the surface. The Shelton range of drainage equipment available to overcome these problems is outlined.

The use of lightweight aggregates in drainage schemes is gaining in popularity. A table setting out the results of hydraulic conductivity tests with various materials shows the outstanding characteristics of Lytag in this respect. With several grades available from sand through to 12mm, this manufacturer is now available all over Britain. The advantages over conventional materials are enumerated. This leaflet should be in the hands of all involved in sportsturf drainage or those contemplating such work. Copies from Shelton Trenching Systems. Tel: (0732) 833647 or Boral Lytag. Tel: (0889) 583446.

Developed by Allen Power Equipment Ltd for their popular 18" hover mowers, their latest innovation, the Tri Cut Pro Blade, has been designed in response to requests for improved cutting performance whilst maintaining the need for maximum possible protection for the operator. The new blade uses the normal height of cut adjustment and is fitted to the 218 Tecnomotor and 218SI Suzuki powered 18" machines.

The metal disc carries three free swinging blades, manufactured from Nylon 6, which cut grass with the efficiency of metal but offer operator and machine protection if solid objects are encountered. The blades can be simply removed and replaced when worn or damaged, quickly and easily.

The new Tri Pro Blade is a result of exhaustive testing and improvements and Allen believe this new blade is the most efficient nylon cutting blade ever designed for a rotary mower.

The debut of the Jacobsen LF3810 Fairway Mower complements the company’s LF100 (2.5m) and ST5111 (3.4m) machines to complete the Jacobsen fairway range. The 3810 has five cutting cylinders, a working width of 3m (10ft) and the same styling as the recently announced ST5111. The 3810’s diesel engine is mounted between the axles to provide an exceptionally low centre of gravity for safe working on banks. Drive is hydrostatic with stepless forward/reverse speeds.

The control lever is conveniently placed, together with the Synchrosift control which is used to raise or lower three, four or all five cutting cylinders to allow cross-cutting of fairways to be undertaken quickly and easily. The cylinders have 10 blades and are arranged so that they precisely follow ground contours. Cutting heights down to lcm (3/8in) are possible. Working speeds can be up to 7.5mph. For easy servicing the complete operator platform can be lifted clear to provide access to engine and drive line components. Other features of the new LF3810 include power steering, adjustable steering wheel and quality suspension seating to provide an exceptional level of operator comfort for long periods of working.

The new high performance Ransomes Fairway 300 is a 5 unit ride-on fairway mower which offers many additional features and benefits over the current competitive lightweight fairway mowers. Already exhibited at the GCSAA
economy, low exhaust emissions and low noise levels - which make it very friendly to the operator and the environment. Designed to enhance operator efficiency is a new style console which includes a tilting steering column with all the controls immediately to hand and system monitoring dials for regular maintenance checks. The 300 is fitted with new hydraulically driven 26" cutting units which are based on the successful Motor 180D units, offering a total cutting width of 114". Both the height of cut and the cutting cylinders can be adjusted without the need for tools. It features 4WD with wide turf tyres which offer exceptional traction with low ground pressure and enhance its stability and ease of operation when working on fairways. When cross cutting fairways all five units can be raised in a single operation, enabling fast turns and ease of manoeuvrability.

- John Deere's versatile new 1800 utility vehicle takes a range of sprayer and turf maintenance equipment for professional turf care applications. This heavy-duty, four-wheel vehicle features an 18hp petrol engine, hydrostatic transmission and power steering. Load capacity is 907kg and the Softrac tyres give excellent traction combined with low ground compaction.

- The two-person adjustable bench seat tilts forward to provide easy access to the Kawasaki liquid-cooled V-twin engine. Ground speed is infinitely controlled in low and high ranges, for working and transport applications, from 0 to 11.5mph. A console-mounted lever provides easy speed and direction control. Stability and manoeuvrability are enhanced by the 55" wheelbase and 66"overall width. Overall length is 1 02". The vehicle can be fitted as standard with a Hardi sprayer with 66 or 132gal capacity tank and 20ft wide boom. An optional universal frame enables it to carry a variety of other turf care and maintenance equipment. Prices start at £6,400.

- Lamborghini's the new 'force on the course' - has introduced a range of compact tractors in a bid for the golf course market. The Lamborghini range in the UK now spans 25 to 165hp in 15 models. Called the 'Runner' series, the new compact machines are available in three models; the Runner 250 with 25 DIN hp diesel engine; the Runner 350 with 33 DIN hp diesel engine, and the Runner 400 with 40 DIN hp diesel engine. All models are equipped with an advanced 12 forward, 12 reverse speed shuttle transmission, 4WD and load sensing power steering as standard. Power units are Mitsubishi. The 350 and 400 models have the same 1490cc four-cylinder engine to which a turbocharger is added for the 400 model to provide the power increase to 40hp. It also gives the Runner 400 a significant advantage in terms of improved combustion and fuel efficiency. The small-

Video shows tough turf facts

A new video from Netlon Limited - Agriculture News and Technology

The new Runner 250, is powered by a Mitsubishi three-cylinder engine with 1118cc capacity. The Road Runner 350 compact is priced from £9,650 and will be available shortly.

ICI Professional Products have launched a free collection and disposal service for their UK amenity customers. The service is a co-operative venture with Envirogreen and follows the introduction of new (April) laws on special waste. The Duty of Care under the Environmental Protection Act, 1990 requires anyone who has the responsibility for controlled waste to take all reasonable steps to ensure its correct disposal. The free service is offered on all empty pesticide containers carrying ICI Professional Products labels. * Option 1 – Free collection and disposal of ICI Professional Products empty containers in batches of 200 litres or more. * Option 2 – One annual free collection of batches of empty ICI Professional Products containers under 200 litres.

ICI have also launched the new ICI Professional Products 'Guide-to-Excellence', which attempts a fresh and innovative approach to customer communications. Combining technical substance, commercial purpose and industry relevance, the Amenity Guide has been specifically designed to interest the reader by being both educational and entertaining. The result is a fully illustrated 84hp guide segmented into defined areas, designed to allow each of these segments to become standalone guides in their own right.

Each section includes a brief overview of the use for which the product is being recommended, with appropriate photographs, illustrations, diagrams, graphs and charts to aid a more thorough understanding. Following each product use area are tables, which provide all the essential and relevant information of product application, rates of use, timing and area coverage. Where appropriate chemical active ingredients and MAFF numbers are included.

The new 4ft (122cm) SISIS Multislit is a deep slitting aerator for relief of compaction, increased drainage and improved root development – six inch (15cm) or eight inch (20cm) slitting tines can be fitted. The Multislit has been developed from many years experience with the highly successful AO/4S. There are five tines fitted to each larger diameter tine plate to give more slits and a shorter slit length on the surface. The tine plates have a wide rim to reduce surface marking when operating at full penetration.

The Multislit performs without the need for VPF variable pressure frame although it will operate with one, making it a versatile aerator suitable for attachment to a wide variety of tractors and power units.

The new Charterhouse Lawnssystem is a unique concept specifically aimed at the renovation of lawns, tennis courts, bowling greens and cricket squares. The machines consist of a pedestrian spiker, pedestrian scarifier and top dresser/fernisher spreader. All the units are located on a purpose built trailer and each machine has been designed with three main points in mind. The first is simple operation, the second high manoeuvrability to gain access in difficult areas, the third robustness to withstand heavy use. Though aimed at the hire market, the system is such that it may well anticipate acceptance from the greenkeeping profession.

The system comes complete with a leaflet on how to renovate turf areas, written by Jim Thorn, remembered by all as head groundsman at Wimbledon. Jim is not the only high profile member of our industry to endorse the system, for Steve Tingley, head groundsman at Wembley and Jack McMillan, latterly head greenkeeper at Sunningdale and now an international consultant, have given the system their full support and endorsement.
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KEEPING IN TOUCH WITH NEWS AND COMMENT FROM THE REGIONS

EAST SCOTLAND
The 'Willie Wood Memorial Trophy', held at Swanston GC on 6 August, brought with it a smaller than usual entry. Normally held in October, the competition was brought forward as an experiment and I regret this decision backfired on us. However, our grateful thanks to the captain and committee; to the course manager and his team for the excellent condition of the course. Our grateful thanks also to our sponsors, Sports Turf Services, with our apologies for the small turn-out. The trophy was won by Dunbar GC.

An old friend of the section, Laurence Pitie, graced our company with his presence and though it's a number of years since Laurence left his native Scotland he hasn't lost his Scottish touch. He presented the section with a bottle of our raffle and won it himself! Needless to say, he was delighted to be re-drawn.

As yet I cannot confirm the rumour that Richard Dugan is retiring from Glencourse GC. Dick has been a stalwart of the section and attends all of our events. As soon as I have confirmation (or denial), I shall let you know.

One person confirmed as retiring is Duncan Hurd from Longniddry GC. Duncan has been a member of the section for many years and under the SIGGA flag was committee member, section chairman and Scot- tish representative. Over the past few years he has kept a low profile due to back injury and the ill-health of his beloved wife. Naturally, our best wishes go to him for a long and happy retirement, as also they do to another retiree, Jimmy Renton from Gifford GC.

The question must always be asked 'why, with so many past members? I would be delighted to know the possibilities available for winter events. The winner was George Morison from West Kilbride – George worked under the watchful eye of his own tutor, Jim Paton, and now returned to the STRI, on 'Agronomy, are we missing by us and I'm sure he will be a great asset to his new club.

Just along the road from me at Ardeer GC, Neil Turner has taken the head greenkeepers role, moving back to Scotland from England. Good luck to them all.

I have received phone calls from two young greenkeepers looking for employment. One is presently employed by a council (working on bowling greens), and wishes to return to golf course work. The other youngster has just completed a full time greenkeeping course at Elmwood. If you can help either, please call me and I'll put you in touch.

I was talking to Turnberry's esteemed course manager recently and I'm glad to say he has completed his abdication. He has renounced his English citizenship and become a Scottish International – yes, George represented Scotland (playing for Turnberry) in the Ford National Team Championship. This was staged at The Belfry and George contributed to the outstanding Scottish victory – vanquishing all comers to lift the title. Nice one, Mr Brown! Now all we need to do is encourage him to say 'bye to the Low country scene and buy a braw bight moonlight nicht the 'nicht' in no time. Seriously, congratulations on the Ford result, George, and on your success at the BIGGA National Tournament. You must have won enough to keep your 'tour card' for this year – beware the veterans tour!

I would like to thank all members who sold raffle tickets – the efforts made were greatly appreciated by the committee, who are now looking into the possibilities available for winter events. The winner was George Morison from West Kilbride – George worked under the watchful eye of his own tutor, Jim Paton, and now returned to the STRI, on 'Agronomy, are we missing by us and I'm sure he will be a great asset to his new club.

NORTH WALES
Once again winter is upon us and it is time to organise those winter lectures. Times and dates for such events will be announced at our Autumn Tournament on 14 October at Chepstow GC, but we hope to have our first lecture either on the second or third week of November. Members who are not playing in the competition may contact David Proctor or Terry Adamson for further information.

On 28 October Lindum Turf will be staging a demonstration at Abersgele GC. All are welcome; so please come and support.

Many congratulations must go to Alan Sharp (and his staff) at Chirk GC&GC for finishing second in the Northern Section of the I.C.I. Premier Greenkeeper of the Year award.

At the Welsh College of Horticulture prizegiving held on 8 July, four students received special awards: Graham Parker (Best 1st year on Phase II) The Gem Professional Prize, Martin Howell (Best 2nd year on Phase II) The Frazer Turf Prize, John Edwardes (Best Demonstrator on Phase II) The Conference Merit Prize, and Matthew Horton (2nd year greenkeeper achieving the overall best marks) The Rufford Top Dress Cup. This year the C&G Phase II Prize proved particularly successful, with two students awarded distinction in both exams and five others receiving one distinction and one credit-well done to them all.

FINALLY
One more personal note, the committee would like to thank Mark Proctor for his help in starting our section some three years ago. We take this opportunity to wish Mark and his family the very best in their new venture in Germany.

DAVID PROCTOR

MIDLANDS
We are again holding our Regional seminar at the Warwickshire College of Agriculture, Moreton Hall, Moreton Morrell, Warwick, this time on Wednesday 25 November. Our speakers and their subjects this year are:

• Jeffrey Taylor of Johnson Seeds on 'Grass Seeds and Wild Flowers'
• Andy Cole, formerly with the Warwickshire College and now returned to the STRI, on 'Agronomy, are we on the right lines?'
• David Golding, BIGGA's education officer, on '1992 – the most important year for Greenkeeper Training?'.
• John Hacker of Professional Sports Turf Design Ltd on 'British Specifications for the construction of golf greens?'
• Richard Minton of ICI on 'The understanding of fertiliser'.

Seminar programme and application forms have been sent out, so if you have not received a copy and would like to attend, please contact me on 0455 283053. We are holding the cost of the tickets at last year's price of £20 per delegate, which includes cof- fee on arrival, a buffet lunch and afternoon tea. We are limited to approximately 120 delegates and with a Midland region membership of over 600 it would be wise to return your applica- tion forms as early as possible.

ROGER WILLARS

EAST ANGLIA
Just a quickie lads, for even greenkeepers have hol- idays (mostly, it would seem, in August, for only 15 turned up at Colchester!).

Ladies played at Thetford GC. The captain, who played on Keith Chinery's patch, which Sam tells me was in good condition. By the way, Keith won the Vic Wakefield Cup and will now get a 'proper' handicap!

All's well that was wild at my end and I'm sure all's well that was wild in the regions too.

Mike Latherope
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CLEVELAND
Our Autumn Tournament will be held at Middlesbrough Golf Club – details later.
Graham Pyle’s course extension is being carried out by Graham (with the help of a contractor from his club) and the green will be built to USGA Spec.
Ian Harrison, head greenkeeper at Darlington, reached the regional round of the ICI Greenkeeper of the Year award – congratulations, Ian.
Pleased to hear of Bob Upton’s appointment at Romanby GC, Northallerton, N Yorks. This is a large acreage and I think water features are to form part of the course – details later.
Aendraume disease can be grown out in the growing season – more tricky later.
Autumn programme of events is being arranged for October; November and December and a newsletter (sent to all members) on Roger’s recent addition to the family – a son, Andrew – was born on 23 March and weighed in at 8lbs 11 ozs.
BRUCE BURNELL
DEVON & CORNWALL
Our Christmas meeting will again be at the very popular venue of Okehampton Golf Club on Wednesday 9 December. As is usual, members will play a greensome format for the PJ Flegg Trophy during the morning, with the usual course inspection offered to non-playing members. This year our afternoon luncheon entertainer will be Tank Sherman, who comes very highly recommended by our local talent spotter! Numbers will be restricted to 80, so please make sure you return your entry form to me as soon as possible to avoid disappointment. All members who plan to travel on next year’s regional trip to BTME at Harrogate should have returned invitations for the spraying and first aid training to see if this new status affects his 3 handicap rating.
ROGER TYDEMAN
SOUTH EAST
Regional news of great importance concerns our former armchair chairman, which is 50th stage of the month (Tuesday 3 November) at Cannington College. This well established annual event is sponsored by Avocorn Amenity Products, the cost being £10 for members and £15 for non-members, inclusive of lunch.
A packed programme will begin at 9.25am with an introduction by Rod Feltham, of Avocorn Amenity Products, followed by ICI’s Richard Minton on ‘Understanding the South East’. This year sees an earlier and highly satisfying trend extending still further with the presentation of papers by no less than three of our own greenkeeper members, all making their appearance on the Cannington rostrum for the first time.
In order of appearance they are Jason Hampton (at Spenholst College on a National Diploma course), who will talk on ‘The golfer – making him less green’, Neil Macintyre (at Cannington taking Phases II and III) talking on ‘Turf and tee on the golf course’, and Guy Woods (Finalist, Student of the Year 1990) on ‘Managing Poi era annus greens successfully’.
Additional speakers – each an acknowledged master of his chosen subject – include Roy Brown of Timperley GC, who represents our Northern section as our own education officer, David Golding, talking on ‘Greenkeeper Education – what is available’, and the famous golf course architect, Donald Steel, discussing ‘Golf Course Architecture’. In both morning and afternoon sessions ample time will be allowed for questions.
This is an event not to be missed and please phone me on 0803 844056 to be booked by me on 0863 508456.
GORDON CHILD
SURREY
Bill Mcmillan, already celebrating the recent birth of his daughter, kept ‘it’ in the family by winning the trophy that carries his family name – The Mcmillan Tankard – with a score of 37 points. Jeff MacIntyre finished second and Cameron Mcmillan (yes, another one!) placed third. Cameron also made the costly mistake of achieving a hole in one and afforded the tradition of drinks all round in the clubhouse!
Thanks go to Sunningdale for granting courtesy of the course, to the green staff for course presentation and to Sunningdale Artsians Club for their hospitality.
Will any section member interested in the proposed free transport to BTME at Harrogate please contact a committee member.
Dates for the diary: Autumn Tournament at Worlesdon on 29 October (closing date for entry – 16 October). South East Regional seminar at the Embassy Conference Centre, Colchester on 2 November.
Congratulations to Ronnie Christie of Addison Palace GC on his recent marriage. We will be watching to see if this new status affects his 3 handicap rating.
ROGER TYDEMAN
SOUTH WEST AND SOUTH WALES
Regional news of great importance concerns our former armchair chairman, which is 50th stage of the month (Tuesday 3 November) at Cannington College. This well established annual event is sponsored by Avocorn Amenity Products, the cost being £10 for members and £15 for non-members, inclusive of lunch.
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GORDON CHILD
BUCKS, BERKS & OXON
Not much going on, but thanks again to Mark Barthelme of Risborough Turf for putting on an excellent invitation day at Maidenhead GC. Results were: 1st Les Witham (West Berks) 2nd Brian Woodhouse (Little Chalfont) 3rd Tony French (Lambourne GC) Wooden Spoon Ian Lupton (Lynham GC).
A little word of warning to Messrs Tribe and Fletcher about had it still been on patch against Messers Nudds and Horwood they delivered an early in the round crippling shot with a wicked 3 iron to John Nudds, which caught him sharply on the knee.
Apparently it didn’t matter, for he seemed to play better after being hit (they breed ‘em tough at Gerards Cross!).
Congratulations to Dave Childs of Ellesborough GC, the only qualifier from BB&O section to win through to the bekil finals – play well, Dave.
RAY CLAYRE
Prevention, they say, is always better than cure. It is certainly cheaper! Never is this adage better confirmed than in early autumn when preparing a course for winter. My comments are based on the knowledge gleaned over more than four decades from practical men, who in turn probably learned their skills not just in the hard work of experience but from their elders, so that some of this lore may well go back in direct line to the early years of this century.

Early in my advisory career I was taught much of my practical greenkeeping by a quiet and immensely wise Aberdonian greenkeeper, Frank Smith, who in the early thirties left Cruden Bay railway hotel course for rich Glaswegians, to take charge of the plots at the newly established Research Station at St. Ives, Bingley. He it was who, with immense patience, corrected not just my enthusiasm and follies but in later years those of my fellow advisers – if they would listen – passing on his unique knowledge of seaside greenkeeping. Never was he more needed than today.

Recording such comments is meant in no way as trying to teach experienced men how to suck eggs, but it may be useful, both to guide those starting and also to remind others of facts which may have been forgotten. If it proves anything, it is firstly that nothing basically changes in sound greenkeeping, since the grasses and their needs do not change, and furthermore that there are no instant cures, but plenty of instant problems.

It was Frank Smith who impressed on me that ‘you don’t apply fertilisers after the end of July’. Remember that the temptation to try and speed up recovery from war time neglect and abandonment of golf courses in the autumn of 1945 was enormous. The wiser heads stressed mechanical aids; fools rushed in with fertilisers; and some today are still rushing, though perhaps even they have learned not to use nitro chalk – or have they?

This ban applied equally to all fertilisers, even those containing little nitrogen. Never was it more sensible, in most cases, for the next century let alone the fine turf at any time – the demand is minimal and the existing supply in the soil more than sufficient, in most cases, for the next century let alone this. Soluble potash merely goes to the drains in autumn and nitrogen stimulates lush growth. Apart from it being a mild fungicide and autumn and nitrogen stimulates lush growth, which promptly goes down with Fusarium patch disease at the least provocation.

This does not mean that it is anything other than sensible to use sulphate of iron in the autumn. The advent of power scarifiers made it that much easier to remove huge quantities of thatch, often encouraged twenty years ago by mismanagement (over watering and over feeding) which thankfully now seems less common. Far better of course to correct the thatch problems by deep routine aeration and other preventative treatment.

In my early advisory work it was common practice, as soon as winter came – and that meant the cessation of top dressing – especially smothering is inevitable – as with snow – and that is to avoid smothering the turf. Some- times smothering is inevitable – as with snow – but some can be prevented, notably in avoiding top dressing – especially heavily – when there is no growth for the turf to absorb it. In my early advisory work it was common practice, as soon as winter came – and that meant the cessation of almost all play save for a handful of expatriate Scotsmen – to go onto winter greens and literally smother the main greens with one heavy application of ‘compost’, burying the grass so completely that it took a week or so for it to show through. The inevitable result – especially when allied to the ubiquitous autumn fertiliser – was all too often a crop of ‘mow-mowing’ treatment and left scarred surfaces until growth resumed in the spring.

Today, not least because winter play is almost as heavy as in summer, we adopt a ‘little and often’ procedure, in the growing season so that the fine screened top dressing is absorbed, almost within hours rather than days, by the growing grass.

Something else can be done to help greens stand up to a sustained winter assault and that is to leave plenty of grass on them! The worst for shaving to produce faster greens (which has already ruined the greens on some of our famous courses) seems to be waning, but if you are unlucky enough to have one of these shaving fanatics in charge, you are going to have a battle. Personally I would never mow closer than 3/16th, (though I might allow a dispensation for very special events if closer mowing were not prolonged for more than 10 days), because we can speed up greens in other, less damaging, ways and in any case it is the grass species which has the greatest influence on speed. Certainly we should never cut closer than 3/16ths in September or October and raise the height, as well as lengthen the interval between cuts to help the grass put something back into the roots while soil temperatures are still high enough.

Severe scarification leads to a routine autumn task, but again this has always been condemned by experienced men, on the grounds that one should never tear the hell out of turf unless it was growing actively and could quickly recover. The advent of power scarifiers made it that much easier to remove huge quantities of thatch growth or thatch, often encouraged twenty years ago by mismanagement (over watering and over feeding) which thankfully now seems less common. Far better of course to correct the thatch problems by deep routine aeration and other preventative treatment.

Talking of prevention, it is worth observing that routine spraying with systemic fungicides is an expensive non-solution to chronic disease problems. Such fungicides must be absorbed by the growing plant and have to be applied in anticipation of an attack and so can often be wasted if the attack does not materialise. Far better to cure the basic cause, when there will be no disease anyway. If a series of unplanned events does cause an attack, better to deal with it by contact fungicides before it gets a hold.

If your course suffers from poor drainage of greens – perhaps they were built without under-drainage or on heavy clay soils – then early autumn is the time to deal with the problem – for example by Vertidraining early when the subsoil is still relatively dry and friable – and the greens firm enough not to wheel mark. This sounds fine but the golfing calendar extends so late into the autumn today that operations, which must be done in early autumn to be effective, are postponed until so late in the year that damage and poor results are inevitable. Thus one preventative measure should be taken months earlier – education of the management and the members into accepting some slight inconveniences and disturbance, so that essential work can be done when it should be done and not left until the competition season is over.

Another preventative measure which must be planned ahead – especially regarding the ‘education of members’ – is to avoid smothering after the end of August, no matter what the weather is like in September. The basis of sound irrigation is to start late and stop early. The idea is to go into winter with dry greens. Since none of us is blessed with the power of infallible weather forecasting (though some are better at guessing than others), the chances are that the gambler who acts on his belief that the autumn will stay dry will get caught in monsoon conditions, and nothing wins worse than sodden turf. But all this needs planning well ahead and not all clubs will be able to assume that ‘it isn’t green it’s dead’ and base their standards on the course being in perfect order on the day they want to play, never mind any other times.

There are of course many management tips on minimising winter damage, and especially the effects of concentrated wear, such as banning trolleys or at least requesting members to demonstrate their virility by carrying their clubs – or seven of them, but that is another story for another day.

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ROVRAL GREEN AND CDA ROVRAL CONTAIN IPRODIONE READ THE LABEL BEFORE YOU BUY: USE PESTICIDES SAFELY
An overall view should be taken on upgrading work, particularly with drainage system improvement. Now is the time to start planning for drainage improvements. Wrong end of the winter period? Not at all. The recent wet weather has brought back for many the easily forgotten memories of heavy going which, for some, date back to real winters of several years ago.

There is nothing to beat a good monitoring period over the winter when areas can be marked on an accurate plan and studied for possible causes. Vital bits of kit include a spade for the bold or a turf repair implement for the tentative, with a Dutch auger to examine soil conditions to depth. Oh, and of course two coat hooks, watering can, bin liner, and wellies (waders?) to mention but a few of the specialist instruments of the trade. Wellies to get you into the ditches or watercourses where everything starts or finishes, depending on your point of view; the bin liner to leave a tidy turf surface; a watering can to crudely study sub-surface permeability. Coat hooks? – easily fashioned into an amazingly informative drain detector (send sae for details!)

An occasional examination, noting as much as is reasonable on what happened where and when following heavy rainfall or steady drizzle can be invaluable to the detective work that determining the cause of a problem can often become.
Types of problem

On an established course, the first question asked should be 'are we dealing with an increased usage or similar surface condition problem, or with a deeper problem? Or both?' Or with a deeper problem? Or both? similar surface condition problem, a heave problem caused by many more feet passing over the surface is a heave problem, the other a water problem, the other. One is a soil problem, the other a water problem, and the other a water problem. Pipes do not last forever; they become overloaded as additions are made over the years. This overload or surcharging can cause a problem some distance from the source. For instance a new surface drainage system which intercepts what was surface run-off into the pipe could cause headaches as gradients fall.

Water flow or hydrology can change, although recently the tendency has been for these effects to reduce - with springs or seepage lines disappearing, though not forever. Rising water levels at the main outfall end, due perhaps to sedimentation on or off site or increased run-off upstream are more likely offenders. Suffice to say that a wide ranging approach is needed at the problem examination stage if the resulting options are to be in any way reliable.

Planning a scheme

Whether the proposed work is large or small in scale, careful planning is always worth the effort. Much may be at stake, not least the reputation of those involved in organising on behalf of the club or management.

Timing and logistics should be thought out in detail to minimise the inevitable disruption which must occur to a greater or lesser extent with any work. Various 'windows' in the usually busy annual calendar of a course can be identified and those occurring at the favourable times of year earmarked. Unfortunately the best conditions for work and the busiest time of the year often coincide. Let us not forget also that the best laid plans of mice and men are always at the complete mercy of the weather.

We can at least attempt to make any drainage work as efficient as possible from the organisation and design point of view. Without going too deeply into the design aspects, it is worthwhile taking a look at how design can affect installation unfavourably.

There are only rare occasions when there is really only one option available to either solve a problem or lay out a new system. Finding the right one is not always a simple question of cost: it may be more to do with minimising disruption in terms of time taken to do the work or the effect on the course itself.

Design

Take for instance trenching, the core of most schemes. Width, depth, and excavation difficulties need to be addressed. All displaced soil has to be handled, probably removed. Anything which can be done to reduce volumes involved helps efficiency, eg. smaller pipe size = narrower trench. Designing for minimum volumes, both of soil removed and permeable fill brought in, is very important; but it cannot be of any detriment to the required drainage capacity of the system. Additionally, when 'trimming' a design, a thought must always be given to the equipment that is going to be installing it.

You may be specifying a system which requires several machines which are tines, or one machine which is not easy to locate. Digging-wheel type trenchers have a width and depth restriction, generally 50-75mm and 600mm respectively. Chain trenchers similarly cannot generally go much less than 80-100mm wide, or much more than 150mm. At the greater widths and depths it is not easy to find a machine which can elevate soil directly into a trailer and thus soil handling becomes a problem. Deep drains, sometimes necessary for seepage lines, present such a problem. The author has seen an NCB loading shovel make an almost perfect job of lifting soil from a turf surface, following deep drain installation on a fairway, but who has the nerve to recommend this on their course! To avoid this type of problem the design might be adjusted. Is it possible to install two 150mm outfall points rather than one 300mm? Once out of a large trenchers' capacity, a simple job can become a civil engineering exercise.

Design must carefully take into account gradients too. It is possible to 'grade-through' a hump or hollow; but the trenching depth capability becomes critical, as does an accurate means of levelling, ie. with well set-out boning rods, or

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Magazine binders: good sense and great value

A well-worn phrase borrowed from the world of antiques and collecting - today's disposable is tomorrow's collectable - is really a warning not to throw things away. If you doubt such wisdom, think how valuable an early version of the simple hand mower is today.

But there's more to the whole question of keeping things than mere profit. Antiques, researchers, lecturers and all practical exponents of business; art; craft or science, the most valuable source of information is the magazine, especially those from days long past.

This applies equally to the magazines of today, and a visit to the offices of your local greenkeepers will usually reveal well-thumbed copies of even the most current issues of trade magazines, often stacked neatly with the good intent of keeping them for posterity.

Sadly, these copies often get mauled, damaged or 'taken away' and what began as good intent can end as infernal frustration.

With that thinking in mind, and conscious of the fact that the bulk of serious articles appearing within the pages of Greenkeeper International offer the means by which greenkeepers may return to a feature of particular interest - perhaps to refresh the memory on a well established though perhaps little-used technique or to merely confirm an understanding of a given method or philosophy - your Association have commissioned binders for your copies of Greenkeeper International.

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44 - (now more probably) with laser equipment linked to the hydraulics of the machine.

Many mistakes are made on the backfilling stage, often resulting from the design or specification. It is not necessary, for instance, to lay a normal drainage pipe on a bed of gravel or to support it on either side. I view this as a waste of effort and materials. It is not always necessary to fill a trench up to the same level with permeable fill. Up to the surface where surface water interception is required; at 100-150mm deep where connection with the topsoil layer, or a slit-groove system may be useful; perhaps none at all where the pipe function becomes water carrier rather than water collector. Remember too that it is possible to get unperforated pipe for this function, where sediment and root ingress is a possibility.

The topsoil finish to a drain presents difficulties too. Most excavating equipment has to remove all soil and replacing a proportion of that soil means most probably a separate operation, placing what is essentially subsoil on the surface - this is not desirable! A sand finish is often chosen over the permeable fill but many do not like the effect during dry weather, with drought induced yellowing lines appearing easily.

Furthermore, check bridging factors to avoid sand migration.

Summarising on the design aspect suggests a simple logical sequencing of what, how and when, thus avoiding the embarrassing if not disastrous afterwards.

Installation

I begin this section with an announcement to new course developers: put the most comprehensive system in now whilst the shackles are off, it pays in the long term. Big machines can be used with impunity, high work rates, low costs. The so-called trenchless drainage option is there, materials can be hauled around the site with regard only to caring for soil conditions.

Once the course is sown or (even worse) being played, material carting can become a nightmare. Excavating the turf is strictly taboo, interfering with the status quo, albeit a damp one, out of the question. Well okay, that's a bit strong, but better to avoid such problems at the construction stage. Even without this there are often quick, effective ways to install remedial or new drainage systems which avoid the protracted struggles of green chairman and greenkeeper alike. The techniques and equipment do exist for all sorts of apparently unusual conditions, situations and requirements.

The actual installation work is made much less traumatic if everyone knows what to expect: what is involved, how long it will take, when will the after-effects be gone etc. Weather unfortunately could be the biggest and unavoidable trauma of all. Provisional plans for alternative access routes, material drop-off points, lowered ground pressure equipment, are sensible for critical schemes. The budget should also cover other weather effects such as standing time: hire costs; extra transport costs, even track-laying or returfing work.

Hopefully this article has clarified the position to some extent. Drainage work is pretty straightforward if planned properly. There is nothing wrong with the piecemeal approach - of phasing work and gradually intensifying a system, patching up as required - in fact there is much to commend it. But if this approach is taken in hope rather than through calculation you may just possibly be prolonging the agony unnecessarily.

The benefits? Better turf wear, less disease, happier golfers, confident greenkeeper, less input/higher output, bulging coffers! Well perhaps not bulging, but the financial potential is there. Finally, as a last general comment, take a step back from the course occasionally and look objectively at the potential for major improvement work. Look at drainage, bunkers; landscaping; landform, tees and greens - and ask yourself if piecemeal improvement is the best way to raise the profile, to fend off competition or improve finances?

Highly skilled though most greenkeepers are, there comes a point where development plans outstrip staff capacity. In these cases, short-shrift could be made of such plans with the effective use of outside help.

The author, David Hemstock, is an independent consultant specialising in golf course development and upgrading.

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Most golf courses use a variety of top-dressings for their greens, these varying greatly in moisture content and particle size and thus in their 'flowability' and ease of application. In addition there are a number of other materials, such as salt, grit, fertiliser and seed which may need application and which can be spread by specific machines. However there is always the danger of seeking a 'jack of all trades' machine which may be 'master of none'.

As with any machinery purchase it is vital to establish priorities, be they price, accuracy, longevity, low ground pressure or any other feature, and to establish which materials need to be spread, with what accuracy and at what volume and rate. Having set these goals it becomes easier to select or reject specific machines. Prices of spreading machinery vary from a low of around £500 - if you are prepared to accept the limitations of a spinner broadcaster - to £11,000 for a state of the art Turfco LA2 Mete-R-Matic.

Spinner broadcaster machines range from the simple single disc tractor mounted machines such as the Amazone EKS through to trailer spreader models of which the Charterhouse Bulk Dresser is an example. There are also many other makes of broadcaster with single or double discs. Critical appraisal may be needed with the former, ensuring that there is adequate agitation, but the latter in trailed form and designed or adapted for spreading volume material should be cost effective for high outputs.

More conventional for top dressing are machines such as those produced by Sisis, Huxley, Modus T, Turfco, Charterhouse, McConnel and Ransomes. These machines place the material over a fairly narrow well defined band, often assisted by a rotary brush to break up and impel the dressing into the ground. They are available variously in fully mounted, semi-mounted (with rear support wheels) and fully trailed versions. Prices range from about £2,000 upwards. A number of machines, such as those from Sisis and Modus T Systems, are available in mounted or trailed versions and are easily converted — as is the Amazone spinner broadcaster. The most suitable form for specific situations will depend upon a number of factors, such as the prime mover available and capacity required.

The options for the prime mover range from (compact) tractors to turf maintenance vehicles (TMVs), such as Hydromain or Cushman. However there is a growing range of such machines, including those from Huxley, Jacobsen, Hauler, Kawasaki and John Deere. Compact tractors may need a more expensive trailed type of top dresser, as many are too light to be stable when the implement is fully loaded. For non-linkage, non-PTO prime movers, such as ATVs, a bogie or chassis with an independent engine is available, capable of carrying virtually any mounted implement including spreaders and sprayers.

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THE WATERMARK GOLF CLUB AT OVERSTONE PARK REQUIRES A

HEAD GREENKEEPER

This new 18 hole Golf Course created within the grounds of a Victorian Estate in Northamptonshire occupies mature undulating parkland, overlooking a pretty fishing lake. Designed by Donald Steel, this Par 72 course at 6446 yards will entertain and challenge all our Club Members, from the less experienced to the scratch player.

We are seeking an experienced Head Greenkeeper to prepare, maintain and develop this course to its full potential. The ability to lead and motivate staff is essential, coupled with a practical knowledge of modern greenkeeping machinery.

Apply in confidence with full CV to:

Tony Snowden

GOLF MANAGEMENT
GOLF CONSULTANCY AND MANAGEMENT
103 HIGH STREET, BRISTOL BS1 4HU

Mickleover Golf Club require a

HEAD GREENKEEPER

Applicants must possess a recognised qualification and be experienced in all aspects of Course management. Ability to lead and motivate staff, organise work programmes, plan budgets and generate ideas would be expected. Practical knowledge of modern machinery would be an advantage as would be the needs of golfers.

Salary negotiable.

Please apply in writing with full CV to:

The Managing Secretary
Mickleover Golf Club Ltd
Uttoxeter Road, Mickleover
Derby

or telephone (0332) 516011/512092 for further details

GREENKEEPER INTERNATIONAL October 1992 55
Cowglen Golf Club

wish to appoint a

HEAD GREENKEEPER

Applications are invited for the position of COURSE MANAGER at this established Golf Club in Glasgow. The successful applicant will have knowledge and experience of modern Greenkeeping methods and machinery, including construction, and will be able to organise and motivate staff.

Salary – negotiable.

Applications in writing, enclosing full CV, should be sent to:

R. J. G. Jamieson, Esq., C.A.,
Secretary, The Cowglen Golf Club,
301 Barrhead Road, Glasgow G43

The Burstead Golf Club

requires a

HEAD GREENKEEPER

for their quality 18 hole course under construction in rural South Essex just 10 miles from the M25.

This is an ideal opportunity for an ambitious hard-working and skilled person who feels capable of developing both a newly sown course and his/her own greenkeeping team.

Applicants should be fully qualified and experienced in the use of modern machinery and the applications of recently developed techniques and treatments. The ability to work within mutually agreed budgets will also be required.

Salary negotiable.

Please send full CVs to:

L. Mence
The Burstead Golf Club
Tye Common Road
Little Burstead
Essex CM12 9SS

The Curragh Golf Club

Applications are invited for the position of WORKING COURSE MANAGER

The oldest golf club in the Republic of Ireland situated in the Curragh, County Kildare, invite applications from persons holding the highest experience in all aspects of greenkeeping, course maintenance, and presentation. He/she should have the ability to manage and motivate staff, work within agreed budgets and be fully responsible for maintaining the course to the highest standard.

An attractive remuneration package will be offered to the successful candidate.

Applications in writing enclosing a CV which will be treated in strictest confidence should be addressed to:

The Honorary Secretary, Curragh Golf Club, Curragh, County Kildare, Republic of Ireland

Closing date for receipt of applications: 30 October 1992.

CRIEFF GOLF CLUB, PERTHSHIRE

require an

ASSISTANT HEAD GREENKEEPER

Applications are invited for the post of Assistant Head Greenkeeper at Crieff Golf Club. Applicants should have a National Certificate in Greenkeeping and Groundsmanship and several years’ experience with a golf club. Experience in the control and management of staff would be an advantage, as would BIGGA membership. Salary and conditions are negotiable. No accommodation is provided. An appointment is expected to be made by 1st March 1993.

Apply in writing to:

The Secretary, Crieff Golf Club Ltd.
Perth Road, Crieff, Perthshire PH7 3LR

WELWYN GARDEN CITY GOLF CLUB LTD

requires an

EXPERIENCED GREENKEEPER

Minimum Qualification Levels 1 & 2
Salary commensurate with experience but could be in excess of BIGGA recommendation to suitable applicants.
No accommodation is available.

Apply to:
The Secretary/Manager, Welwyn Garden City Golf Club Ltd
Mannicotts, High Oaks Road, Welwyn Garden City AL8 7BP
LAKESIDE GOLF CLUB
require an
EXPERIENCED GREENKEEPER
This is a new position with full responsibility for the maintenance of an 18 hole course.
Salary commensurate with Qualifications/Experience
Application with CV to:
The Secretary, Lakeside Golf Club
Rugeley Power Stations
Armitage Road, Rugeley, Staffs WS15 1PR

Ratho Park Golf Club
require a
QUALIFIED ASSISTANT GREENKEEPER
Applicants must be experienced in all aspects of greenkeeping maintenance and have a good knowledge of modern machinery.
Please apply in writing with CV to:
The Secretary, Ratho Park Golf Club, Ratho, Newbridge, Midlothian EH28 8NX
Tel: 031 333 1752

Hadley Wood Golf Club
require
FIRST ASSISTANT GREENKEEPER
with minimum 5 years experience. He/she will be joining a young enthusiastic team at a prestigious golf club.
Salary £10,500 per annum. No accommodation available.
Please apply in writing with full CV to:
The Secretary/Manager, Hadley Wood, Golf Club, Beech Hill, Barnet, Herts EN4 0JJ

Coombe Hill Golf Club
applications required for a
QUALIFIED ASSISTANT GREENKEEPER
With a minimum of four years on course experience.
BIGGA rate applies.
No accommodation.
Applications with full CV to:
The Course Manager
Coombe Hill Golf Club, Off Coombe Lane West
Kingston, Surrey KT2 7DG

LEE PARK GOLF CLUB
require a
FIRST ASSISTANT GREENKEEPER
With a view to taking over as Head Greenkeeper.
Salary negotiable. House available on the course.
Full CV to:
The Secretary
Lee Park Golf Club Ltd, Childwall Valley Road, Gateacre, Liverpool L27 3YA

• RECRUITMENT continues on Page 45
We welcome two new members to the section, Ian Vertidrained and overseeded. Remaining in the area, North Scotland, of Dornoch, now that Robert Patterson and his major work is under way on the second course - The staff have the famous links back in top condition.

Older members will be saddened to learn of the death of retired member George Cranna, of Kemnay, near Inverurie. Our thoughts are with Mrs Cranna at this time and we wish her well.

South Coast

In pride of place this month is Kerran Daly, head greenkeeper at Salisbury and South Wiltshire GC. Kerran successfully gained the Master Greenkeeper Certificate this summer and is the first member of the section to obtain this prestigious award. Congratulations, Kerran - no doubt other members will be inspired to follow your example.

Your secretary needs a response from section members! First aid training, now a vital part of staff development, can be provided by the section, this training to take place at two to three days of training. Please let me know if you are interested, so that a programme of training can be provided.

Secondly, the provision of courses to BTME at Harrogate in late January and Westurf in April. A coach to both these events could be provided if required. Again, let me know if you are interested in making a trip to these events.

South Coast Meetings - Basingstoke Golf Club

The South Coast section should be proud indeed of the support from our greenkeepers and their guests, for a field of 56 came to Basingstoke GC to participate in the Summer Tournament. Again, this year the event was sponsored by T Parker & Sons (Turf Management Ltd) and Roffey Brothers Ltd., with additional prizes supplied by Avoncrop Amenity Products, Sta-Brite, Rigby Taylor, ICI Pro- fessionals and the Golfing Institute of Great Britain and Ireland. Many thanks to the staff of Basingstoke GC for looking after us so well. Last but not least, thanks must go to Rigby Taylor for sponsoring this tournament each year, as indeed they have for many years.

In August I managed a few days away to compete in the BIGGA National Tournament at Littlestone on the Kent coast. The course was superbly presented by Malcolm Grand and his staff and many felt it was quite possibly the highest quality turf they had the privilege to play on.

The gales of the first two days seemed to pale into insignificance compared to the final day. The course was superbly played by Karl Blundell and it was great to see the young boys of the club, James Buchanan, join the members for a wonderful meal supplied by Val Reddie and prizes were presented by chairman Ken Lodge and representatives of the sponsors, with David Haskell of T Parker & Sons presented the Parker Shield to the winners.

You all probably have read the report of the National Tournament at Littlestone in Greenkeeper International. No words are adequate to describe the quite tremendous weather conditions on the last day. I can quite honestly say that I hope never again to venture out in such weather conditions - if venturing means I must play under such howling gales and torrential rain!

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Results: Parker Shield - John Flavell and Alan O'Neill (Parkstone) 47 points. Runners-up: Bob Den- nis and Henry Janes (Alresford) 46. 3rd: Shaun White and Eddie Robertson (Ferndown) 46. 4th: Ian Rickman and Chris Malby 44, 5th: Phil Wentworth and Brian Long (The Army) 44. 6th: Derek Miller and Steven Stroud (Alton) 44: 7th: Adrian Archer (Broadstone) and Eddie Hadgkiss (East Dorset) 44: 8th: Paul Jackson and Basil Oakley (Ferndown) 40. Longest drive: Barrie Pemberton (The Army).

Section programme for winter lectures -

• 4 November '92 at Alresford GC (7pm) Mr A Betts on Trees and Grants.
• 2 December '92 at Royal Winchester GC (4pm) Section AGM.
• 13 January '93 at Rowney Dean (6pm) Golf Course Europe. Equipment.
• 3 February '93 at Dorset College of Agriculture (2pm) Mr Jim Arthur on Commonsense Greenkeeping.
• 3 March '93 at Alresford GC (7pm) David Harrison on 'The Way Forwards'.

Bob DENNIS

North West

Once again the Pattison Trophy is in its rightful place with the North West section! The reason?

The season is now coming to a close, with skies looking ominous and the days beginning to fall. We shall all be soon Vertidraining and hollow tining and, no doubt, incurring the wrath of our members.

The greenkeepers have seen yet another year of competition - this year we are losing a dedicated staff who make such events possible. Hal- landshire G.C. have been host to the first Sheffield Amateur Scratch Open, with a full field of 72 top players from around the country. The competitors were complimentary about the course and condition - well done Gordon Brannam and his team.

The section welcome new members and look forward to meeting them at the winter lectures held on the first Thursday of each month at Rotherham GC (from Oct-April) at 2pm. Please try to support these lecture meetings, for they offer an opportunity to meet other greenkeepers and trade members in a very relaxed atmosphere.

The Committee are very impressed with the effort our members have made in conforming to the dress rules - especially the younger members who have excelled themselves.

If any Trade member is interested in sponsoring a meal shot to the members - please get in touch with me 0295- 813137.

Our AGM and Turkey Trot will this year be held at the South Coast section AGM - Colchester Centre, Essex. November 11th-12th: IOG Scotsturf Trade Seminar - Cannington College

November 12th: BIGGA Region Seminar - Colchester Centre, Essex

November 12th: BIGGA Region Seminar - Aldwark Manor, York

November 25th: BIGGA Region Seminar - Service Courses (six weeks) - Aldwark Manor, York

November 27th: BIGGA North Scotland Section Conference - Dundee College

COMING UP

October 14th: BIGGA Northern Region Seminar - Askham Bryan College

October 14th-15th: KUBOTA Challenge - The Belfry, Sutton Coldfield, Warwickshire

October 16th: BIGGA Northern Region Seminar, Reaseheath College

October 19th-November 27th: BIGGA Management Courses (six weeks) - Aldwark Manor, York

November 2nd: BIGGA South East Region Seminar - Colchester Centre, Essex

November 3rd: BIGGA South West Region Seminar - Cramlington College

November 11th-12th: IOG Scotsturf Trade Exhibition, Edinburgh, Scotland

November 12th-14th: Golf Course Europe '92 Show - Monte Carlo, France

November 24th-26th: Golf International 2000 - Sandown Park, Esher, Surrey

November 25th: BIGGA Midlands Region Seminar - Warwickshire College

November 27th: BIGGA North Scotland Section Conference - Dundee College

December 7th: ICI Professional Products Premier Greenkeeper Award: Finals - Aldwark Manor, York

David Wood advertising tee mats and Willie McConville astride a motorised fine turf roller? I wonder if they receive royalties for such appearances?

Finally, I have now moved house and would ask that you note my new phone number - 0322 665457.

PAUL COPSEY
BTME
BIGGA Turf Management
Exhibition and Seminar
Programme 1993

20-22 JANUARY 1993, HARROGATE

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Please also send me details of the Seminar Programme
(commences 18 January 1993) ................................(tick) □

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