WATER
ON THE COURSE
Your greens aren’t the only thing that will appreciate the new 2243

Your golfers will love the way it leaves your greens, too. That’s because its new offset design leaves less compaction on the playing surface. Which gives your golfers a better shot at improving their game.

To reduce harmful rutting and compaction, John Deere uses a unique offset design that lets you change the direction of your perimeter cut each day. Giving your greens a well deserved rest. Your golfers a better shot at a birdie.

The 2243 also features a liquid-cooled, 18-hp (13 kW) engine, steerable cutting units, power steering, hydrostatic drive and more.

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NOTHING RUNS LIKE A DEERE
ALL THE DETAILS for further information on the products and services advertised in this issue. Just state the companies’ Ad Ref numbers and leave it to us.

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**GREENKEEPER International**

**C O N T E N T S**

**Water on the course**

Ponds and lakes come under the spotlight as we examine the assets and liabilities of water features on golf courses

**BIGGA’s new man at the top**

Roy Kates, the Association’s new chairman, has his eye on Europe, as he explains to David White...

**Education and inspiration in equal amounts**

Words and pictures from the National Education Conference believed by many delegates to be “the best yet”...

**Looking ahead to Landscape Industries**

It’s “more than just a trade show”, they say...

**DEPARTMENTS**

**Greenkeepers library**

David White examines some of the latest bookshop offerings from publishers who have the greenkeeper in mind...

**Faces and places**

**Around the Green**

**COVER PICTURE:**

A view of one of the 13 lakes being built at the Bank House Golf and Country Club. See Page 27

**Take a closer look at what Greenkeeper International can do to promote your business**

Here’s what one of our advertisers has to say about the industry’s most effective medium:

“Over the past year Greenkeeper International has proved to be a popular publication and a very effective magazine concerning response to advertising we placed in it. We will be more than happy to use it even more extensively during 1992.”

...DAVID BOOTHBY, Toro Sales Manager, Lely (UK) Ltd.

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© 1992 British & International Golf Greenkeepers Association
Woodbridge Golf Club, which celebrates its centenary in 1993, is renowned as one of the best golf clubs in East Anglia with all areas of the golf course having been kept in a top class condition over the decades. This excellent condition is largely due to head greenkeeper Lynn Arbon and his staff. Lynn celebrated 25 years of service with Woodbridge Golf Club and, as our picture shows, was presented with gifts from Ransomes managing director, Eric McCoy, at a recent ceremony.

Lynn Arbon is a well known figure at Woodbridge Golf Club, though he tends to keep a low profile and just gets on with the job he knows best. The state of his course is testimony to his expertise.

Barenbrug UK has appointed new distributors for its Bar range of amenity grass seed mixtures to cater for increasing demand and to provide high quality seed backed by technical expertise and service.

Barenbrug UK is a subsidiary of Barenbrug Holdings in the Netherlands, one of Europe’s largest grass seed companies.

Woodbridge Golf Club, spiritual home of the Ransomes International Greenkeepers Tournament, has been a good training ground for greenkeepers from abroad, and Ransomes have on many occasions had good reason to call on Lynn to meet greenkeepers at Woodbridge whilst they were visiting Ransomes plant from places such as Finland, Belgium and as far away as the United States and Japan.

The Bar range of 15 mixes provides for all professional amenity requirements, with emphasis on golf courses. Barenbrug UK is a subsidiary of Barenbrug Holdings in the Netherlands, one of Europe’s largest grass seed companies.

Rolawn of York report of theft of their newly laid turf during the night. The new turf is obviously just too tempting. The thefts intrigued the national press, who resorted to such headlines as “Haul in one” (Daily Star) after 200 square yards was stolen from new greens at the Dewsbury and District Golf Course.

Gary Rawlinson, head greenkeeper of Heworth Golf Course was interviewed on local radio and TV after 50 square yards were stolen from his newly laid 5th tee. His new remedy was to spray mark the turf with criss-cross white lines hoping to deter would-be turf strippers. “The course is near a main road and houses, so someone must have watched us laying the turf,” he said.

At the Dewsbury course, head greenkeeper, Jeremy Eastwood had just completed renovating the 5th and 6th greens with the new big rolls of turf when night-time thieves struck. They lifted 200 square yards and in the process inflicted thousands of pounds of damage to the rest of the course with their vehicles.

Barenbrug UK has appointed new distributors for its Bar range of amenity grass seed mixtures to cater for increasing demand and to provide high quality seed backed by technical expertise and service.

Avonicrop Amenity Products, Bristol, will cover the South West; Collier Turf Care of Norwich will supply the East; Aitken Sportsturf of York will look after the North; Aitken (Seedsmen) of Glasgow will distribute through Scotland; and Lindsay Professional Sportsturf of Belfast will cover Northern Ireland.

The Bar range of 15 mixes provides for all professional amenity requirements, with emphasis on golf courses. Barenbrug UK is a subsidiary of Barenbrug Holdings in the Netherlands, one of Europe’s largest grass seed companies.
Who and what are moving on and moving in, in the greenkeeping industry

• The six BIGGA winners selected to play in the BARENBURG International Golf Trophy event at Nunspeet in Holland are: Jim Lake, Druids Heath GC, Aldridge. Richard Pride, Thorndon Park GC, Ingrave. Barry Holt, Burford GC, Oxon. Richard Creane, Gosforth Park GC, Newcastle upon Tyne. John Philp, Carnoustie, Angus; and Huw Parry, Bristol & Clifton GC, Bristol. These six players will join fellow European amenity turf specialists in the tournament, plus a Dutch tour which includes a visit to Barenburg's plant breeding centre. Greenkeeper International will publish a photo report and results in June.

• Greenkeeper International sends good luck wishes to Sunningdale greenkeeper Robert Brewer, who is away to Canada on an extended trip which will include an attempt to obtain a private pilots licence. No doubt the time will soon come when we shall see 'the flying greenkeeper' aloft.

• The Institute of Groundsmanship, organisers of the IOG Trade Show, have appointed Gene Price Communications (Tel: 081 866 8254) to handle press and PR for the exhibition. Bookings for stand space and all other matters will continue to be handled by the Exhibition Administrator at the IOG, 19-23 Church St., The Agora, Wolverton, Milton Keynes, Bucks MK12 5LG (Tel: 0908 312311) The official catalogue is published by Adam Publishing Ltd. The event is scheduled for September 8-10th and will again be held at Peterborough.

• Greenkeeper International was saddened to learn of the recent death of Jack Simpson, a past chairman of the BGGA and a member of the executive committee representing the North East. Jack will be remembered with affection as a fine head greenkeeper who served his Club, Ponteland GC, over 50 loyal years. Our deepest sympathies are extended to his widow and family.

• Southwood GC, Farnborough, Hampshire, were the lucky winners of the Kubota G1900S ride-on mower, worth over £6000, at the annual Kubota Draw organised by the Golf Foundation - a registered charity established in 1952 to promote and develop the game of golf among young people. A record number of 116 Clubs throughout the UK qualified for the Kubota Draw by each raising £200 or more for the Golf Foundation's annual appeal, which raised over £71000 in 1991.

• A new consultancy service has been launched by Robert Laycock M.Sc., former technical director of Rolawn (Turf Growers) Ltd., and previously a researcher at the STRI. The consultancy, TurfGrass Science, offers a full agronomic service to established golf Clubs as well as to courses which are new or under construction. At a time when consultants are as prolific as new courses, where does TurfGrass Science fit in the market? The answer lies in the name: "There is a real need for a new independent scientifically based agronomic service for golf Clubs. There has been a very positive response from prospective clients," says Laycock. TurfGrass Science is able to give impartial authoritative advice on all aspects of golf course agronomy. Advisory visits, analyses of soil, sand and plant material are all part of the service, as is the identification of grasses, weeds, pests and diseases. Laycock has worked with close-mown grass since 1974 and is a Chartered Biologist and a Member of the Institute of Horticulture. Tel: 0759 3186860.

• Growing Technologies, formerly Rokolene, has announced the appointment of former sales and marketing manager Rob Marriott to the position of commercial director.

• Chandlers (Farm Equipment) Ltd have been appointed Toro Professional Grass Machinery dealers for Lincolnshire and S. Humberside. Jim Carr has been appointed as Grasscare Manager, Chandlers (Professional Grasscare), the new name under which Chandlers will operate.

• Irrigation and slurry handling company, Wright Rain Ltd., have announced the appointment of a new managing director. Mike Damen will control the operation of Wright Rain's Sports Turf irrigation business, which is available through four regional branches.

• Amazone Ground Care - a division of Amazone Ltd - have appointed Richard Tyas as sales demonstrator for the Eastern region. Richard, who lives near Doncaster, was previously with New Holland dealers Platts Harris, involved with their grass care division.
THE BIGGEST GANG SHOW EVER

Match the biggest Kubota yet with the Ransome hydraulic gang units and you've got the ideal combination for mowing the big, open spaces of fairways and sports grounds.

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DAVID WHITE talks to one of BIGGA's youngest ambassadors, the new national chairman Roy Kates

Career-wise, it is probably true for most of us that one person is the guiding influence in deciding our future. That person may be a parent, teacher or friend - or merely a colleague deciding our future. That person may be a par-ent, teacher or friend - or merely a colleague deciding our future. That person may be a par-ent...
Even if greenkeepers don’t actually spend the money, they should be aware of the varied pieces of golf course furniture that’s available, in order to offer a valued opinion, points out DAVID WHITE.

The average golfer, who will certainly not know his agrostis from his Poa annua, is nevertheless an opinionated soul who will judge a golf course, or at least a newly visited golf clubhouse and surrounding practice putting greens and teeing areas, from the first impressions that meet his eyes as he leaves the car park. Thus a poor impression created early in the day will take twice the effort on the course proper in order that the opinion may once more swing in the greenkeeper’s favour.

Whilst the head greenkeeper may have no direct control over crazier impulse committee purchases, the clever man will keep a watchful eye on new innovations and ideas and thus be able to advise his green chairman on what is or isn’t worthwhile – for in that way he will have a direct influence on intelligent acquisitions.

Certainly the head greenkeeper will be unable to control the number of those increasingly popular widow donated memorial benches that are dotted around the course, but wherever possible he should guide the committee into purchasing only teak made furnishings, particularly those made from sustainable plantation stock. There are several companies in the teak furniture business who endorse this environmentally friendly concept, and many of them support BIGGA through using the pages of Greenkeeper International for their advertising.
Turning again to first impressions, whilst some of today's newer golfers are totally unschooled in the art of tidiness and course manners (and I shudder to think what the inside of their houses must look like), it must never be forgotten that litter is less likely to be indiscriminately scattered if receptacles are seen in proliferation around the course—and there are some really handsome designs around that do not intrude upon course aesthetics.

Again, look at teak, or at some of the clever cast metal designs, which need no more than a quick wire brush down every five years or so, followed by a quick re-spray.

I make no apology for raising the question of ball washers, if only to report on vastly improved materials and to praise those Clubs which have had the good sense to replace old, worn out cleaners with more modern and infinitely more practical styles. In particular, I'm much taken with the nifty Canadian 'Bayco' cleaners with their 'twist to clean' action which Pattisson & Co are marketing and which, I'm reliably informed, are selling like hot cakes. Around the green, I like Tacit's swivelling flagpole and appreciate bright, unfaded flags. I also appreciate a bright white cup at which to aim (including the earth rim) and 'Hole-In-White' seems a clever and utterly simple idea.

If you want people to know what to do, where to go, or what to expect on any given hole—stick up a sign! Quite apart from speeding folks up, these bright and attractive signs actually enhance course appearance, though with so many splendid signs being marketed now it is difficult to highlight just one, or declare a 'best buy'. Signs come in GRP, plastic, natural wood and pressed aluminium and there isn't a maker around who won't design a set of signs especially for your course—they are not necessarily expensive, either.

Finally, crossing a stream or brook can be done in several ways, with the most obvious being the use of railway sleepers—effective no doubt, but not exactly pretty. A touch of real class can be added with the installation of an attractive bridge, and here again the modern manufacturer has made great strides in the past few years. Bridges are rarely stock items and must be properly designed to meet maintenance machinery loading requirements, but the warning here is not to leap at the cheapest quote from the local builder cum timber merchant, rather consider the options available in steel, or the clever Swedish timber designs from Lappset.
Greenkeepers chip in for a bright future

Two Regional Administrators have joined the Silver Key Circle. Both Gordon Child and Norman Exley are now proud to wear their Silver Key Circle ties indicating their contributions to the new Education and Development Fund.

"I am particularly pleased to welcome Gordon and Norman as members of the Silver Key Circle," said BIGGA's Executive Director, Neil Thomas. "The Education and Development Fund represents the ideal opportunity for donations, gifts and bequests to be made which will advance both the status of the greenkeeping profession and standards of golf course management.

"Individual donations to the fund are just as important as those from companies and groups and it is gratifying that our members now wish to contribute to the development of education and training within the profession."

Details of the Fund and benefits of membership to the Silver and Golden Key Circles from BIGGA HQ, telephone 03473 581/2 or by fax on 03473 8864.

Gordon Child and Norman Exley - new members of the Silver Key Circle

Booking deadline set as BTME 1993 shapes up

Companies exhibiting at this year's successful BIGGA Turf Management Exhibition have until June 1 to confirm the same positions for next year.

New companies and existing exhibitors have expressed keen interest in high profile positions and so a June 1 booking deadline has been set in order that last year's exhibitors occupying the prime sites, can still keep them.

Exhibitions Officer Debbie Savage comments: "With a lot of people waiting for these prime sites, it's only fair that we have this deadline. If companies had a good space this year and they want the same next year, it's imperative that they contact us with their booking as soon as possible."

The 1992 BTME was considered throughout the industry as being the best yet. In his welcoming speech, BIGGA President Viscount Whitelaw declared that "Greenkeeping has come of age." The Harrogate event attracted thousands of visitors and was held in conjunction with the popular Education Seminar Programme.

The Association believes that since 1989, BTME has established itself as the premier exhibition within the fine turf industries.

Continued development and growth of the event is constantly monitored by BIGGA and the BTME Steering Committee.

Dates for the 1993 BTME are January 20-22. For more information, or a copy of the comprehensive Information Pack, which details all you need to know about prices and stand space, contact Debbie Savage on 03473 581/2 or by fax on 03473 8864.

The rush to build new golf courses has gathered remarkable pace with 1,890 planning applications now lodged with local authorities in England alone. Of these 735 have so far been given approval. These statistics were revealed recently at the first seminar organised by the British Institute of Golf Course Architects.

Keith Wright, secretary of the EGU, warned about the trend that had "brought the entrepreneur into the marketplace... and encouraged the opportunist non-expert to enter the field of design, construction and support services".

The seminar, entitled 'The Positive Face of Golf Development' examined key issues affecting the golf development industry, including the number of additional courses that really are needed and the amount of detailed geographical and financial analysis required before a course can be established.

Leading experts in specialised areas of golf development offered frank views on the way the sport must progress and also issued their own warnings on the pitfalls.

Jim Arthur enjoys telling the true story of a Japanese visitor to one of Scotland's lesser publicised golfing gems and on purchasing a green fee.

The cost was £50 and the following morning the tourist returned, clutching another £60, declaring the desire to repeat his previous game. "We canna tak yer money agin, sir," came the reter, 'yon sixty poonds was for a wee monthly ticket!"

Some weeks ago, writes Paul Worster, I was spraying Spasor Total Kill to eradicate weeds and grass which were threatening to inflate a gravel fringe of the putting green at Lilley Brook. Reaching half way round the fringe with the knapsack sprayer I noticed three students deliberately putting off the green into the fringe, and then kicking or throwing the ball back on. I approached the ringleader and asked him to stop, pointing out that any spray residue on the ball was likely to damage the green. This request brought a tirade of sarcasm along the lines of "oh dear, what a tragedy", accompanied by much mirth from his mates.

I was then faced with the choice of either completely losing face, or perhaps aiming a blow to the lous' nose - an awkward situation.

However, in a moment of inspiration I held up my rubber-gloved hands and said, "of course, this particular chemical can cause extreme skin reaction resulting in a bright red rash." At this point the lads' manner changed abruptly, "Oh my God," he screamed, dropping both club and ball as though they were suddenly red hot. He was last seen racing for the showers, leaving his mates, who up until then had been merely tittering, on the ground and helpless with laughter.
A Greenkeeper International tribute to supporters of the Greenkeeper Education and Development Fund.

Number 3: STEPHEN FELL, Lindum Seeded Turf

Stephen Fell, the chief executive of HR Fell & Sons Limited, a long established family agricultural business of which Lindum Seeded Turf is the turf production and marketing arm, is a man of many parts, or perhaps to put it more accurately, many careers.

What most would be delighted to have crammed into a lifetime, Stephen seems to have crammed in within just a few short years, and whilst it would be every young man’s dream to travel extensively whilst carving a career, each of Stephen’s sorties to far flung corners of the globe, undergoing many different though essentially agriculturally related tasks, has neatly and successfully dove-tailed into his earning a living, with a clear cut path of progression emerging.

To understand more of Stephen as the turfgrass businessman however, one perhaps must look at the family connection, in particular the paternal influence of his father, Henry Fell, who is chairman of the company and a Fellow of the Royal Agricultural Society. Henry is a Council Member of the Royal Agricultural Society and is well known and highly respected in both British and European agriculture. Add this to the fact that the company is managed personally by members of the Fell family, each playing an important part in the overall success of the business, and it seems to logically follow that Stephen has enjoyed a guiding influence from an early age and that his present task of chief executive can be seen to have followed a very logical path indeed.

Stephen himself is a Member of the Royal Agricultural College, having taken a Diploma in Rural Estate Management in 1975 and is also a Chartered Surveyor, qualifying in 1977. He worked as a surveyor with ADAS in Durham, essentially involved in land use and open cast reclamation and also managed a farm in Limoges in France for four years. He was estates manager at the large country estate in Kent of Robin Leigh-Pemberton, taking control of farming, forestry and property management for nine years and as previously noted, he has travelled extensively both as a Nuffield Scholar in the Antipodes and then as a Nuffield Scholar in the Antipodes and then studied turf technology in Australia, the United States and, of course, throughout Britain.

As one might expect, Stephen is in love with the countryside, though one could never call him a rabid conservationist in the now accepted sense. No, for that would mean he was anti golf courses, anti developments, anti growth and anti diversification - and that is clearly not his line. To appreciate his philosophy, we can do no better than extract segments of his recent address to the BIGGA Education Conference at Cirencester, in which he talked of an awareness of big golfing fortunes has come the general farmer who suddenly thinks that turf must be a profitable enterprise. Armed with only a thin veneer of expertise the new farmer/turf grower has cast his net into muddy water and therein, warns Stephen, lies the problem, with turf grown on a whole range of soils, nearly all of them incompatible with the rootzone mixes on your greens and tees. He further warns that greenkeepers should be vigilant in seeking out only fine turf grown on stone free sands such as are found only around York, in North Lincolnshire between Caister and Market Rasen, and near Woodbridge in Suffolk. Don’t be deluded, he says, for on soils other than those highlighted the growers are on suspect territory and one should not be led astray by their doubtful cut price products.

Turning a moment from the man to his company - Lindum Seeded Turf - it is well known that Lindum are avid supporters of BIGGA and their education cause, and for the past two years they have sponsored our National Education Conference and contributed in many varied ways, all geared toward making the lot of the greenkeeper a better one. They believe that efficient golf course management and country conservation are compatible and are actively involved in negotiations for the setting up of a nationwide wildlife and conservation management programme at an affordable price. Why do Lindum want this? Quite simply because they see the need developing if not being forced upon the industry and feel that the service would fit well within Lindum’s current portfolio of services and products. How would it work? Through a network of 42 advisors (16 in Scotland) who are mostly graduates and all experienced in ecology and conservation management. The service is envisaged as taking the form of a visit from a local advisor, one well acquainted with the type of habitat and indigenous species, and the production of a written appraisal to include highlighting areas of specific interest, outlining recommendations for future management and providing information on possible grant aid that may be available. Follow up visits would be available and on course half day training sessions with several greenkeepers from one area are envisaged.

Lindum may well be in the business of supplying fine turf, as their list of clients bears witness, including such internationally famous courses as Gleneagles, Royal Birkdale and Wentworth, but they are also in the business of preserving the environment, of maintaining excellent course aesthetics. In short, they have their finger on the pulse of nature.

In describing Stephen Fell earlier as a turfgrass businessman, the picture fell short of describing the man totally, for he is a naturalist, a man with a feeling for the beauty of the land, one who is friends with the countryside and one who believes that a well designed golf course should be a celebration of nature. All this in a modern business with a long standing policy to major on quality and to use only the very best STRI approved varieties grown on light sand to ensure fast establishment and bonding on the customers prepared site. The latest technology is available to Lindum and this ensures that these quality standards are consistently maintained and that confidence in their products is never questioned.
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DAVID WHITE, reporting on an ambitious BIGGA National Education Conference, discovers how the learning process can be inspirational – and even fun

Three days of incarceration in a college theatre is not the sort of thing too many greenkeepers would wish upon themselves, but the whisper that became a roar – that BIGGA conferences are somewhat different – was out, and on the occasion of the Lindum Seeded Turf sponsored BIGGA Education Conference staged at the inspired seat of learning, Cirencester Agricultural College, delegates were unanimous in declaring three days as not nearly enough! Time and again one would hear comments that this was the best conference yet, that there was so much to learn, that they wished it might go on longer, and (with not a little touch of pride) that the greenkeepers had the professionals ticked into a cocked hat in terms of both material and presentation! It was magic stuff and did much to bolster self esteem in a profession that is clearly on a rapidly rising curve.

Certainly the ambitious programme covering seventeen presentations from no less than fourteen speakers called for slick adherence to timing, and although on this occasion our able chairman Gordon Child was minus his red light warning, his skill in running a tight ship was again evident – we’ll award him ten out of ten for efficiency!

One way to win instant acclaim is to tell an audience something they want to hear, and Tom Cook began on a high note by stating in his presentation ‘Can we maintain pure bentgrass putting turf in cool temperate climates’ that the answer was a categorical NO! In truth, he covered all angles by maintaining that in parts of the USA he believed the answer was yes, and continued by explaining why bentgrass failed, revealing that in no less than 450 courses in Oregon and Washington (climate similar to Britain) there were no 20 year old courses with pure bentgrass greens, probably fewer than 20 mature courses with more than 50% bentgrass on greens and the average green in this region was probably yielding 80-95% Poa annua. The rogues in this equation were revealed as over zealous use of water and surface disturbance.

It would take the length of a novel to report thoroughly on every aspect of the conference, the reader therefore must be content with this overall picture spanning many hours of presentation, whilst appreciating that some of the papers may form future features within Greenkeeper International. Thus I will mention without comment the presentation given by Dr Neil Baldwin of the STRI on ‘Integrated disease management’, the talk on ‘Project management compared with normal golf course construction contracts’ by Jonathan Gaunt, the insight into ‘Greenkeeping in Norway’ given by Tor Senstadt, and Gordon Jaaback’s presentation on ‘Limitations in rootzone design’, not to dismiss them but rather to concentrate on the first of a trio of head greenkeeper presentations, that of Royal Liverpool’s Derek Green on ‘Dry Patch’.

Derek told in his typical droll humorous style of the 180 hydrophobic acres on the links of Hoylake, with some 50-60% of Dry Patch on any one green which appeared in a mosaic pattern. Some of the worst affected areas at Hoylake, we learned, were in roughs and sand dunes which had never been treated with anything. The theory was suggested that Dry Patch might be caused or exacerbated by sand top dressing applications, necessary with increased play, though Derek was at pains to point out that his links greens were not pure sand, rather a 80-20 mix with dirty sand and crushed shell. Dry Patch at Hoylake was certainly no recent phenomenon either, for old records revealed that the problems were first noted back in 1920. Derek told an amusing tale of the investigative work undertaken by the STRI, when he jokingly suggested that at one time it seemed they were taking so many samples that his fear was that an upcoming tournament might well be played over 15 greens at Hoylake and 3 at Bingley! Thus far, he told us, no positive results have come from these experiments, though of course he remains optimistic.

To round off our first day, Jim Arthur presented a paper on ‘Drainage, before and after construction’, this originally scheduled for delivery by his indisposed old friend, Barry Cooper. Although Jim delivered Barry’s piece word perfect, he could not, of course, resist the temptation to spice the contents with his own invaluable reminiscences and observations – pure vintage Arthur of the finest quality which nicely rounded off the official proceedings, though shop
It was magic stuff and did much to bolster self esteem in a profession on a rising curve

13 • talk continued well into the small hours!

Jon Allbutt is well known to our readers as both author and presenter of no-nonsense information relating to spraying, pesticides, codes of practice, COSHH regulations and the like. Delegates might have been forgiven for thinking beforehand that his subject, 'Using chemicals on the course and complying with the law', was as dry as dust, but the man is a veritable wizard in making presentations not only interesting but fascinating. Thus we enjoyed forty minutes of Jon, whilst learning of the perils that lurk in failing to comply with the law. One wag was heard to whisper, he could make a 'phone book sound interesting, and indeed this was the case, a hard act to follow.

That Stephen Fell, managing director of Lindum Seeded Turf, was able to follow Jon with aplomb is to be applauded, for his paper on 'Course aesthetics, good, bad and indifferent' was delivered with sound professionalism and gave delegates much food for thought - indeed this obviously wasn't Stephen's first time on the podium at Cirencester, for he is a graduate of the Royal Agricultural College, having majored in Estate Management in 1975.

Learning more of 'The development of education programmes for the greenkeeping profession in the USA' was our next major presentation, delivered by William Roberts, president of the GCSAA, and followed by Carol Borthwick asking Where do we go from here?'. Carol is so well known to our chairman, modestly murmuring about her talk, she gave a whole new meaning to the school marm edict 'pay attention!'

Where do we go from here?'. Carol Borthwick asking Where do we go from here?'. Carol is so well known to our chairman, modestly murmuring about her talk, she gave a whole new meaning to the school marm edict 'pay attention!'

We all knew 'where we were going from here', making our way to a luncheon room that buzzed with informed comment and bulged with good food - a splendid break thoroughly deserved by speakers and delegates alike.

Laurence Pithie is so well known and well informed that there was no need to persuade delegates to return to the lecture theatre to listen to our first 'Master Greenkeeper'. Laurence spiced an altogether fascinating talk with his own highly professional slide presentation in talking of 'Golf course development' from his own individualistic viewpoint, enlivened the proceedings with shots of course construction disasters that would make Harry Colt turn in his grave.

Like the good trooper he is, Pat O'Brien of the USGA Green Section finally made Cirencester some 24 hours late, having been stuck on the ferry between Ireland and the mainland overnight, and though his talk on 'Bentgrass management in the southern USA' was covered, his thrust was interspersed with so many anecdotes that he had the gathering in stitches of laughter, a natural comedian who could always get a job as an entertainer should his agronomy career falter! He was later to continue in like vein with his 'Ten best all-time tips of the USGA Green Section' - hugely entertaining and rewarding.

Came the finale, and it was with Bernard Findlay, course manager at Portstewart Golf Club, that the seal of excellence was finally set. I will purposely refrain from exposing his stunning presentation, for this will be a major feature within our pages in the near future, but I can reveal that Bernard has actually built a seaside links course from scratch, has the scars to prove it, the pictures to back up his experiences, and tells many anecdotes that will all want to visit Portstewart to see the course for yourself. Bernard began the day as a greenhorn presenter, modestly mumbling about his lack of experience and finished as the star of our conference, a perfect role model for other greenkeepers - indeed all platform presenters - to follow in the future. That BIGGA can produce such worthy speakers from within the ranks is a great credit to the profession and augurs well for the future of both greenkeeping and the National Education Conference of 1993. Incidentally, should the success of the conference and Bernard spark off the inclination in others to become public speakers (see Page 12 of the April issue), they could do no better than attend a two-day specialist course at HQ Give David Golding a call on 03473 581.
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THE PROCESS OF MANAGING AND MAINTENANCE OF SPORTS GROUNDS, PLAYING FIELDS, LEISURE OR AMENITY FACILITIES will be the focus of the 47th trade exhibition of the IOG.
L

legislation and the requirement for specific label recommendations have reduced the number of herbicides which are available to the greenkeeper. Cost and delays have prevented several manufacturers and distributors from seeking approval for herbicides unless they have a significant and assured market, and while there are a number of materials which are approved for 'grass,' most if not all are primarily approved for agricultural grass – or cereal (which is a grass!). Amenity grass – ie. turf – is regarded as a different 'crop' and use. Nevertheless those manufacturers or suppliers with a significant interest in the turfgrass market have tried to ensure that their most important products are still available – although several are still in the Ministry of Agriculture approvals 'pipeline.' Only Approved Products may be supplied, stored or used: approved by the Government and including a wide range of products which encompass herbicides, adjuvants (wetters), insecticides and fungicides.

The manufacturer or his agent (who may be an importer or licensee) must seek approval for new uses even for materials which are already approved for apparently similar use, whilst approval is also needed if an existing product is re-formulated. The Minister can also make specific requirements over the use of specific products (such as has happened with ioxynil) and these may include how and where they may used and at what maximum application rates. They can also stipulate requirements for protective clothing.

As an example, ioxynil is a valuable herbicide for taking out speedwells but it cannot be used with hand held or knapsack sprayers. It is perhaps not surprising that the products which are currently available are (mostly) those with the longest history of use and the first hormone weedkillers to find general use in agriculture: chemicals such as 2,4-D, mecoprop (CMPP) and MCPA. These pre-date most of the non-selective products such as paraquat. The two notable exceptions to this hormone weedkiller family are ioxynil and ferrous sulphate, used as a moss killer. Several suppliers have suggested to Greenkeeper International that in future they will not be licensing some of their products for amenity turf, thus the range available from any particular supplier – not the overall range of products – is likely to be greatly more restricted.

Maximum weed control comes from optimising the application of the selected herbicide with obvious limitations being imposed by weather, growing conditions, stage of weed growth, and the efficiency of the application. Weather limitations obviously include rain, and the less obvious such as drought and hot weather – which place stress on the grass as well as inhibiting the uptake by the target weeds. Hot weather may also cause vapour drift with 2,4-D ester »» 19

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**GREENKEEPER INTERNATIONAL**

**Selective herbicides – for the control of broadleaf weeds in turf**

<table>
<thead>
<tr>
<th>Active ingredient</th>
<th>Formulation</th>
<th>Suppliers and product name</th>
</tr>
</thead>
<tbody>
<tr>
<td>2,4-D amine</td>
<td>Liquid</td>
<td>Agrichem 2,4-D, Mirfield MSS 2,4-D amine, Vitax Syford</td>
</tr>
<tr>
<td>2,4-D amine + mecoprop</td>
<td>Liquid</td>
<td>Rhone Poulenc CDA Supertox 30, Vitax Sydex</td>
</tr>
<tr>
<td>2,4-D amine + picloram</td>
<td>Liquid</td>
<td>Chipman Atladox HI</td>
</tr>
<tr>
<td>2,4-D ester</td>
<td>Liquid</td>
<td>Rhone Poulenc Dicoret Extra, Mirfield MSS 2,4-D ester, Vitax Forester</td>
</tr>
<tr>
<td>2,4-D ester + mecoprop</td>
<td>CDA</td>
<td>BP Oil/Chipman BP Zennapron, ICI Verdone CDA</td>
</tr>
<tr>
<td>2,4-D + dicamba</td>
<td>Liquid</td>
<td>Vitax New Estermone</td>
</tr>
<tr>
<td>2,4-D + dicamba + ioxynil</td>
<td>Gran Fer</td>
<td>ICI Longlife Plus</td>
</tr>
<tr>
<td>2,4-D + mecoprop</td>
<td>Liquid</td>
<td>ICI Super Verdone</td>
</tr>
<tr>
<td>2,4-D + mecoprop + ferrous sulphate in fertiliser</td>
<td>Sol Powder</td>
<td>BP Oil/Chipman Zennapron</td>
</tr>
<tr>
<td>Chlorthal-dimethyl</td>
<td>Liquid</td>
<td>Vitax Weed 'n' Feed Extra</td>
</tr>
<tr>
<td>Dichlorphen</td>
<td>W/powder</td>
<td>ISK Biotech Dacthal W-75</td>
</tr>
<tr>
<td>Ferrous sulphate in fertiliser</td>
<td>Powder</td>
<td>Rhone Poulenc Super Mosstox</td>
</tr>
<tr>
<td>MCPA</td>
<td>Liquid</td>
<td>Fisons Greenmaster Moskiller, Vitax Green Up Mossfree, Vitax Lawn Sand, Vitax Turf Tonic</td>
</tr>
<tr>
<td>MCPA + mecoprop</td>
<td>Liquid</td>
<td>Vitax Microgran 2</td>
</tr>
<tr>
<td>MCPA + mecoprop + dicamba</td>
<td>Gran</td>
<td>Chipman Tribute, Mirfield MSS Mircurm Plus, Fisons Tritox</td>
</tr>
<tr>
<td>Mecoprop</td>
<td>Liquid</td>
<td>Rhone Poulenc Clovotox, Mirfield MSS CMPP</td>
</tr>
<tr>
<td>Mecoprop + MCPA in gran. fertiliser</td>
<td>Liquid</td>
<td>Fisons Greenmaster Extra</td>
</tr>
</tbody>
</table>

**Suitable for seedling grasses or young turf**

- Isoxaben
- Mecoprop
- ioxynil

**For special situations, control of docks, nettles and bracken and so on**

- Aulax
- Triclopyr

**Suppliers**

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- BP Oil Ltd, BP House, Breakspear Way, Hemel Hempstead, Herts HP2 4UL. Tel: 0442 232323
- ISK Biotech Europe Ltd, 4th Floor, Central Court, 10 Knoll Rise, Orpington, Kent BR6 0JA. Tel: 0899 74011
- Fisons plc, Horticulture Division, Paper Mill Lane, Bromford, Ipswich IP6 8BZ. Tel: 0473 830492
- Hortichem Ltd, 14 Edison Road, Churchfield Industrial Estate, Salisbury, Wilts SP2 7NU. Tel: 0722 330122
- ICI Professional Products, Woolmead House East, Woolmead Walk, Farnham, Surrey GU9 7UB. Tel: 0352 733919
- Mirfield Sales Services Ltd, Grosvenor Works, Louthwaite, Huddersfield, West Yorks HD7 5JE. Tel: 0484 9445451
- Noris-Chipman Ltd, Portland Building, Portland Street, Staple Hill, Bristol BS16 4PS. Tel: 0772 9737374
- Rhone Poulenc Ltd, Regent House, Hubert Road, Brentwood, Essex CM14 4TZ. Tel: 0277 281414
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and this has been known to decimate susceptible plants at a considerable distance downwind.

Probably the most common hormone material for use on amenity turf is 2,4-D, formulated by several companies either as an amine salt or in the ester form. Hormone weedkillers work by interfering with the plant's hormone system, causing abnormal stimulation and distortion before death. A single application applied when the weeds are growing actively in the early part of the season is likely to control weeds such as Plantains, Mouse-ear Hawkweed and Creeping Buttercup (which are very susceptible), though a second application four weeks later may be needed to finish off Daisy, Cat's Ear, Dandelion and Sorelles. Cleavers and trefoils may survive two applications, but obviously if these are a dominant problem you should perhaps look at using another product. Applications can safely be made with a tractor mounted sprayer or by hand-held or knapsack sprayers which allow 'spot weeding' to be carried out. Dicotox Extra, an ester form, is suggested by Rhone Poulenc as being ideal for the economic control of a range of weeds on 'outfield' turf. Apart from relative low cost it has the advantage of being resistant to light rainfall.

More frequently, 2,4-D is sold as one active constituent of a proprietary herbicide - of which mecoprop (also known as CMPP) is the most common partner. It is available both as a conventional liquid for dilution with water and application by motorised, tractor or knapsack sprayer or even by watering can, and as an oil/water concentrate for CDA application. The addition of mecoprop increases the spectrum of control by perhaps 40%. This combination is available from ICI Professional Products for CDA as Verdone CDA and from BP Oils/Chimnapron, both with the ester form of 2,4-D and the limitation of spraying in hot weather. In contrast, Superto 30 in both CDA and conventional dilatable liquid from Rhone Poulenc uses a 2,4-D amine salt and as a consequence is non-volatile so that it may be safely used near ornamental or other susceptible plantings. Dosage rates of these chemcals is reasonably flexible allowing them to be tailored to the susceptibility of the targeted weed. White clover, creeping buttercup, plantains, daisy and dandelion succumb to the Rhone Poulenc recommendation of 84ml in 9 litres (of water) to cover 100m². Doubling the inclusion rate (but not reducing water or area) should provide control of red clovers, lesser trefoil and other weeds. Mecoprop is active against chickweed and it has a significantly greater effect on clovers and trefoils than 2,4-D, having the advantage of being particularly safe for the grasses, to the point that it is recommended - as Clovotex, by Rhone Poulenc for application to young seedling grass or turf. Again there is the flexibility to apply by hand or power sprayer or even a watering can (with a fine rose). As already stated this flexibility does not extend toioxynil, which in a straight active ingredient formulation as Actrillawn 10, is a prime herbicide for new grass and turf, and one which is particularly effective on chickweeds and trefoils. Whilst not a hormone weedkiller, it is a contact herbicide which inhibits photosynthesis and respiration and is exceptionally safe for fine turf grasses including bents and fescues (but excepting crested dog's tail) and it may cause temporary tip scorch on perennial ryegrasses - especially if care is not taken to avoid over spraying. No claims are made for control of mature weeds, thus it is essential these be removed before seeding - perhaps by the use of a non-selective herbicide such as parquat, diquat, or glyphostat which require to be delayed before seeding. However, in general, environment awareness would suggest mechanical control prior to planting.

Particularly effective for 'difficult' weeds such as Speedwells, Parsley-piert, Pearlwort and Woodrush is the mix of Mecoprop with ioxynil which suppliers Vitax were selling as Synox, though currently they are having difficulties with supply. Their recommendation is only for established fine turf. Vitax previously sold their pesticides under the Syn- chemicals mark and some of these products are still around. Another useful hormone herbicide which is found in combination with other active ingredients is dicamba. Vitax combine it with 2,4-D in New Esterorne to give control of weeds such as Black Medick and Toad Rush as well as enhancing the control of species such as Chickweed and Common Mouse Ear. ICI include it with 2,4-D and ioxynil in their conventional liquid herbicide Super Verdone while Chipman in Tribune, Mircam in Mircam Plus and Fisons in Tritox add it to MCPA and mecoprop to give an optimum wide spectrum of control. Vitax's answer for weed control in newly sown grass is Knot Out. Based on Isoxaben this is ideally applied within two days of sowing so that it forms a layer over the soil surface, and as it is a residual it is absorbed by broadleaf weeds as they break through. Weeds controlled include Mayweed, Speedwells, Common Mouse-ear Knotgrass, Common Chickweed and Parsley-piert. Like most residuals it is inactivated by high organic matter or peat in the soil, from usually as a Ferrous sulphate compound, is well known for its ability to control moss and algae, though often it is not even recognised as being a selective herbicide as it is frequently a component of fertilisers. The contact application is perhaps less critical than with any other 'herbicide' as it can be put on by watering or spraying with hand or mechanical sprayers.

Many of these products can be 'tank mixed' with adjuvants - wetting agents, liquid fertilisers, conditioners or fungicides etc., however such mixing must be within the label recommendations. For instance Rhone Poulenc list Mildothane Turf Liquid as being suitable for mixing with Clovotex and Superto 30 where disease control is required in addition to weed control. Vitax suggest their 50/50 liquid feed as an ideal way of boosting the grass to fill in where weeds are killed. Some agronomists recommend the use of wetters to aid absorption of the chemical, but these must have clearance for this use. No one can be unaware about the need to 'read the label' before using any pesticide: all warnings, precautions and statutory recommendations must be included - and the container must at all times be complete with its label.

For anyone who has a personal computer there is the option to buy the Datachem program, a very comprehensive software package which assists the user in selecting the right product (from the Rhone Poulenc range) and to set rate use, including the calibration of the sprayer. The database also assists with the identification of pests and diseases. Past entries are saved for future reference and the program also allows data to be added to the database.
Pesticides course an ‘overwhelming success’
– and some places still available for next one

by DAVID GOLDING, Education Officer

The pilot Pesticides Course held at BIGGA headquarters was an overwhelming success with all five members passing both FEPA PA1 and 2A examinations.

Members travelled to headquarters on Monday, 16 March for two days’ intensive training with the Association’s Health and Safety consultant, Jon Allbutt. On the Wednesday morning all delegates completed the Foundation Module (PA1) and during Thursday and Friday morning the application tests (PA 2A) were negotiated.

It is essential that all course managers/head greenkeepers become certificated for the application of chemicals and BIGGA headquarters is only one option for students to consider for certification. Many colleges have run very successful training courses but testing has at times been a problem. However, this is a cheaper option rather than our in-house course. The benefits of our course is that we train and test within five days at the Manor and the camaraderie which is apparent amongst the mature greenkeepers is a vital ingredient in the preparation for the tests (see letters page).

In programming and projecting our own course it was thought that whilst younger greenkeepers will choose the college route, the more mature greenkeeper would prefer the informal surroundings of BIGGA headquarters.

In conclusion, I would like to thank tutor, Jon Allbutt, Colin Gregory, managing director of Hardi Sprayers and Richard Bishop, sales director of Ransomes, for the loan of equipment used on the course. This is much appreciated as it is well documented that many greenkeepers when facing their FEPA tests have been asked to use equipment, chemical labels etc. which have no resemblance to golf course maintenance. This is an issue which we are confronting with the examination body and it could be that shortly we will be requiring certificated greenkeepers to become examiners! Watch this space.

For those members still not certified, please contact your college for details of the PA1-2A courses or for members who would prefer the BIGGA route, the next week for training and testing is Monday, 5 October-Friday, 9 October inclusive. Cost is £421.27 +VAT = £495.00 including accommodation, meals, training, examination and certification fees. There are only six places available, so ring headquarters now to book your place.

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DAVID WHITE examines some of the latest offerings from publishers who have the greenkeeper in mind.

For those who use pesticides (and who doesn't?), there is the most bewildering range of products available to control pests, weeds and diseases or the regulation of plant growth. The aim of The UK Pesticides Guide is to guide the user in the selection of pesticides, by providing details of all the products marketed and their approved uses, both those recommended on the labels and those which have been officially approved but are not recommended on labels and for which the suppliers will not accept responsibility (off-label approvals). The book is revised annually.

The compilers draw from authoritative sources: approved labels and product manuals, The MAFF/HSE publication Pesticides 1991, and entries in The Pesticides Register, the official monthly publication on approvals (including off-label approvals) up to and including the issue for August 1991.

Coverage, as you might expect, is most thorough, not only in identifying producers but in providing guidance on how to use them safely and effectively, but without giving dose rates, volumes, spray schedules, or approved tank mixes. There are sections on FEPA and COSHH, substances most dangerous (the Red list), use of herbicides in or near water, maximum exposure limits, which diseases or weeds a product will best be suited for, and special precautions that must be taken.

It would be remiss of me not to mention that the bulk of pesticides are primarily used by the agricultural industry, (the book lists them all), but that stated, any greenkeeper will find enough for the book to be a veritable bible of facts and information.

As an interesting aside, and admitting that it is not a book you will ever read from cover to cover, in my investigations I discovered one fungicide, as yet listed as being effective in the control of for golf..." and decided that while in Scotland I would visit 14 famous venues, ostensibly for a 2,000 word article for a golf magazine, identifying Scotland with the birth of golf and giving his opinions on the overall scene as he saw it today. As he was unable to satisfy the former and it took him over 60,000 bright and breezy words to do the subject justice, the magazine never did get its article. Instead came By Yon Bonnie Links! — Sam's fifth full-length narrative hard-back and best summed up with his closing epilogue on page 217: Whether from the Highlands, Lowlands, Netherlands, Midlands, or Papua New Guinea — addicts the world over acknowledge Scotland as the 'Holy Land' of golf. This light-hearted story of a pilgrimage across that 'Holy Land', amongst those who worship at its shrine, should leave little doubt that golf and its history needn't be quite so awesome as some would have us believe!

It's not quite a '1066 and All That' version of golfing history, because although amusing, it is, in every way factual. But thanks to a colourful imagination and love of hyperbole Sam has converted 400 years of 'sacred' lore into a zestful presentation which will please all but the stuffiest of students, and certainly all addicts and non-participants alike.

On reading an early draft, a top golfing historian wrote to the author: "This is good breezy stuff — but whether they'll let you play again at Muirfield is an interesting question!"

The idea of the history of golf — without the boring bits! — certainly delighted me and I believe you'll be equally enamoured by its irreverence.

By Yon Bonnie Links! is published by Aedificamus Press, 113 The Ridgeway, Northaw, Herts EN6 4BG, at £12.95 post free.

The Boon Sprayers Hand-book, edited by the BCPC Chemicals Application Committee, and produced jointly with the Agricultural Training Board is a handbook which sets out to give practical and easy-to-understand guidelines on how to spray agrochemicals safely and effectively when using boom sprayers; and how to calibrate and look after the increasingly sophisticated machinery being used today. It describes the many different types of tractor mounted boom sprayers and includes details of nozzles, spray pumps, control systems, booms and boom suspension, and filters.

Guidelines are provided on methods of calibration, spraying practice and maintenance, as well as on health and safety aspects. It is cleverly illustrated and written without calling on unfathomable scientific jargon and will prove invaluable to those who are receiving instruction in the use of such equipment, as required by FEPF. Published by BCPC Publications, Bear Farm, Binfield, Bracknell, Berks. RG12 5QE, the handbook costs £5.00 post free.

The STRI's role as a publisher of books is well known, and news that a comprehensive guide to golf course management is currently being planned and should be available in the not-too-distant future is likely to interest throughout the world of greenkeeping. In the meantime, their...
Every association of importance needs a disciple and the Association of Golf Club Secretaries were indeed fortunate in having John Crowther as their leader for many years. His recent book is an up-to-date, comprehensive guide to all aspects of golf club management, from draft contracts of employment to damage by driven golf balls.

Far from being dull and heavy reading, all chapters have a crisp, clear style, with many devoted to non-management stories and articles, some with full colour pictures. The author has used considerable 'inside' knowledge in compiling this book, benefiting from his years as national secretary of the Association of Golf Club Secretaries, and his continuing success in running the National Golf Clubs’ Advisory Association. He was himself a secretary of a golf club, and was a 4 handicap golfer for many years. He has always known that there was a need and a demand for such a reference book in the golfing world. One small sector, reproduced here, deserves exposure beyond these pages and should be posted on every Club notice board: “The number of members in a Club may be 250 or 1,250. They all, as individuals, know how to do the job better than the staff and officials. They are experts in administration, accounting, greenkeeping, the law, stock control, housekeeping, car parking, slow play and fast play. They all know how to produce fast true greens, deal with vandalism, make a profit, keep beer in top class condition, know where to buy wine at low prices and are able to cook and serve excellent meals at a third of their present cost. They, however, do not know how to pay their subscriptions on time, deal tactfully with visitors, mend pitchmarks on the greens, rake bunkers or understand the rules of golf or the handicapping scheme. They are, therefore, a special breed who need very careful administration and control. However, it is surprising how many of them are so friendly and pleasant and how good it is to work on their behalf”.

This hard-bound volume is a valuable working document for golf club secretaries, members of committee, and indeed any golfers interested in the management of their Club.


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The members at Holtye Golf Club, on the borders of Kent and Sussex, have sound reasons to be proud of David Wood, their 31 year old head greenkeeper of just three years standing. To even the most casual observer it is clear that the Holtye course is in spanking condition – unarguably better now than it has been for most of its 99 years of existence. They can with every justification boast of David’s achievements, not only for his bringing the appliance of science to this utterly charming course, but in capturing a veritable armful of major awards as the star student of the BIGGA approved Plumpton College, under the expert tutelage of David Blackmur.

Few, however, would have believed that the young junior golfer who joined Holtye in 1974 whilst still attending the nearby Sevenoaks Public School would develop into a major Club asset. No, they knew him then only as a keen youngster who played a mean game whenever studies permitted and who happily worked on the course during weekends at humble green switching, his first greenkeeping exposure. David has always been a keen golfer, playing now to a handicap of 11 and having been in single figures when calls upon his time were not as demanding as they are now.

Leaving Sevenoaks in 1975 with eight ‘O’ levels, David astounded his parents (his father is a schoolmaster) by announcing that he wished to make his way in the world of agriculture, beginning with a two year spell on a mixed arable and dairy farm. This decision was hardly surprising however, for his grandfather had been a farmer – indeed may well have been his guiding influence – and the family home was sandwiched between two lovely farms. The call of open air life had snared David early and he was determined to make headway, spending three years between 1980 and 1983 at Plumpton College whilst taking a National Diploma in General Agriculture. However, this young man was no run-of-the-mill agricultural labourer and in observing the general decline in agriculture he quickly moved into his own business as a garden landscaper and designer, his own boss at 22!

The creative aspect of landscaping was very much to David’s liking and it is conceivable that he may well have progressed and, who knows, perhaps even entered into golf course design, but it was not to be. In his own words, ‘Landscaping was a hugely satisfying business, but like so many one-man-bands I was doing too much for one, working all the hours that God created, but still not quite making enough profit to pay for an assistant’.

The call of golf echoed again and early in 1989 David joined the greenkeeping staff at Holtye, a small team in which his obvious talent soon came to the fore. It may seem hard to believe, but within eight months he was offered the job of head greenkeeper – a meteoric promotion happily accepted.

Holtye is on common land, Par 66, 5,325 yards, nine holes of quite delicious heathland reminiscent of a miniature Ashdown Forest. The traveller comes upon it quite suddenly on the twisting main road between East Grinstead and Tunbridge Wells, its simplistic charm guaranteed to turn every head. It is carved through age old woodlands and is sparsely bunkered, thanks to clever green siting, with cross hazards of close cut heather through wide runnels – a legacy of old pack horse tracks. It is a haven for wildlife (look out for David’s strategically placed bird breeding boxes), and is awash with silver birch, fir and gorse. Only may be forgiven for forgetting that golf is the reason for its existence, for the numerous glimpses of nearby Ashdown Forest and stunning views of the North Downs can easily make one dismiss the less than perfect shot. It is a hugely popular course with 450 active members and its very popularity could have been its downfall.

With popularity comes activity, and the nine holes have
greenkeeper with an impressive academic past – and a sparkling future

been well hammered over the years, compaction being a continually recurring problem. David's programme evolves around relieving compaction and retaining the near 100% fescues and bents often found on heaths lacking any depth of top soil. It is typical heathland, weak and acidic, and David is of the opinion that not having automatic irrigation until very recently was the saviour of such fine turf. A greens irrigation system was installed in 1990, prompted perhaps by previous drought panics, but David uses this in a minimal way, giving the natural firm turf just enough moisture to keep the grass alive - no more, no less. He believes that over enthusiasm with fertilisers in the mid-80s was the cause of the dreaded Poa annua creeping into his greens, though he keeps this from becoming more than a minor irritation by natural minimalistic practices - ageless methods well taught at Plumpton. Even in late March the hand mown greens were looking healthy and putting quite beautifully - a credit to his clever maintenance programme.

Ninety-odd years of marching feet have taken their toll and David was at pains to point out that a programme of slitting, hollow tining and Verti-draining was an immutable necessity. Enthusiastically, he took me to where Colin Pryce was working with his Terralift compressed air subsoil aerator, hammer probing to a depth of up to 3ft and firing a sea-weed based soil conditioner under pressure, into the soil profile. "I had seen the Terralift was complementary to Verti-draining, working wonders in relieving deep seated compaction on our fifth green, which was rebuilt a few years ago with decidedly dodgy materials and had always panned and behaved out of character", he said, "the whole nine greens are undergoing the same treatment now and I am sold on the efficacy of the treatment. The cost is £1,300 and takes about two days, but will be appreciated long after the price is forgotten" - sound recommendation indeed.

David reports directly to the general committee and keeps members informed with detailed but easy to understand course maintenance notes. Understanding is clearly the first step to acceptance, and David's members greet him with enthusiastic support, and David's committee notice that they have been impressed long after the price is forgotten by David's academic record, for in recent times he has achieved the rare and coveted distinction of being the first ever greenkeeper to take the nationally awarded City and Guilds Silver Medal - the Top Student of the Year Award presented by the examining body itself, the City and Guilds of London Institute Examination Board. Last year he won the BIGGA Cup and Tankard for Best All Round Student (Phase II) in Greenkeeping and Sportsturf Management at Plumpton and he is currently engaged in Phase III, a busy man in every way.

Where does a high-flyer like David set his sights? Despite his unbelievable modesty I fancy that Europe may well beckon before too long, for those Europeans have a penchant for British technical competence and seem ever willing to offer both challenges and generous pay structures. Looking at his bulging library of well-thumbed fine turf manuals and stealing a glimpse at his recent examination work - whilst never forgetting his practical expertise - one thing is certain: we shall be hearing much more of David Wood, both on the course and in the continually active world of greenkeeper education.

"Few would have believed that the young junior golfer who joined Holtye in 1974 whilst still attending the nearby school would develop into a major Club asset!"

Apart from day-to-day routine, David has the touch of an ecologist in restoring still more of the delicious heather. He is also carrying out a continuous programme of rebuilding pocket sized tees into areas which will more adequately cope with constant tee box changes and all tees will be sizably increased in time for Holtye's centenary year. His new construction is detailed (as one would expect from a landscaping expert), utilising sound practices and turved with Tiller turf, grown and lifted from a complementary growing medium. Whilst the tee building takes place, David is also installing strategic tee pop-ups himself, which makes him something of an irrigation engineer to boot. Nothing is left to chance and those tees already completed are looking wonderful. One hesitates to use the language of the real estate salesman, but they are of true championship quality and size, greatly improving playability.

David's BIGGA connection began three years ago, being a perfect mixture of active golf participation (he won the prestigious Ransomes Trophy at Ganton, represented BIGGA in the Kubota Challenge in 1990 and played for England in the Ransomes International Challenge at Fulford in 1991), along with dedicated work for the Kent section as their treasurer and secretary, taking the latter mantle from John Miller - a tough act to follow. His earlier committee work at college has stood him in good stead and he is now on the regional board, being the spokesman for Kent. Long term aspirations lean toward serving at national level, which he hopes might come "when I've enough experience". It would be remiss to gloss over David's academic record, for in recent times he has achieved the rare and coveted distinction of being the first ever greenkeeper to take the nationally awarded City and Guilds Silver Medal – the Top Student of the Year Award presented by the examining body itself, the City and Guilds of London Institute Examination Board. Last year he won the BIGGA Cup and Tankard for Best All Round Student (Phase II) in Greenkeeping and Sportsturf Management at Plumpton and he is currently engaged in Phase III, a busy man in every way.

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<table>
<thead>
<tr>
<th>Major machinery and equipment in the Holtye stable</th>
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<td>2 John Deere 855 compact tractors.</td>
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<td>2 John Deere 22&quot; pedestrian greens mowers.</td>
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<td>1 Sabo-Roberine C900 3D mower.</td>
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<td>1 Coremaster hollow-tiner.</td>
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<td>1 Charterhouse multi-purpose spiking frame with deep and fine slitting drums.</td>
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<td>1 Wessex rotovator</td>
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<td>1 Hardi sprayer</td>
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<td>1 72&quot; rotary deck for compact tractor.</td>
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<td>(aged) Ransomes Hahn 171.</td>
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<td>2 Ransomes Auto-Certes. plus Sports Ground</td>
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<td>Irrigation automatic pop-up system.</td>
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Greenmaster Organic – a new initiative for the greens.

FISONS
When Jim Parker, owner of the new Bank House Golf and Country Club, just outside Worcester, was contemplating the design of the golf course, his step-father who lives part of the time in Florida told him "Plenty of lakes, Jim, that's the answer!"

The first phase of eleven holes and a spectacular necklace of seven lakes set in 120 acres of countryside, which is being manicured and moulded into an attractive par 72 course together with a driving range is now being completed. The second phase of the remaining seven holes and six lakes, which includes building a tunnel under a secondary road, will be undertaken during 1992.

A spokesman for Laser Civil Engineering said: "We were certainly intrigued at the prospect of including so many lakes. Such high water storage is, of course, very commendable these days and this does not reduce the level of water in the lakes because there is so much water being induced by the circulating pump from lake number seven to lake number one".

Only a small pond fed by surface water existed at the start when Ocmis Irrigation came on the scene in March 1991, about four months after work on construction had begun. They devised a system of water management involving the re-circulation of water from the bottom lake (number 7) to lake number 1 by weirs and sluices to lake number 2 where the water is abstracted for use on greens and tees. Water falls from number 1 to number 8 lake by gravity and is pumped back through a sunken pipe line. There are manual hydrants for approaches and fairways. The course will not flood because the same pipes which feed by gravity would also take water off the site. The lake at the second hole holds seven million gallons and there is a waterfall between lakes 2 and 3.

Head greenkeeper David Kelly, who has had American experience and was previously at Bearstead, Maidstone, expresses his delight: "The Pencross creeping bent now on the putting surfaces requires plenty of water", he says,
Above: Jim Parker, left owner of the new Bank House Golf and Country Club, with course designer Bob Sandow. Previous page: young trees in place in a lake setting.

27 and has as his first assistant, Robert Bishop, a very keen BIGGA member, who came from Evesham. Arthur Young, who assists full time, has considerable local connections which have helped in the development plans.

Some of the hedgerows have had to go but trees have been saved and more will be planted. The Malvern Hills provide a fine backdrop and the spire of Worcester Cathedral and the tower of Bromsford Chapel pierce the skyline. Swans move, oblivious to the world of golf, on lakes two feet deep containing trout and carp, with lilies setting the scene. It is not only aesthetically pleasing, there is a strategic challenge too.

Playing the tenth (Par 4, 310m) you drive between lakes 2 and 3 landing on a wide fairway, with lake number 2 comfortably to the right. Two of the lakes are in play. The ninth is a splendid dog-leg with a carry across the water of 150 yards. You cross lake 4 (lakes 4 and 5 both have an island which come into play) - it being a very reasonable width even for the high handicap - or you can lay-up after about 50m. You then play alongside lake 5, which is on your left.

Course architect, Bob Sandow, says, “I was not really taken back when I was asked to incorporate as many as thirteen lakes into my design. In fact, it is something I am getting used to, though admittedly not always so many, for all over the world there is growing emphasis on lakes for golf courses. No more so, of course, than in the USA, where they are very popular. One of the most famous examples is at Augusta National; and in South Carolina for the most recent Ryder Cup millions of TV viewers saw the spectacular lake orientated course at Kiawah Island. Here at home we also have the example of The Belfry, where lakes figure at the 10th, 17th and the impressive 18th.”

He goes on to say “When a course is built on a comparatively small area like Bank House – 120 acres for a par 72 and Driving Range – one has to apply a safety zone and there are lakes and trees are ideal. “It is a very well installed system and when one considers the urgent need for water storage, there is further good sense in using lakes in the design of the course”.

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DAVID HEMSTOCK considers the merits, or otherwise, of water features on golf courses and looks at planning, design, construction and maintenance.

As with many other aspects of the golf course, the pros and cons of water features are an emotive subject, more often than not producing an emphatic for or against, with rarely a display of indifference.

We all seem to have an almost instinctive affinity for water: ponds, lakes, streams are an attraction in being mysterious, changeable and always drawing attention. Any Club with water on its course (formal rather than casual) should view it as a valuable asset. Those without would do well to consider the value of establishing a water feature to add interest and variability to play, to improve the views, to encourage wildlife diversity, to serve a purpose, say irrigation, drainage or even fire fighting to name but a few – or indeed all of these.

Historically, water features are important. Our island once had many more areas of exposed water than it does now, particularly in England, but innumerable ponds have been in-filled, with streams, running ditches and springs piped for convenience. There is an element of maintenance involved with any open water, arguably less than that of an equivalent turf area perhaps, but still representing a commitment which if not carried out may result in an eyesore rather than an asset.

Time casts the cloud of doom over many such areas, slowly and often unnoticeably, as siltation, shading by trees that have increased in size and changing water inputs have their effects. A greenkeeper needs to have another string in his bow – that of water area management – if he is to keep the whole of the course in thriving condition.

The arguments against? Well, as a number of greenkeepers have put it to me in the past, they have enough on their plate without the regular donning of waders to cope with black sludge, blocked outlets, midges and water weeds. Fair comment, but many such problems can be avoided with good planning at the construction stage. One bad experience with an ill-conceived water feature should not condemn water features forever and if you are unfortunate enough to have a very demanding area of open water, perhaps there is a way of reducing the maintenance requirement, for instance, in a pond which requires regular cleaning, one that may be suffering from leaf-fall and a build up of organic matter which cannot break down quickly enough, because conditions are not right for biological decomposition eg. trees are blocking out light and aeration is not sufficient.

These problems suggest that presenting a good water circulation is essential to provide oxygen for healthy water. If flows have reduced for some reason (many spring supplies are not what they used to be due to the recent low rainfalls), then perhaps rainwater harvesting can help supplement water inputs. By this I mean directing more surface run-off or drain flow by actively diverting these flows in...
‘What to do with that strip of mud when water levels drop…’

holding up play. A definite edge and deep water leaves no one in any doubts what to do.

Concerning banks, a particular problem is what to do about that unsightly strip of mud which appears as water levels drop, either through evaporation losses or drawdown by irrigation. A large surface area will give less drawdown for a given amount of water abstraction than a small area, but evaporation losses will be greater. Typical evaporation losses can amount to 0.3 metres over the summer and when coupled with irrigation use can make a pond look fairly bad by the end of summer.

The National Rivers Authority, when considering an application for abstraction of water for irrigation, may stipulate that the summer base flow from the supplying source must be maintained, meaning that all water must be collected in winter with potentially very little reliable summer replenishment. This has implications on cost of construction with expensive regulatory structures being required, but also heightens the drawdown problem. Edging the water with crushed stone (rip-rap), slabs, blocks and textiles etc., is effective as a disguise but is again expensive, given the generally large area and circumference involved.

Why not place a ‘tank’ or steep-sided reservoir, purely for the purposes of irrigation, away in a corner where unsightliness does not bother anyone? The design will have to be carefully executed, but this now applies to most water areas. The NRA should consult on all work to main watercourses, including drain outfalls, foot-bridges etc. and you may also require an impounding licence for a proposed pond or lake. Planning permission will also be required, thus levels will have to be calculated, along with drawing of the pond, cross-sections, inflow/outflow etc. and an assessment of cost produced, including the method of sealing. Of course, the obvious but occasionally un-addressed question of where the initial filling water will come from also be decided. It is easy to be too optimistic on the latter point, particularly with the low winter rainfalls we seem to be experiencing. Drains which flow reliably may mysteriously stop for all sorts of reasons, indeed this is happening at present. Thus reducing losses through seepage by adequate sealing is important. The cheapest method of sealing off on the right soil type is to compact and puddle clay. Done traditionally by scooping out soil, throwing a bale of hay into the middle and allowing cattle to do the poaching or puddling for you, heavy machinery is the preferred method now. Weight, high ground pressure, smearing and good, fairly high moisture content of the correct type of soils are essential to form a good seal. Subsequent to this the clay seal must always be covered by at least 0.3m of water or protected by a layer of soil, gravel etc., where it is periodically exposed to the air. Otherwise it will shrink and crack and the seal is lost. This is a lesson which has been well learnt, often from constructors who did not pay enough attention to sealing work.

On sandier or more free draining sites, the rule that ‘you get what you pay for’ applies

On sandier or more free draining sites, the rule that you get what you pay for applies. Polyethylene or PVC is commonly used as a waterproof lining, but needs protection from sunlight or it will harden and be easily damaged. A life-span of 10 years or more is possible if the correct gradients, jointings and laying methods are used. Heavy duty grades cost up to £10/m². Butyl rubber is tougher and potentially has a longer life costing over £5-6/m² for 80% Butyl + 20% EPDM. It does not require a soil cover, but can look ugly without. Other proprietary membranes are available, eg. reinforced and coated polyethylene or polyester reinforced bitumen, etc with costs which can be as low as £29

Pond under construction: clay seals are not necessarily easy to form. Vertical faces require special treatment.
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‘A natural appearance is really the main aim: a blending in with surroundings through careful construction, without civil engineering straight and angles...’

plenty of opportunities for unique wet area habitat species to develop. Indenting the shore-line and varying the depth on margins and planting will increase the rate of development and maturity of a new pond or lake. It is a good idea to deposit some of the original topsoil (or better still silts) from an old pond or marshy peat into the water feature to act as a pump-primer for this development process. Marginal plants can be planted directly into mud (marsh marigold, bur-reed, watermatt), emergent plants in 150mm deep water (reedmace, common reed, water plantain). Aquatics (floating, such as water lily, or submerged, such as water milfoil) are best planted with weighed Hessian sacking to anchor them at the right point. Temporary protection from wave action can be provided by anchored floating logs or a similar ‘boom’ type of arrangement aimed at breaking up waves. Insects and other wildlife appears very quickly in new ponds, thanks primarily to water pond, and with a bit of luck other more interesting fauna such as frogs and newts will appear, or in the case of a renovated pond, re-appear.

From then on it is a case of monitoring over the years and watching for tell tale signs of developing problems... dredging, controlling pollution and as a last resort, chemical control (following consultation with the NRA).

The result? A healthy stretch of water which will hopefully benefit the course in a variety of ways...

• The author, David Hemstock, is an independent consultant on golf course improvement.

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Miltown Golf Club (Dublin)
Muirfield (Gullane) Golf Club
Omonde Fields Golf Club
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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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Letters to the editor are always welcome. They should be signed and carry the writer's address and telephone number. The editor reserves the right to edit letters for length, clarity, libel and good taste. Please send letters to: The Editor, Greenkeeper International, 13 Firle Close, Seaford, East Sussex BN25 2HL.

Green issues contained New course was 'great' Saw point...

We write concerning a green issue which has come to our attention over the last few years, that of the use of plastic containers for the storage of organic based foliar feeds. As an eighteen hole golf course, we use 90 or more of these 25 litre drums each year, which we think could be refilled and used again by the manufacturers. It is an environmentally sound practice to have to burn or dump the containers after use when they are perfectly capable of being used again.

We feel the sports turf industry should be setting standards for other industries to follow, for even our local council recycles plastic, glass, paper, etc. – and in this day and age every effort is from counts. We would welcome any comments from manufacturers, such as Farmura, or any greenkeepers that have views as strong as our own on the subject of the environment.

Concerned Greenkeepers
West Sussex GC, Pulborough
* Greenkeeper International asked Farmura for their comments, which are published below:

As a company manufacturing environmental products we share the concerns expressed by West Sussex – clearly a different attitude towards packaging has to come.

For a number of years we have from time-to-time refilled customer’s drums and we would be pleased to publicise and extend this service to other Clubs. I would stress at this stage that this is a refill service and not an exchange – a trace of the wrong contaminant could do serious damage.

Apart from the 25 litre containers a cost effective option is the 210 litre drum which, apart from being refilled, can be sold as a water butt – have you seen what they cost in garden centres! These can be mini-bulk tanks is another option we would be pleased to hear from anyone who is interested in discussing the above in more detail.

Jonathan Harmer
Managing Director, Farmura Environmental Products, Ashford, Kent

I was privileged to be part of a team of five who were the guinea pigs on the first one week pesticide spraying course at Aldwark Manor. As one of those guinea pigs I would just like to say ‘well done BIGGA’ – you have come up with an answer that there was not the course excellent but the results at the end of it were equally so, for we all came away having obtained our PA1 and PA2A certificates.

I would just like to say a special thank you to Jon Allbutt, our lecturer for the week, who made it so interesting and enjoyable. I would also like to thank all the lads on the course; because the high morale and the team work certainly gave me the confidence to obtain my certificates. I would certainly advise any greenkeeper who is un-certificated (and I’ll bet there’s a few out there) to go on this course. What a week, well done BIGGA.

Don J Wilson
Dyham Park GC, Barnet, Herts

I wish to congratulate all those involved in the Royal Burgess GC took delivery of two Ransome ‘GT’ Classics last year and have been very pleased with their performance over ten months of cutting. We did, however, have a problem with the grooved rollers, which would collect grass from a dew soaked surface and therefore affect height of cut. After much debate and several attempts at scrapers, the suppliers (not Ransomes) fitted scrapers that have so far proved to be the answer, keeping the grooves free from debris.

We would be interested to know if other ‘GT’ users have experienced the same problem, and if so, what was their remedy?

Staff of Royal Burgess GC

* Greenkeeper International asked Brian Mitchell, General Manager – Engineering, Ransomes, to comment: “Ransomes do have plans to develop a suitable scraper for grooved reels but these are not available at present. We are, however, aware of the needs for these in certain cutting conditions.”

As we begin another season, how many greenkeepers, I wonder, have been using chainsaws throughout the winter without supervision and correct safety equipment? I am a head greenkeeper in Leicestershire and have just completed a two-day chainsaw course given by the Agricultural Training Board at Rothley Park, providing the student with valuable experience in both safety and correct usage.

It is very important to know your saw – inside and out – and our first task was to strip down the saw and get to know each part before putting it back – without any parts left over! The next session consisted of sharpening and the safety aspects of the guide bar, ie. maintenance properly carried out, which can save time and money.

Our second day consisted of on-site work, but before we could begin to saw, our safety equipment was inspected. I have to admit mine was pitiful: a pair of steel capped boots, a safety helmet and the all-important first aid kit. To continue the course I needed the correct equipment and this was hired from the examiner for a small charge.

On-site, the work consisted of felling trees some 20-25 feet high and 5-10 feet apart. This is where skill, expertise and experience comes into its own. Most important of all, however, was ensuring the safety of ourselves and others. The course was valuable experience and we all passed the examination successfully.

And if the law changes concerning chainsaws and equipment, the careless user and his Club may face fines of up to £2,000. Can they afford this?

Gavin Rossen
Lingdale GC, Woodhouse Eve, Leicestershire

I wish to congratulate all those involved in the National Education Conference at Cirencester: not only to the speakers, but...
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35 - also to the staff at the college who looked after us so well, and to the BIGGA team who once again presented a very professional image, with the whole event running so smoothly.

The event lived up to my every expectation and how refreshing it was to hear of Bernard Findley's experiences and what he has learned from them. To me this was without doubt the most interesting forty minutes of the whole weekend. Before this we had Mr Jim Arthur preaching to us about the common sense attitude to greenkeeping, which parts of the industry would have us believe to be highly scientific. He also warned us of the realistic threat of certain elements of the game taking our jobs. If ever there was a rallying call for the profession to push ahead through education, this was certainly it.

Yes, I left Cirencester refreshed and enthused, confident in the fact that the profession is moving in the right direction and proud to be a member of the Association. Long may the Association give us the opportunity of attending such informative and value for money events.

Many thanks.

Paul Seago
Head Greenkeeper, Royal West Norfolk GC

I must put pen to paper to write and congratulate everyone involved for a most enjoyable and successful three days at the National Education Conference at Cirencester. One can only imagine all the hard work that was put in by everyone at headquarters.

The standard of speakers was excellent - both from home and abroad - with three people who I feel must be mentioned by name and beginning with Bernard Finlay for his excellent paper on his experiences at Portstewart GC - it was good to see one of our own up there - well done Bernard! Secondly, Mr Patrick O'Brien, Director, SE Region, Green Section USGA, - what can I say? Only that I will remember (and giggle over) his presentation for many years to come. Finally, Mr Jim Arthur, who I do not agree with on many things but at least one knows which direction Jim is coming: head-on with both guns blazing (and usually in my direction!).

Robert Gilbert
Head Greenkeeper, The Wisley GC, Surrey

An article in the April issue of Greenkeeper International by Hugh Tilley, entitled 'Fertilisers', appeared with the following statement:

'Manganese, zinc, copper and iodine are all important at trace levels, and these and many other compounds, vitamins and amino acids are found in seaweed. Thus the inclusion of seaweed meal or extraction in fertilisers and foliar feeds is a useful addition.'

This statement is incorrect. Iodine is not an essential trace element for plants, nor are vitamins used by plants in any shape or form.

I would also like to state that the STRI does not recommend the addition of calcium and boron in fertilisers for turfgrasses, as there is no scientific evidence for the addition of these elements creating any benefit to turfgrass generally.

Dr Peter Hayes
Director, Sports Turf Research Institute, Bingley

Greenkeeper International invited journalist Hugh Tilley to comment. This is his reply:

My information was obtained from several major manufacturers, backed by my own years as a professional grower of (agricultural) grasses. Theirs is the statement that iodine and vitamins (et alia) are essential for healthy plant growth.

The feature did not suggest that the STRI recommended calcium or boron, simply that there was an 'indication' (from a member of their own staff) that there could be a benefit, even a need, for these on sand based constructions and on areas of acidic sand.
In the turfgrass context, a growth retardant is a chemical which in some way reduces or slows down normal grass growth, thus reducing the need for mowing to maintain a neat and tidy turfgrass area which is visually acceptable to golfers. When first marketed for amenity use, growth retardants were heralded as a panacea for the landscape manager, and even as a cure-all for the time-consuming and expensive process of grass cutting.

However, despite certain advantages which may be gained from growth retardants, currently only a small proportion of amenity grassland is being managed chemically by growth retardants. In this article, Neil Baldwin, of the Sports Turf Research Institute, explains the mode of action of growth retardants, describes the situations in which their use is appropriate and explains how to use them to their maximum effect.

The way in which growth retardants work, i.e., how they influence plant growth, depends very much on the active ingredient they contain. One or more of the growth retardants currently available, are based on three active ingredients, namely maleic hydrazide, mefluidide and paclobutrazol. Maleic hydrazide works through foliar absorption, inhibiting plant cell division, thus producing a slower growing grass plant. Mefluidide, although distinct chemically from maleic hydrazide, also works via foliar absorption, and by slowing down leaf growth, but in addition it inhibits seed-head production of the grass sward. Paclobutrazol is effective in a completely different way, being root absorbed and it inhibits grass growth by preventing the production of the plant growth hormone gibberelic acid.

The effectiveness of growth retardants depends very much on the situations in which they are used. The growth retardation achieved by these chemicals may, in ideal situations, be considerable. In field trials, conducted by the Sports Turf Research Institute in the early 1980s, maleic hydrazide, mefluidide and paclobutrazol reduced grass growth by up to 25%, 60% and 45% respectively, dependent on the grass species present. The duration of grass growth suppression also varies according to the chemical applied. Both maleic hydrazide and mefluidide are considered relatively quick acting with up to 12 weeks and eight weeks suppression of grass growth achievable respectively. Generally, little or no effect of paclobutrazol is observed 10-15 days after application, but growth inhibition has been recorded up to 14 weeks thereafter and occasionally treatment effect is carried over to the following season. However, each growth retardant has differing effects according to the botanical composition of the sward. Maleic hydrazide tends to inhibit coarser grasses, leaving the finer species, in particular fescues, to thrive. Mefluidide has long lasting effects on annual meadowgrass, bents, perennial ryegrass and crested dog's tail and in the shorter-term, will suppress the growth of fescue, Timothy and smooth-stalked meadow-grass. Paclobutrazol tends to have lesser effect on deep rooted, coarser grass species. Thus, it is necessary to have an appreciation of the grasses present on the part of the golf course to be treated to achieve maximum results.

On the golf course, each area may be considered separately for its potential for controlling grass growth by application of a growth retardant. For large areas of grassland, such as golf fairways, gang mowing is often the easiest and most cost-effective way of restricting sward height. However, growth retardants have proved their worth in certain situations such as where the grass area in question contains many obstacles, for example, such as around tree bases. Small, isolated areas, for example along fencelines, where mowing may be expensive and/or inconvenient are also suitable cases for growth retardant treatment. On low maintenance areas, such as embankments, growth retardants may be appropriate, as they are also for situations on the golf course, where mowing would be difficult or dangerous in practice. Also, growth retardants have a specialist use on erosion control areas where it is important to maintain a dense, uniform growth of deep rooted grass to resist soil erosion. Indeed, it is in these types of situations where growth retardants may be extremely cost effective. In comparative studies, reducing grass growth by spraying has been shown to be a quarter of the cost of maintenance using a rotary mower and one-fifth the cost of Flymo operation.

NEIL BALDWIN of the Sports Turf Research Institute examines turfgrass growth retardants for the golf course.

**Advantages**

- Significant cost savings over conventional mowers for specific situations.
- Highly suited to difficult/dangerous areas to mow.
- Drought resistance of sward may be improved.
- Season long control may be achieved from 2-3 applications.
- Minimises yield of unwanted clippings produced by mowing. May be integrated with mowing to produce the desired effect.

**Disadvantages**

- Trained and qualified operators needed for application.
- Unsuitable for high quality, fine turf or large open areas.
- Do not give the high quality visual appearance of mowing.
- No single growth retardant available to suit all situations.
- Lack of use experience by many amenity managers.
- Being classified as pesticides there may be opposition to use of chemical sprays.

**Examples**

- Treated
- Untreated
Users of growth retardants will notice they are sometimes formulated together with herbicides and are also recommended both alone and in mixtures. This is because in situations where growth retardants are being considered, there is usually a range of grass species present, together with non-grass species, such as broad-leaf weeds. Whilst mowing trims all vegetation present instantly to the required height, growth retardants have varying effects, according to the botanical composition of the sward. Paclobutrazol is available only as a mixture with the herbicide dicamba (proprietary name Holdfast D) to inhibit both grass and broad-leaf weeds. To achieve similar aims maleic hydrazide is available as a mixture with the herbicides dicamba and MCPA (Mazide Selective), although there are several maleic hydrazide only products such as Mazide 25, Regulox K and Royal Slo-Gro, to name but three examples. Currently mefluidide (Echo, Embark and Mowchem) is not formulated together with a herbicide as this chemical does give some suppression of broad-leaf weed species, although in situations where broad-leaf weeds are a problem, they may be controlled by tank mixing with Approved herbicide formulations. Certain growth retardants may also be tank mixed, paclobutrazol plus mefluidide or paclobutrazol plus maleic hydrazide are recommended where coarse grasses, such as couch, are dominant or in situations where suppression of grass seed heads is important.

To get the best results from growth retardants it is critical to follow the manufacturers recommendations for use carefully to achieve acceptable results. With maleic hydrazide the application rate is critical as a small over application may lead to severe scorching, whilst if under applied effectiveness is markedly reduced. Consequently, when combined with climatic effects such as rain after application, growth retardation by maleic hydrazide may be unpredictable. In contrast, mefluidide is overall very reliable, providing it is used correctly. Mefluidide should be applied when the grass is dry, ideally eight hours elapsing before rainfall. Best results are obtained when mefluidide is applied in April-May when grass growth is strong. Mefluidide tends to make the sward greener and more lush in appearance, although some discoloration may occur if applied in very dry conditions. Paclobutrazol has its greatest effect when applied in the autumn (October-November) prior to onset of grass growth, or in August-September to reduce the autumn flush of growth. Paclobutrazol is relatively inactive in dry conditions, but acts reliably when soil moisture is high. Generally, paclobutrazol is leached slowly although heavy rain after application may negate effects.

There have been several recent developments in growth retardant technology. A review of USA journals and periodicals has shown that the three growth retardants available in this country are also the mainstay of those available and used on turfgrass world-wide. However, there have been recent developments, particularly in the use of growth retardant, for the selective inhibition of annual meadow grass in fine turf, although it will be some time before this is available to the UK greenkeeper. Also, research is in progress evaluating ways of minimising the scorch problems associated with growth retardant applications.

Landscape Industries '92 is the right event attracting the right audience and, in light of the buying changes being experienced by the industry, it is at the right time of year.

Landscape Industries is the only event devoted to all aspects of the landscape and leisure industries and it has established itself as the major exhibition for the industry with over 250 exhibitors and 8000 visitors in 1991.

All the leading companies will present the latest technology, equipment and services to provide you with the most comprehensive range of exhibits.

A unique feature of Landscape Industries is its ability to present a truly working event. An extensive range of working demonstrations will cover equipment for landscaping, maintenance, amenity, forestry and construction. This gives you the ideal opportunity to assess the equipment and allow the products to speak for themselves. Landscape Industries '92 is right for the industry.

Landscape Industries is more than just a trade fair, for the country's finest research, educational, advisory and training organisations will be at Landscape Industries '92, together with many exhibits featuring the practical application of specialist landscaping skills.

A series of half hour, informative discussion sessions will be held each day:

- 10.30am - TRAINING NEEDS ANALYSIS COMPUTER MANAGEMENT SYSTEM
  John Topping, Deputy Chief Executive BALI, John Pearson, Otley College.
- 11.30am - TRAINING & CERTIFICATION IMPLICATIONS OF THE HSE GUIDANCE NOTE ON CHAINSAW USE
  Terry Howard, Agricultural Training Board.
- 1.30pm - CONTRACT MONITORING, MAKING CONTRACTS WORK
  Patrick Kilburn, Client Manager (Grounds Maintenance) ILAM.

TECHNICAL INFORMATION POINT
Expanding on the successful demonstration area in 1991, an information point in the heart of the exhibition will provide independent advice and information from key specialists: John Shildrick, NTC; Mike Canaway, STRI; Suky Pryce, University of Manchester and Peter Dury, Nottingham County Council on a range of topics including:

- turf re-inforcement materials
- turf for general purposes BS 3969
- grounds maintenance
- peat alternatives
- BS 7370
- organic waste recycling

TREE SURGERY
The Arboricultural Association will be demonstrating a variety of tree surgery and tree climbing techniques and the Agricultural Training Board will hold a chainsaw maintenance and operation training session alongside.

INTERPAVE
Interpave, the Concrete Block Paving Association will be staging working demonstrations of the correct procedures for installation of concrete block paving. This will be carried out by members of Interlay, the Association of Block Paving Contractors.

BALI / ATB TRAINING IN ACTION
The first stage of a 5 year development plan will be started at the 1992 event. Trainees from industry and colleges will undertake a project to construct a landscaped area by working in groups and having the opportunity to develop various skills. The demonstration highlights the types of training available to those in the industry.

BALI PENTATHLON
This light hearted competition shows practical landscaping skills when teams complete an obstacle course involving a variety of tasks which require everyday skills. Competitors are drawn from both professional landscaping companies and allied organisations.

FENCING COMPETITION
The aim of this new feature is to assess the ability of 2 man teams in erecting several different types of fencing, with the emphasis...
a trade fair’

Make a date for Landscape Industries, Stoneleigh, June 3/4

being on high quality and all round workmanship. A trophy for the winners is kindly being donated by fencing news.

EDUCATION AND TRAINING
Adding to the educational and training focus of the event will be a number of organisations including:
- National Turfgrass Council
- Sports Turf Research Institute
- Landscape Institute
- ADAS
- British Turf and Landscape Irrigation Association
- City and Guilds
- Dry Stone Walling Association
- Institute of Horticulture
- Joint Council for Landscape Industries
- Learning through Landscapes Trust
- National Association of Agricultural Contractors
- Scottish National Heritage
- More than 12 horticultural colleges

AWARDS
- Landscape Institute’s “Landscape Management Award” will be presented for the second year.
- ILAM’s “Open Space Management Award” will be presented for the first time at Landscape Industries ’92.
- A best stand award, sponsored by Landscape Showcase, will be presented by the organisers to the best indoor and outdoor displays.
- The BALI Chalk Award will be presented to the best display from a landscaping college exhibiting at the 1992 show.

Landscape Industries ’92 will be held at the National Agricultural Centre, Stoneleigh Park, Warwickshire on Wednesday 3rd and Thursday 4th June. The event is open from 9.00am-5.00pm on both days. Admission, car parking and catalogues are free.

Some of the exhibitors:
- Donath Seeds Ltd will be exhibiting their range of Finn hydroseeding machines, Conwed Fibers erosion control products and their new range of seed mixtures for the landscaping industry. Now part of the DLF TRIFOLIUM Group of Companies, they will be pleased to advise visitors on specific site problems and will be launching Conwed Fiber ‘Futerra’ landscaping fabric. Ask for their product information pack which contains catalogues and samples. Tel: 0666 502834
- Shelley Signs will be displaying a range of signs and panels which are suitable for golf course applications. The signs are manufactured in Glass Reinforced Plastic (GRP) with the end text and illustrations inset printed into the surface of the sign. This results in a totally smooth finish and a sign that is exceptionally durable, easy to clean – one that will provide many years of service.
- Bucher-Guyer (UK) Ltd., who operate their sales-service and spare parts facility from Telford, Shropshire, will be exhibiting their range of Finn hydroseeding machines, Conwed Fibers erosion control products and their new range of seed mixtures for the landscaping industry. Now part of the DLF TRIFOLIUM Group of Companies, they will be pleased to advise visitors on specific site problems and will be launching Conwed Fiber ‘Futerra’ landscaping fabric. Ask for their product information pack which contains catalogues and samples. Tel: 0952 541483

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sation, colouring the woodchip. As such it is ideal where the mulch is required to blend with the natural soil colouring. Its composition of different sized particles varying in colour and texture can be used to enhance visual contrasts between lawns, paving and other mulches. Tel: 0242 528877

- New items of solid teak outdoor furniture to be introduced by Gloster Leisure Furniture include a bench for feature locations and a capacious rubbish receptacle. The Tetbury seat features a back panel which includes a curved top rail and horizontal back rails. Available in 4’ and 5’ sizes the Tetbury fea-

tures shaped flat arms, a contoured seat panel and carved finial tops to each back leg. Gloster’s new rubbish receptacle, pictured above, offers an elegant solution to litter problems. Measuring 28 square and 31” high, the receptacles feature sturdy construc-

tion with tongued and grooved side panels within a pegged mortice and tenon framework. Up to 7 cubic feet of rubbish can be contained within a galvanised steel wirework basket which is easily removed through the top of the receptacle.

Like all Gloster’s range of furni-
ture the new items are manufac-
tured from teak obtained exclusively from plantation sources, a policy which has earned

LANDSCAPE INDUSTRIES '92: some of the new products

Landscape Industries '92: some of the new products
CLEVELAND

A busy month of lectures and social activities in March to report, beginning with a talk given by Ian Webster from Houghall College, Durham, on “Water Management”. Ian suggested that water management is all too easy: just programme the timing and greens are watered while we sleep. But do we know how much water is already in the soil? We need to, and by using a moisture meter (which probes the soil), we can obtain an instant read-out. We need to allow for evaporation on sunny days, transpiration loss in growing conditions, and irrigate only to make up for those losses. Soil moisture checks should be undertaken two or three times a week, greenkeepers then will learn quickly how their greens drain water away: if they draw slowly (on clay or peaty soil) then irrigation should be applied with caution. It is too easy to over-irrigate and the result — soggy greens all winter. Do water carefully, for we must use chemicals as a last resort. Chemical symbols tell us of the dangers and (the greenkeeper) and the public (the golfer) — great care and protecting ourselves — mouth, nose, skin contact etc. COSHH is for the protection of all, so play safe and take all necessary precautions.

Finally, also in March, our committee held a celebratory dinner to mark our national chairman’s year of office. George Malcolm was presented with an inscribed decanter set by section chairman Harry Lees. The Middlesbrough GC are delighted that George has represented our national interests and their chairman, Jack Higgins, gratefully received a plaque from Viscount Whitelaw which is to be wall mounted in the clubhouse. Ian Holoran presented George with a framed photograph.

BRUCE BURNELL

NORTHERN

Another month goes by and when you read this our annual dinner dance and first golf competition will already be history.

Our lecture season has now finished and it was pleasing to see more people attending — keep it up! However, not many BIGGA members turned up for our last event, which was a quiz night with our colleagues from the IOG. It was a good night, we were made very welcome at Headingley and the event could possibly be repeated next year. By the way, BIGGA won the quiz — of course!

Golf events are filling up quickly so don’t delay booking. £10 deposit to me at 23 Hinchcliffe Avenue, Baidon, West Yorkshire. BD17 6QY.

Our friends in the trade are again being very generous with Henson & Chatell sponsoring our last mailshot, Yorkshire Mowers again sponsoring our Invitation Day, Pattisons the famous Roses Match and Chaplins our Autumn Tournament. Many thanks to you all, it is greatly appreciated.

Looking ahead now to the 1992/93 lecture season, some interesting events are being lined up — a trip to see the John Deere plant in Nottingham, a Lloyds workshop (as we had to cancel the trip to them, they have offered to come to us — so I hope it will be well supported), and also Eddie Seaward from the All England Lawn Tennis Club at Wimbledon. I have met Eddie and been shown the complex there. I can assure you all that his talk will be very interesting, both for greenkeepers and their wives.

BOB LUPTON

DEVON & CORNWALL

St Enodoc G.C. was the venue for our March meeting, the morning competition being for the Sup turfgrass seed mixtures at the Landscape Industries ’92. There are 15 mixtures, all of which have been formulated to meet the exacting professional standards for golf, landscaping, turf and amenity use. Whatever the requirement, ranging from putting greens to tennis courts, or from hard-wearing rugby pitches to roadside verges, one of the blends will fit the bill. A careful choice of high-performance grass varieties are especially tailored to customers’ requirements and the intended end use of the turf. Consideration is also given to low maintenance needs and environmental concerns.

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AROUND THE GREEN

Keeping in touch with news and comment from the regions

Glover’s a listing in the Good Wood Guide published by Friends of the Earth. Tel: 0272 540349

The British Association of Golf Course Constructors will be exhibiting at Stoneleigh, on Stand No. EX H5. Tim Banks, Secretary of the BAGCC, together with Jonathan Franks of British Seed Houses and Mark Pierson of Brian D Pierson (Contractors) Limited, will be on hand to offer advice to those interested in golf development. For further details telephone 0202 822372.

For the first time, Barenbrug UK will be demonstrating a selection of its BAR range of amenity grass seed mixtures at the Landscape Industries ’92. Barenbrug of British Seed Houses and Mark Pierson of Brian D Pierson (Contractors) Limited, will be on hand to offer advice to those interested in golf development. For further details telephone 0202 822372.

There are 15 mixtures, all of which have been formulated to meet the exacting professional standards for golf, landscaping, turf and amenity use. Whatever the requirement, ranging from putting greens to tennis courts, or from hard-wearing rugby pitches to roadside verges, one of the blends will fit the bill. A careful choice of high-performance grass varieties are especially tailored to customers’ requirements and the intended end use of the turf. Consideration is also given to low maintenance needs and environmental concerns.

Barenbrug UK is able to provide such carefully targeted mixtures because it has outstanding grass varieties in every category of the STRI turfgrass seed lists. Tel: 0359 70766.
43 (19-28) T. Clark, R. Parr, T. Blackburn, N. Macintyre and J. Bullen. PLEASE MAKE SURE YOU INFORM GORDON CHILD OF YOUR AVAILABILITY TO PLAY.

Our afternoon educational talk was presented by Malcolm Spence on Health and Safety. Malcolm cleared up some of the grey areas of recent legislation, informing members that three wheel ATV's have been banned from sale due to instability. A question was raised from the floor with regard to the three wheel Cushman, which many had thought of as an ATV.

Malcolm's answer was that he is of the opinion that a Cushman was not an ATV but he wasn't sure on this matter. His interesting talk was cut short through lack of time, though members have asked him to return and continue at a later date, Perranporth being the possible date next February. The section extends thanks to St Enodoc GC for allowing us the use of their excellent facilities and to Stuart Dymond and his team, who prepared the links in superb condition.

RICHARD WHYMANT

* Ransomes advised Greenkeeper International that the Cushman is not an ATV in the accepted sense of the terminology, i.e. it is not an ALL TERRAIN VEHICLE, having been designed specifically for use on fine turf. — Editor.

SOUTHWEST

Stinchcombe Hill Golf Club was the venue for the final Winter Programme Meeting for 1991/2. This harder-than-average to find course nestles in the hills (somewhere) overlooking the River Severn, Oldbury Nuclear Power Station and the Severn Bridge.

At this point the reader may just get a hint of the difficulty the sub-editor had in actually finding the place, and eternal thanks are due to the petrol pump attendant in North Nibley (I think), whose immortal response to the question "how do I get to the golf course?" was (in suitably broad accent) "bad place to start from, this." He wasn't kidding either! Anyway, we made it with seconds to spare.

We found the course in much improved condition over recent years and Matthew Ayres, a non-member on the staff at Stinchcombe (soon to join, we hope), showed us all how to play, recording the best score of 36 points. The actual result was as follows: 1st M. Pearce, Wells 34pts. 2nd P. Godwin, Tracys Park 33pts. 3rd Powell, Filton 32pts. 4th S. Frankcom, Tracys Park 32pts.

Our thanks to Stinchcombe GC and their staff for their hospitality, also to Avoncrop & Techsol for their generous prizes. After lunch it was over to Peter Jefford of Rufford Top Dress Supplies for a most informative lecture on the perils of choosing top dressing for your course. There's more, much more, in choosing top dressing than meets the eye and our congratulations and thanks to Peter for putting it over so well.

Congratulations to Kevin Green of Filton and his wife (who I'm told played some small part) on the birth of their daughter, Katy-Ann. I'm reliably informed that Kevin's quiet disposition has remained largely unaltered, apart from softening at break times as he attempts to catch up on his sleep. Commiserations to 'Merv-the-Swerve' Gray from Clevedon, on his recorded injury sustained on the course. We all hope he is soon back to full health and look forward to seeing him at the next section event.

SURREY

The regional Gentlemen's Dinner held at Walton Heath on March 17th saw Mick Haynes employ his local knowledge of difficult conditions to take the main prize. However, the very next day he injured his leg playing football and may struggle to play his Huxley Bowl match (Competitors note: round one due by May 18th).

Returning to its traditional venue at New Zealand GC the Cresta Cup on June 8th, the format as usual being afternoon golf and tea — please enter promptly.

The annual England v Scotland match will take place at Regate Heath GC on July 30th. Players in recent years will testify that this is contested with the fervor of the Calcutta Cup and it is also noted that an English victory is long overdue. Anyone wishing to play should contact Derek Walder (England) or Robert Brewer (Scotland) who will select the teams accordingly.

Despite recent appeals, I have received little feedback from members regarding sectional news. Remember that births, marriages, promotions and retirements may well of interest to our members and I'm sure these must occur with some frequency. Please don't hesitate to forward any such items to either Dave Andrews or myself.

ROGER TYDEMAN

SHEFFIELD

The section would like to thank David Golding for presenting the talk on education at our March lecture, held at Rotherham Golf Club. Also thanks to Yorkshire executive Mr Peter Wharton, who came along to the meeting to update our members on what is happening with the education syllabus at Askham Bryan College. Mr Wharton is a member of the College Advisory Committee.

I have just completed Phase III City & Guilds Management at Askham Bryan, a course tightly packed with vital training for today's course manager. The list given here will give you some idea of the syllabus: Surveying and planning; Golf course design; Conservation; Tree preservation; Fertilisers; Plant care; History of golf; Soils and drainage; Herbicides; Labour planning; organisation and costing; Machinery costing; Budgeting exercise (final project); Computing; Quotations; Filing systems; Stocktaking; Ordering goods; Machinery records; Partial budgets; negotiation; Employment legislation; Highways legislation; Industrial relations; Training; Man management; Safety legislation; Wages; VAT; Disciplinary procedures; Interviewing procedures and requirements; etc. How to turn an address into an appeal; Report writing; Supervision of staff; Forward planning; Long term planning; Assignment visits; Work study; Presentation of written work; Verbal presentation; Communication and Personal presentation.

The student is given assignment work to take home — with a deadline. The wise entrant will be prepared to put it over so well!
opportunity to wish all new members every success in their first year of membership. In addition, I would like to wish Mark Proctor and his family all the best, for Mark has taken on the new job of course manager at Carden Park GC.

Going on to something different, many thanks to all concerned for organising our recent welding lecture at Northop. These events could possibly be better attended, so please lads, give us more support if you possibly can.

Dates for your diary include May 21st for our spring tournament, which will be held over the delightful setting of Chester (Curzon Park) GC. Please also note that this is an Icki qualifier (tee times are from 10.00 am - 11.45 am) and also note that no entries will be accepted on the day. Please send off your entries (and the payment) before the event. Members requiring additional information regarding this event should call T. Adamson on 0978 852908.

Finally, don't forget - if you have any news, views or opinions, please contact 'you s truly' on 02487 712490.

DS PROCCTOR

LONDON

Several members of the London section attended the National Conference at Cirencester in March, which gets better every year. I know our members were enthralled by the talks given by some of the speakers and equally enjoyed the after lecture discussions which took place. A big hello to Adrian and Ian from Hadden Hill GC, near Didcot in Oxfordshire-by the way, have you sorted out your education yet?

April 9th saw our Spring Tournament played at W. Middx. GC, the sun shining all day and everyone enjoying it immensely. My partner and myself only managed 10 holes in the morning, due to a few uneducated (in golf course etiquette) members of W. Middx., but the course was a fine test for all the players.

Thanks to the Club for making us most welcome throughout the day. Two new trophies were being contested for this year: the Staterite Shield for the a.m. medal round and the Turf Management Systems Salver for the p.m. Stableford. Results were: (morning) 1st - Robert Washbrook, Hadley Wood GC - nett 70 off 13 handicap. 2nd - Steve Cox, Abridge GC nett 70 off 17. 3rd - Darren Burdis, Hadley Wood GC nett 71 off 6. (afternoon) 1st - Steve Cox, Abridge GC 43 points off 17, 2nd - John Jackson, Wanstead GC 38 points off 4. 3rd - Robert Phillips, Portsers Park GC, 37 points off 10. There was also a guest prize which was won by A. Phillips with 28 points.


All our members were certainly dressed accordingly, both on and off the course, which was good to see and your committee hopes this will continue. Our thanks to all the companies which continue to support us, especially Icki, Staterite, Parkers, Rigby Taylor, Turf Management Systems and CMW.

A final note, Craig Handside has taken over as temporary secretary of the section, as Brian Kelly is unwell. Get well soon, Brian. Craig's telephone number is 081 447 0214 and you should call him if you have any queries.

ANDREW PHILLIPS

MIDLANDS

Having just returned from Cirencester, where our National Education Conference was held, I must mention how successful this event was and praise the high quality of the speakers, who covered a wide range of subjects. These subjects prompted much discussion during the evenings and indeed well into the early hours of the morning. The venue was an excellent choice, set in such attractive surroundings and backed by splendid facilities. Thanks are surely due to the staff at headquarters for the fine way in which this event was organised.

On March 20th we held the last of our lectures during the winter period, with an excellent turnout of 45 people in attendance. The first speaker, Martin Ford, gave a very interesting talk on trees, followed by John Franklin (with support given by Howard Storey) reinterpreting John Deere, his talk being followed by a working demonstration with the whole John Deere range being made available for use. Our thanks to John Deere for providing a buffet for those attending, and to Ivan Beelestone and his Club - Telford G&CC - for both organising the event and allowing us the use of their facilities. A special thanks to Abcon (top dressings) for financing all the competitors meals!

JIMMY RICHARDSON

SCOTTISH REGION

The Scottish Region Conference took place at Langside College, Glasgow on March 10th, a day in which we had everything from pouring rain and bright skies, followed by hail and snow. However, this did not deter people from travelling from as far afield as Southerness and Fortrose on the Black Isle. Six speakers entertained the audience of 140.

Colin Urquhart, Langside College, spoke on greenkeeping education and of the varied types and contents of courses covered at Woodburn House. Colin was followed by the ebullient Danny Godfrey of Inter-Seeds, who gave his audience a further insight into the breeding and selection of seeds, backed up with some interesting slides. Unfortunately Chris Kennedy from Wentworth had to withdraw at a late date but his capable assistant, Jim McKenzie, took over to tell us about the Good, the Bad and the Ugly sides of greenkeeping as he saw it. By using his collection of slides, Jim emphasised these points more vividly. This was followed by Neil Thomas, who addressed the audience on 'BIGGA - The Crossroads', where we have come from and where (hopefully) we are going. Following on from the progress made in the last 5 years, Neil explained the Bigga design and how, in his view, our membership to give the Association their whole-hearted support and at the same time to impress upon non-members the benefits to be gained by being a member of the Association.

Just before lunch a presentation of a magnificent print from a painting of the Old Course, St. Andrews was made to Cecil George from the Scottish region, to thank him for all the hard work put into the Association over many years, with hopefully many more to come. The presentation was made by our chairman, John Crawford. After lunch Ben Simpson of Alnigre astounded everyone with his slides on the many and varied uses of seaweed throughout all ranges of landscaping and horticulture. Finally George Brown of Turnberry told us in his own inimitable style: 54
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**Head Greenkeeper/Deputy Course Manager**

£14,500 – £16,500 PER ANNUM + BENEFITS • COOKHAM, BERKS

Winter Hill Golf Club is owned by the John Lewis Partnership and situated in the Berkshire countryside overlooking the River Thames.

We now require an experienced Head Greenkeeper/Deputy Course Manager. In addition to having formal qualifications, you must be experienced in all aspects of greenkeeping, machinery maintenance and computerised irrigation systems. You must demonstrate the ability to supervise staff and work well within a team.

We are part of the John Lewis Partnership – a company owned by its staff. They have a ‘say’ and a share in its success... a fact that helps to give us a very special family atmosphere.

Benefits Include:

- Free accommodation – three bedroom house on the bank of the River Thames
- Shopping discounts – 12% off most Waitrose and department store purchases... 25% in department stores after 12 months.
- Profit sharing – the best scheme in the country. After business investment, ALL profit is shared out as bonus. While there can be no guarantee for the future, in recent years this additional annual income has been between 9% and 17% of pay.
- Non-contributory pension scheme.
- 4 weeks’ holiday (5 weeks after 3 years service).
- A share of the staff fund.

For further information and application form, please apply to the Club Secretary, Winter Hill Golf Club, Grange Lane, Cookham, Berkshire, SL6 9RP. Tel: (0628) 527613. Ref: GI/6/5.

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**Caldy Golf Club**

Wirral (“The Leisure Peninsula”) require a **HEAD GREENKEEPER**

Applicants must be fully experienced in all aspects of modern greenkeeping methods, have a practical knowledge of modern machinery and irrigation systems.

- Ability to motivate a small staff essential
- Salary is negotiable
- Accommodation not available.

Apply in writing with CV to: The Secretary, Caldy Golf Club, Links Hey Road, Caldy, Wirral L48 1NB
Limerick County Golf and Country Club

COURSE MANAGER

Applications are invited for the position of Course Manager for this prestigious, 18 hole parkland golf-course now under construction at Ballyneety, near Limerick, Ireland.

Designed by Des Smyth & Associates, the 6,800 yard championship standard layout will be completed in December, 1992 and open for play in April, 1994. The owners wish to retain a suitably qualified and experienced greenkeeper who would wish to be directly involved in the construction and "grow-in" phases as a prelude to taking over the full-time duties of Course Manager.

The successful applicant will have had a minimum of three years senior greenkeeping experience and possess a recognised professional qualification. A working knowledge of computer-controlled irrigation systems, course equipment maintenance and excellent supervisory and work planning skills are essential requirements.

The remuneration package is negotiable and the appointment will be effective on July 1st, 1992. Please forward application with full CV and references to:

L J Meade, Chief Executive, Limerick County Golf and Country Club Ltd, PO Box 94, Raheen, Limerick, Ireland.

NORTHAMPTON

Applications are invited for the position of

HEAD GREENKEEPER

The challenging position on this new course which has been in play for 18 months requires appropriate qualifications and experience in all aspects of modern course management.

The successful applicant must be able to control and motivate staff and have a comprehensive knowledge of machinery maintenance and course budgeting.

A generous salary will be offered to reflect the qualities required. A three bedroom house is also available at the Course.

Written applications including a full CV should be sent to:

Chairman of Green Committee
Northampton Golf Club
Harlestone
Northampton NN7 4EF
SPORTSTURF LTD

require a

SALES REPRESENTATIVE

To call on golf courses, local authorities, cricket and bowls clubs in the north west of England. A knowledge of fertilisers, grass seeds and pesticides would be helpful, also previous sales experience.

Apply in writing with CV (in confidence) to:

Mr E Russell
Aitkens Sportsturf Ltd
Unit 18, Moor Lane Trading Estate
Sherburn-in-Elmet,
North Yorkshire LS25 6DX

COURSE DEVELOPMENT MANAGER

RINGWAY GOLF CLUB

Ringway Golf Club, a prestigious parkland course situated south-west of Manchester, is seeking a suitably qualified and experienced person of proven ability for the newly created post of Course Development Manager.

The prime function of the position will be the development of the course and other golfing facilities. He/she will report directly to the Chairman of a small Course Committee of which he will be a member.

A practical motivator and technically competent, he will be responsible for all aspects of work on the course, operating within agreed capital and revenue budgets and longer term plans. He will be expected to play a major and imaginative part in the formulation of these budgets and plans.

The position is a challenging one to meet the needs of the Club for the longer term as well as the immediate future. The remuneration package and terms and conditions including relocation expenses will reflect the importance of the appointment and are negotiable for the right person.

Applications in writing, with full CV should be made to:
The Course Chairman, Ringway Golf Club, “Hale Mount”,
Hale Barns, Altrincham, Cheshire WA15 8SW

MINCHINHAMPTON GOLF CLUB

COURSE MANAGER

Minchinhampton Golf Club have an established 18 hole golf course set in beautiful Cotswold countryside. An additional 18 hole course is currently the subject of a planning application and it is anticipated that construction will commence this year.

The club requires an experienced and qualified Course Manager to maintain and improve the present high standard of the existing course. Some involvement with the construction of the new course is likely with prospects of management of the full 36 holes. A high level of autonomy will be given.

Commencing salary likely to be £20,000-plus, but could well be substantially more for an outstanding candidate. For further information write to:

The Secretary, Minchinhampton Golf Club,
New Course, Minchinhampton, Stroud,
Glos GL6 9BE

ASSISTANT HEAD GREENKEEPER

required at the above golf centre, consisting of 36 holes and 25 bay driving range. The facility has been designed, built and will be maintained to a high standard, opening in June 1992.

The successful candidate will be fully qualified and able to demonstrate the ability to shoulder responsibility.

Send full personal details including current salary level to:
A J Acres, Operations Director, Burhill Golf Centres Limited,
The Club House, Burhill, Walton-on-Thames, Surrey KT12 4BL

BEACONSFIELD GOLF CLUB

Applications are invited for the position of

ASSISTANT GREENKEEPER

Applicants must have suitable qualifications in all aspects of course management, machinery maintenance and irrigation systems.

Attractive package, including bungalow.

Applications in writing, including a full CV to:

Mr P I Anderson, Secretary,
Beaconsfield Golf Club Ltd,
Seer Green, Beaconsfield, Bucks HP9 2UR
We are looking for a **FULL QUALIFIED WORKING HEAD GREENKEEPER** for INGON MANOR GOLF & COUNTRY CLUB

This is a new position with full responsibility for the management of an 18 hole parkland course. Applicants will have a free hand to put their stamp upon this course and will not be answerable to a committee. Salary negotiable in accordance with experience. All replies will be treated in the strictest confidence.

Reply in writing with CV to:

The Managing Director
INGON MANOR GOLF & COUNTRY CLUB
Ingon Lane, Snittersfield, Nr. Stratford-upon-Avon, Warwickshire

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Lutterworth Golf Club
Leicestershire

Applicants are invited for the position of **HEAD GREENKEEPER**

No accommodation available.

Please apply with CV to:

The Captain
Lutterworth Golf Club
Rugby Road, Lutterworth, Leicestershire LE17 5HN

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Romiley Golf Club
require an **ASSISTANT HEAD GREENKEEPER**

To join an ambitious and progressive team. City & Guilds Certificate together with sound knowledge of machinery and irrigation systems required. Should be capable of leading a team after initial guidance from Head Greenkeeper.

Salary negotiable. No accommodation.

Apply in writing with CV to:

The Secretary
Romiley Golf Club
Goosehouse Green, Romiley, Stockport SK6 4LJ

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Laleham Golf Club

requires an **AMBITIONOUS ASSISTANT HEAD GREENKEEPER**

to become part of our enthusiastic course management team.

Apply with full CV quoting two referees to:

The Secretary, Laleham Golf Club, Laleham Reach, Chertsey, Surrey KT16 8RP

Closing date 31st May 1992

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Royal Dornoch Golf Club

require a **FULLY QUALIFIED GREENKEEPER** as soon as possible.

Applications and CV to:

The Secretary,
Royal Dornoch Golf Club,
Golf Road, Dornoch,
Sutherland IV25 3LW

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Glynhir Golf Club
require a **HEAD GREENKEEPER**

Applicants should have suitable qualifications and practical experience in all aspects of course management and in the operation and maintenance of equipment. The successful applicant must be prepared to work with, motivate and control staff.

Salary negotiable – no accommodation available.

Apply, in writing, with full CV to:

Mr E P Rees (Honorary Secretary)
Glynhir Golf Club, Glynhir Road, Llandybie, Ammanford, Dyfed SA18 2TF

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NEWBY GRANGE HOTEL AND GOLF CLUB

Require a **HEAD GREENKEEPER**

- Must be qualified and motivated
- Must be over 25
- Will NOT answer to a committee
- Salary negotiable.

Applications in writing with full CV to:

Mr Tony Sansom, Newby Grange Hotel & Golf Club, Crosby-on-Eden, Carlisle, Cumbria

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Seeks position on the Continent, on a course presently being constructed, or newly constructed course.

For further details write to:

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York Y06 2NF
manner how he was always open-minded about all greenkeeping practices and how what was good for one course might not be suitable for another. There was an intriguing insight into George's ideas of bunker renovation and also the exasperation and delights of working a links course on the West coast of Scotland after winter storms and on beautiful summer days. All in all it was a good day.

My thanks go to all the speakers and Cecil George and John Crawford who chaired the two sessions. To Langside College in allowing us the use of the facility and to the catering staff. I especially thank Colin Urquhart and Margaret Hamilton from Langside for their assistance, and Willie Blair, Chris Yeaman, Andrew Forrest and Fraser Ross for their assistance at registration. This was the first time a conference had been held at Langside and there were a few problems, most of which were overcome. The main problem was probably the lack of parking spaces at and around the college. That aside, the day was very successful and we look forward to the 1993 conference, which will probably be held at Oatridge College, again in March.

The annual Match Scottish Region v the Secretaries Association, took place at Elie Golf House Club on Wednesday 18th March. After extremely heavy rain all morning throughout Scotland everyone was a bit apprehensive, but as usual Elie was dry and mud free. Mind you, there was a gale blowing and when Brian Lawrie, Elie head greenkeeper told us that play was off the medal tees, visions of another win for the greenkeepers seemed acceptable, due to our being used to working in such conditions. When our leading couple, the vice-chairman of the Scottish Region, Gordon Moir and his partner Cecil George, strode to a flourishishing 5/4 victory the writing was on the wall and the second match also finished at the 14th – another win for the Region ?? Well someone forgot to tell the secretaries that they're not supposed to win and except for Sam Morrison and Joe Wallace, the match was a rout: Secretaries 6 Greenkeepers 2.

There will have to be some serious selection before the '93 match and many of the regulars should be shaking in their shoes. Well done all you gallant secretaries, ably led by captain Gilbert Dempster from Longniddry. Just in case our captain for the day Gordon Moir and Cecil get carried away with themselves with their win, I would remind them that their opponents were approximately 50 years older (combined) than them. All in all it was a fine day, finished with a blether, a dram, a guild meal and stories from the respective captains. Our thanks to Sandy Sneddon, secretary at Elie and all the Elie staff for their hospitality and to Brian Lawrie and his men for the excellent condition of the course. Next time Brian, put us off the ladies tees – maybe we will then have a chance.

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64 manner how he was always open-minded about all greenkeeping practices and how what was good for one course might not be suitable for another. There was an intriguing insight into George's ideas of bunker renovation and also the exasperation and delights of working a links course on the West coast of Scotland after winter storms and on beautiful summer days. All in all it was a good day.

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Following on from last month, here are the four remaining speakers. Our fifth and final speaker in the morning of our one-day conference will be David Golding, his subject naturally being education, with particular reference to the Master Greenkeeper Certificate. Maybe this will provide the spur needed for North Scotland section members to enrol – for so far we have no participants. I believe this will be David's first seminar in Scotland and we are indebted to Neil Thomas for taking over his duties to allow him to come north. Following David's talk will be a question and answer session, followed by lunch. This will be followed by Peter Lloyd, assistant secretary of the Scottish PGA. Peter is to give us a light-hearted look at life SPGA style. We welcome a speaker from the professional body just as we welcome a member of the IOG, Mr Andrew Murray, as our seventh speaker. Andrew was parks manager of Kirkaldy DC until retirement and he will be addressing us on golf course maintenance in the public sector.

Last but by no means least, we have Eric Shiel, executive consultant of the JGCC. The Joint Golf Course Committee was set up by the R&A, aimed at giving golfers a better deal and improving conditions on courses. Its birth was the direct result of "The Way Forward" document, which was published a few years ago. Mr Shiel's talk will be "The Way Forward – An Update", with the JGCC telling me that by conference time they hope to have a significant message to impart – we look forward to hearing it.

Following all this will be a lively question and answer session, wrapping up what we hope will be an interesting and educational day. There are 180 seats available in the college lecture theatre, so when you get your application, return it quickly to avoid disappointment.

Congratulations to ex North Scotland chairman John Flint, who after 50 years of golfing has recently recorded his first hole in one. Well done, John, there is hope for us all! On a more serious note, congratulations are due to John Geddes, who is leaving Kintore GC to become head greenkeeper at Ellon GC, and to Derek Lithgow, a Scot who is returning north from London to become head greenkeeper at Banchory GC, taking over from Jeffrey Herd, who after 30 years as head man is stepping down to the quieter role of assistant. Other movements are David Sinclair, assistant at Royal Aberdeen, moving to a similar post at Cruden Bay and Graham Mackie, assistant at Murcar, moving to Glenbeagles. Martin Orawe, newly qualified Dornoch greenkeeper, is joining the Scottish takeover at Wentworth. We wish them all well in their new jobs, along with any other members on the move.

IAIN MACLEOD

COMING UP

June 3rd-4th: Landscape Industries '92, Trade Show – National Agricultural Centre, Stoneleigh, Warwickshire.
July 16th-19th: The Open Championship – Muirfield, Scotland.
August 16th-12th: BIGGA National Golf Tournament – Littlestone GC, Kent.
September 8th-10th: IOG Trade Exhibition – Peterborough, Northants.
September 24th: ISEKI Championships Final – Coventry GC, Warwickshire.
October 12th: TORO/PGA European Tour Student Greenkeeper of the Year Award – Aldwark Manor, York.
October 26th-November 27th: BIGGA Management Courses (five weeks) – Aldwark Manor, York.
November 12th-14th: Golf Course Europe '92 Show – Cannes, France.
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