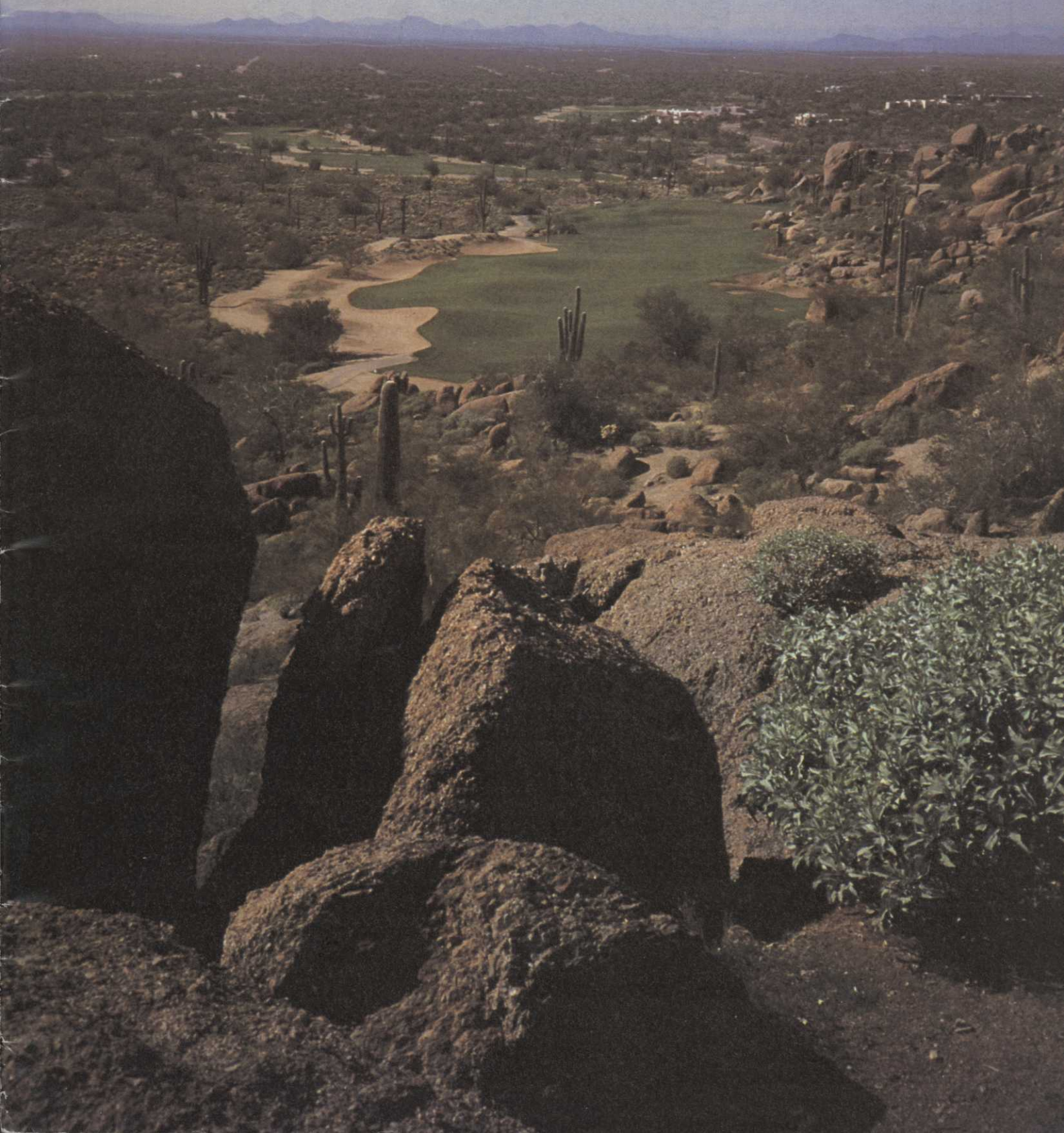


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Greenkeeper



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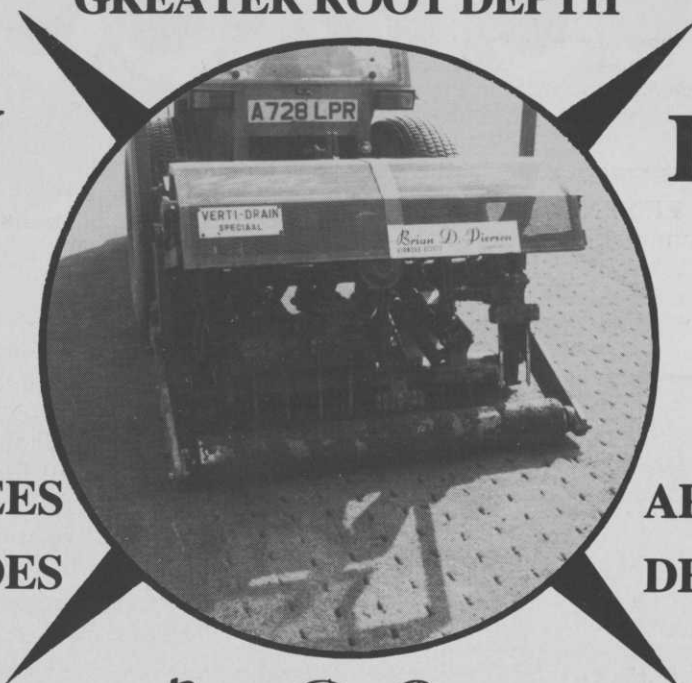
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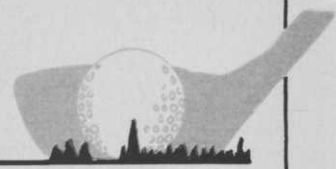
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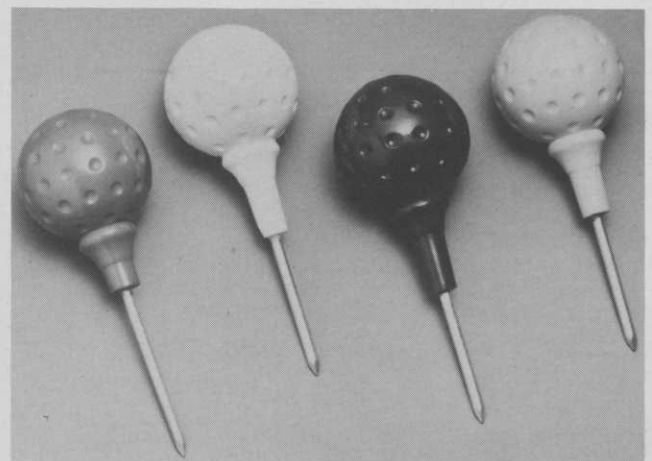


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GOLF COURSE EQUIPMENT AND TURF MAINTENANCE MACHINERY MANUFACTURERS

This issue

MARCH 1987

Front cover: The somewhat daunting view from the 1st tee at the Desert Highlands Golf Club, designed by Jack Nicklaus, near Scottsdale, Arizona. *Greenkeeper* was there to attend the Golf Course Superintendents Association of America's 58th conference and show.

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The British contingent of luminaries included *Greenkeeper* publisher Michael Coffey who reports on the show and conference. Dr Peter Hayes of the STRI relates his impressions of the golf courses on page 8

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BIGGA Progress To Date...

As reported in our January/February issue a number of meetings have been held by the new association's board of management. The main subject under discussion has been the appointment of a General Administrator, now that the post has been widely advertised the preliminary selection procedure is in the hands of management consultants, who it is hoped, will produce a short list of suitable candidates during April. Interviews will then take place with the members of the board of management, resulting in an appointment. Assuming he has to give notice the successful candidate will take up his post before June. The board of management have already confirmed that subscription renewals will not be sent out until the association's office, to be housed in the STRI's headquarters at Bingley, is fully operational. A certain amount of disquiet has been voiced by "members" at the lack of information regarding the association, cancellation of the annual conference, the priority given to the annual golf tournament, the absence of an identity or logo and problems with regional finance. It must be remembered that the BIGGA hopes to be a highly professional organisation and as such it must be properly set up. There is an agreed constitution and the appointment of a professional to run its affairs is eagerly awaited. This all takes time and there will be only one opportunity to launch this venture successfully, so it is well to adopt a 'slow but sure' approach. In the meantime the board of management, which can only meet at monthly intervals, is doing all it can in the time available.

The adoption of a magazine by BIGGA is also under review with the management consultants drawing up a tender document, which it is understood will go to not only those publications devoted to greenkeeping but also to national golfing magazines.

In the meantime educational events at a local level continue to be well supported throughout the country as is the annual greenkeepers dinner at Walton Heath this month which will provide many "members" in the south of England with the opportunity of reviewing progress to date.

• • • • •

Congratulations are in order for Kevin Munt on his appointment as Course Manager to the Wentworth Club. Kevin who is a BIGGA board of management member and was the first chairman of EIGGA in 1984 is moving south, after less than a year, from Royal Dornoch. He was previously course manager at Hankley Common. Wentworth will pose a considerable challenge as there are plans for a third course to be added to the East and West (the famous Burma Road), this course much favoured for televised tournaments is not without its problems. The club have also recently appointed Dr. Peter Hayes, director of the STRI as their adviser.

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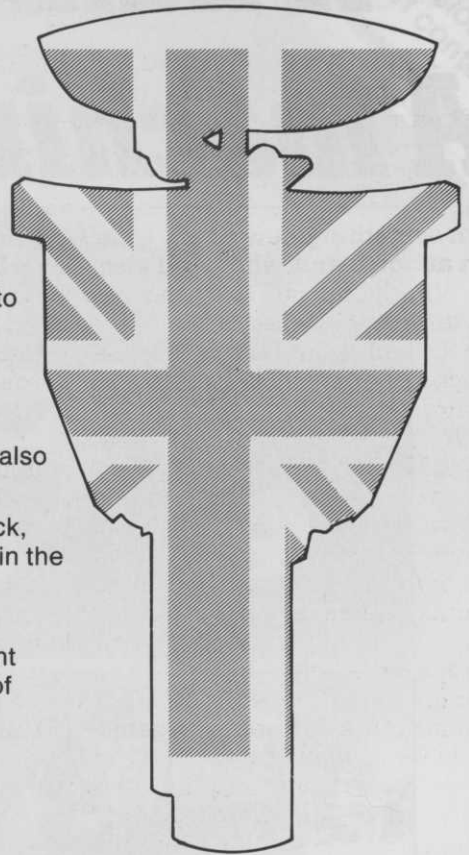
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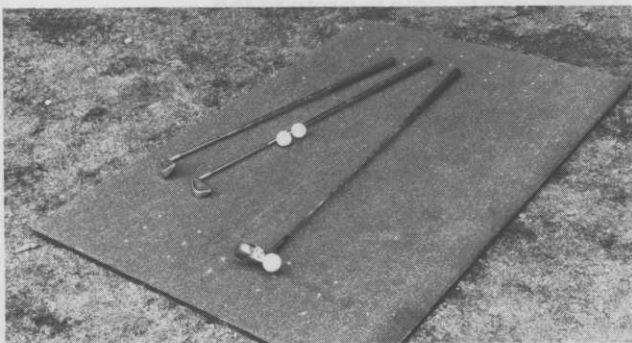
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By the time I got to Phoenix

I HAD willingly accepted an invitation from the Golf Course Superintendents Association of America to chair the international golf course management session at the 58th International Golf Course Conference and Show in Phoenix, Arizona at the end of January, writes Michael Coffey.

A trip to the United States is always a delight. I find it stimulating. I learn something new every time I go, the weather is invariably better than at home and, above all else, America is where anything is possible. Whether I could live there permanently or cope with all that food is a different matter, but hospitality and friendliness abound.

Long-haul flights are not to be enjoyed, especially if, for reasons of simple economy, you travel TWA (The world's Worst Airline?). Seven hours to New York with a third degree grilling by a 'welcoming committee' from the immigration service, followed by another five hours down to Phoenix, takes a bit of getting over.

Phoenix, a city of nearly a million, about the size of Birmingham, but a lot better organised, is essentially a one-storey sprawl, expanding daily into the desert. However, there appears to be plenty of room left. Phoenix was a staging post, renowned for its clear air and favoured by those suffering from allergies, although since the introduction of resort hotels, cultivated and irrigated gardens and verges, sufferers have had to move steadily further and further out.

An indication of how times have changed rapidly can be gained by noting that, in 1946, the suburb of Scottsdale had no made-up roads. Currently, there are 20 golf course and real estate developments under construction!

At this point, it might be wise to point out that, although I enjoy America and many of its attractions, I am well aware it is neither practical nor economically feasible to import American ways wholesale to the UK. For instance, could anyone see £65 becoming commonplace as a green fee here?

The hotel that housed the British party was very pleasant, set in 26 acres with oranges and grapefruit growing everywhere. It also featured a large pool and, with temperatures touching 75 degrees, jetlag soon disappeared.

My first venture out was for "enforced culture," a trip to the Grand Canyon courtesy of Jack and Rita McMillan's hire car. Two hundred and twenty miles of

desert, with no petrol stations en route from Phoenix, through the Red Rock cowboy country, where ranches are measured in tens of thousands of acres, eventually brought us to the canyon rim.

Spectacular it most certainly is, over a mile deep and several miles long with the Colorado River running through the bottom. A proposed helicopter trip was quickly cancelled or, should I say, chickened out of! It's well worth a visit if you ever get the chance.

It was time to check into the conference and show. The GCSAA's hospitality to international visitors is limitless. From executive director John Schilling down, the entire staff could not have been more helpful. I would especially like to thank Jim Prusa, who has now left the association and will be greatly missed by all, Colleen Pedersen who has taken over as the GCSAA's director of education, Judy Jones, who handled all our problems so swiftly, and Bob Still and Chris Caldwell.

The trade show itself is almost as big as the IOG show at Windsor, but indoors. There is much to see and many people to bump into, although the British contingent was smaller than in recent years. It included David Palmer of Supaturf on a first visit to see his son, Richard Fry, Mr and Mrs Jonathan Franks of British Seed Houses, Dr Peter Hayes, director of the STRI, Bill and Eileen Hawthorn of Watermation, Christine Smith, who was not always in charge of the IOG's young and 'old' groundsmen of the year, Chris Smith of Jacobsen, Duncan Stewart of Maxwell Hart, Bob Dodsworth and John Wilson on a very busy Ransomes stand, as well as Jim and Audrey Arthur, Jack and Rita McMillan and Howard Swan, chairman of the NTC, who were speakers in the

international golf course management session programme.

Maybe it was because the show was shorter this year, but I didn't see that many new things, much attention being given to the Jacobsen turf groomer and its copies. Ransomes, I gather, had a novel way of entertaining guests, taking them to a rodeo, complete with covered wagons, and barbecue.

During Friday, Jack McMillan, course manager at Sunningdale and vice-chairman of BIGGA, gave a paper on deep aeration, i.e. the use of deep slitters and the verti-drain. Jack was concerned that the audience might not understand his Scottish brogue. Suffice it to say that the verti-drain stand manned by Ruudi Francissen of Redexim of Holland, which sells the machine in America, had 50 enquiries that day alone.

Saturday was taken up entirely by the international session. With the assistance of Colleen Pedersen and Judy Jones, the entire team of speakers, from such diverse places as the Philippines, China, Japan, Mexico, Sweden, Scotland and England, were brought together for a photocall and to 'break the ice.'

Chairing the session was a little harrowing, but we got under way with a quick fire, but excellent, presentation on golf in Japan, then similar topics covering China, central America and the Philippines. By this time, the audience was dwindling due to a rival session on The Black Layer, something Arthur Harrison of SISIS could have sorted out had they asked him to speak.

Matters were revived by Rolf Loewgren of the Swedish Golf Federation who spoke on Golf In Northern Europe. His tongue-in-cheek performance had the audience highly amused. Jack McMillan gave a good account of how poorly greenkeepers in the UK had organised themselves until recently and how he felt optimistic about the future of the British and International Golf Greenkeepers Association.

Howard Swan gave a paper on The British Isles - The Traditional Home Of The Golf Course, which was very patriotic and extremely well-researched and illustrated.



GCSAA trade show in full swing.

Jim Arthur brought matters to a close, by which time only 45 remained in a room capable of holding over 300. No doubt Jim would have had some very interesting words for the 400 who attended the 'black layer' gathering next door.

Everyone gave their best and I understand that sales of the session tapes are going well, although I doubt whether the top ten will be threatened. After nearly four hours of listening and handing out plaques, Toro's reception was much appreciated.

I had been looking forward to Sunday. The United States Golf Association green section held its annual seminar, which was, as usual, well-attended, although guest speaker Howard Keel of Dallas fame and a former greens chairman at the Bel Air Country Club seemed a little lost without a script.

I enjoyed the best of the season's tips, which are the ideas USGA agronomists pick up as they visit clubs around the country and pass on each year to



Grand Canyon, Arizona.



Speakers at the international golf show management session: Vicente Buencamino, Jim Arthur, Rolf Loewgren, Michael Coffey of Greenkeeper, Howard Swan, Alwyn Tai, Toru Inoue and Jack McMillan.

GCSAA members. Star of the show was Stanley Zontek, who patrols the mid-atlantic section. He is a polished and amusing performer and I am pleased that he will be giving a UK audience the benefit of his knowledge and wit

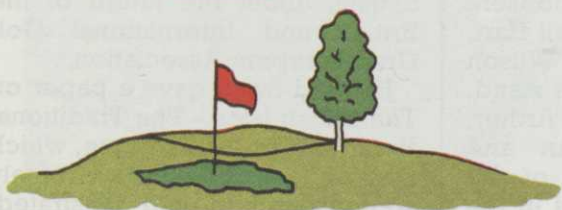
sometime in 1988. I was less impressed with The Magic of Lime from the green section head Bill Bengueyfield. But, as I said earlier, all that glitters and is American does not necessarily apply to Great Britain - far from it!

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I had been invited by a good friend, Dan Pierson, who is superintendent at the Cherry Hills Country Club in Denver, where Andy North won the US Open in 1978, to play the Desert Highlands Golf Club, outside Scottsdale (see the comments of Dr Peter Hayes on the facing page and the feature on page 19).

Accompanied by Howard Swan and Dr Peter Hayes as 'official photographer,' a great time was had by all. The whole set up is unbelievable and I am sure I will never see anything quite like it again. Together with other golfing extravaganzas such as Troon Village and Desert Mountain, it is a testament to unlimited imagination and the fact that, if you have enough money, anything can be turned into a golf course.

On our return, sunburnt and excited by what we had seen, we attended the GCSAA president's reception - the culmination of a year that Riley Stottern will always remember and a most enjoyable party. This was followed by the Jacobsen international dinner, the highlight of which was an amazing feat by Curt Kimpfbeck, who introduced all 70 or so diners from all over the world by name, recognising each of them with a little anecdote.

Monday saw the wind up of events and saying goodbyes, with the grand finale being the banquet. The top table was three tiers deep and some 1,700 sat down to dinner - an awesome sight. The focal point was the presentation of the Old Tom Morris Award to Robert Trent Jones, now an energetic 80 and a man who has put his name to some 500 golf course designs right across the world.

Born in Lancashire, his family moved to New York State when he was six and he soon became a useful golfer - finishing top amateur in the 1927 Canadian Open.

The new GCSAA president Donald Hearn took office, retiring president Riley Stottern received many compliments and appreciation was shown to associate director Jim Prusa, who was making his final official appearance for the GCSAA.

Marie Osmond and her brothers brought the whole show to a rousing end. A fitting piece of razzmatazz for an event that is almost larger than life, but an extremely enjoyable experience.

My impressions of golf in Arizona - by Dr Peter Hayes

THE annual rainfall of Scottsdale is about six inches per year, hence the climate is arid. The native vegetation is mainly of a desert type, dominated by cacti plants - for example, the saguaro and cholla cacti - and small yucca shrubs.

In the development of any golf course in this sort of hostile, arid climate, water is an absolute necessity and by the addition of water to these areas, the desert can turn green. One of the biggest problems in Arizona, and also Southern California and Florida, is the shortage of good water. Therefore, irrigation schemes on golf courses and landscaping areas are carried out by using secondary water - that is, effluent from sewage works, etc. This secondary water is piped separately to golf courses and used for overhead irrigation.

Naturally, warm season grasses are used - these use water more efficiently and, therefore, the predominant grass is Bermudagrass (*Cynodon dactylon*). This grass and its modern cultivars, such as Tifway and Tifgreen, grow well during the hot summer months, i.e. from May through to October when they are at their peak.

However, during the cooler winter months, Bermudagrass goes into a dormant phase and turns light brown and no matter how much water is added to this grass in its dormant state, it will not green-up.

Consequently, these areas have to be oversown with ryegrass during winter to give green conditions and it is normal practice in these hot, low rainfall areas to overseed greens, fairways and tees with perennial ryegrass. This seeding is carried out in October and the best cultivars of perennial ryegrass are used for this purpose (the cultivars we would normally use on playing fields).

When temperatures rise in late spring/early summer (late April), perennial ryegrass is unable to survive under high temperatures and dies out. Then the Bermudagrass starts to grow and takes over and grows during the hot summer months.

Fairways and tees at Troon and Desert Highlands were of Bermudagrass and, during my visit to these courses, they were green as a result of over-seeding with perennial ryegrass. The greens, on the other hand, had been sown out to bentgrass (either Pennecross of Penneagle) and these produced a good putting surface.

With Pennecross or Penneagle, the biggest problem will arise under Arizona climatic conditions during the predominant high temperature period of late August when it can reach 110° to 120° in the shade and it is under these stressful conditions that the bentgrasses will probably be at their weakest. But during the major playing season, which is winter-time, these grasses produce superb putting surfaces.

There is no doubt that both courses were very beautiful and maintained to a very high standard. However, the Nicklaus course at Desert Highlands was extremely strenuous. It consisted of five par-five holes and, from the middle tees, was 5,861 yards in length. The carry consisted of many native plants including cacti and other spiny desert species and, even for reasonable golfers, it was difficult to clear the carry and reach the fairway.



The magnificent view from the Willingdon clubhouse.

OUT ON THE COURSE

PETER NEGUS, 36, head greenkeeper at Willingdon Golf Club, Eastbourne on the East Sussex coast, is a likeable, modest man with intense enthusiasm for his job.

John Campbell reports.

"I was educated at boarding school near Reigate in Surrey," Peter said. "On leaving school, I spent two years as an apprentice welder, during which time I took holiday work at Burnham Beeches, a parkland course in Buckinghamshire. The job appealed to me so much that I joined the staff and spent nine happy years working under a very good head greenkeeper, Brian Payne.

"In 1977, I was appointed head greenkeeper at Willingdon and now live within easy reach of the club." He has been married to Barbara 14 years and the couple have two boys, Daniel, 11, and Stephen, 7, "one of whom I hope will follow in father's footsteps!

"My hobbies are golf, snooker and photography. I think golf is essential for every greenkeeper. It allows him to understand the game and appreciate golfers' needs. Photography plays an important part in my record-keeping, as construction, etc, is better recorded visually. As for snooker, well, if you can't putt, you can always use a cue!

"My other main interest is computers, which I find a great asset

in the job. Comparing work programmes from year to year in graphical, as well as written, form and then cross-referencing them can be very enlightening. Time spent programming is well-rewarded and facts obtained from data can be endless."

Willingdon is an attractive downland course on the town's outskirts. Formed with nine holes in 1898, it was redesigned first under the direction of J.H. Taylor

in 1904 and then by the celebrated Dr Alastair Mackenzie in 1925. A unique feature of the course layout is that 90 per cent of it can be seen from the clubhouse.

"Situated on a chalk base, we don't have too many serious problems. Like all coastal courses, you have to be on your guard against leatherjacket invasion and be prepared to take immediate control measures before serious



Peter Negus (right) and staffmen R. Charman, J. Dean and L. Bennett.



damage is done," Peter said. "Another factor we have to contend with is the wind. Spraying, fertilising, etc, have to be done early in the day as calm periods are often few and far between.

"The free-draining land makes the course playable all the year round, which means more play when neighbouring courses are closed. I also find that grass growth tends to continue well into the end of the year.

"I have an excellent relationship with the members, club secretary and green committee, who have seen how the benefits of careful planning and investment in the course over the past few years have raised the standard of the maintenance programme.

"At one time, topdressing was done infrequently. Now it is carried out four times a year. Having modern trailers and a mechanical bucket for the tractor allows all construction work to be undertaken by the greenkeeping staff instead of relying on contractors who are often unskilled.

"We have provided the professional with a practice ground by re-routing the 18th fairway and construction of new tees and bunker improvements have been extensive, but there is still a lot to be done.

"Equipment sheds have been improved to provide a machinery maintenance workshop separate

from the storage area and greenkeepers' messroom and staff numbers have been increased from three to four.

"Our range of machinery consists of a Ford 3000 Tractor with mounted 5/7 gang units for fairways and semi-rough, which are mowed with this equipment between April and October after which we use a set of Ransomes trailer gangs to eliminate tractor wheel marks. We also have a Hayter Rotary for the semi-rough.

"We possess two Ransomes 171 hydraulic triplex mowers, both in excellent order and used mostly for tees, aprons and verticutting, and a spare set of ten-bladed greens units mow the greens about a dozen times a year.

Hand-mowers

"Most green cutting is done with hand-mowers daily with the Ransomes Auto Certes. Cutting the greens at weekends entails an early start, but it is well worth the effort to present a smooth, sleek putting surface. Since adopting the policy of using pedestrian mowers two years ago, I am convinced it has resulted in a much higher standard of greensward.

"We have a Kubota four-wheel drive 27hp tractor, which is indispensable for construction work and well able to cope with the terrain's hilly nature. A

Cushman with all the necessary attachments has helped revolutionise many routine jobs.

"Last winter, we decided to improve one of our deep bunkers by revetting, Scottish style, the face with turf. The major problem was calculating the amount of turf required. After enquiries, I could not find a company able to supply turf at the desired thickness of two inches. Our course is a very compact layout with virtually no spare ground to lift turf. Eventually, it was decided to use a certain area, the only one available, after which it could be reseeded with a bent/fescue mixture and maintained as a turf nursery.

"The first step was preparing the bunker face. Then we made a simple wooden frame to help us build the wall at the correct angle of 65°. The frame consisted of two 2 x 1in pieces of wood, one length 7ft, the other 4ft, fixed together with a strengthener at the correct angle. A right angle was made with the two pieces of wood and a spirit level was attached to the 4ft piece. When the 4ft length was level, the 7ft one was at the correct angle to lay against the face of the wall.

"A foundation trench was excavated along the base of the bunker face. Dealing with the chalk's uncertain friable nature, it was not easy to prepare a smooth, level surface to lay the turf against. Next, we systematically



Peter Negus.

began to lay the back end of each turf in firm contact with the chalk wall. Where this was not possible, soil was rammed down at the back of the turf to fill any voids. The turf was laid in brick fashion using a turf mallet.

"As the wall grew, we gradually came in from the sides to achieve the desired shape. After reaching the required height, the surrounding surface areas were blended to complement the bunker. A ramp was constructed at the base and sand added.

"This was our first attempt at bunker revetting with turf and we learned a lot in the process. For instance, the slope of the ramp up the face was not sufficient to allow a fair recovery shot from the bunker floor. We have since altered this and made the floor more concave. We also adjusted the angle to about 60° by trimming back the turf wall with a sharp spade.

"After a few months, problems arose due to the turf wall being backed against the chalk. Soil used to fill the voids filtered through the chalk and gaps began to appear at the top of the bunker, but this has all been dealt with. The bunker is a great success, but whether we would build another would depend on availability of turf."

Peter supports the formation of one new greenkeeping association. "The bigger we are, the better and the more united a front we present, the more our views will be respected by everyone in the game."

He is also a firm believer in greenkeeper training. "All our



Old turf stripped from original bunker face in preparation.



Bank shaped and base ready for first row of turf. A wooden frame was constructed to maintain the correct wall face angle.



Final rows of turf laid. Edges were stepped down to allow for shaping.



Several rows of turf laid in early stages of construction.




The completed job!

staff have attended educational courses at some stage. The younger ones obtained City and Guilds 1 and 2 in greenkeeping. I also attended college for a phase 3 certificate.

"In Sussex, we have Plumpton College and were lucky to have

Nick Rigden responsible for so much greenkeeper training. Sadly for us, he has moved on to pastures new. I think a good college training, combined with experienced practical background, helps produce first-class greenkeepers."

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Surrey

In January, the branch held a seminar at Sunningdale for young greenkeepers to present talks and gain confidence in public speaking.

The evening started with a short introduction by Kenny MacNiven on A Need For Public Relations, which was very well-received by the audience of 50 greenkeepers.

The next speaker was Cameron McMillan, whose presentation, Father To Son, included slides of Sunningdale and the work methods of his father's younger days and how they are done today.

Jack stood at the back listening and proud to think he has brought into greenkeeping another chip off the old block. Well done, father and son!

The next speaker was Bob Thompson, head greenkeeper at the Hoebridge Golf Centre. His theme, Pay As You Play, was extremely interesting, especially to those greenkeepers in private clubs hearing that people queue up at 5.30am to play!

It's a wonder Bob manages to get any work done. He also discussed the problem of not having a head greenkeeper on the staff while the course was being built.

The third speaker was branch secretary Paul Pearse, whose topic was Surrey Golf Courses. Paul showed many slides taken on golfing trips around the county, going from heathland to chalk downs, parkland and clay. It is nice to know Surrey golfers have such a wide choice.

Finally, Jack McMillan gave a



A typical Surrey scene -
Camberley Heath.

resume on the formation of BIGGA. It seems everything looks well for the future.

Our thanks go to Sunningdale artisans for granting us use of their bar and club rooms for the evening.

•

The annual Vitax tournament takes place at Ferndown GC, Dorset on Thursday May 21. Six teams of greenkeepers representing the Midlands, mid-Anglia, Wales, south-west, Devon and Cornwall and the south coast will compete.

Organised by Vitax's amenity manager Colin Murphy, it is being supported by Vitax Key distributor Roffey Bros of Bournemouth.

London

The seminar at Aldenham Golf and Country Club was a great success and my thanks go to Mr Phillips for allowing us the use of the club and to speakers Derek, Chris, Norman, Graham and John. Thanks also to Allan Moffit and John Cockburn for their valued support.

Anybody wishing to put a team into the summer league should contact me as soon as possible. This year, the format has changed slightly and the two top teams of each league go through to the quarter-finals.

We are busy putting together a programme for the year, so watch this space!

Michael Peters.

Dear Sir...

I always read Jim Arthur's articles in *Greenkeeper* with interest. They not only match our way of thinking about how to treat Poa annua on greens, but also because they are easy for us amateurs to understand.

In *Yobs and yuppies (Greenkeeper, November/ December 1986)*, Mr Arthur wrote: 'Education must also extend to club members.' He also mentioned: 'Seminars and club evenings.'

I would like to bring your attention to another line of communication between the greenkeeper, his green committee and club members.

In the Netherlands, clubs have their own journals, published six, nine or 12 times a year.

The Eindhovensche Golf Club - 55 years young, with 18 holes and 800 members - started to seriously attack Poa annua on the greens two years ago, hand-in-hand with Mr L. Kappen Ing, the Dutch Golf Federation's agronomist.

At the same time, the green committee started to contribute articles to the club journal about the 'bad guy' (Poa annua) and the 'good guy' (Agrostis-Festuca). Written in a lighthearted way and not too long, club members read the series with interest.

Members know exactly what we are doing with the greens and why we are doing it. We get a lot

of questions and Shakespearean remarks such as 'Much Ado About Nothing.' And we are accused of having a Poa annua complex - the green committee is the talk, not of the town, but the bar!

We need simple information on topics such as the link from Poa annua, via fertiliser and water, to thatch and why the colour of the green is of no importance to a good putting surface and most of my information comes from *Greenkeeper* and *Golf Monthly*.

Perhaps the idea of clubs producing magazines could spread to the UK. The potential readership is vast and it should be given this simple message: 'To hell with Poa annua. Long live your fine British grasses!'

But never promise them a rose garden...

Rob Keunen, Green Committee Member, Waalre, Holland

Ed: Communication is the watchword of most successful and happy golf clubs and I am very pleased that you find Greenkeeper so useful in spreading the 'gospel.'

You and your fellow countrymen are to be congratulated on such an innovative publishing scheme. I know of no UK club producing a regular magazine - although, no doubt, someone will correct me.



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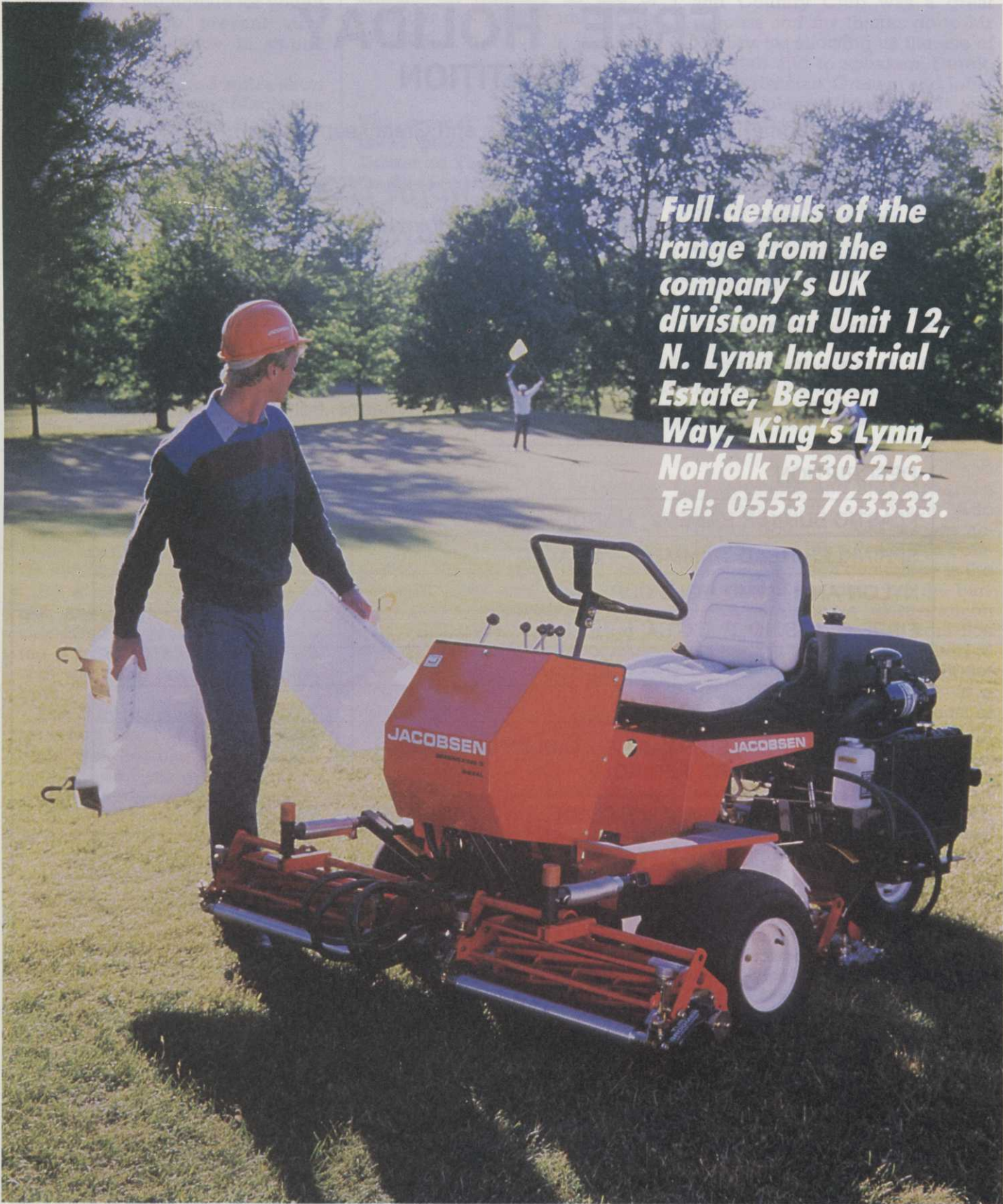
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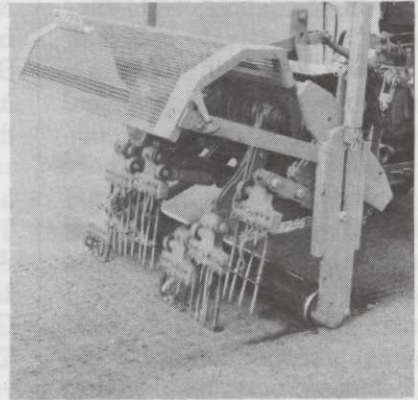
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Further Association News Round-Up From North of The Border

West Section: Lectures at Woodburn House are being well received both by Students and College Staff.

A Question Night was held at Cawder Golf Club in January and this was fairly well attended, a convivial evening was held by all.

Some internal problems have been encountered by the West Section Committee leaving us without a Secretary/Treasurer at the moment and this is being dealt with by myself and Committee as a matter of urgency.

Our Booklet advising all members of the West Section was to have been posted but this has been delayed at the moment.

A joint Seminar involving ourselves and Ayrshire takes place at Ayr Technical College on February 19th 1987.

A visit to S.A.I. in Edinburgh takes place in March and that completes the West Section's Winter Itinerary.

A. R. Connell

Ayrshire Section: The sections games night held just before Christmas was a great success, with 32 members in attendance, which I believe is the best attended games night yet. The Committee hopes this is a good guide to the future attendance wise.

The calendar for the year is taking shape with two meetings

later this month. The first is the joint Ayrshire/West Section Seminar at Ayr Technical College when the Sports Turf Research Institute will provide the Speakers on the 19th and the following week on the 26th is the sections A.G.M. at Prestwick.

The Spring Golf outing will be held at Stranraer Golf Club on Tuesday 7th April and the Autumn outing will be on Tuesday 15th September at West Kilbride Golf Club by courtesy of both Clubs Committees.

The Radix Students at Ayr Technical College are progressing through their modules successfully and they seem to be enjoying the enthusiasm shown by the Staff. Several Courses in Ayrshire have volunteered to assist with practical experience for the College until they can build up their own facilities. The Students in the second year have been taken on visits to the S.A.I. Seed facility at Ingliston and on the same day they also took in the Scotsturf Exhibition at Ingliston. They visited West Kilbride to see a Tee under construction and did some work on the visit. Future visits planned include Bunker construction at Ayr Belleisle Golf Course, Championship Course presentation at Turnberry Hotel Golf Course and Green construction at Glasgow Gables Golf Club. This exercise also lets the Students see other Golf Courses where they can compare types and layout with their own.

Finally, Mr G. Brown, Course Manager at Turnberry Hotel has

been co-opted onto the Section Committee, and we would like to welcome him to this position. The Committee feels sure that any contribution made by George will be both welcome and beneficial to the Section.

J. Paton

Central Section: A visit to Inverclyde Sports Complex at Largs, on Tuesday 20th January, was enjoyed by 17 members of the section and our sincere thanks go to Hugh Blair for giving us a very extensive and interesting tour of the whole complex and a full explanation of how it functions.

At a committee meeting held on Thursday 29th January, a very lengthy discussion took place on the new Greenkeeper's Association, with the Chairman and Secretary giving a full explanation of the set up so far.

K. Vertigan of SISIS wished to know what part of the Trade would be expected to play in the new Association and expressed the feeling that this should be clarified well in advance of any of the section's spring outings.

Section golf outings were proposed as follows, Spring 1988, Scotsraig, Autumn 1988, Schawpark.

A letter will be sent to all members of the section, encouraging them to give their full support to the new Association and to take a more active part in all the activities which are organised for everyone's benefit.

John Crawford

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Dear Sir

I was very interested to read John Campbell's article entitled 'Out on the Course' concerning course manager Laurence Pithie and Minchinhampton Golf Course in Gloucestershire, which appeared in the Jan/Feb issue of the Greenkeeper.

I myself work at Beverley and East Riding Golf Club in North Humberside, (which was also founded in 1889) as an assistant greenkeeper, where I have been for the last five years. What I found interesting about the article was that we at Beverley have a lot of similar problems as Mr Pithie. Our course is situated half a mile from Beverley on a patch of common land called the Beverley Westwood. Between the months of april and december we have cattle grazing on the common and course, sometimes as many as 500 but the last couple of years down to 160 due to new EEC

regulations on milk production. Usually we rely on cattle to graze down the rough but last year for the first time in club history we had to cut semi-rough. Our first job in the morning between april and december apart from routine switching etc. is to remove cow dung from fairways, greens, tees and bunkers with a shovel. Unlike Minchinhampton we are allowed to fence off our greens permanently which is a great help in protecting the putting surface. We have an automatic sprinkler system and are allowed to use certain weed-killers and fungicides usually when cattle are not present, as for fertilizer we use that too but not any organic fertilizer as the mess afterwards is horrific. We also have a full spiking and top dressing programme. Our greens are cut usually with our Toro GM3 or a 20" mower, our tees are cut by hand always and cutting around the wire

fences on the approaches is quite an art. Fairways are cut weekly with a Ransomes trail set of 5 gangs and we have just purchased a new set of 3 gangs for semi-rough.

Our most common and mounting problem is that of vandals, mainly at weekends, with flags being taken or destroyed. Also someone has an urge to go spinning around in a car on the fairways, nothing though to match the car in the picture shown in your article.

I was very pleased to see that we at Beverley are not the only club with these problems, I wonder how many other courses there are in the country with similar problems and hazzards as Minchinhampton and Beverley Golf Club. Thank you once again for an interesting and enjoyable article.

I.T. Collett

Assistant Greenkeeper

Beverley & East Riding Golf Club

Tridents Major Move

Richard Lawrence managing director of Trident Turf Supplies has announced the appointment of Roy Dagnall as amenity division sales director. Roy was previously with Rigby Taylor Ltd., and now joins Trident to take responsibility for the company's move into National Local Government Contracts. Commenting on the move Richard Lawrence said "Roy's vast experience and numerous contacts will be of great benefit to Trident. With an increased product range we are confident that we can satisfy all the needs of our growing list of customers."

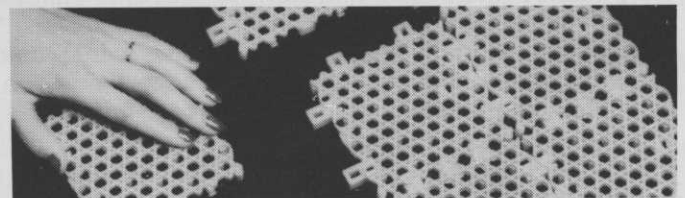
Deere on the course at Sunningdale...



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Deep in debt in the desert

GOLF in the Arizona desert is perhaps the ultimate in money gone mad. Land, clearly good for nothing, is converted at vast expense into golf courses so different from that which we know and understand that, in some instances, clubs have had to change the rules of the game. While in Phoenix for the GCSAA annual conference and trade show, I had the opportunity to visit two courses and play one of them, writes Michael Coffey

Both clubs, Desert Highlands and Troon, are surrounded by, and exist for, real estate development. Some of the statistics give a graphic account of how such clubs come into being - property at Desert Highlands, a development enclosed by a fence and with armed security guards on the gate, starts at half a million dollars and the price for a standard design home goes up to 1.8m dollars.

There are 27 greenstaff for 18 holes and the estate common areas, green fees are in the region of \$100 and you can only be introduced by a member. Members include US PGA Tour stars such as Dale Douglas, Tom Weiskopf and even the designer Jack Nicklaus, who recently competed in a members and guests day with his son. To be a member, you have to buy a plot, although you don't necessarily have to build - they start at \$350,000.

At Troon, the story is similar. you have to buy a plot then apply for membership, which costs an initial \$25,000 entrance fee, playing dues of \$175 per month and \$600 per annum for food and drink. The course, designed by Tom Weiskopf and Jay Morrish, recognises Weiskopf's win in the 1973 Open Championship and his winning mementos are in a trophy case in the spectacular clubhouse, which features English carpets, cherry wood from France and Italian marble.

The locker room has a gym, sauna, steam bath and plunge pool. So far, in the first year of operation, there are 62 members, but real estate sales were going well during my visit. The course, with its winter dormant Bermuda grass, is not nearly so inviting to play as Desert Highlands, although the two-tone effect certainly makes each hole stand out. Needless to say, there is a replica of the famous Postage Stamp short hole (Royal Troon's 8th) which somehow looks out of place with a backdrop of the Sonoran desert.

I played Desert Highlands thanks to Denver superintendent Dan Pierson, together with a friend of his and Howard Swan of Golf Landscapes. We all commented on Nicklaus's architecture, cost of construction, cacti, wildlife and the general opulence. STRI director Dr Peter Hayes was a passenger in our buggy.

Nicklaus designed this as his first desert course and it opened in 1983 with the first televised 'skins' game. The cultivated part of the course is probably only about 70 acres and is laid out among the real estate plots in such a fashion that every hole is separate. The practice ground is huge and, like the rest of the course, heavily contoured. There is also an amazing putting course, which features five par threes, an overall length of 1,087 feet and a par of 41!

Crushed marble

The golf course, as we played it from the back tees, is 7,099 yards, par 72. This month's front cover, taken from the 1st tee, illustrates the difficulties. The light brown, long 'bunker' down the left side is a feature found on most holes. It is finely crushed marble and forms a sort of semi-rough - you play the ball where it lies and it is known as the 'transitional area'.

A local rule, covering a ball hit beyond this area into the desert proper, reads: 'A ball hit beyond the transitional area into the desert may be played as a lost ball with the following option: drop ball in fairway at point where ball last crossed margin of fairway with penalty of one stroke.'

Going into the desert in golf clothing is not advised as the cacti literally come out and grab you, hence the warning that: 'this golf course can damage your health, (and pocket)! On one occasion when, having hit a shot straight right, I ventured into the brush,

picking my way very carefully, I found nine golf balls before I came across mine. I was evidently out of my depth as a golfer, as well as financially!

No one bothers to pick up the golf balls and when they strike large cacti near a tee, for example, they plug (again, no one bothers to prize them out). During the summer, when temperatures can rise to 120 degrees, the cacti cover up these holes to conserve moisture. The temperature inside the plant rises so high that the imbedded golf balls just melt.

Played from the back tees, the course was too tough for our party, not all the holes were well-designed and the examination of the golfer was not always fair or obvious. Much use has been made of little pimples and a succession of grass potholes, all of which penalise you heavily. None the less, the course was fun to play, although whether I could cope with being a playing member, I very much doubt.

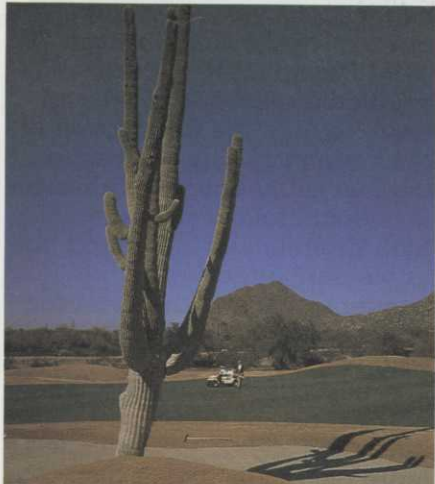
Irrigation is obviously a major factor in maintaining such a course and the club is particularly proud of the fact that it only uses recycled waste water. I do not know the quantities, but they must be considerable as the local planning authorities have decreed that, in two years time, golf courses will only be able to use waste water and that it will have to be self-generating. In other words, to irrigate a golf course in the desert, you will need to have properties or an hotel producing enough for your needs. Water from the Phoenix area has to travel 900 miles with an average evaporation rate of some 40 per cent.

The uniformity of playing surfaces was excellent if totally 'artificial'. Greens were lightning quick and had many sweeps and considerable borrows. Landing areas, in the main, were quite wide, but there was a great premium on the correct line from the tee, making approach shots much easier.

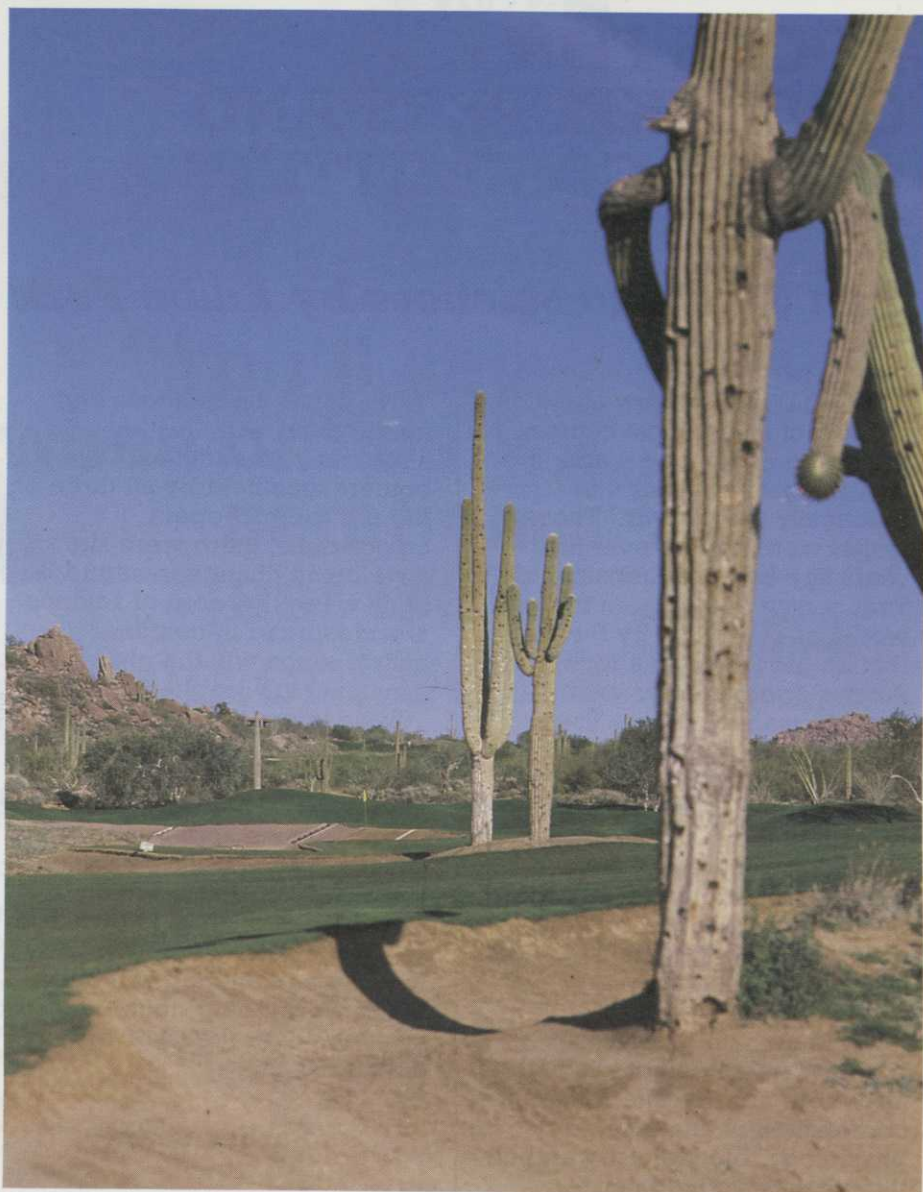
With such a comprehensive irrigation system for fairway watering, each sprinkler head had the yardage to the middle of the green on it - a great help and, no doubt, a trend that will become commonplace over here in time.



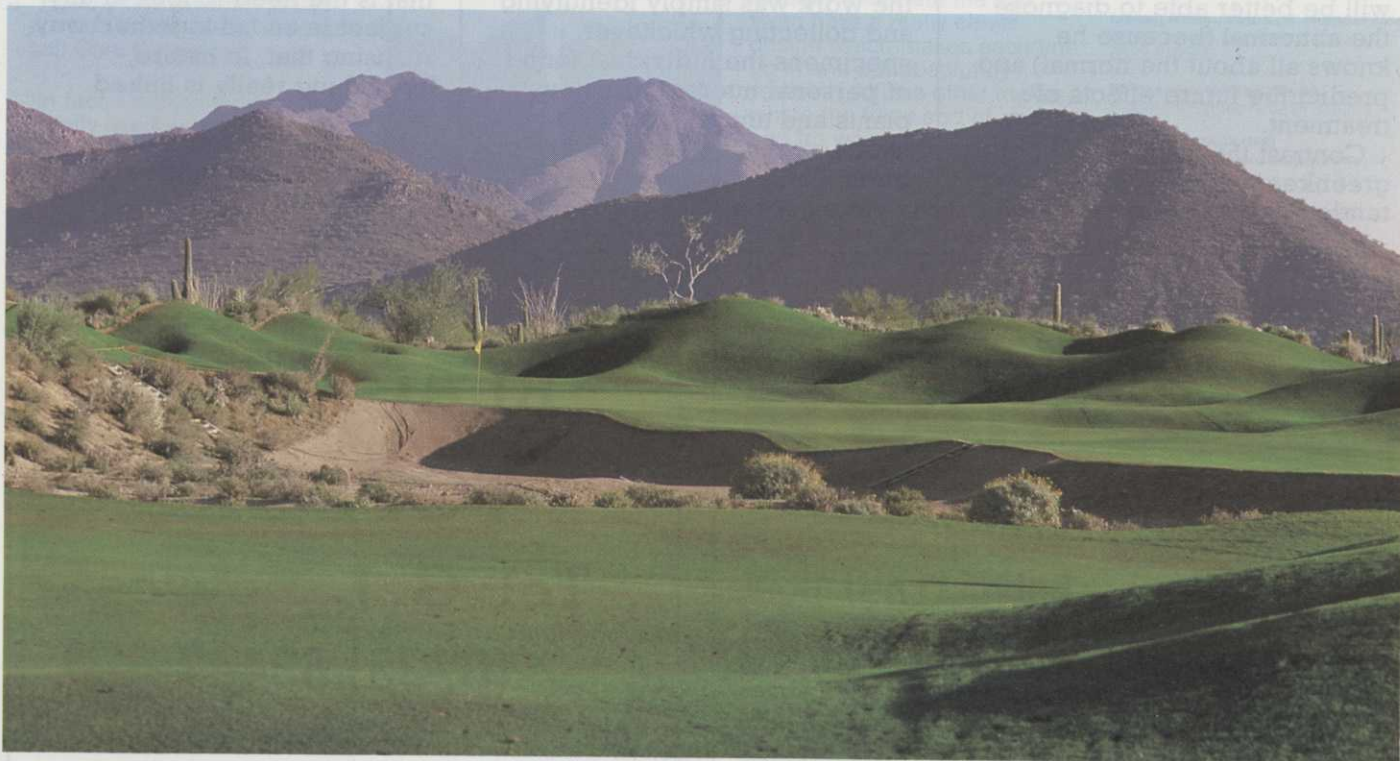
Howard Swan ventures off the beaten track.



Troon's 'two-tone' course.



Golf balls imbedded in cacti.



Desert Highlands 9th green.

BOOKS FOR GREENKEEPERS AND GREEN COMMITTEES

Part 3 – Basic Sciences by Eddie Park

'I WOULD like to draw attention to the fact that at most courses the green committee – and, in fact, the greenkeeper – is practically an amateur.' Those words were written over 35 years ago by Lord Brabazon of Tara, a man of stature in the golf world, as is evident by the fact that he gave his name to a famous open amateur event and also the main course at The Belfry.

Harsh words at the time, but to some people there is still a ring of truth in them. I have always found a fascination in the science behind the art of course maintenance – in, other words, the 'why' of it. But this does not seem to interest many greenkeepers.

In the medical world, the budding doctor is not allowed anywhere near a patient until he is proficient in anatomy, physiology, biochemistry and all the other basic medical sciences. The intention is that he will be better able to diagnose the abnormal (because he knows all about the normal) and predict the future effects of treatment.

Contrast this with greenkeeping, which has tended to be obsessed with the

'how' of it – the methods and techniques.

Recently, at excellent conferences held by all three of the old greenkeepers associations, there were signs of a welcome change in attitudes. Only when that core of science is widespread in course maintenance will the charge of 'amateur' be dropped for good.

Basic knowledge stems from what used to be called nature study – mainly observations of the plant and animal world. I recently came across a book called *The Naturalist In Britain* (1976) by D.E. Allen, which traces the growth of knowledge about the natural world, a fairly recent phenomenon with most of the work being done by amateurs over the last two centuries.

Earlier years

In the earlier years, much of the work was simply identifying and collecting whichever specimens the individual found of personal interest – obviously, plants and animals, but also fossils, rocks, insects, butterflies, birds, etc.

An early book in my collection

is *The Field Naturalist's Handbook* (1893) by the Rev. J.G. Wood, typical of its era and showing the immense variety of these organisms already catalogued and grouped under habitats, but it took some time for the concept of communities and the reason for their existence to take shape.

Nevertheless, as early as 1785, a farmer called William Marshall was writing: 'Soils will ever find, in process of time, their proper produce,' perhaps the earliest evidence of an understanding of that most important subject for greenkeepers – plant ecology.

The word 'ecology' has many definitions, but the one I like best is: 'The study of the all-togetherness of everything.'

Sir Arthur Tansley, one of the founding fathers of the modern naturalist movement in this country, wrote *Our Heritage Of Wild Nature* (1946), which predicted most of our present troubles, e.g. the destruction of the countryside by agriculture, the inevitable economic disaster that would follow widespread high productivity in farming, the unpleasant effects of coniferisation and the need for education in nature for those who work in it.

In this latter connection, he pointed out the fact that education should concentrate more on 'things' rather than 'subjects.' What he meant by that is the need to look at any subject in an 'all-together' way, realising that, in nature, everything really is linked together.

I believe it is our failure in this respect that has led to the

Continued on page 36...

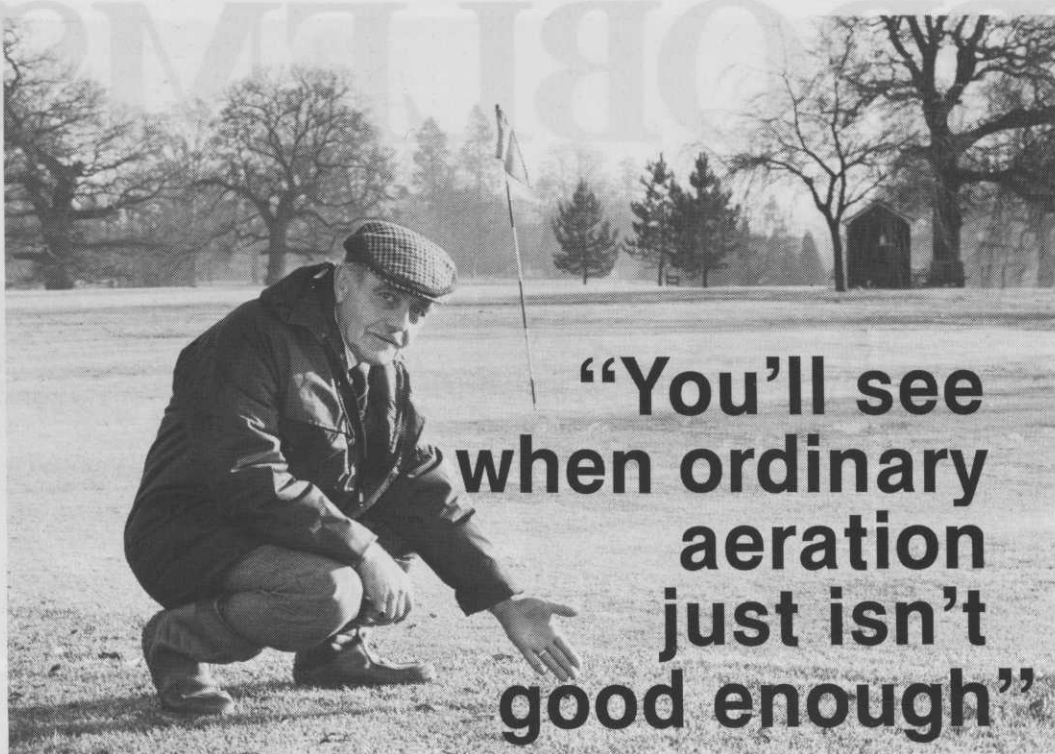
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“You’ll see alright. It may be surface water is still a problem. The turf could be looking thin and tired. Weeds could be on the increase.

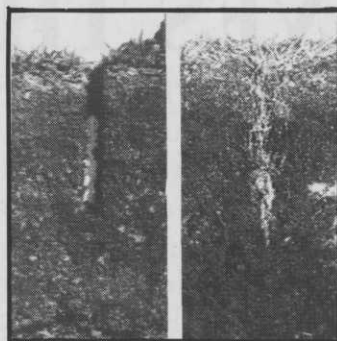
“What you can’t see so easily is the cause. Compaction. Or a build up of thatch. Probably both. Either way, the result’s the same. Water doesn’t soak in properly. The soil is starved of oxygen. Rooting gets shallow. Weeds and disease get a hold. You’ve got a problem and just spiking holes in the ground isn’t going to solve it.

“Hollow tine aeration is the answer. What the Ryan people call Core Cultivation.

“In fact, I reckon that for most heavily used sports areas, Core Cultivation should be a routine part of any turf maintenance programme. Not just a problem solver. Obviously, how often you use hollow tining varies according to different soil conditions. I find once in the Spring and Autumn is about right.

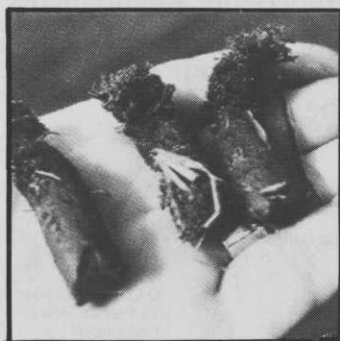
“So what’s this core cultivation all about?

“First, hollow tining actually removes cores of soil—and thatch of course. That obviously relieves soil compaction far better than a spike or slitter. As a result, it opens up the soil giving better movement of air, water and fertilisers. If the soil is good, breaking up the cores, either by a scarifier or a Ryan core processor, separates the thatch, which can then be removed easily.



New vigorous growth after hollow tining

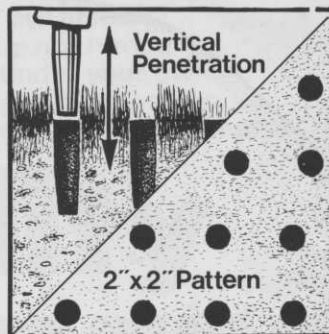
Cores of soil and thatch



“Why do I think Ryan hollow tine aerators are the best?

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Cameron Forms Major Part Of Engineering Group Buy-Out

Cameron, the horticultural, sports turf and landscaping irrigation division of Wright Rain, plus the Macpenny fog and mist propagation business, has been involved, as part of Wright Rain, in the formation of a new British engineering group.

This is a result of the Birmid Qualcast Group decision to sell off three companies outside its main area of operation. Four directors involved have formed a consortium to buy these businesses.

Backed by Schroder Ventures and CIN Industrial Investments, the £2.6 million deal includes Wright Rain, plus BQ Precision Engineering in Leicester and BQ Industries with a manufacturing operation in Birmingham and its Sterling Scaffolding Division in South Shields and Edinburgh.

The newly formed group has a combined turnover of £14 million and employs just under 400.

For Wright Rain and Cameron, there will be no change of name or direction. The company is undertaking considerable investment at its Ringwood factory to increase production facilities for its range of pumping, irrigation and liquid waste handling equipment.

The company claims that the downturn in the UK agricultural market has been offset by its widening the range of products and markets, so that now less than

35 per cent of business is reliant upon UK agriculture.

These actions have included diversification through acquiring the Cameron horticultural, sports turf and landscaping irrigation business in 1983. Cameron now accounts for over 25 per cent of Wright Rain business.

The second area of develop-

ment has been in the range of liquid waste handling and pumping products for the industrial market through the company's Farrow Division, which concentrates on sales in more diverse markets, including mining, quarrying, local authority, manufacturing and processing activities.

Suffolk Set To Swing Some More

CDC Landscapes of Waldringfield, Woodbridge, Suffolk has almost 30 years of landscaping construction and alteration to golf courses behind it, as well as wide experience of turf culture and management of extensive amenity areas.

The company is also landscape maintenance contractor to our government in the UK and West Germany and has the largest stock of used and reconditioned modern equipment in the country, with all types of hydraulic and trailed grass mowing machinery available for sale or hire. Repair work is carried out on the premises.

In 1983, CDC Landscapes designed and constructed Heath Farm Golf Course at Waldringfield, a popular nine-hole layout offering a good test of golf. Planning consent has been granted to extend the course to 18 holes with an additional nine-hole practice layout.

The course is situated in an attractive part of Constable country

with river views enhancing the golfing scene and landscaping work on this flat expanse of agricultural land has produced beautifully sculptured greens, tees, mounds and bunkers.

Heath Farm Golf Club is now bulging at the seams with an ever-increasing number of visitors playing the course. To cope with the influx, the club plans to spend £184,000 enlarging the facilities.

At Priory Park, near Ipswich Airport, a holiday and leisure centre is being developed and the site includes a nine-hole course designed and constructed by CDC Landscapes.

Built in an ideal setting on a sheltered piece of land, the course slopes gently to the edge of the River Orwell. An automatic watering system has been installed and the course is due to open in the spring.

Ease and economy of maintenance has been the prime consideration in the design of both courses.

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Turf Treatment With A Dedicated Touch

Regular and thorough aeration throughout the year provides the key to the production and maintenance of first-class playing surfaces on Sunningdale's championship golf courses.

Indeed, aeration is the basic component of the complete turf management programme practised by Jack McMillan during his seven years at the club. The programme was developed specifically to suit the soil characteristics of Sunningdale's 400 acres.

The soil type, Bagshot Sand, is described by Jack as fairly impoverished and inert, comprising a sand/silt mix of little topsoil depth, which can, on occasions, behave like clay.

"By that I mean the soil compacts quite easily under foot or wheeled traffic. It will also bake in hot weather. Therefore, it is essential that the ground is aerated intensively all-year-round so that it retains its structure and remains free-draining."

Jack is a firm believer in maintaining an aerobic soil structure.

"On most courses that means carrying out thorough and regular aeration to combat the joint effects of the continuous passage of feet and machinery.

"At Sunningdale, everything we do goes hand in hand. If the soil compacts, it neither handles water well nor allows vigorous and healthy root growth. Rain or applied water will tend to run off, causing ponding, while in hot

weather, plant cover can be burnt off, leading to rapid turf wear and erosion."

Jack added it was, therefore, vital that the soil and its structure be kept in as good a condition as feasibly possible. He employs a Cushman Turf Truckster equipped with Huxley and Cushman slitting attachments to carry out an intensive winter aeration programme on the Old and New Courses at Sunningdale.

Commencing in October, the equipment is used exclusively each week to treat the greens, surrounds and tees. Snow or heavy frost is all that lays the machines off.

The Huxley slitter is fitted with 6in blades, while those on the Cushman version are 4in long. The two machines are then worked alternately so that aeration is carried out at a different depth each week.

This helps "open up" the soil structure more effectively, while reducing the risk of a hard, impermeable layer forming - a particular hazard when aeration is performed at a constant depth.

The greatest likely problem at Sunningdale, however, is compaction within the surface layers, so aeration of the top few inches of the turf at a weekly intensity is essential.

The Cushman Turf Truckster is used with a range of attachments from the Huxley and Cushman stables to handle hollow-coring, brushing, spraying, topdressing and the matting-in of materials, all carried out by the club's 13 groundstaff.

The Old Course, which opened

in 1903 and has bigger putting surfaces and bunkers, is looked after by a foreman with four staff. A foreman and three staff tend the New Course, which dates from the 1920s.

The remaining groundstaff comprise a central tractor squad and a full-time mechanic.

Sunningdale applies about 500 tonnes of topdressings a year, in seven or eight separate applications. The soil mix, consisting of 75 per cent sand and 25 per cent peaty-loam, is produced on site by the club's Royer processing equipment and is used on all 36 greens, approaches and tees. Dressings are only applied when there is a promise of plant growth or actual growth is occurring.

On the spraying side, Jack said that the predominantly acid soils of the two heathland courses did not encourage the establishment or growth of many broad-leaved weeds. "The sprayer is used primarily for fungicide treatments and for the monthly application of a cocktail comprising a wetting agent and sulphur of iron.

"The Huxley brush is in regular use during the spring and summer, removing dew from the greens, while the dragmat helps us spread the topdressings thoroughly across all surfaces. The brush is also used in ideal conditions to apply a finishing touch to the greens after matting," he said.

Jack, who entered the profession when 14, is looking forward to May when the world-famous Surrey club stages the Walker Cup.



Mounted at the rear of a Cushman Turf Truckster, a 66-gallon Huxley sprayer.



Cushman equipment slitting the Old Course 18th.



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The five formulations in Fisons Greenmaster range provide a year round fertilizer programme for all fine turf.

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"Our four greens have to satisfy 10,000 bowlers a year. We've independently compared proprietary slow release fertilizers and, for both our spring and summer nitrogen requirements, Greenmaster Super N proved the best." - Mr. George Smith, Head Greenkeeper, St George's Lawns Bowling Greens, Cliftonville, Margate.



"To maintain good greens under the constant hard wear our golf courses receive, we need fertilizers which work quickly and effectively. The Greenmaster

range gives us the flexibility and reliable response we need." - Mr Ray Mower, Area Superintendent, London Borough of Hillingdon Leisure Services Department.



"Our busy course is played virtually every day and the members rightly expect greens that play well all year. We've found that Greenmaster fertilizers keep the greens healthy, growing vigorously and resisting wear." - Mr Len Arbon, Head Greenkeeper, Woodbridge Golf Club.



"We're proud of the fine reputation our parks have gained. To maintain it we need accurate, reliable and safe fertilizers in the right formulations. The Greenmaster range meets all these needs and, comparing cost per treatment and quality, Greenmaster offers real value for money." - Mr Keith Scrimgeour, Horticultural Manager, Glasgow District Council Parks and Recreation Department.

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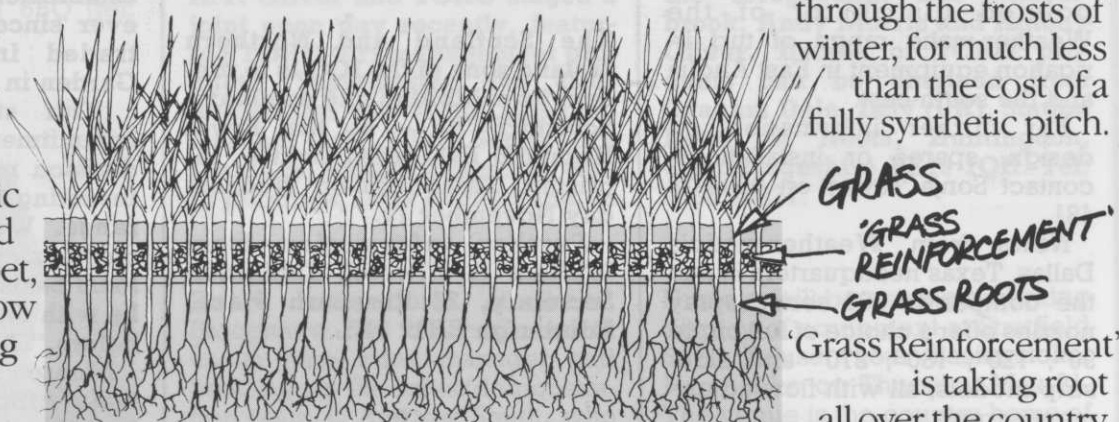
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Playground, park or penalty spot, wherever grass is worn away, that's where you need a little extra help.

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Scotland

Stewart and Co. Seedsmen Ltd, Stronghold Works, Mayfield Industrial Estate, Dalkeith EH22 4BZ. Tel: 031 663 6617/8/9 (24 hr)

North England

Rigby Taylor Ltd, Rigby Taylor House, Garside Street, Bolton BL1 4AE. Tel: 0204 389888

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Greenline Distributors Ltd, Castlewellan Road, Banbridge, Co. Down. Tel: 08206 23861

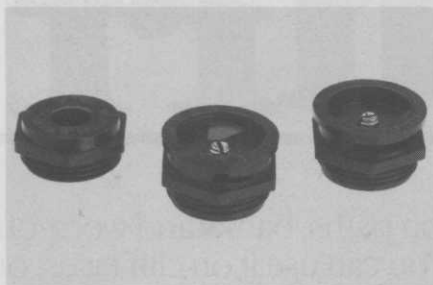
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Rigby Taylor Midlands Ltd, Unit 9A, Warwick Industrial Estate, Budbrook Road, Warwick CV34 5XH. Tel: 0926 401444

'Grass Reinforcement' Suppliers also supply Notts approved seed and topdress.

Full details from Notts Sport, Launder House, Harborough
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 Tel: 0533 851111

People, Places, Products



Weather-matic's 200 series.

Prime Watermen is the newly appointed distributor of the Weather-matic range of turf irrigation equipment in East Anglia and the south-east.

For further information on design, spares or installations, contact Sonja Taylor on 0502 78 481.

News from Weather-matic's Dallas, Texas headquarters is that the company's 200 series spray nozzles offer a choice of full circle 90°, 120°, 180°, 270° and side-strip models, all with flow adjustment screws.

The 200 series precision-molded ABS plastic spray nozzles are designed exclusively for use with Weather-matic 32P, 35P, 36P, 37P pop-up sprinklers and 95P shrub bodies - 30 series pop-up heights range from 2½in to 12in.

Weather-matic also offers the 300 series brass nozzles in a full range of coverage patterns, including strip sprays designed for use with the 30 series pop-up sprinklers.

Vitax has appointed a new distributor for its Key range of products in Devon and Cornwall. Contact: **Monro Horticulture, Long Rock, Penzance, Cornwall TR20 8JH. Tel: 0736 710304.**

Dorset-based **Roffey Brothers (Tel: 0202 523752)** will now extend its trading area to include Somerset and Vitax will shortly be announcing the appointment of further Key distributors in Avon and South Wales.

A new arrangement for the sale and distribution of the Scottish

Agricultural Industries' Longlife range of turf foods has been made to ensure wider availability in England and Wales.

The range is now supplied through ICI Professional Products' distributor network. Within the new agreement, support for the range will continue to be given by Chipman, the existing distributor.

As before, ICI Professional Products handles SAI Longlife in Scotland. SAI can be contacted on 031-332 2481.

The Scotland and Northern Ireland zone of the IOG is to present its exhibition and seminar - **Scotsturf '87** - at the **Royal Highland Exhibition Centre, Ingliston, Edinburgh** on **Wednesday November 11.**

Further information from **William A. Elwood, Exhibition Secretary, 22 Roseburn Place, Edinburgh EH12 5NL.**

The inaugural Huxleys two-day service course was voted a success by instructors and students.

The course, designed specifically for engineers from appointed Cushman dealers, attracted 19 representatives to the new 1,200sq ft fully-heated building, built by Huxleys at its New Alresford factory for training and visitor reception.

Training manager Terry Cooper said the primary aim of the service course was to im-

prove diagnostic ability. First place went to Michael Edge of Leicester Horticultural Engineering with Roy Shoreland of Birds Grasscare second.

Monro Horticulture is the result of an amalgamation by Kenneth Wilson Horticulture and Fyffes-Monro Horticultural Sundries. Gordon Hunter is managing director of the company, which will provide a nationwide service from eight depots.

The name Monro has been established over a century - ever since George Monro first traded in London's Covent Garden in 1862.

"Our strengthened national commitment to the horticulture division means that we will be investing to improve the product range. We pride ourselves on meeting customers' needs on a local basis, so all contact should be with the Thorp Arch office as before," Mr Hunter said.

Monro Horticulture has its main office at **Morwick Hall, York Road, Leeds LS15 4NB. Tel: 0532 738282.**

May & Baker Environmental Products and Burts & Harvey have produced a new training 'package' for those using amenity pesticides.

A 14-minute video features TV journalist Howard Stableford, who examines statutory requirements and demonstrates 'do's and don'ts' of handling



Inaugural service course at Huxleys.

chemicals. *The Safe Use Of Environmental Chemicals* costs £46 (VHS and Beta) or £62 (U-Matic), inclusive of VAT and postage.

Accompanying the video is a 16-page booklet on safety procedures - it contains a ten-point safety check list as a separate self-adhesive sticker.

A copy of the booklet is available free of charge. Purchasers of the video can request up to 20 further free booklets and quantities in excess of 20 are available at 20p each.

Further information from May & Baker, Regent House, Hubert Road, Brentwood, Essex CM14 4TZ (tel: 0277 230522) or Burts & Harvey, Crabtree Manorway, Belvedere, Kent DA17 6BQ (tel: 01-311 7100).



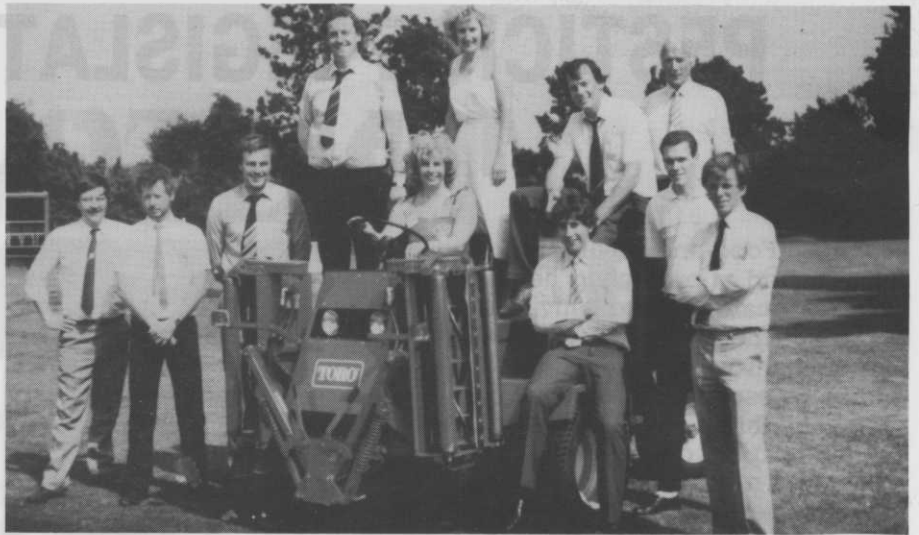
Mark Bowley.

Mark Bowley has joined Kings of Coggeshall, Colchester, Essex as general manager of the horticultural division. He takes over from George Freear, who has gone back to horticultural production. Mark, 29, has ten years selling experience in commercial horticulture, having previously worked for Fargro and then Fisons as technical sales rep.

Barrie Cheetham, 50, has joined Vitax as amenity manager for eastern England and Scotland. He retired recently from Fisons after 26 years service.

Contact him at 3 Barham Court, Melbourn, Royston, Hertfordshire SG8 6EW. Tel: 0763 60825.

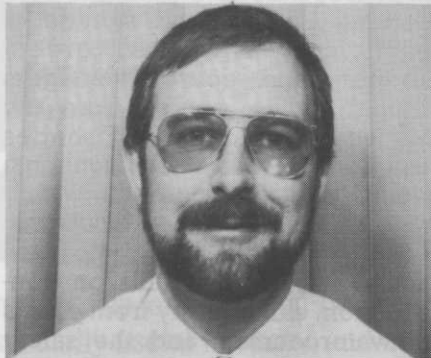
Colin Murphy becomes amenity manager for the west and Ireland. He is based at 21 Maes-y-Sarn, Pentyrch, Cardiff, South Glamorgan. Tel: 0222 891893.



A.T. Oliver and TORO staged a joint open day recently, featuring TORO turf management products. Surrounding the 450D Reelmaster are Colin Graham, Graham Dale, Clive Soper, Lyn Jennings, Angela Chapman, Colin Jennings, Dick Peckett and, in

the foreground, Bill Misselbrook, Andy Morris and Antony Oliver. Details of TORO products can be obtained from Graham Dale, Lely (UK), Station Road, St Neots, Huntingdon, Cambridgeshire PE19 1QH. Tel: 0480 76971.

Dabro International of Prees, Shropshire has Bruce Cusworth as its new sales manager and heading up the sales/demonstration team is Andrew Smith, who was previously with the Burgess Group for eight years.



Bruce Cusworth.

Frank Driver of 1 Jupiter House, Calleva Park, Aldermaston, Reading, Berkshire, RG7 4QW (tel: 07356 77451) is offering a trade discount of 20 per cent on mini sprayer units.

Four versions are available, ranging in price from £445 for a petrol handsprayer to £1,897 for a mini sprayer unit with micronair heads.

Extras, such as a hand lance (£73) and an electric pump (£90), to suit all the models are available and full details are given in the company's new colour brochures.

Huxleys will be staging a working display of equipment at Stratfield Saye House, near Basingstoke, Hampshire on Thursday May 21. The venue is the country home of the Duke and Duchess of Wellington.

Entry will be by personal invitation card only, obtainable in advance from Michael Bird, Huxleys Grass Machinery, The Dean, New Alresford, Hants SO24 9BL. Tel: 0962 73 3222.

The new all-weather playing surface at Great Yarmouth's Wellesley Road Sportsground was officially opened by Trevor Brooking, the former England and West Ham mid-fielder. The floodlit surface, sand-filled Nottsward on an envelope system, can be used for hockey, basketball, netball, tennis and football.

A Nottinghamshire system was used for the Temple Park pitch at South Tyneside and for a mini-park using Nottsward sand-filled grass for Liverpool council. And the biggest multi-purpose area yet to be built in Britain, providing two soccer pitches, is being installed for Southampton council.

Full details from Notts Sport, Launde House, Harborough Road, Oadby, Leicestershire LE2 4LE. Tel: 0533 718892.

PESTICIDE LEGISLATION AND THE GOLF CLUB

THE 1985 Food and Environment Act is aimed at protecting health and safeguarding our environment, but there appears to be a loophole through which private golf clubs escape this legislation, or so they think!

After a paper I gave recently on health and safety, many greenkeepers told me that either their clubs have refused to listen or discuss their position, or, worse still, some head greenkeepers insist that these problems are nothing to do with their duties.

However, if our profession is to achieve its rightful place in the golf world, we must address ourselves to these problems. We can no longer accept the 'head in the sand' attitudes of the majority of golf clubs in this country today. The act's implications are, or should be, of concern to us all.

In a recent turf magazine, I read the totally misleading comment that the act was nothing to do with golf clubs - rubbish! Every time any 'pesticide' is used on a course, great harm can occur, either to the operator, public or environment if efficient calibration and/or application is not carried out.

The term 'pesticide,' by the way, refers not only to pesticides, but fungicides, herbicides and, surprisingly, wood preservers.

One immediate effect the act has on a golf club is the presence of an illegal product such as DDT - this will lead to a large fine. The supply and use of protective clothing, masks, gloves, boots and spray suits is very basic management, but how many clubs supply them and how many greenkeepers use them?

Many committees have a simplistic view of work carried out on the course. They constantly relate to what they do to their lawns and seem to think that golf course management is a lot of fuss about nothing. Education is again the key - education of club staff and officers is vital.

As we have found in the past, far too many clubs are totally apathetic when it comes to encouraging greenkeeper training



By Peter Wisbey, course manager at North Foreland Golf Club, Kent.

and it is my experience that when any sort of educational activity takes place, be it a seminar, trade talk or visit, or simply a few greenkeepers walking a course and exchanging views and ideas, you see the same faces and the same clubs represented time after time.

Returning to the 1985 act, codes of practice are now available concerning the use and storage of pesticides. All head greenkeepers and course managers should obtain copies from the Ministry of Agriculture Fisheries and Food. These codes contain a wealth of information with which we should familiarise ourselves.

The code on storage is of particular use, with details on construction, siting (away from drains or watercourses) and the safety aspect with reference to emergency vehicles, access, etc. It should be a matter of professional pride to have clean and organised storage of all the requisites in regular use on the course. The old adage: 'show me a greenkeeper's sheds and I'll tell you what the course is like' is a very true one.

The new act has far-reaching implications, enforceable by law, for agriculture, local authorities and contractors. One important aspect is the testing and certification of operators, which will be carried out by the National Proficiency Tests Council based at the National Agricultural Centre, Stoneleigh. Although golf clubs

cannot be forced to put staff through such an examination, I feel strongly that clubs should voluntarily send senior staff to sit it.

One aspect of both the 1985 Food and Environment Act and the Health and Safety at Work Act puzzles me when related to private golf clubs. As I have already stated, the law appertaining to agriculture, etc, is clear. But a farmer spraying a field is unlikely to encounter members of the public. On a golf course, however, spraying takes place, on occasions, around play, with all the obvious risks that entails.

As far as the Health and Safety at Work Act is concerned, there is a similar anomaly. A farmer, again working in the same field as before, has to have his tractor fitted with a safety frame. On the golf course, this cannot be enforced by law. I don't think anyone would argue that there is a much greater chance of overturning a tractor while mowing an undulating fairway than working in a relatively flat field.

I feel the powers-that-be should address themselves to this ridiculous situation.

In conclusion, although I have only briefly touched upon details of the 1985 act, which could fill a number of magazines (again, I urge you to obtain copies of the codes of practice), I cannot stress enough the need for us all to approach these subjects in a serious and professional manner.

Committees are made up of businessmen used to dealing with facts and figures. Approached in the proper manner, with all the relevant information to hand, a positive response can be forthcoming. Check on the insurance implication of improper storage and third party cover for members and visitors. Storage in an adequate building or container need not be all that expensive. Keep records of stock, dates and amounts used, operator, results, etc.

Above all, don't give up and say: "My club won't listen." Make them. In the long run, they may thank you for your persistence.

VOTE OF CONFIDENCE

Sales of Daconil* *turf* prove the point. Since it was launched by ICI last year, greenkeepers everywhere have elected to use this turf fungicide based on chlorothalonil. Well you can't keep a good fungicide down!

Its unique mode of action means that even after years of successful use on fine turf it continues to be effective.

And because of its multi-site action and chemical composition it can be used **1** in sequential spray programmes with total confidence.

The list of turf diseases prevented, controlled and cured is impressive:



But that's not all. Daconil *turf* can be used at any time of the year and is especially useful in spring and autumn when disease incidence is most likely. It has dependable and consistent disease activity and only needs to dry on the leaf to resist heavy rains, morning dew or frequent watering. And because of its liquid formulation it is easy to dilute and apply.

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Daconil *turf* contains chlorothalonil. Read the label before you buy; Use pesticides safely.

*Daconil is the registered trade mark of SDS Biotech.

People, Places, Products, Continued...

The Birmingham IOG branch has organised a seminar entitled **Pesticide Legislation And The Groundsman**, which will take place at the Manor House, University of Birmingham on Thursday April 9.

Papers will include **Legislation And Codes Of Practice** by Mrs H. Hamilton of the Ministry of Agriculture; **Legislation And The Manufacturer** by Keith Cleverly, ICI professional products manager; **Legislation And The Retailer and Pesticides And The Environment** by Dr M. Anderson, lecturer in zoology at the University of Birmingham.

Cost of attendance will be £5 for IOG members and £10 for non-members. Tickets and further information may be obtained from the seminar organiser: F.J. Hammond, Windmill Cottage, Manor Gardens, Bristol Road South, Northfield, Birmingham. Tel: 021-476 6300.

British Seed Houses supplied grass seed for the new championship course, designed by Jack Nicklaus, at St Mellion. In the spring and autumn of 1985, straight pennecross creeping bent was sown on greens and tees and fairways were sown with the standard BSH A12 fairway mixture, which contains chewings fescue frida.

BSH has been appointed main distributor for the new smooth stalk meadow grass called Julia. The Sports Turf Research Institute made Julia the highest rated poa pratense in its 1987 seed guide. Independent trials carried out at the institute showed that Julia is a compact, hard-wearing poa that withstands regular mowing down to 20mm and has a good resistance to fungal disease. The company intends to introduce Julia in several of its fine turf mixtures for the forthcoming season.

Phone-in brief news stories to Greenkeeper on 0255 507527.

Intensive Irrigation For Nicklaus Course

The first championship course in Britain designed by Jack Nicklaus has opened at St Mellion and irrigation consultant Watermation has engineered a means to supply sufficient water to the fairways and greens without disturbing play.

Watermation's solution, a solid state irrigation system, automatically controls 400 sprinklers, sup-

plied with water by eight Grundfos CR multistage centrifugal pumps and the pop-ups are only operational at night.

Water, drawn from two man-made lakes, is distributed from two pumpstations, each housing three Grundfos CR16s, one Grundfos CR4, a control system and a pressure tank.



St Mellion's championship course.

Turf Equipment Company Check List

Jacobsen Textron has updated its list of UK service agents and their corresponding areas.

Service agent: Risborough Turf Supplies (Tel: 08444 3023) for **Bucks, Berks, Oxfordshire, North London**; Lambs Lawnmowers (0733 46611) - **Peterborough, Northants**; Hyvale Power Equipment (0602 270667) - **Leicestershire, Northants**; Marscot Plant Hire (021-744 9050) - **Warwickshire, Birmingham, West Midlands**; Grassland Machinery (05438 77866) - **Birmingham, West Midlands, Staffs**; Davenport's of Shrewsbury - **Clwyd, Birmingham, West Midlands, Staffs, Shropshire, Gwynedd, Powys, Hereford, Worcestershire**; R.S. and P. Horticultural (097873 750) - **Shropshire, Clwyd, Gwynedd**; Motrac of Cross Houses, Shropshire - **Shropshire, Clwyd, Gwynedd, Powys**; K. Morgan (0873 880244) - **Dyfed, Powys, Hereford, Worcestershire, Gloucestershire, Gwent, Mid, South and West Glamorgan**; Bristol Garden Machinery (0272 719361) - **Gloucestershire, Avon**; Greenlay (0670 822857) - **Northumberland**; B. and W. Lawnmowers (0254 886301) - **Cumbria, Lancashire**; Fletcher Stewart (061-483 5542) - **Cheshire**; Old Forge Engineering (0277 353611) - **Essex, North London**; Fabrication and Mowers (01-440 6165/5462), Club Mower Services (0582 841040), Wedgeride Horticultural (0442 54768) - **Herts, Beds, North London**; Canterbury Golf Club (0227 453532) - **Kent**; Shanks Mowers (01-771 4811) - **North Kent, East Surrey**; Professional Turf Machinery (04862 28658) - **West Surrey**; Alan Mills Garden Machinery (0580 200804) - **East Sussex, part of Kent**; Jenman Engineering (0703 448581) - **East Dorset, Hampshire, West Sussex**; F.G. Adamson (0482 631148) - **Humberside**; Auto Garden (Glasgow) (0505 24341) - **Scotland**; Fulbourne Garden Machinery (0223 880762) - **Cambridgeshire, including Newmarket**; C.N.S. Mowers (048526 234) - **part of Norfolk**; Professional Grass Care (0673 858989) - **Lincs**; Princes Agricultural Engineers (0246 590256/590609) - **Derbyshire**; L.F. Jewell of Bridgwater - **Somerset**; Parkins Horticultural Engineers of Mitchell - **Cornwall**; Devon Garden Machinery (08047 2124) - **Devon**; J.M. Raine of Spennymore - **Durham, Cleveland**.

Armitage and Sons of Huddersfield (0484 536010), Taylor Machinery Services of Sheffield and B. and P. Farm Equipment of Dorchester, Dorset complete the list.

Full details from Jacobsen Textron, Bergen Way, King's Lynn, Norfolk PE30 2JG. Tel: 0553 763333.

STOURBRIDGE GOLF CLUB

invite applications for the post of

HEAD GREENKEEPER

Applicants must be fully experienced in all aspects of modern greenkeeping, machinery maintenance, staff supervision and turf management techniques.

Salary negotiable. Accommodation available.

Please apply in writing giving age, course experience and qualifications to:

The Secretary, Stourbridge Golf Club,
The Club House, Worcester Lane, Stourbridge,
West Midlands. DY8 2RB

ASSISTANT GREENKEEPER

Golf Club requires experienced Greenkeeper for good maintenance work on 18 hole downland course. Must be experienced in use of tractors, mowers and general course machinery. Preferred age 30 plus. Clean driving licence. Good salary and overtime and annual bonus. No accommodation.

Write in first instance with CV to:

The Secretary, Guildford Golf Club,
High Path Road, Guildford. GU1 2HL

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Required for proposed championship golf course. Must be fully knowledgeable on turf management and machinery maintenance. It is our intention to take the successful applicant on immediately to assist in the development of this prestigious scheme in a beautiful part of Cheshire.

Please apply in writing to:

The Director, Shrigley Hall Golf Club,
Shrigley Park Estate, Pott Shrigley,
Macclesfield, Cheshire.

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require a

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Applicants should be fully conversant with all aspects of greenkeeping and have a knowledge of modern equipment. Salary negotiable according to experience.

Apply in writing to:

The Secretary, Tunbridge Wells Golf Club,
Langton Road, Tunbridge Wells, Kent. TN4 8XH

WEST HOVE GOLF CLUB

urgently require an

ASSISTANT GREENKEEPER

who has qualifications and experience.
No accommodation available.

Salary dependent on experience.

Apply at once, giving career details to:

The Secretary, West Hove Golf Club,
369, Old Shoreham Road, Hove, East Sussex. BN3 7GD

Basic sciences by Eddie Park - Continued...

present unsatisfactory situations both in agriculture and golf course maintenance. There has been too much emphasis on narrow subjects and opposing theories and too little on the inter-relationships between all living organisms.

Yet, all through this past critical 40 years, the naturalists have been pointing the way ahead. A series of books, the *New Naturalist Series*, streamed forth, over 50 of them, all with the general intention of bringing together subjects such as botany and geography (rather boring on their own, but interesting if linked with the effects of man) and all produced under an enlightened editorial board by top-class writers.

The bad news is that many of them are now out of print. The good news is that many are back in circulation in old-book shops at low prices.

Seaside holiday

An early experience for me was buying *Wild Flowers* (1954) by Gilmour and Walters during a wet seaside holiday and being captivated by its easily understood ramble through the history and science of practical field botany, together with a simple introduction to plant ecology.

Find one somewhere and enjoy it yourself and try to follow it with *British Plant Life* (1953) by W.B. Turrill.

The relationship of geography to these subjects and an introduction to conservation are well explored by L. Dudley Stamp in books such as *Britain's Structure And Scenery, Man And The Land, The Common Lands Of England And Wales* and *Nature Conservation In Britain*.

The author held a chair of social geography at London University and much of his work was devoted to the actions of man on the countryside, including the scientific basis for conservation. The historical aspect of these subjects is

fascinating in its own right, but for those who now want to know how to avoid the natural disasters with which we are surrounded, it is essential reading.

You may be wondering if this isn't a roundabout way of increasing your knowledge of the science behind greenkeeping. My experience, and I gather that of others, is that this kind of background reading makes it much easier to understand the sciences involved when you come to them.

Other books that explore related subjects in an interesting way are *The Common Ground* (1980) by Richard Mabey, *Farming And Wildlife* (1981) by Kenneth Mellanby and the provocative *Theft Of The Countryside* (1982) by Marion Shoard.

I have been greatly impressed by the experience at my course with help received from Yorkshire naturalists, initially to stem the tide of neglected scrub invasion, and also by their wealth of botanical knowledge, shedding new light on greenkeeping procedures.

So, to start on some of the basic sciences themselves. Those responsible for the maintenance of golf courses find considerable value in learning as much as possible about these subjects and it does not matter where you start.

Most public libraries have a fair selection of modern books, but I find many of them either too superficial or far too complicated. Fortunately, some of the best books were published between 1947-60 and, again, these are now to be found in old-book shops at reasonable prices.

It seems logical to start with climate - the weather, which we all talk about so much (and use too often as a convenient excuse for poor conditions), but not so much weather forecasting as weather patterns. We all have a poor memory for weather in the past and it comes as a shock

when we have a wet autumn or a dry spring or whatever. The truth is that our weather is remarkably consistent over the medium to long term.

Locally, it may do something extreme, but it always pays its debts and averages out. Try to find a little book called *This Weather Of Ours* (1946) by Arnold B. Tinn, which puts this very much in perspective.

Different sides

Geography is another subject with many different sides and it is well worth taking a careful look at the similarities and differences between areas. A series called *The Study Map Note Books* by Allan Murray or *Physical Geography* by R.K. Gresswell are both helpful.

No longer should we be prepared to accept that data from the USA can be just transplanted bodily to the UK or even that conditions in the north-west of Britain are identical to the south-east.

I have never been able to whip up much enthusiasm for geology and judging from the number of books on the subject going cheaply in the shops, I'm not alone!

However, it is a good idea to have some knowledge of what is under the site in which you are involved and its history. *Geology And Scenery* (1938 and reprinted many times) by A.E. Trueman is an old favourite that describes the geology of most areas of Britain and relates it to the scenery we can see. A very helpful book for those who don't want to get too involved in the subject.

I hope I have kindled an interest in finding out about the widest possible nature scene, for only then can the limitations of man's ability to control everything begin to be appreciated.

Soil science, botany and more plant ecology to follow next time.

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**The Secretary, Flackwell Heath Golf Club
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Due to the impending retirement of Mr. Hugh Marshall after 20 years service at this prestigious Championship Heathland Course north of Leeds, applicants are invited for the position of

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For further details and application form apply:

**The Chairman, The Greens Committee,
Alwoodley Golf Club, Wigton Lane, Leeds,
West Yorkshire. LS17 8SA**

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FOR THEIR 18 HOLE PRIVATE COURSE

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Applications in writing giving previous experience to:

**The Secretary/Treasurer,
Gosforth Golf Club,
Broadway East,
Gosforth. NE3 5ER
Tel: 0912 853495**

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**The Secretary/Manager, Milltown Golf Club,
Lr. Churchtown Road, Dublin 14, Ireland.**

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