tificial and so contrived as to be unacceptable to the traditionalist. It was exactly the opposite.

A large expanse of open meadow to the front of the clubhouse contained the home greens, outward tees and fairways, downhill and undulating, dotted with white sand in beautifully shaped bunkers. To the left and right were the treelined fairways to the l0th and lst, with no discernible rough – green and flowing, open and pleasant.

The greens borrow heavily, true to Mackenzie tradition. Originally Bermudagrass, they were more recently converted to bent, with considerable reshaping and reconstruction to suit grass and architectural whim. The greens had been returfed in that process and, interestingly, were exhibiting problems of poor rooting, soil incompatibilities and capillary breaks similar to those I have experienced at home.

I would never have believed that could have happened at Augusta, but it didn't shatter the dream!

Fairways and tees were common Bermuda, dormant, of course, on our visit, oversown with ryegrass, providing, by Masters time, perfect golfing surfaces.

Reaching the holes on Amen Corner (11, 12 and 13) was the climax of our tour. The architecture was stimulating and all without the vast array of flowering shrubs in bloom. It must really be a picture at tournament time in April.

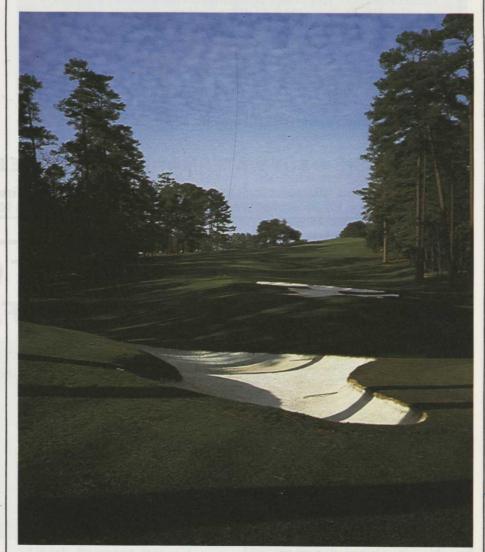
I have to say that it should be in good condition. After all, no one plays it. The membership is exclusive, to understate the point. In the five hours of our visit, we saw only five golfers – one four and a single! And the course is closed through the hot and humid summer prior to overseeding and preparation.

I was surprised to find a parthree course also on the club's land, to the back of the elegant colonial houses that flank the clubhouse. The short course plays a significant part in Masters week when the pros have a lighthearted day on it. From what we saw, it looked as attractive, challenging and superbly kept as the main course.

We returned to the clubhouse – which, sadly, we were not permitted to enter – in the late afternoon



The British contingent – Howard Swan, Rita and Jack McMillan – revelled in the delights of Augusta, guided by Paul Latshaw.



and to the maintenance complex. It may be modestly provided with buildings but, by many British standards, it was palacial.

There was an office with a secretary, a laboratory, staff facilities, mower stores, material stores, large machinery stores, all excellently laid out and maintained, and as many Cushmans as I have seen on one golf course.

Needless to say, Jack McMillan

melted at the sight!

I came away with the lasting impression that it was all being professionally managed and presented, much to the credit of the superintendent and his staff, some 50 years after the inspiration of Jones and Mackenzie began it all.

Augusta National is a marvellous golfing place and it was a magical day.



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GOLF COURSE MAINTENANCE NOW – A PERSONAL VIEW BY EDDIE PARK

IN THE November '85 and April '86 issues of *Greenkeeper*, I wrote articles on the problems encountered in the reclamation of indigenous turf and the sorry state of our winter golf. Now, in early 1987, it is timely to take another look at British courses and try to establish the problems that are most exercising the minds of those at the 'sharp end.'

So, what are the problems? Each year, they are becoming more severe and technically more diverse. They are mainly man-made, including the everincreasing problem of compaction. Last year, just for a change, every season was late and this type of variation occurs frequently enough to rate as a normal hazard.

I know some think I am a doom and gloom merchant, who exaggerates today's problems and views the past through rosecoloured spectacles. Time will tell who is right. In fact, 'time' is a most important word. My impression is that it can take a long time to really wreck a golf course – maybe as long as eighty years on some intrinsically good sites.

The worrying feature is that the pace of deterioration has quickened. Many people have confused all this with a move to a more modern form of the game and lack the scientific knowledge to appreciate that the end result could be devastation. Let us be clear about one thing, attempts to produce 'modern' golf, with year-round receptive greens, involve maintaining those greens at a fixed point in the natural process of decay.

"North of Watford, at least, that situation may just be changing, particularly as we are now beginning to see the wholesale digging up of greens that have been wrecked by mistaken policies."



A thatched green is dug up.

This is far too difficult a trick for mere mortals and the inevitable result has been a big drop in standards. In turn, these have been disguised by the fact that sufficient customers seem prepared to continue to pay for what are demonstrably poor conditions. North of Watford, at least, that situation may just be changing, particularly as we are now beginning to see the wholesale digging up of greens that have been wrecked by mistaken policies.

On the positive side, I find numerous examples of greenkeepers with ambition who have taken on great sites in a poor state and are backing their expertise and courage to produce real improvements – David Jones when at Purdis Heath, John Philp at Carnoustie, Kevin Munt, until recently up at Dornoch, and David Spurden at Ganton are just the first examples that come to mind.

I think, however, it is worthwhile looking in more detail at the difficulties greenkeepers tell me they encounter when trying to reclaim indigenous turf. Undoubtedly, some just go too fast – more than one course manager has remarked to me that it is easy to get rid of Poa annua. The really difficult trick is to bring along bents and fescues at the same speed. In a dry year, it's child's play to make life impossible for Poa, but much more of a task to produce the right balance of conditions for what I call 'our' grasses. Equally, of course, some people go too slowly and find that what they fondly hope is the 'middle way' is no way at all. Sufficient aeration without the degree of trauma that antagonises members is not impossible, but it is difficult to please all the members all of the time.

Many greenkeepers are coming under increasing pressure to succeed in their agreed aeration programmes without any disruption to play and have had to compromise on the number of passes each green receives. Better to do it deep enough and often enough and hold out the promise that the worst will soon be over.

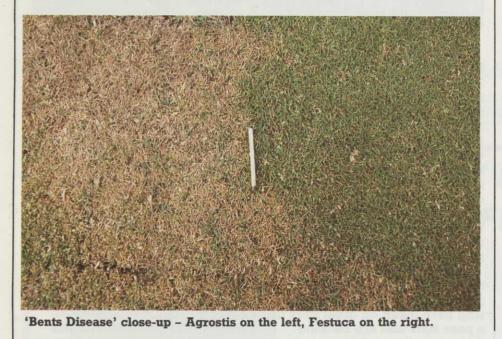
To do that, it is essential to be equipped with machinery that really gets deep enough without making too much mess and in as short a time as possible. Such machinery does exist, but too often I find a club trying to manage with something inadequate.

I have a lot of doubts about the efficacy of many of the hollow-tining operations I have seen. Poor penetration means that only the surface drainage is improved and the water lies on the still-compacted layer three inches down. The green feels softer simply because the surface layer remains wet and the golfer doesn't really appreciate the 'pegboard' effect.

We could do with a more objective method of measuring degrees of compaction – it is very difficult to make comparisons having regard for seasonal variations.

Irrigation can be greatly reduced and should be carefully recorded but, here again, I find courses without even a meter to measure how much water was put on (and when) and no records of rainfall. An old shallow spiker can be modified to keep the surfaces of greens just 'pricked' in drier seasons. Together with monthly spraying of wetting agents, the requirements for irrigation can be dramatically reduced. When I have spoken at greenkeepers' meetings, I have found considerable agreement from experienced men that many problems stem from nonuniform construction giving, especially, varying permeability. An efficient hand-watering system, with adequate pressure, quick couplers and good greento-green transport can make it possible for a skilled staff to do a good job.

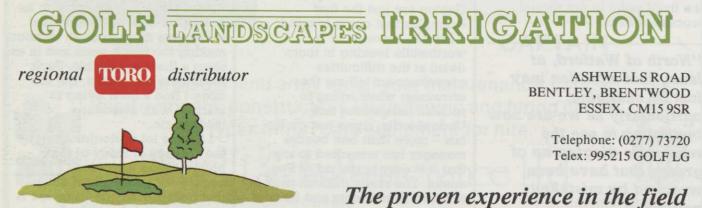
Having got all this basic husbandry right, then, surely, everything must be plain sailing? Well, as some people have discovered, this is not always so. Those who have disposed of their thatch find it a daunting prospect that there is still the little matter of reducing the dominance of Poa annua. It doesn't even seem to be a constant picture from week to week.



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This is the point at which it is so necessary to regard each green as a space where the grass population can be varied by management of ecological factors. And if a week is a long time in politics, it is an even longer time in the grass population of a green. Patience, subtlety and sheer cunning are required.

Worse still, there are some really nasty snakes to slide down. Looking back through pre-war Lindrick reports by R.B. Dawson and R.P. Libbey, I can read of dry patch problems and appreciate what heartache it caused. It's still around today at some courses and I certainly admire anyone with the fortitude to cope over the long time it takes to get these problems under control.

I hinted last year that at Lindrick we had a summer problem – at the first hint of stress from drought or heat, we saw some of our agrostis curl up its toes. This only happened to agrostis, not Poa annua (which we might have expected) and certainly not fescue, which looked healthier than ever. These grasses could be growing unaffected only inches away, so we called it 'Bents Disease.' Nobody seemed to have a definite diagnosis.

After a few weeks, the grass seemed to recover, although we would have been happier to see it displaced by a grass without these disadvantages. Keen observation by course manager Kevin Hazlehurst and his staff showed that there was deficient root growth in these areas for some time before they saw any

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"Dr Neil Baldwin, the new plant pathologist at the STRI, has now taken this research under his wing and he already thinks he has seen the same conditions at Ganton. I think he may well find it in a lot more places, too."

symptoms. Dr Neil Baldwin, the new plant pathologist at the STRI, has now taken this research under his wing and he already thinks he has seen the same conditions at Ganton. I think he may well find it in a lot more places, too.

After three summers of suffering, we have worked out a palliative remedy – well before trouble strikes, our staff are treating these affected areas (and only these areas – lest we encourage Poa annua elswhere) with selective irrigation.

So, what of the future? Well, I reckon that 'now is the time for all good men to come to the aid of the party,' as the old saying goes. Let's forget the past and just accept that, with few exceptions, most clubs got it wrong at some time or another.

I hope that the campaign in Golf Monthly to encourage authorities to grasp a whole range of responsibilities will bear fruit. National problems demand national remedies – they cannot be shuffled off on to individual clubs. Golfers must be educated to realise that

DELIGENED PATE

better golf costs more and requires expertise, not least among men who represent them on committees.

I have been impressed, when asked into clubs to explain things with the help of slides, at the amount of interest shown nowadays by so many golfers. That must be a good sign. Incidentally, this does seem to be a possible way to get members off greenkeepers' backs, albeit time-consuming.

And what about greenkeepers? A united association and a better training scheme will not, in themselves. solve all the problems. I can speak with forty years experience of belonging to a profession. To be seen to embrace ethical responsibilities, the desire to use advisers in a productive fashion, the wish to learn as much as possible (not just about the interesting aspects, but the whole subject) are the ways to improve status, not by some kind of decree. There are many daunting tasks ahead for the new association and I hope they will not forget the essential PR component.

Sensible changes

The advisers? It must be evident to all that future success depends on a willingness to make some sensible changes in their ways of operating. A visit to a course followed by a report, however helpful at the time, needs extensive follow-ups. Committees have to be convinced that potentially traumatic policies are right and necessary, even if it requires a presentation to the members. Very often the interpretation of a prescribed policy is no easy task.

It is no criticism of Dr Peter Hayes to say that many of us would like to see a more commercial attitude at the STRI, offering a fuller service by wellpaid advisers. It is, as usual, a chicken and egg situation with demand from customers a prerequisite.

I just wonder if the board of management at the STRI, composed as it is of men who proclaim ignorance of the technicalities, is able to make it all happen.

One can only applaud their administrative expertise and their generosity in giving up a great deal of time, but is this going to be enough?.

"I have been impressed, when asked into clubs to explain things with the help of slides, at the amount of interest shown nowadays by so many golfers. That must be a good sign. Incidentally, this does seem to be a possible way to get members off greenkeepers' backs, albeit time-consuming."

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Notebook

Closer Liaison For Jim And The STRI On R&A Work



Jim Arthur.

To ensure a greater uniformity in course conditions and presentation of links hosting the Open Championship and courses taking the qualifying rounds, in 1971 the R&A championship committee, under the chairmanship of the late Charles Lawrie, appointed Jim Arthur to advise on course preparation and long-term links management.

The resulting free advisory service to these clubs, as well as those hosting the Amateur Championship and Walker Cup, developed quickly and in the ensuing 16 years Jim Arthur carried out regular visits. This was in addition to his private consultancy work in Britain and on mainland Europe, covering over 400 courses.

Jim now wishes to reduce his workload, which has grown greatly since his advisory career started at the Sports Turf Research Institute (then the Board of Greenkeeping Research) in 1946.

This is especially the case with his extra work in recent years with the Greenkeeper Training Committee, liaison with the selected training colleges and involvement in the work of the R&A's greenkeeping panel of the external funds supervisory committee.

As part of the closer liaison between the STRI and Jim, as well as the backing and support of the R&A for the body's advisory services and research programme, a start is being made in the form of joint advisory visits by STRI specialist golf agronomists and Jim to those courses hosting qualifying competitions for the Open.

In this way, the R&A feels that continuity of advice will be maintained with the aim of producing the true links conditions desirable for all its championships.

Jeffrey Perris has been appointed the STRI's senior advisory agronomist. Jeff hails from South Wales and he joined the institute's advisory staff in 1966 after graduating in agriculture from the University College of North Wales, Bangor.

Much of his work is undertaken in the West Country, but he also travels extensively in western Europe. Jeff will continue with his existing duties, which include lecturing, and will help lead the development and extension of the institute's advisory service.



Jeff Perris.

Hodges and Moss has appointed Tony Howard, 53, technical rep for its industrial and amenity division in north Staffordshire and the West Midlands.

With its headquarters at Shrewsbury, the division, formed

in 1982, specialises in the identification of problems arising in forestry, amenity and vacant land areas, as well as providing solutions.

The division is also engaged in the control of pests, diseases and weeds in sportsturf and landscaped areas, as well as the supply of herbicides, fertilisers and composts to local authorities, industry and leisure clubs.

"Combined with the resources of out plant pathology laboratory and an experienced workforce equipped with the latest mobile machinery, the division continues to attract new customers, so we are delighted Tony has joined us," manager Bob Bolland said.



Tony Howard.

Peter Bridgewater has joined Supaturf as a rep for the northern home counties. Customers can contact Peter at home on Witney (0993) 74419 or through Supaturf's southern branch on Iver Heath (0895) 832626/834198.



Peter Bridgewater.

News & Views

Notes From Scotland

The **Central** area AGM was held at Tulliallan GC. Jim Cameron (Callander) was installed as chairman and Ian Ritchie (Ladybank) vice-chairman. Jimmy Kidd (Gleneagles) gave a resume on the progress of BIGGA.

Nearly a hundred met at Ayr College for the **Ayrshire/West** seminar. While this was a joint venture, most of the organisation was handled by Ayrshire secretary Jim Paton.

The college staff pulled out all the stops to ensure a successful day, with the superb catering, splendid facilities and enthusiastic cooperation we have come to expect from Mr McKinney and his team.

Harry Diamond and Alastair Connell, chairmen of the Ayrshire and West sections, introduced the morning speakers, David Boocock and Stewart Ormyroyd, who were followed by a question and answer session.

Dr Peter Hayes of the STRI started the afternoon by talking

about grasses. Jeff Perris discussed maintenance problems and his answers to them, presented in a positive way, struck a responsive chord in the audience.

A panel, consisting of the four speakers and two chairmen, faced some 'nippy' questions at the final question time, especially from Chris Kennedy and Jimmy Kidd, and with George Brown bowling a 'googly,' the afternoon finished on a high note. Cecil George proposed a vote of thanks to all concerned.

Special mention should be made of the younger members who attended, some of whom travelled from as far afield as Glasgow, Dumfries and the Isle of Arran to attend their first seminar.

The first **East Midlands** annual spring golf tournament as a part of BIGGA will take place at Hinckley GC on Wednesday May 13, starting at noon.

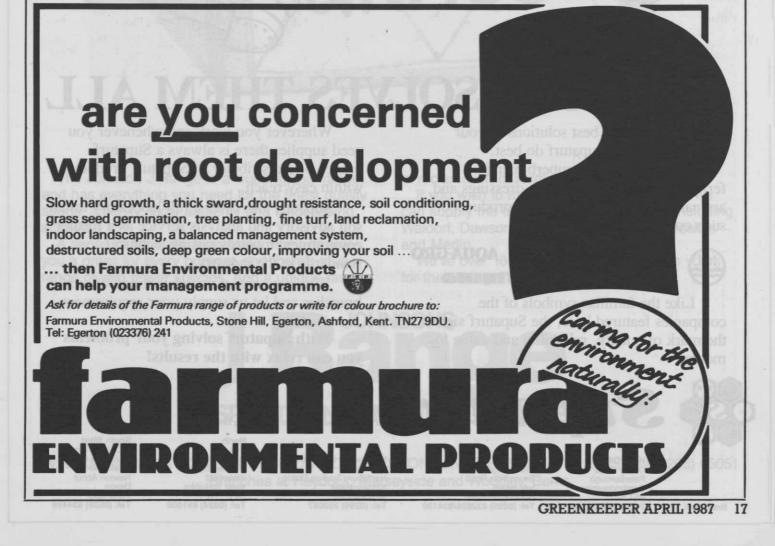
A medal competition, the draw for teeing-off times will be made on the Saturday before – further information is available from R. Willars on Sutton Elms 283053.

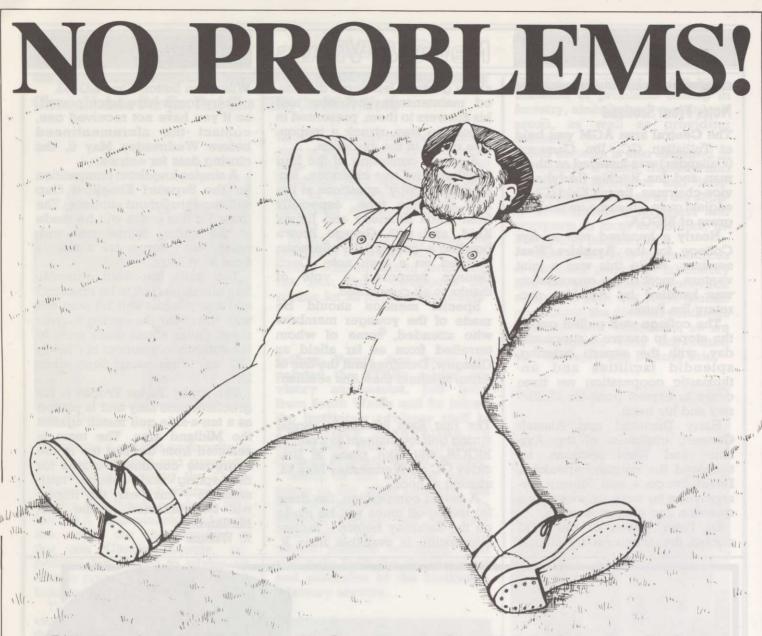
Entry forms have been posted, so if you have not received one, contact the aforementioned before Wednesday May 6, the closing date for entries.

A singles knockout competition for the Supaturf Knockout Cup will run throughout summer. The draw for this event will be made at the spring tournament and, again, entry forms are available from R. Willars.

The pairs knockout competition format has still to be arranged and entry forms will be sent out with those for the spring tournament. Other future dates include the autumn tournament at Chevin GC on Wednesday September 23.

The Rigby Taylor Trophy is for greenkeepers only and is played as a ten-a-side golf match against the Midland area. The team is selected from the first ten in the aggregate combined scores for the spring and autumn tournaments – this year, the trophy will be contested in the East Midlands. *R. Willars.*





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Lely (UK) offers the new TORO Triflex 88 grass cutting unit for attaching to its range of Groundsmaster 322D or 327 models.

The Triflex 88 is a variable width cutting unit with rear discharge in three chutes. Width of cut is either 54in, 72in or 88in. Mowing rate from the offset deck is up to 4.7 acres/hr at 5.5mph. Height of cut is between 1-4in adjustable in $\frac{1}{2}$ in increments. It has five heattreated steel blades 19in long, $\frac{1}{4}$ in thick and $2\frac{1}{2}$ in wide.

From the operator's seat, the wing decks can be raised independently for transport or cutting with either wing and centre or centre deck only. The unit is of reinforced welded construction with a pto driven gearbox.

For further details, contact Graham Dale, Lely (UK) Ltd Toro, Station Road, St Neots, Huntingdon, Cambs PE19 1QH. Tel: 0480 76971.

Notebook

Scottish Agricultural Industries of Firth Road, Livingston, West Lothian EH54 5QW has launched a new turf food specifically designed for use on fine turf where no phosphate is required. Longlife Finegreen N contains Didin, which gives more efficient utilisation of nitrogen in the fertiliser supplied.

This new organic-based minigranular addition to the Longlife range is safe and easy to use and the inclusion of Didin ensures a longer and more even growth response from fewer applications. Packed in 25kg polythene sacks, the normal application rate is 35gm per sq metre.

Further information from Mrs J. Heeks on 0506 39281.

Brian D. Pierson (Contractors) is carrying out alterations to Torquay GC (£130,000), Salisbury and South Wilts CG (£10,000), Royal Lytham and St Annes (£31,000), Royal Birkdale (£40,000), Tandridge GC (£10,000), Romsey GC (£28,000), Formby GC (£6,000) and building a £100,000 five-hole extension at Puttenham GC.

The company completed three new courses in 1986 and it is anticipated that four or five more will be constructed this year.

Each year, Gannon holds open days/workshops at soccer clubs. The programme covers winter pitch renovation and soil amelioration.

This year's dates and venues are: May 14 – Leeds United, 19 – Newcastle United, 20 – Bolton Wanderers, 21 – Chester City, 27 – West Bromwich Albion, June 2 – Brentford and 4 – Crystal Palace.

The programmes commence at 9.15am and interested parties should contact Gannon at Welbourn, Lincoln. Tel: 0400 72475.



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