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Why we

JIM ARTHUR on the new European golf green specifications

Any sensible business must take a hard look at money spent on development – in effect to see whether investment is justified or subsidies are deserved or even potentially productive long term, or could give, even in the much longer term, a reasonable prospect of improved efficiency or profitability. However golf is not, sadly, regarded as a business by so many who control the amateur aspect of the game, now widely enjoyed by so many from such a wide range of character, ability and background.

Golf, although representing a huge investment nationally, is too small an industry to be able to support pure academic research – there must be an expected if not attained end-result of commercial or practical value, as opposed to discovery for discovery's sake alone.

It is necessary to differentiate between fundamental research and work on evaluation assessment or investigation. Much can be gleaned from the study of contemporary work over the whole world of golf on specific parallel problems – with due caution against taking on board philosophies based on conditions which are not relevant to our (temperate European) environments.

Many of the world's major breakthroughs, for example in medicine or nuclear physics, have been the results of accidents! But one must have a seeing eye, as did Sir Alexander Fleming in making the connection which led to the development of penicillin. Frankly, pure research is so costly and so unlikely to lead to worthwhile discoveries in the short term that it must necessarily be confined to those bodies, ie. university departments, properly equipped with all the vastly expensive hardware from electron microscopes to multi-bank computers, which expense could not conceivably be justified for the benefit of what the outside world tends to regard as a fairly frivolous hobby!

There is in fact no commercial justification for the establishment of departments of serendipity from which once in a blue moon and with accompanying shouts of Eureka, inspiration produces shattering results.

The above philosophy directly relates to the procrastination and arguments appertaining to one tiny aspect of golf, namely the specifications for the construction of golf greens, now approved in principle

by the Joint Golf Course Committee of the Royal and Ancient.

By dint of a great deal of work behind the scenes and a good measure of compromise and give and take by all concerned, three specifications for construction have now been agreed, and (even more importantly) it was further agreed that there should be no question of 'compromise', taking a bit of this or a bit of that from one specification and adding it to another.

These three specifications need to be established primarily because far too few of those engaged in building new golf courses, whether developers, designers or constructors, know little or anything of the technical problems involved and, as is so often the case, seek advice from those with even less qualifications or practical experience. One can never stop fools being parted from their money, nor innocents abroad losing their all in setting up what they erroneously perceive to be what the customer wants.

The second reason for setting up and agreeing standards is the vexed and increasingly important impact of litigation on the golfing scene. Those building to agreed and approved specifications can at least gain some shelter from that protection. Deviations – especially by employing methods specifically prohibited in these specifications – can and have resulted in massive claims for total rebuilding of new greens, costing insurance companies – especially with added legal costs – sums well in excess of £1.5 million. Insurance companies are increasingly concerned about being taken to the cleaners and are refusing further insurance cover to miscreants.

Much has been written about these three specifications, which I will not repeat save to say that there is really no fundamental difference between all three in the standards laid down for the root zone itself. The differences relate to the drainage layers. Where there is effective drainage, as on some true links or even (more rarely) sandy heaths, with guaranteed drainage potential of 200 cm (8") per hour, then specific under-drainage is not needed (provided any constructional compaction is corrected).

With the vast majority of sites, under-drainage is vital. A herring bone or grid system of plastic drains is let into a prepared and consolidated base and any surface effect of

need to keep our eye on Europe...

such drains masked by a stone carpet, which in turn is blinded by a filter layer to prevent infiltration of the root zone particles into the stone. Extra drains to provide intercept (cut off) drainage is specified in the case of greens cut into a slope – and also provision to deal with any low areas, e.g. the front perimeter of the stone carpet.

It is important that the ratio of particle size between successive layers does not exceed 1:10 if drainage is to be effective and particle drift prevented. The basic difference between the true USGA Green Section specification (not sand-only construction) – yet another modification being due in 1993 – and the UK system is largely in the size and depth of stone in the drainage carpet. On very flat sites, in order to achieve the desired minimum fall of 1:80 of the herring bone system under the UK specification, the base may be valleyed – unnecessary, of course, where the green rises from front to back at a slope of more than 1:80.

Long experience shows that using a larger stone ('25-40 mm clean' being specifically laid down) in deeper depths permits full mechanisation of construction and consequently cheaper costs. Whilst there may be exceptions when using very skilled and experienced operators when it may be possible to mechanise building to USGA standards – generally it is safe to state that 100 mm (4") of pea gravel will not support a 360° swing excavator, especially on our normal soft conditions, and the gravel of the USGA spec. merely gets pushed into the base. Neither the depth nor the stability of the pea gravel permits mechanical handling save under rock hard dry conditions – as in the States – and thus much of the construction involves costly and slow hand work. Working on plywood boards with high levels of labour-intensive hand moving of gravel sand and root zone mix can give excellent results, but at a cost.

Those who attended the Harrogate workshop prior to the BTME itself (as well as others) will have seen the USGA video on building greens and been horrified at the

errors shown, ranging from bulldozing turf, top soil and subsoil off in one indiscriminate mess for re-use on green surrounds later, to tracking bulldozers back and forth over fragile root zones, not to mention tractors and spinners lashing on lime and fertiliser so heavily that one could not see the machine, let alone the poor operator!

It is worth remembering that, at a conservative estimate, bearing in mind that the UK system with deeper layers of larger stone has been extensively used (not just by me alone) since the mid sixties, there are well over 3000 golf greens built to this system, none of which, given reasonable post-construction maintenance, has ever given a moments concern in well over 25 years. While agreement on the physical criteria laid down to identify satisfactory – and unsatisfactory – raw materials is important, it is even more important to be able to analyse reliably, consistently and logically, e.g. root zone mixes especially. At present ten identical samples sent to ten testing laboratories will result in ten different results. This would not be so much of a problem if the same samples re-submitted a month later were reported on identically by the same ten stations, but sadly, too often, they are not.

For those who want more details of these specifications, they are available through BIGGA, but my main point in discussing them is that it is not the specifications themselves which are important (though agreement is always welcome) but the use to which such specifications are put. What are 'we' or 'they' going to do with them?

With current work on CEN standards for the European Community raising problems for each and every one of us, it is vital that not only these specifications are advanced, but that they are advanced by knowledgeable, convinced and qualified persons who can stand their corner.

With the German standards diametrically opposed to both ours and the USGA spec., with the French shrugging their shoulders and indicating, as always, that they will take

no notice of agreed standards anyway and with the rest of Europe looking to us for a lead, we, need, as usual, leadership, which as usual is lacking.

Perhaps if all concerned in British golf – from those governing the game from sheltered Elysian heights to all players, amateur or professional and to all greenkeepers from our top men to the lowliest probationer – realised what will happen to our golf courses if German views prevail, there would be less apathy and more active opposition. Currently, in Germany, new courses may not have fairways wider than 30 m with semi-rough 3-5 m, and the rough may not be mown more than once a year, whilst there must be large open plastic lined pits: at the side of each green to take the drainage and 'effluent' from the stone carpet, amongst countless other daft 'green' notions.

Frankly, while we may be prepared to put up with countless invasions on our life style, suffer multitudinous officious regulations as to what we

may or may not do, I feel that if the Germans start to impose their ideas on golf on us, then the Scots at least might well start World War III. It is no good putting this down to rabble rousing on my part.

If we do not impose our ideas and standards, others will be imposed on us and we need golf-minded, experienced, forceful advocates if we are to make any impact on Teutonic stubbornness and EC invasiveness and pettifogging regulations.

The day may yet dawn when golf will be regarded as a self-damaging occupation, to be shielded from the public gaze and confined to an incurable minority, with recruitment specifically prohibited as being harmful to the mental and physical health of younger generations, and even passive golfing (on TV) banned on the grounds that it might corrupt or damage the health of non-golfers.

