The JA Legacy

Tim Lodge examines the Jim Arthur philosophy to see if it is really possible to achieve in modern golf.



With the loss of Jim Arthur goes the foremost evangelist for greenkeeping traditionalism. Jim espoused his ideas so passionately and for so many years that the whole process could be, indeed is, referred to by his name; the Jim Arthur approach to golf green maintenance. There is probably not a golf course in the UK on which he has not been mentioned and where 'his' debate has not taken place.

A great man for sure but I believe there is now a need to progress and develop his philosophy of sward management. The truth is that, although technically sound, his ideas are poorly adapted to the realities of course maintenance in the harsh commercial environment in which most clubs now operate. Also, the manner in which his ideas are pursued within some clubs seems to cause at best heated debate and at worst serious distress and anxiety, particularly among greenkeepers.

There really is no need for all this. What is required is a wider understanding of what processes are actually taking place and a clear indication of whereabouts a particular golf course lies within this range of processes. All golf courses are different and no single approach is suitable for them all.

The JA approach revolves around the minimal use of fertiliser to promote the growth of fescues and bents and to limit the growth of annual meadow grass. This brings improved playing quality and the major advantage of not being susceptible to the problems associated with annual meadow grass; excessive thatch, anthracnose, fusarium, discolouration, irregular growth patterns and so on.

In essence, what is being created is the natural environment of our two favourite grasses (although they have been cross-bred to an extent that some of their natural characteristics have been lost). So, red fescue is '...abundant in short grassland, on dunes, moors and mountain slopes...' and brown top bent is ...'widely distributed on heaths and moors' (CE Hubbard, 1984). These are very barren environments. The only fertiliser source is likely to be rainwater (which contains a tiny amount of nitrogen) and the occasional droppings of rabbits or sheep.

They are also very dry environments. Although rainfall may be high in mountain regions, the fescues in particular survive on very sandy soil through which water flows rapidly and which is able to retain comparatively little moisture. These are of course the characteristics of sand dunes or links environments. The JA philosophy also stipulates the minimal use of water.

But when we consider UK golf courses in general we have a number of points of departure here. Firstly, most use fertiliser on their greens, some

quite a lot of it.
Secondly, most
courses have an
automatic irrigation
system even though
fescues and bents are
almost certainly able

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to survive with only a fraction of the output of which such systems are capable. Thirdly, most golf courses do not have especially free draining greens. At least 40 % of them are established on clay soils and almost all of them do not have a form of green construction that allows drainage

"A great man for sure but I believe there is now a need to progress and develop his philosophy of sward management" (infiltration) rates even remotely similar to that of a typical close-cropped turf on, say, a sand dune.

This would appear to narrow the number of courses on which the JA philosophy might

successfully be applied to a very few. These would be the great links and heathland courses, which are the first to be cited by the JA evangelists.

As an agronomist I have made it my business to visit all forms of golf course. On site I frequently hear the opinion that while the JA approach is theoretically sound the philosophy is impracticable on that particular course. With a sward that may be dominated by annual meadow grass the commercial imperative is to maintain a suitable playing surface come what may. Let's face it, most golfers don't care what species of grass they are playing on.



So, many clubs are content to spend on fertiliser and water, and to pay the subsequent costs associated with disease and thatch control. Most people will appreciate that this is hardly a 'sustainable' or environmentally sound approach but at this particular moment in time it may well be the most economical. Membership is up and the golfers are happy. The idea of 'if it ain't broke, don't fix it' prevails very widely.

Also, in the larger scheme of things, the environmental damage purportedly done by the golf course through its use of fertiliser and water, and possibly even pesticides given the restrictions on their use now in place, is probably far less than that done by the golfers who drive their



cars, and sometimes even fly, to the club in order to play. For a commercial golf course especially, taking a strong environmental position on greens maintenance could put you out of business. Who would be prepared to jump first?

Faced with these arguments, I find it very difficult to be evangelical about the JA approach. What I would advocate is a maintenance regime that involves the use of fertiliser and water appropriate for the condition of the greens at the time and given the restraint that golf must continue to be played on satisfactory surfaces throughout as much of the year as possible. In practice this usually means achieving a gradual reduction in fertiliser use alongside a suitable and intensive programme of aeration, top dressing and a carefully considered irrigation, scarification and mowing regime. Quite simple really!

Altering the maintenance of greens will bring about changes. The speed of transition towards a more JA type of surface is related to the degree to which you are prepared to impose the necessary regime. So an abrupt reduction of fertiliser and water use to the sort of rates applied to a links course, carried out on an annual meadow grass dominated parkland green, coupled with plenty of overseeding, will bring about a massive alteration in sward composition within a year or so. It could also reduce membership to zero and result in the sacking of the entire greens staff.

A more subtle approached is therefore essential. Indeed, the whole package of operations needs to be assembled very carefully after taking a good look at the existing conditions.

In addition, it is necessary to assess the general zeitgeist of the club's attitude to these things. For example, the membership of many clubs is made up of more elderly individuals who are not prepared to sit at home while a lengthy and potentially damaging process is taking place on their golf course. Even though the end result will be a marked improvement, these people consider, quite fairly, that they may not be around to enjoy it so they would rather play golf on reasonable surfaces now, thank you very much.

One golf course is never the same as the next and it is with regard to these, rather complex, things that the experienced eye of an independent agronomist can be most advantageous. In practical terms, the end result of all of our work is the achievement of deeply rooted, healthy grasses that provide good playing surfaces.

Very often, it is the annual meadow grass that makes the most of these circumstances but it is also possible to shift the sward composition gradually towards a greater content of 'the finer grasses' that brings all the advantages of that condition. The main thing is not to get too tied up in knots about the actual species that you are working with. Chill out, people, chill out!

Agrostis is founded by Dr Tim Lodge and is an independent sports turf consultancy. Dr Lodge is a registered expert witness in the area of sports turf, a founder member of RIPTA and a member of the BASIS Professional Register. Further information is available at www.agrostis.co.uk or on 01359 259361.

















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