Thoughts on Irrigation

I felt that I have to put pen to paper after reading Jim Arthurs latest article on irrigation. I have known Jim for some years having the benefit of his knowledge in preparing my previous course for the final qualifying rounds for the British Open in 1981 and again in 1985. We also served on the Greenkeeper Training Committee together.

I am a great believer in his common sense approach to greenkeeping, if not always the manner in which it is dispensed. However, I do not agree with his views on irrigation techniques as so far as golf greens are concerned.

Jim describes infrequent irrigation as a hearsay. To me it is an efficient way to produce firm, fine greens with a good depth of root. As in all things there are extremes, such as suggesting that one whole week irrigation be given in one night.

I have never heard, suggested that once per week is the norm, rather at three or even four day intervals, maximum. In practice I have personally used two to three week intervals on the greens of the eighteen hole par 3 course attached to my previous club. The key is, not only an efficient irrigation system, but perhaps more important an efficient drainage system, if you are to avoid the ‘water logged bogs’ that Jim describes.

In the case of the par 3 course, I used hoses and impact drive sprinklers, which could cover the complete green. These would run for up to two hours. The greens were well aerated and we experienced very little run off, even on featured greens. Of course this was carried out at nighttime. These greens were and I believe still are, predominantly festuca with some agrostis, but during summer, no poa annua, although it always seemed to appear in the spring. But believe me it could not tolerate the irrigation technique I have described and very soon disappeared when the first dry snap arrived. Even two weeks after irrigation, the rootzone, some six to seven inches down.

Jim, in more than one report stated that in his opinion the main course greens would one day be as good as the short courses were.

There, are to my mind, two main flaws to Jims argument. The first is that poa annua in most cases, tends to be shallow rooting and surely applying 250 gallons per night (not much more than the capacity of the average sprayer) is pandering to just that. That amount of water is not going to soak down to the roots of the finer grasses we wish to encourage and more than once I have heard the term ‘make the root system go looking for water’ and I take this as downwards, not upwards.

There is also of course, the danger of losing the hydraulic pull if the upper strata is allowed to dry out too much. We all know where this leads. Re-wetting the soil problems and subsequently dry patch. I have always, as far as is possible, tried to work with nature and in the natural run of things. It does not rain for five or six minutes every night!

Ask yourselves a question. You are irrigating during a hot spell and there is a thunderstorm. - What do you do? Many systems have a ‘rainstat’ fitted, but if you don’t, in most cases you will turn the system off. When will you put the system back in operation? - When the greens look and feel like they need it - I hear you say. Exactly, and if this is not heavy infrequent irrigation then I don’t know what is! I use the same system to clear bermuda grass fairways of poa annua in and temperatures of up to 40c it does not take long! It is just too hot for it to work on the greens, which are pure sand, sown with Penncrest bent. These greens drain too quickly.

The second point concerns timing for this type of management.

This system has been used in the United States with good results and has been featured in the Green Section Record, the quarterly magazine of the U.S.G.A. Green Section.

Before I hear the old cliches concerning American methods, it should be pointed out that many states have climatic conditions similar to the U.K. and this must be borne in mind when it is suggested that their methods are not applicable in Britain. After all who were the first to use ‘pop-ups’, Cushmans, ride on greens mowers and many other things now in common use this side of the Atlantic. I have written my thoughts, not to be controversial, but to encourage an exchange of views and ideas. Experimentation is so important, trying something new does not mean that you have to stick with it.

Let’s hear more from the men in the firing line on this type of subject.

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