

# **HAVE A HEART**

## **- HOW TO APPROACH FERTILISING YOUR BOWLING GREEN**

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### **God only knows!**

I am writing this article with the aid of pure exasperation. In doing so, I'd like to settle the issue of fertilising bowling greens. You could say that I am fed up with people applying fertiliser for the wrong reason. We maintain a bowling green for it to play well **NOT** to look good. This isn't rocket science for goodness sake!

It all came to a head in September. I haven't managed to play much bowls this year having moved away and become a father. I have been keeping my eye on the green on a regular basis but not had much contact with those actually doing the greenkeeping. I was happy with the condition of the green after a slow start and didn't feel it necessary to apply any fertiliser after the initial main feed (8-0-0 in June). The wet summer weather maintained turf health without any need for extra help. In recent years, the surface has become dominated by bents and fescues and now tends to look after itself. This has been achieved by keeping fertiliser and irrigation inputs to a minimum. I thought that everyone understood this. I am living on a cloud!

So, I was a little dismayed when I bumped into our greenkeeper who told me that he'd bought some fertiliser for late summer because a neighbouring club's greenkeeper had told him that the "*green looks like it needs a feed*" and could recommend "*just the stuff*". I can only assume that this was because it was a dull rather than deep green. Curious about the stuff, we went to the storage shed to see what was helpfully suggested. I couldn't even laugh when confronted by the 24-4-12 high performance long-lasting fertiliser. Now this *is* rocket fuel and is about as wrong as you can get for the end of summer. I blame myself of course and will try to make myself clearer.

## **Why do we apply fertiliser?**

As greenkeepers, our overall aim is to produce a consistently firm, fast, smooth and true surface on which to play. The woods must release to draw and run-out freely. We achieve this by creating a healthy and even sward dominated by the finer grasses with a turf base free from undue thatch accumulation. We employ considerate mowing, appropriate scarification, occasional top dressing, overseeding, regular aeration and keep fertiliser and irrigation inputs to a minimum. The finer bent and fescue grasses flourish in an impoverished environment.

If you fertilise to make the green look good, you are creating a productive environment that naturally favours the development of annual meadow grass. Annual meadow grass is a quick growing weed that is prone to disease, droughting and also builds thatch for fun. Annual meadow grass is hard work at best and no good in truth. Feeding for colour (and indeed irrigating without care) will bring a horrible deterioration to your green in the form of annual meadow grass dominance.

In answer to the question, we apply fertiliser judiciously to maintain turf health whilst favouring the development of the finer grasses.

## **How much is judicious?!**

Each green is different. The level of play, frequency of mowing, sward composition, underlying rootzone type and weather conditions will vary and they all have an impact on the level of fertiliser required. The guidelines for fertilising fine turf reflect this variation and recommend between 8-20 g/m<sup>2</sup> Nitrogen applied per year on a soil rootzone (with the need for potash and phosphate to be determined by soil analysis). Put simply, you should be striving to apply the minimum amount of fertiliser possible to retain a healthy grass cover and favour the finer grasses.

In other words, we don't feed fine turf to make it look good, we carefully fertilise to sustain hardy growth.

## **When is fertiliser required?**

We feed the green for it to be able to withstand the rigours of play and with reference to the overall maintenance plan. We are trying to favour the finer grasses and know that they flourish under minimal feeding so could be tempted to apply hardly any fertiliser at all. However, the pressure of play and essential maintenance operations will require a certain level of active growth. Creating a smooth and true playing surface will need regular mowing and possibly verticutting. Thatch prevention might require scarification or top dressing. These are quite damaging and aggressive operations which require active growth to bring recovery. So, fertiliser will be required to boost growth at certain stages in the maintenance calendar.

## **The reason for applying fertiliser**

The following diagrams serve to illustrate the kind of thing. Don't get too hung-up by the exact level of growth just try to picture what I mean. As a greenkeeper, you will need to determine for yourself the minimum and maximum growth levels required to successfully maintain your green. You should then use your fertiliser as a means of controlling the situation.

Figure 1 shows how fertiliser applications may be used to manipulate growth at certain stages in the maintenance calendar. In spring, we require a few weeks strong growth to allow the turf to recover from winter dormancy and allow early season preparations to take place. An application of Lawn Sand followed by a dressing of "spring and summer" fertiliser should produce enough early season growth to allow any scarring to recover and operations such as scarification and top dressing to take place. Once the desired surface has been achieved, all we want to do is sustain it through the summer with the minimum possible level of growth. This might mean the application of liquid feeds, light dressings of solid fertiliser or none at all depending on conditions. This is the time when you need to stick by your principles and not fertilise if the turf isn't a deep green colour. We might need to strengthen growth at the end of summer to generate recovery from the season's play and before the end of season renovations. A low NK (2-0-2 + Fe or similar) turf hardener should be used at this time and not high-octane fuel.

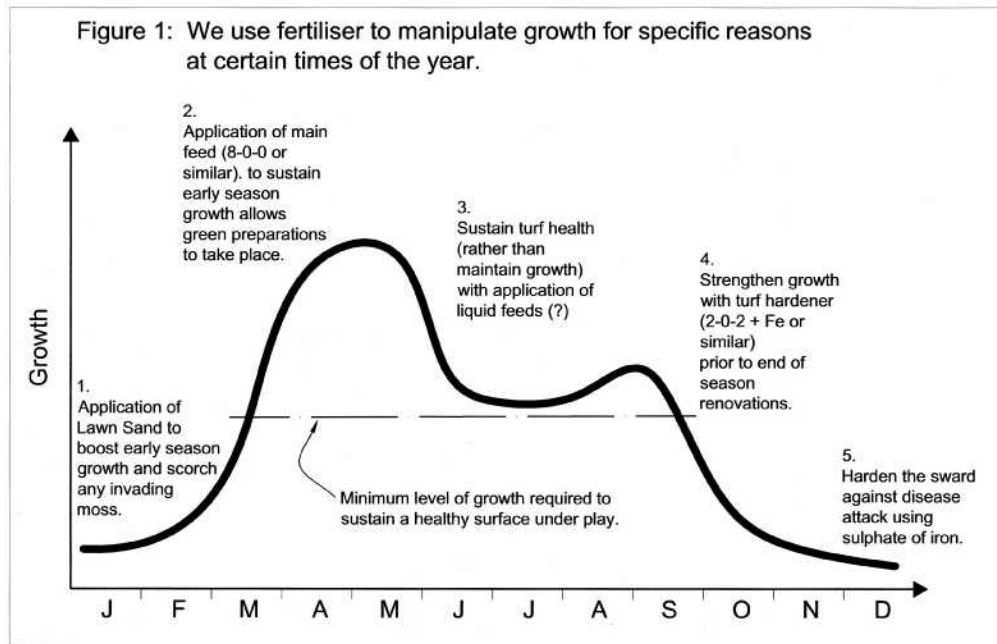


Figure 2 shows what happens when strong growth levels are produced throughout the year. This may occur after frequent or heavy in-season fertiliser applications or the inconsiderate use of controlled release products. Too much growth produces a slow surface, encourages disease, favours the development of annual meadow grass and leads to thatch accumulation – it is a nice dark green though!! Such a situation will require intensive and aggressive maintenance to keep the surface playable. The fine grasses do not like aggressive maintenance. Overfeeding is a cardinal sin and leads to ruin.

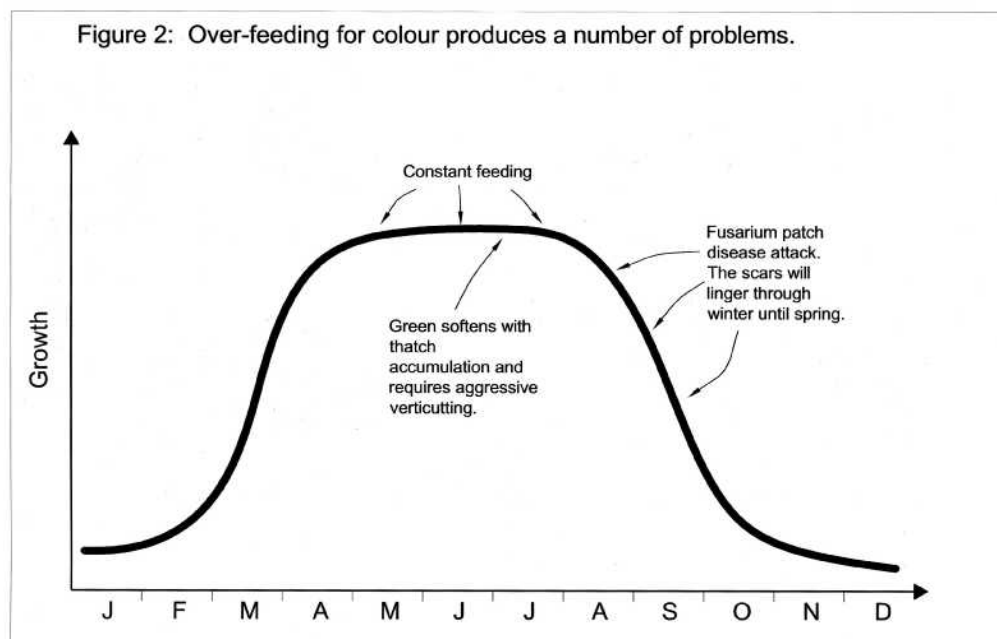
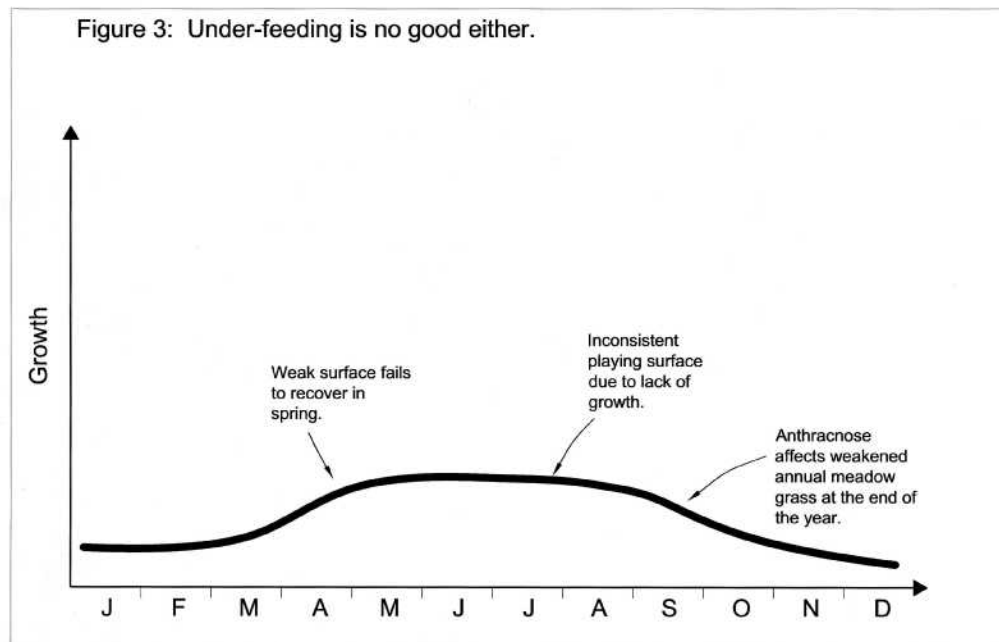


Figure 3 shows that too little fertiliser during the year might produce a weak and worn surface, which is also no good at all.



### Think for yourself

Greenkeeping is all about creating the right balance. To create a bowling surface dominated by the finer grasses the balance needs to be *quiet*. Bents and fescues flourish in a relatively unproductive and undisturbed environment. Too much growth only brings annual meadow grass and all its associated other evils. Applying fertiliser to improve the colour of the green is the biggest mistake you can make. In any case, it is true to say that if a bowling green looks good it won't be playing well. You need to stick to this principle. When applying fertiliser think about what you are trying to achieve and if it's the finer grasses, think again.

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