The Back Nine

A new column for writers and members to air and share their views on golf greenkeeping topics

Robert Laycock calls for a simple approach to golf green nutrition.

I was thinking about Jim
Arthur the other day. I often
do. It may be because I was
traumatised by his attacks
on me 20 years ago when I
first set up as an independent
agronomist and was "the new
agronomist kid on the block".

However, I think we eventually achieved mutual respect, and he inscribed my copy of his 'Practical Greenkeeping' book with the phrase "From one agronomist to another", which is something I treasure.

Jim Arthur was well known for having a minimalist approach to golf course agronomy, which did not go down well with some people but in the right circumstances it produced fantastic results.

Although he was highly qualified in plant and soil science, Jim Arthur did not need soil chemical analyses to determine the nutrient requirements of turf.

The healthiest golf greens I visit as an agronomist are managed in a "Jim Arthur" style. They are old links greens with a high content of red fescue and browntop bent - completely aerobic with deep roots.

They are fed once a year and receive very little fungicide treatment. The club car park is always full, so they must play well too!

But not every course can be like that. Some of my other clients' greens require much more fertiliser - if this is necessary to get the best golfing surfaces for that course.

But it is always best to aim to achieve the optimum, as applying too little or too much can be detrimental and can contribute to triggering disease outbreaks. Get the plants healthy by getting the nutrition right and you reduce the risk of disease, saving money on fungicides.

Some greenkeepers make it hard for themselves by adopting complicated programmes of fertiliser and chemical applications, planned in advance with their fertiliser supplier and which are intended to be adhered to. What makes it worse is that some golf course advisers, who should know better, also want to appear more knowledgeable by producing over-complicated plans.

In my opinion, it is better to adopt a simpler and less prescriptive approach, working with the turfgrass plants, the soil they are growing in and the local climate and tailoring inputs to the greens in a flexible way as the season progresses. This is certainly the cheapest approach.

It is important to understand the technical stuff so that you can decide which products are best for you. But you also need to be able to encourage plants to grow to their optimum.

Remember that it isn't just fertiliser that stimulates growth. Aeration encourages rooting and better rooting allows the turfgrass plants to take up more nutrients.

So I advise my clients to take advantage of analyses of soil and tissue from their greens, but not to rely on analysis alone to decide what treatments they need.

If the turf on the greens is healthy, with a proportion of fine grasses, an aerobic rootzone and deep roots, that tells you it has all it needs and it may be possible to reduce inputs, which is a great advantage in these straitened times.

BUT only reduce fertiliser applications if this is not going to damage the turf. Some greens need more fertiliser than others and reducing it too rapidly can lead to poor green surfaces (and, in the worst cases, the issuing of P45s to those in the firing line).

At the end of the day, the purpose of golf greens is for golfers to putt on them. If putting surfaces are poor, the greens are not being looked after properly.

Fertiliser reduction can become a "macho" thing - seeing who can reduce the most. But at the end of the day, all greens are different and all have their own optimum treatments.

Know how your turfgrass plants grow. In order to get the best from his turf, a greenkeeper needs to understand the relationship between plants and soil in the same way as a gardener or a plant ecologist does and this is more important in achieving healthy turf than being a great golfer.

"Keep it simple. Less is more"

It is interesting to note that because he was not a keen golfer, the great Jim Arthur was sacked many years ago as the club agronomist by one of my client golf clubs - but that might have been an excuse!

Think about what you are doing, and retain a balance between supplying too little and too much. For example, most soils contain adequate amounts of phosphorus for plant growth.

If you feel this is the case, drop it from your fertiliser programme, though you may have to shop around to find a fertiliser without phosphorus these days. Just apply what is necessary.

The healthiest greens need to receive nitrogen as the only major nutrient applied to them and if you can produce good greens by doing that, don't allow yourself to be convinced that you need to apply phosphorus and potassium.

This isn't something you can learn from a book but only from experience.

It is how Jim Arthur was able to advise on nutrition without using analysis results. But if you can't do that you need the figures to back you up.

As Jim Arthur would have said, "If in doubt, don't feed".

Keep it simple. Less is more.





wide-ranging career as a turfgrass scientist, beginnin with MSc research at Imperie College, London. This was followed by six years cutting edge research at the STRI and then working with a plan breeder in the grass seed industry before becoming Technical Director of Rolawr and General Manager of Karsten Turf Science. He is a Chartered Biologist and a Fellow of the Institute of Horticulture and first began working as an independent professional agronomist 20 years ago. Recently relocated to the North York Moors National Park, Robert is mainly occupied advising on golf courses of all types across the UK.