

About time too!

It is traditional at this time of the year to look backwards and comment on the 2020 season.

Well, this last season did not really happen. Looking back, on the bowling front, under half of the members took part in some form of organised bowling and a few took part in roll ups.

From my point of view it was difficult to get really motivated but I was able to experiment with the green. As the amount of bowls being played, on your green, was very much reduced and non-existent in the early part of the season, I had a unique opportunity to try different products; different application rates; different watering rates, etc...

I tried various fertilisers from the Sustane and the Maxwell range plus soil amendments from AGS and Pitchcare. I was quite surprised how some performed.

I realised that I needed to apply more fertiliser than I had planned, but less soil amendments.

So, for this winter and upcoming 2021 season I have decided that I will be using three fertilisers from the Sustane range, coupled with a product called Bolster and half rate cold pressed seaweed. Half rate as Bolster also contains some seaweed!

So, through the winter I will apply 22kgs (a bag) of the 100% organic 4-6-4 each calendar month. Being 100% organic, it will not leach through the soil very much. However, if the rain continues some of it will end up going down the drain!

For April, May and June I will apply Sustane Turf Revival 6-2-4 + Fe with added calcium, magnesium, sulphur and some mycorrhizal fungi. The extra nitrogen, denoted by the first number ie. 6, will help get growth started. The lower P (phosphorous) will balance out the higher winter levels, and the K (potassium) level with help to maintain the required level for good healthy growth.

In July, August and September I will switch again to a bag every month of the Sustane 5-2-4 + fe. This fertiliser is again mostly organic and will help to maintain a good healthy grass plant as well as a good, vibrant, biologically active root zone.

All the fertilisers in the extensive Sustane range are based on composted, dried poultry waste which is full of

beneficial microbiology which will make a big difference to the root zone. Since I have started using Sustane I have noticed that the rootzone has become more friable. The technical term means it has aggregated. This will help natural aeration, root development and thatch degradation. I believe these fertilisers have improved the root zone structure so that now your green only has a few very small patches of moss.

This fertiliser will be applied every two or three weeks, so hopefully members will not notice its application!

Also, Bolster is a liquid and will be applied monthly with the compost tea and seaweed. I will be making my version of compost tea by adding a few handfuls of the Sustane 4-6-4 to rain water and then bubbling air through it to super oxygenate, for around 36 hours or so. This will in turn enable the bacteria and fungi to increase in number before being sprayed onto the green. Yes, this procedure is fiddly, time consuming and is something of a "black science" but one which I feel is important to carry out monthly, when soil temps are above 7 degrees C.

The Bolster is really an insurance. It contains seaweed, humic acid, fulvic acid, a few micro minerals, thatch eating fungi and many more micro ingredients. These will in turn hopefully lead to a very healthy, robust grass sward and a root system that will be able to cope with high stress situations and fight off disease.

I am expecting this complete approach to result in NO fungicide applications; NO insecticide applications and a better environment for me as a green-keeper and bowling member.

So what else have I deduced from this very strange year?

Firstly, I need to carry out more aeration! I realise that this operation is not popular with members but it is vital. The deep aeration with my Air2g2 machine is great and I will carry out this operation at least three times a year. When I roll the green, usually twice a week or so, I always have the small slitter in operation but I have now realised that is not enough. So, I need to be spiking more and probably need to carry out this operation at least 9 times a year. To enable me to do this efficiently I have arranged a demonstration of a new machine for early in the new year, if it ever stops raining. This new machine will cut down the time taken to carry this out from 2.5 hours to around 1.25 hours. However, as always, it will come at a huge cost! But one that I feel is justified.

As the thatch levels continue to decrease, now down from around 35 - 40mm to around 12mm, the green will be firmer which will result in a quicker green. With my green-keepers hat on I would like to see the thatch levels down to under 10mm all over. At this time, the thatch levels are inconsistent over the green. The end 3 metres or so have very little thatch at all, whereas the centre has around 15mm. I know that I will reduce

the thatch and the green will get quicker. I will be able to control, to some extent, the green speed by altering the height of cut. Last season I was able to cut at 5mm. However, it would be good to achieve a quick running green at 6mm. In reality, a higher cut means less wear and reduced stress to the grass plant, resulting in a healthier green and the natural grass species improvements accelerate.

That brings me nicely to my aim to establish a green of fescues and bents (more desirable grass species), rather than the more prevalent poas (often referred to as weed grass species). The fescues and bents root much deeper and therefore are able to "find" more various inputs giving more posture, resulting in less need for irrigation, less dry patch and increased green speeds.

I managed to speed up the process last summer by restricting inputs, including irrigation, but ran into problems. By reducing water and fertiliser I stressed out the poa grass plants. This has allowed the bents in particular to start to flourish but it will be a long process which will take several years. In the meantime, the stressed out Poa is very susceptible to disease and other attacks. This year, during the late season and autumn, the Poas succumbed to a disease known as Anthracnose which weakened the plant even more to allow its roots to be taken over by bad, root eating nematodes. These nematodes are not fussy and as they were in the ascendency, they also attacked some of the desirable bent grasses.

Where I've pushed some areas of the green too hard, there are very small areas of moss developing.

Unfortunately, it is very easy to get it a little wrong.

On the plus side, the Poas have been hit hard, and I have learnt a lot. On the negative side I pushed things a bit hard. I now have to control these nematodes which will not be easy.

But, hey ho, that is what I am paid to do, so stop moaning and get on with it.

Lastly, **A VERY HAPPY NEW YEAR** to all members and bowlers all over our planet, and fingers crossed the word Covid will not be the main topic of conversation in 2021.

Paul Wright