



TOP DRESSING AND FERTILISER

Dave Weston writes why are both top dressing and fertiliser applied to parkland greens?

Secretary At Work: June 2004 *(reviewed January 2012)*

Each process serves a completely different purpose. The top dressing material is insoluble, ie it does not dissolve in water at all. The fertiliser is soluble, if granular it does dissolve, either immediately on contact with water, or slowly over a period of time, the modern - “slow release” fertiliser.

In order for the Greens mower to cut the grass to a uniform height, the surface over which the front and rear rollers are travelling has to be uniform. Foot traffic over the green and in particular un-repaired pitch marks produce minor localised undulations in the green surface. These affect the smooth passage of the cutter as it passes over the fine turf. A light dusting of top dressing, drag-matted into the grass, fills any holes, levelling up the surface at the base of the grass.

If done during the growing season, twenty four hours should be sufficient for the grass to have grown through the dressing. The dressing should then be unnoticeable.

If the base is level, then the cut will be level. Once the grass has been cut following the application, the greens should be faster and have a truer putting surface. Top dressing should be done “little and often”. Heavy applications should be avoided, as they “smother” the grass, leaving it susceptible to attack by disease.

Because the grass clippings are boxed and removed, the trace elements, nitrogen, potassium, and iron, and to a much lesser extent phosphorus, are removed in the clippings. Over a period of weeks during the summer growing period, the soil loses these nutrients and it is necessary for the greenkeeper to replace them by applying artificial fertiliser.

Compounds of phosphorus, the element essential for the growth of the grass roots, are broken down by the plant only very slowly. Its level in the soil is usually controlled on an annual basis by applying it as part of the autumn/winter fertiliser.

Potassium and in particular, nitrogen are used daily by the growing plant and these are the vital elements removed in the grass clippings. To keep the greens healthy, both elements must be made available to the grass plant by regular applications throughout the growing season. They form the nutrients of a Spring/Summer fertiliser.

Should the greenkeeper require an immediate improvement in the growth of the grass, then a “liquid” fertiliser is applied. The word liquid is a misnomer. The fertiliser is applied already dissolved in water. This has two advantages and one disadvantage over a granular application. It is immediately available to the plant and can be applied with even precision over the green surface. However if it rains heavily immediately on application, the nutrients are washed through the soil profile before the plant has a chance to absorb them, wasting the cost of the fertiliser. The granular fertiliser is applied via a cyclone spreader.

The greenkeeper will choose to apply the fertiliser when showery weather is expected. If it does not rain, the fertiliser will remove moisture from the grass turning it brown (burning). With most Clubs now having an irrigation system this should not happen, as the watering system will be used to leech the fertiliser into the soil.

An ordinary granular fertiliser will give a sudden spurt to the growth of the grass, making them slow to putt on. As the nutrient effect wears off the grass turns from green to yellow and the greens speed up (good for the golfer) but “hungry” (not so good for the greenkeeper). If they are to continue to be healthy and reduce their susceptibility to disease, the fertiliser cycle must be started again. “Slow release” fertilisers have alternate layers of fertiliser and a coating in the build up of each granule. Each coating delays the release of the next layer of fertiliser. In effect the fertiliser is applied in a series of mini- spurts, thus maintaining both an even colour and a more consistent pace to the greens.

The manufacture of these “slow release” granules makes them more expensive. The greenkeeper will time his fertiliser program to have hungry (fast) greens for the Club’s Major Competitions. What he cannot do is to produce precisely the same speed of greens throughout the summer.

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