



THE LAYMAN'S GUIDE TO TOP DRESSING

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Top dressing is an operation that is required to be carried out increasingly frequently on the greens, surrounds and tees of the nation's Golf Clubs

What is top dressing? Well firstly, we should distinguish between top dressing in agriculture and top dressing in the sports turf situation. In agriculture, it refers to the application of fertilizer - in the sports turf situation, and in the golf industry in particular it refers to the consistent operation of applying a bulky material as evenly as possible to a playing surface.

The first golden rule about top dressing is that it can only be carried out on a growing sward. The application of a material to a surface that is not growing well will smother the turf and frequently creates conditions in which disease can thrive. For successful top dressing, therefore, we need a period of good, consistent growth in addition to dry ground and weather conditions, and a dry material. These criteria will ensure ease of application and prevent any unnecessary problems from developing.

Now that we have established what top dressing is, we must look at the reason for carrying it out, together with the benefits it conveys. There are five main reasons for top dressing:-

1. Top dressing is the only way to promote a true surface - be that on a putting green, its surround/approach or on a tee. The more uniform and true a surface is, then the more accurately it can be mown, the result being a smoother playing surface. It is this approach rather than heavy rolling that promotes good surface uniformity.
2. It leads to an improvement in surface soil quality - this is particularly important beneath greens. The quality of the growing medium can be amended in a number of ways:
 - a) By increasing the organic input of a very sandy medium, for example on a pure sand rootzone or a links fairway area, in order to increase drought resistance.
 - b) By reducing the organic content of persistently wet and poorly drained areas, for example, clay-based greens.
3. It is integral to improvements in surface playing quality, most notably pace, uniformity and firmness. It also has a significant role to play in the repair of damaged surfaces.
4. It provides protection for newly seeded areas, both in terms of keeping birds away and in helping to retain moisture.
5. Each dressing provides some nutritional value. Top dressing can therefore be integrated with the fertilizer programme to produce the required growth response.

There are a number of materials available with which to top dress fine turf areas. The choice of material will depend upon indigenous soil type and its associated drainage/drought - susceptibility characteristics, as well as a variety of other factors, one of the most important being the physical composition of the present dressing. The choice of top dressing materials include:

SAND

Sand is the basic constituent of all top dressings, either in a mixture with topsoil, peat, etc or by itself. It is used mainly to dry and firm up turf areas and improve surface drainage qualities.

The quality of the material used is very important and it must satisfy strict grading regulations. On heavy clay-based sites it is common to use a medium/coarse type sand top dressing to aid drainage. On links and heathland sites, however, when the native sands are much finer, it often makes sense to use a material as similar to the base rootzone as possible.

Chemically speaking, the sands used should be lime-free because high levels of lime can encourage disease and weed and worm activity. Sands with a lime content are sometimes acceptable on coastal sites. The use of pure sand as a top dressing is not usually recommended because there are a number of problems that can develop:-

Layering

A change of top dressing from a pure sand material to an alternative or vice versa can result in layering of the soil profile. This will favour the less desirable shallow-rooted grasses in the long term. As a consequence of this, it is preferable to be consistent with top dressing products.

Drainage

The prolonged use of pure sand dressings can make the surface profile too free-draining. This may lead to difficulties in retaining moisture and nutrient, particularly during the drier summer months.

Drought Tolerance

A reduction in drought tolerance is allied to an extremely free-draining environment - how good is your irrigation system?

Disease

Prolonged use of pure sand dressings may make the turf more susceptible to disease. Take-all patch disease (*Gaeumannomyces graminis*) is known to favour such an environment.

There are, of course, a number of exceptions where pure sand dressings are permissible:-

- ✎ On pure sand constructions.
- ✎ After Verti-draining in a very wet environment. The aim should be to get as much sand as possible down the tine holes.
- ✎ Where an established policy of sand dressings has been used for a number of years and cannot be changed.

TOPSOIL

Good quality topsoils are sometimes used straight as top dressings. However, the majority of top dressings on the market now comprise a good quality light loam topsoil mixed with an appropriate sand. The mixing ratios can be varied according to need, ie from 50:50 to 90:10.

PEAT

Once upon a time this was a common constituent of top dressings. It is still found in some proprietary mixes and provides an able organic substitute to topsoil in most cases when mixed with sand.

Occasionally, straight peat may be used, for example, on drought susceptible areas of links fairways, when topsoil erosion has taken place and water and nutrient retention is proving to be a problem.

There are other sources of organic material that when mixed with sand could provide the necessary requirements for a top dressing material. However, leaf mould, mushroom manure, natural compost, etc are less frequently encountered these days, unless of course, the Club is mixing its own material.

The majority of Clubs now own or have access to machinery for applying top dressing - it is rare to come across the labour-intensive shovelling of material. Anyway, the amount of material now needing to be applied, together with the frequency of the work, dictate a mechanised approach.

Application rates will vary depending upon the reason for top dressing and depending upon mechanical operations carried out prior to it. Most Clubs will commence dressing in the Spring, applying perhaps between $\frac{1}{2}$ and $\frac{3}{4}$ tonne of material to each green, repeating this every month until September. Further applications may be made in the Autumn following Verti-draining/hollow coring. The approximate annual requirement for a Golf Club is therefore:-

- ✂ Greens between 80 and 100 tonnes
- ✂ Tees and Surrounds 40 - 50 tonnes

As both a major budget item and vitally important component of the maintenance programme, a consistent policy of top dressing with a good quality product is an essential ingredient of success of any Golf Club.