

Fairway Maintenance

by

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Although there is a wide variation in the standard of maintenance on fairways all over the country, management should be guided by the same basic principles to provide the golfer with a fair lie from which to play his next shot. The end product on a fairway should give the golfer a clean firm stance which should be as dry as possible.

There is also a wide variation in natural conditions up and down the country, from seaside links to inland park and moorland, which will obviously necessitate local alterations to the maintenance programme but basically all should be aimed at producing a suitable smooth finish.

Drainage

Problems with drainage are not usually encountered on a seaside links but inland courses on a heavy soil can cause headaches for the committees. With increasing winter play on golf courses, it is essential that conditions are as dry as possible. Traffic damage is emphasised in the winter when the soil is naturally more moist and, therefore, it is desirable to ensure that underlying drainage is as efficient as possible.

This can be achieved by improving existing drainage, including cleaning out of ditches etc. and restoring existing drains. The relatively high cost of a comprehensive tile drainage system often proves a stumbling block but there is no satisfactory substitute, particularly in heavily used areas. In certain types of soil it may be possible to carry out mole drainage as a cheaper, although shorter term, solution. With all types of drainage it is necessary to ensure that a good outlet is available.

Mowing

During the growing season fairway mowing is frequently looked upon as a chore rather than an important part of routine maintenance. As it is normally the most frequent operation carried out on fairway, turf mowing can have a major effect on the finish. On some courses rather severe undulations can lead to skinning by the gang mower on the tops, while the sward is left rather long in the depressions, resulting in an uneven end product. The gentleness of contouring to aid efficient mowing should, therefore, be borne in mind during the construction of new holes or courses.

Mowing of fairways should be carried out as frequently as necessary to maintain a smooth finish at the desired height of cut. The cutting height is generally regarded as $\frac{1}{2}$ in. on fairways but local variations may occur according to the situation. Seasonal variations are also desirable including raising the height during dry weather and in the autumn and early spring. Tractor speed should be carefully selected according to the conditions on the course and the direction of mowing should be varied where possible to obtain the best results.

To encourage more vigour and upright growth in the sward, harrowing should be carried out. This operation can be carried out at any time when growth is apparent but usually it is a spring operation when growth first appears. The grass is encouraged to produce more tillers thus promoting more upright growth, while removal of dead and decaying material from the base will allow better penetration of nutrients and water to the roots thus improving vigour.

Aeration on fairways is required to improve root action and relieve compaction, both of which will improve growth. Water may be assisted through the top to the drainage system or underlying soil particularly in compacted or fibrous conditions, thus providing a drier, firmer surface.

Spiking should be carried out on several occasions during the autumn/winter/spring period. To obtain maximum penetration the soil should be moist but the surface should be dry enough to take the tractor without serious damage. It should be appreciated that although some surface disturbance is obtained during spiking, the short term damage is

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far outweighed by the long term benefits. It should also be appreciated that the effect of these operations is cumulative and, therefore, regular treatment is essential.

To minimise damage the tractor speed should be carefully regulated and improvement of the disrupted surface can be achieved either by lightly chain harrowing or brushing or running over with the gang units set high.

Weed Control

Apart from detracting from the appearance of a fairway some weeds can cause a bumpy surface by their mat or cup formation. It is, therefore, necessary to have a weed free sward and control measures should be carried out where applicable using a suitable selective weedkiller. Among weed problems on fairways, daisies and clover are possibly the most prolific and can cause ball finding problems on fairways when they are flowering.

Worm Control

Where the worm population is numerous, soft, muddy surfaces are often found. Wear on areas where there is excessive casting can cause thinning out in the sward. In such a situation control measures are desirable and are normally carried out in the spring or autumn period during mild, moist conditions when the worms are active in the surface.

In some cases major improvements in playing conditions have been obtained merely by removing worms.

Renovation

To maintain as smooth a surface as possible, renovation work i.e. divot filling, should be carried out using a compost/seed mixture. This work should be done thoroughly in the spring and maintained progressively during the summer months. Particular attention should, of course, be paid to these areas from which an iron is usually played from the fairway to the green.

Fertilizer and Lime

These are not usually applied regularly to fairway turf and general symptoms of a lack of nutrients are more frequently seen than the effect of an overdose.

Under British conditions, fairways naturally tend to become more acid and regular maintenance does not alter this fact. A point is then reached where grass growth is weakened and weeds such as sorrel or woodrush become more apparent. Acid turf is also more susceptible to drying out, often only in patches. Liming, therefore, becomes necessary but this should not be done without first having the guidance of a soil test – a service which is available to associate members of the Institute.

If lime is required, it is normally applied in the late autumn or early winter during showery weather conditions. The lime should be applied evenly but, if there are variations within a single fairway, low-lying, lush areas should be avoided.

To minimise the risk of trouble with disease (*Ophiobolus* patch) following liming, a granular fertiliser should be applied in the spring following the lime dressing. The soil analyses mentioned previously will also reveal any deficiencies of nutrients.

Fertilising of fairways is not usually an annual job but it should be carried out as often as necessary to maintain reasonable growth.