MOWING

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Mr Macadam writes about some basic principles of a basic job for apprentices and newcomers to greenkeeping.

DURING the growing season a very high proportion of the working time of the greenkeeping staff will be spent on mowing the greens. The efficiency with which this is carried out largely influences the quality of the grass swards and the putting surfaces. It is important to understand the principles of the work in order to obtain the best results.

Each time a golf green is mown and cuttings removed, the soil deprived of some of its nutrients. Cutting therefore should be aimed at removing the minimum amount of foliage and this calls for regular cutting at a reasonable height of cut. Mowing irregularly and at long intervals is harmful because a greater weight of foliage is removed than by more frequent mowing.

Delayed Cutting

In practice, greens mown three times per week when growth is relatively vigorous usually provide good conditions for satisfactory putting. the cutting is done must be determined locally but Monday, Wednesday and Friday are usually set aside as "mowing days". It is, however, an advantage at the weekend if the cutting could be delayed until Friday afternoon or even Saturday morning, as greens mown early on Friday are often slow to putt on by Sunday when golf nowadays is usually at its height. During the spring and autumn periods when growth is less vigorous, mowing might only be required once or twice per week but uneven and straggly growth should not be allowed to form.

It is often thought that continued close cutting brings about a reduction in the weed population. Whilst this is true up to a point, keen mowing will not eliminate the majority of weeds which establish in golf greens. weeds of turf such as dandelions, daisies, pearlwort, clover and varrow are capable of surviving and spreading under very close heights of cut and over-close mowing would only reduce the competition which the grasses can offer them. In addition, continued keen mowing slowly results in a reduction in grass vigour and density. This condition favours the invasion of moss, thus creating a further problem.

During the main growing season when steady grass growth is obtained, a height of cut of 3/16th in. is the desirable minimum on golf greens. However, during any periods of prolonged drought this could well be increased to 1 in. During drought, growth is hampered and a little extra cover helps the turf withstand the moisture shortage. This is not so important where adequate artificial watering can be done and indeed might be undesirable as an increase in the cutting height might allow straggly growth to develop.

How High?

During the early spring and late autumn periods mowing is best carried out at a height of $\frac{1}{4}$ -5/16 in. according to conditions. During the spring 5/16 in. is quite close enough until signs of fairly settled growth are noticed when the blade can be lowered to 1/4 in. and ultimately to the minimum as growth further improves. During the autumn the reverse order should be observed and it might even be necessary to continue topping the grass occasionally right into the early winter if the season remains open.

There are no hard and fast rules as to the week or month when the height of cut should be raised or lowered as this depends entirely on growing conditions and the prevailing weather. greenkeeper is the person who should be allowed to decide just what is best as his own experience will have taught

him.

Adjustment of mowing heights should be carefully done so that an even cut is assured. Most modern mowers suitable for golf greens are of the roller type. With these the height of cut is the measured distance between a straight edge placed across the front and rear rollers and the actual cutting edge of the sole plate. This distance should be set and checked at each end of the sole plate and again in the middle.

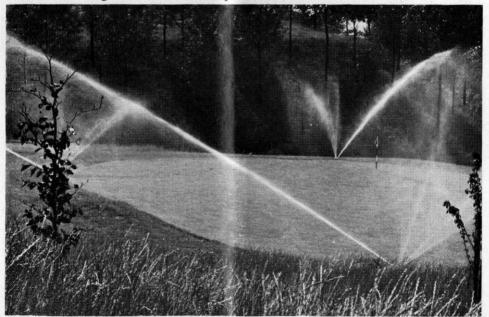
Fine Adjustment

The cutting cylinder should also be finely adjusted to the sole plate. If the setting is too tight the machine will be hard to drive and if it is too slack a clean cut will not be obtained. A simple test is to rotate the cutting cylinder against a piece of paper placed on the edge of the sole plate and adjust the setting until a satisfactory cut has been obtained with the cutting cylinder running freely.

The question often arises whether grass cuttings should be allowed to fly or should be boxed off. It is true to say that the regular return of cuttings conserves plant foods and provides some organic matter to the surface soil. This assists drought resistance and helps

give the turf a good colour. However, the accumulation of organic matter in the base of the turf favours the activity of earthworms and can lead to the spread of weeds and weed grasses. The continual return of cuttings also makes the green surfaces soft and spongy and more susceptible to disease attack. In view of this grass clippings are usually best removed at all times but if the surfaces are completely free of any weed the occasional cut without the box might be beneficial in helping the greens to withstand a severe drought.

Finally the care of the mowing machine should never be forgotten. After each day's work the mower should be thoroughly cleaned of all grass cuttings and any worm casts which may have adhered to the rollers. Regular lubrication should be a habit and the machine should be stored neatly in the shed where it is not moved around unnecessarily when obtaining It should also be other implements. kept away from mixing bases to avoid which corrosion may occur from fertilizer dusts.



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