

# MECHANICAL AIDS TO GOLF GREEN MAINTENANCE

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AT this time of year full use is made of most of the wide range of machinery for golf green maintenance. It is also the time of year when faults arise on old machines despite servicing and the club is told by the agent that they are not worth repairing further. Then there is a rush to replace the old machine and sometimes a purchase is made without consideration of the full range of equipment available and the requirements of the course itself.

The purchase is governed by a number of factors, not the least of which is the cost, but often the purchase price is not related to ensuing benefits. A machine costing half the price of any other on the market may appear a bargain, but if it takes the operator twice as long to do the same job over a number of years, it is not quite the bargain it appears.

Operator comfort, reliability and after sales service should also influence the final decision more than colour or an assortment of gadgets.

## Mowers

Mowers offer the widest choice of any type of equipment and prices vary to suit every pocket. The labour available on most golf courses makes hand machines impractical and powered cylinder mowers only can be considered at the present time.

On a golf green the main requirement during the summer is the quality of finish. It is useless to expect a machine with a cutting capacity of 70 cuts per yard to produce the same finish as another with a capacity of 100. A course with large greens would require, on the face of it, a machine capable of covering a larger area per hour, but large greens with undulations may indicate narrower cutting width. The amount of use a fine cut mower receives makes it necessary for the machine to

be sturdily constructed, easily adjusted and driven by a reliable power unit.

## Scarifiers

Scarification on the golf green is increasingly necessary and some form of scarifier is essential. Rake scarifiers, although merely surface disturbers, are of value as a preliminary to mowing. The severity of scarification can be increased by operator pressure or by artificial means. A limited amount of scarification can be carried out using a comb attachment for the mower.

Generally, however, the scarification required on golf greens justifies the acquisition of a powered scarifier. These machines can be set to varying depths to remove some of the fibrous layer in the base of the sward.

Most machines of this type on the market have interchangeable knives and/or tines so that different types of scarification are available and the machines can be used during the growing season.

## Aerators

Aeration is essential on all types of golf green to relieve compaction, allow air into the soil, and to improve root growth and surface drainage. The tines most commonly available are solid, hollow and thin bladed root action.

The most thorough aeration is done by a hand fork, but as this is also the most laborious, powered machine work has largely replaced it. A hand fork is, however, useful for treating small areas.

The range of suitable powered aerators is small and each provides similar results when used under similar conditions. The majority achieve penetration by the weight of the machine alone. A special point to consider is the ability of the machine to

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carry out the desired operation with a minimum of surface disturbance.

### Sprayers

For chemical control of weeds, pests and diseases where there is little leeway in rates of application, an accurate sprayer is required.

The range includes motorised sprayers, wheels and knapsack models. Those fitted with a 3 ft. or 6 ft. spray boom are preferable to those with a single nozzle lance.

### Fertiliser Distributors

When choosing or using a fertiliser distributor, whether it be a carpet spread or a spinner type, look for even application and ease of calibration, though risk can be reduced by halving the quantity of material to be applied and passing over the surface twice.

### Drag Mats and Brushes

Apart from home-made implements, tools for working in top dressing are

limited to the drag brush or mat or a lute. Generally the drag mat is most satisfactory as it is flexible and will follow the contours of the green better than a brush or lute, both of which are rigid. The brush, however, has the additional use for light scarification before mowing.

### Watering Equipment

The most important feature to consider is even spread of water. "Pop up" watering systems on automatic control remove the inconvenience of sprinklers to the golfer and the labour involved in watering is minimised.

Always arrange a demonstration to ensure that equipment can be readily operated by the staff on their own course.

Equipment is continually being developed and improved and, with recent advances in the automatic watering, one wonders how far automation will go. Perhaps a computer operator's course may be in the syllabus for the greenkeeper of the future.



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