

HUGH TILLEY looks at several distinct types of fertiliser spreader and talks to the people most qualified to talk about them – working greenkeepers

Although the amount of solid fertiliser applied to golf courses is relatively small – frequently using a pedestrian operated spreader, or as a liquid, accuracy is important – even vital.

Several distinct types of spreader are available, ranging from trailed and/or tractor mounted broadcasters to pedestrian operated broadcasters and drop spreaders.

Of tractor mounted and pto driven machines, two spreading principles are common, those which use a spinning disc, and those with a wagging spout. Of hand machines the spinning disc model is most prevalent, however fluted roller models are available – often referred to as 'drop spreaders'. Turf maintenance vehicles accept tractor linkage mounting models. Trailed chassis are also available, designed for ATVs, which allow any small mounted spreader to be used.

Most fertiliser spreaders will spread a wide range of materials, often including top dressings, seed and even salt as well as the more normal granular fertilisers.

How accurately and at what swath width normally needs to be assessed by a few calibration runs.

In fact calibration may be essential whenever a different material is used or there are differing moisture contents in the material.

The ideal spread tapers by weight from the centre of the machine, equally to either side. This allows two adjacent spreading runs to match to give a uni-

form spread. However the normal single disc spinner tends to spread to one side more than to the other. With some machines this can be counteracted by adjusting the position at which the material is dropped on to the disc. With wagging spout models wear and damage to the spout can have a radical effect on spread.

Speed over the ground is another variable which needs regularising. This may be difficult

with pedestrian operated machines, as it relies on the operator walking at a regular speed. On mounted machines, engine speed and gear ratio need to be constant to get a consistent spread.

Thus in selecting a machine the important considerations are the type of fertiliser to be applied, the volumes and rates to be used and the accuracy needed.

Hardi 300 at Sutton Green Golf Club near Guildford

Sutton Green has a new Hardi 300 which is mounted on a MF1020 compact tractor. This is used for fertilising fairways and semi roughs, but it was also bought with the option of using it over greens and tees etc. to apply top dressing. The course is new and to USGA spec., and the machine is in its first season of use.

Head Greenkeeper, Gavin Kyle, said that the spreader has met expectations, although it has not yet been fully tested. Applying top dressings require that the dressing is dry – which he can specify, and he aims to apply these regularly at lowish rates – going over the greens every two or three weeks putting on a hopper full – 300kg – over each green. The hopper is fitted with a very effective agitator and a cover

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has been improvised pending supply of a purpose made one.

With fertiliser only one type of granular has been used, a 21.8.11, and no noticeable unevenness has been seen. With top dressing a 15 metre spreading width is produced and this is fully overlapped to give a 100% coverage.

The spreader, a single spinning disc type machine with a cone shaped hopper, has given no problems in setting or use, however it has been found essential to wash it thoroughly and oil the shutter mechanism after use. Gavin commented that he did not know that fertiliser was so corrosive.

Scott Professional Rotary spreader also at Sutton Green

This pedestrian push machine is used for greens, and has been in use for four years. Spreading is a two man operation with one man placing pegs on the green perimeter for the other to work to. Gavin commented on the need to have consistency of pushing speed. Regular greasing is a simple maintenance procedure and Gavin has encountered no problems with the machine.

Supaturf Evenspread and Greenland Varispreader at Eagle Star Sports Ground in Cheltenham

Run by Dave Turner who has been Head Groundsman for four years, and under Gardner Merchant Pension Fund management, the club uses the Evenspread mainly for the cricket square while a tractor mounted Varispreader is used for the outfield.

Previously the club had a drop spreader and Dave found several specific advantages to the Evenspread. In particular he likes the

fact that the fertiliser is spread in front of the him where he can see how and where it is spreading. The machine was calibrated when new, spreading, sweeping into piles and weighing the material used, and Dave has continued using the same mini-granular fertiliser.

Spread with the granular is about 3m wide and has always appeared even. Wheel marks are easily seen and the groundman can judge the width easily 'by eye'. Dave did say that the user has to maintain a constant walking speed to ensure a constant width of spread.

No problems have been encountered in use and no new parts have been required.

The Varispreader has been in use for over 12 years, being mainly used to apply granular 20-10-10 (or similar) two or three times a year. Dave, again, has no complaints about the 32ft spread. The machine is used behind a

45hp tractor and is easily hitched up being relatively light. The tractor's single speed PTO limit the gear options and require a higher engine speed than Dave would have liked, however this was criticism of tractor not spreader.

Again maintenance begins with a thorough wash off after use, again with particular attention being paid to the control slide. The original spout was damaged - in the traditional way - by backing it into something, and it has been replaced with the newer design with plastic/metal spreader.

Amazon EK broadcasters at Thornbury Golf Centre - Bristol

The centre with 36 holes and owned by Burhill Estates, was so pleased with their first spreader that they bought a second. Head Greenkeeper Robin Greaves commented that because these are so reasonably priced he could afford to buy two. The Amazone EK is a single disc spinner with conical hopper of about 300 litres capacity - other sizes are available.

Materials spread have included top dressing and salt as well as several types of granular fertilisers. In particular the centre uses Sierra-blen S which is a high nitrogen sulphur coated prill material which needs accurate application.

Robin commented that the

spreaders were small, robust and easy to adjust. They gave a good spread and when used for top dressing they gave a very neat and precise edge to the spread which minimised any loss of material off the green and made it easy to see where the material had been applied. One hopper full - about 300kg is applied to each green. The abrasiveness of the material has resulted in some wear to the control gate on the older machine, so that it does not shut off completely and this means that only the newer machine is used for more critical spreading tasks - such as for the 38-0-0 Sierra-blen S.

A modified - extended - control handle has been made for use with one of the centre's tractors, this can be damaged by the cab if care is not taken with setting the linkage height.

Setting the machines is by manufacturer's handbook recommendations followed by user experience.

The Centre also has two Scott Pro-Turf hand spreaders for the greens, these are set according to the manufacturer's chart and are mainly used with Scott's own products, in a recommended two pass routine. No problems have been experienced with either machine. Their construction is such that they are virtually corrosion proof.

