

Low-disturbance drill allows reliable establishment

An East-Sussex-based contractor who specialises in grass establishment and regeneration says the Moore Uni-drill is the obvious choice for his business.

David Williams reports.

Trading as Agrifactors (Southern) Ltd and based at Heathfield, Roland Davis started selling grass seed in 1977 when the Davis family gave up its dairy herd. In the late 1980s, a contracting business started, establishing and maintaining grass for agriculture as well as amenity grass for local authorities. Building and maintaining football and rugby pitches remains a key part of the business, and the Agrifactors team currently looks after 90 football and rugby pitches for clubs, schools and local councils, while approximately 160ha of owned and rented grassland around the Heathfield farm base is for grazing a 100-head beef suckler herd and 250 pedigree Pole Dorset ewes.

Seeds a speciality

Seed supply is 90 per cent of the business. Amenity grass varieties, vetches, herbs and stubble turnips are stocked, including grass mixes made up on site. Wild flower seeds are also harvested, dried, dressed and supplied for planting, often as part of rewilding projects. Wild flower seeds are packaged and supplied to most major retailers throughout the UK and also sold under the Sow Wild brand name.

Rare varieties are harvested under a special licence from SSSIs as part of the Weald Meadows Initiative. This is designed to increase populations of endangered flowers mainly within the local area, and Christopher Davis, who is Roland's son, harvests the seed using a specialist combine, then cleans and prepares it for planting – much of it within 10 days of being harvested.

"We used to cultivate intensively before planting grass, but now the emphasis is on carbon capture and avoiding ploughing," he explained. "More than 90% of what we establish is by direct-drilling and everything we do is as environmentally friendly as possible."

Effective grass establishment

Most wild flower seeds are spread after harrowing, but grass and stubble turnips are established using a Moore Uni-drill – the sixth

owned and operated by the company. "The Moore drill is exceptionally versatile," continued Christopher. "We use a 3m version with 32 coulters spaced at 70mm, but RTK guidance allows a second pass with the coulters between the drilled rows, so we end up with seeds every 35mm for a denser sward. This is preferred for lawns and sports grounds.

"For agricultural grass establishment we use one-pass seeding, as 70mm row spacing is suitable."

GS4 mix trials

This year GS4 grass seed mixes are being created for mid-tier stewardship schemes, and include grass seed, legumes and herbs. "There are restrictions on nitrogen applications, grazing and harvesting, but growers receive area-based payments for growing it," said Christopher. "We have a trial of 40ha on our own land which was drilled into existing ryegrass using the Moore drill to minimise disturbance, and it has proved very successful."

Accurate and reliable

A very short working season of approximately six weeks per year for grass seeding means the team has to average 12ha in a typical 16-hour working day. "It has to be accurate and reliable," continued Christopher. "We can't afford downtime and the Uni-drill requires very little routine maintenance and is quick and easy to set up and use. We tend to replace all of our machinery regularly and before reliability reduces as we don't like paying for repairs."

Linkage-mounted drill

Agrifactors' current Moore drill was purchased in January 2020, and it is the first linkage-mounted model operated, as the previous five were trailed. "When we had trailed versions, we believed they were the better option for our type of use, but limited stock availability last year meant we could only get hold of the mounted machine and now we prefer it," commented operator Harvey Sheffield. "We have to be careful while moving

East Sussex-based Agrifactors relies on a Moore Uni-drill to establish amenity grass including pitches for football and rugby, and for agriculture for grazing and fodder. The drill is also used to plant stubble turnips and grass mixes direct into cereal stubbles, and for overseeding mixes into established grassland (as above). Standard coulters spacing is 70mm, but using RTK guidance a second pass can be made with the coulters operating between the previous seed rows to achieve a dense sward with 35mm seed spacing.

between sites on the road as we use lightweight 4-cyl tractors and the drill is quite heavy, but for manoeuvring on headlands and in field corners it's so much easier to use."

Minimum disturbance

Two rows of discs run at a shallow angle and at only 10–15mm depth for minimal disturbance, and the coulters are mounted alongside and graze the soil surface while dropping seeds in the slot. Coulters depth is set by the rear packer and hydraulic top link, and the drill has been

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John Deere 6130R tractors supplied by Tuckwells make up Agrifactors' main fleet. The 4-cyl tractors were chosen for their compact size and light weight, while also having plenty of power. Users Harvey Sheffield and Ian Draper say the tractors cope well with the mounted drill, although care is needed during transport even with a 1,200kg ballast weight on the front linkage.



Slotted discs operate at a shallow angle and depth, and the coulters alongside each disc drop seed into the slot. A Guttler roller at the rear exerts plenty of pressure to close the slot, ensure seed-to-soil contact and preserve moisture, and it also copes well with undulating ground.

Direct Drilling



There is hardly any soil disturbance, and the surface is left level.

...from previous page

horizontal so the front and rear disc rows and coulters operate at the same depth for even establishment and emergence. A handy indicator at the side of the drill makes it immediately obvious if the drill isn't set correctly. A Guttler roller packer at the rear has proved suitable for all working environments and maintains its performance on uneven ground. For sports pitches too, it exerts plenty of pressure to close the slot and leave the ground level so that immediately after over-seeding the pitch can be used.

The drill has an Accord metering system and its own GPS speed sensor. The tractor's GPS guidance and autosteer ensure accuracy. An optional 270kg weight kit on each side of the drill

frame ensures effective disc penetration on hard ground and proved essential in the dry conditions last year.

Operators Harvey Sheffield and Ian Draper both enjoy using the drill. "Once a week we check and reset all the coulters alongside the discs as having them set correctly is essential and we have found that they can move, but that takes only 20 minutes or so, and apart from that there is little that needs doing," commented Harvey. "The only other issue we have found is that when travelling on wet roads the fan housing collects water splashed up from the wheels, so we have learned to run the fan for a while to dry the system before starting work. It's a minor problem."

Exceptional back-up

"Our drill gets a lot of abuse, as almost all its work is on land belonging to others and there are often tree stumps and large stones which we don't know are there," continued Christopher. "The back-up was exceptional previously through Sam Moore, but, if anything, it's even better now that Agri-Linc stocks the whole range of machines and parts. There is a dedicated representative for Moore drills, and we are more than happy with the service. We get through a lot of parts and anything we have needed has always been in stock and dispatched immediately. There is very little downtime which is critical when we have such a short working season."

"The Moore Uni-drill achieves reliable establishment with minimal soil disturbance, and its ability to perform so well in both agricultural and amenity sectors makes it the best option for our business," Christopher concluded. **FG**



Pictured with the Moore Uni-drill are (l-r): Harvey Sheffield, Ian Draper and Christopher Davis.