Get seedbed right if you want grass to take hold

Successful reseeding is an art in itself and Francis Dunne of Field Options shares some of his experiences on how we can tip the odds in our favour to make the job a success every time.

hether you are doing it yourself or it is essential to spend some time on the detail to make sure you get the result you desire.

"Nowadays, there is a variety of seeding machinery for establishing new leys," explains Francis Dunne.

"Of these, the combination of spring tine type harrow mounted with a seeder is of appeal to both farmers and contractors. Its speed of operation and the accuracy with which seed can be broadcast have led to them being widely adopted for sowing grass, clover and brassicas on cultivated seedbeds. (See main picture).

"The wire tines of the grass harrows create a small depth of tilth

Best practice checklist for successful reseeds

✓ Bury trash effectively

2 Cultivate to create a fine seed bed 3 Roll before seeding to prevent the tines

A Set the harrow tines

to work only the top

5 Calibrate the seeder for each batch of seed used 6 Follow with a heavy
Cambridge roll to cover the seed and consolidate Keep rolling until it is firm enough to ride a

on what needs to be a firm surface. Onto this, seed is broadcast giving the potential for optimum plant distribution. Cambridge rolling is then needed to cover the seed and consolidate the ground, pressing the seed down into the soil for good seed-to-soil contact.

"However, this system is only effective if the seedbed is well consolidated before sowing and the rake tines are set to run less aggressively and to operate at minimum depth," he says.

There have been many partial failures and some disasters when these machines are not operated effectively, or when post-seeding consolidation has not been thorough enough.

Another aspect of good seed to soil contact is whether there is a lot of vegetative material mixed in the soil preventing this actual contact.

"Whether burning it off or not, any trash from the previous crop needs to be buried. So it needs to be effectively incorporated with a plough or heavy discs. Further cultivations need to create a fine, consolidated seedbed before seeding.

"It is always easier to control



seeding depth when sowing with grass harrow/seeders if the final seedbed if firm. After sowing, the ground needs to be rolled so that it is firm enough to ride a bicycle,"

Consolidation

"It sounds straightforward, but the field shown in Figure 1 was power harrowed but not rolled before seeding. Only on the headlands was there enough consolidation to give a decent establishment."



Figure 1: Power harrowed but not rolled before seeding.

Poorly prepared seedbeds and badly set harrows create the risk of burying the seed far too deep and it never germinates.

"When harrowing grassland in the spring to remove trash and open the sward, the tines need to be set to aggressively scratch the ground. But when reseeding in cultivated soil, the top link and depth wheels need to be adjusted so they just work the top 20-30mm of tilth - so they stroke the ground,"

Optimum establishment requires effective cultivation as well as careful setting of the harrow. Figure 2 is another example of failure to roll before seeding, and an incorrect set-up of the harrow.

Mr Dunne explains: "The tines were not set to run shallow - so seed was buried too deep. The field was consolidated with a Cambridge roll, but the tyre marks are from the tractor pulling the rake. The tyre lugs were enough to consolidate the seedbed and prevent the seed from being buried.

"Grass harrows can produce

exceptional seed distribution when seeding on cultivated ground, but to get optimum establishment, grass, clover and small brassica seeds need to be sown at a 5-25 mm depth before final consolidation," he advises.

"Calibration of the seeder is important and an accurate set of digital scales should be used. Grass seed is much lighter than most arable seeds and there is considerable variation across the range of grass and clover species, so this is particularly important.

"Check there are no blockages in the seed pipes, so airflow is good and the resulting spread pattern is even. This can be done in 30 seconds by running the machine on bare concrete before heading off to start seeding," he says.

"Sometimes farmers might



Figure 2: Establishment in tractor treads indicates lack of rolling.

blame poor establishment on their contractor, and sometimes you hear contractors complain that farmers cultivations are not adequate, or maybe they haven't rolled the ground sufficiently afterwards.

"When using the services of a contractor, it should be viewed as a partnership. Farmers should

specify what they want to achieve and discuss with the contractor what needs to be done.

"Compared to crops like wheat or oilseed rape, a new grass ley is a long-term investment. To ensure success, farmers need to give it their full attention and ensure every detail is seen to," he says.



