

Teagasc Notes for the week ending Friday 21st July 2017

Grassland Reseeding

Introduction – the need for more reseeded

Reseeding levels in Ireland are low. Less than two per cent of our national grassland area is reseeded annually. As grass is our dominant feed during the main grazing season, and the primary source of winter forage in the form of grass silage, the low level of reseeded must be addressed. Reseeding must be combined with the correction of soil fertility to successfully establish new swards. Data from PastureBase Ireland shows that there is huge capacity on Irish farms to grow more grass. Economically, pastures with a low proportion of perennial ryegrass are costing farmers up to €300/ha per year due to reduced DM production and nitrogen use efficiency. If the cost of reseeded is estimated at approximately €700/ha, the increased profitability of the reseeded pasture would cover the initial reseeded cost in just over two years. This means reseeded is one of the most cost effective on-farm investments.

Cultivation techniques

How paddocks are prepared for reseeded depends on soil type, the quantity of underlying stone, weather conditions and machine/contractor availability. While there are many cultivation and sowing methods available; once completed correctly all methods are equally effective. The do's and don'ts of a number of cultivation techniques are outlined in Table 1.

Key points when seeding

- Soil test and use the results to fertilise the newly sown sward.
- Spray off old sward with glyphosate.
- Graze sward tightly or mow to minimise surface trash.
- Apply lime.
- Choose a cultivation method that suits your farm.
- Apply fertiliser.
- Firm fine seedbed with good seed/soil contact is essential.
- Roll after sowing.
- Spray for weeds at 4/5 weeks post emergence.

Table 1. The Do's and Don'ts of different cultivation techniques

	Do's	Don'ts
Ploughing	Shallow plough. Develop a fine firm and level seedbed	Plough too deep(>15cm). Cloddy loose seedbed.
Discing	Graze tight, apply lime. 3-4 runs in angled directions.	Forward speed too fast – rough patchy seedbed.
One-pass	Graze tight, Apply lime. Slow forward speed at cultivation.	Forward speed too fast – rough patchy seedbed.
Direct drill	Graze tight, apply lime. Wait for moist ground conditions (slight cut in ground).	“Thrashy” seedbed – no seed/soil contact. Use when ground is dry and hard.

Timing of reseeded

Timing of reseeded depends very much on weather conditions, grass supply and whether the farmer has planned for reseeded or not. Previous survey information suggests that grassland farmers focus their reseeded towards the autumn. This may make sense from a feed budget perspective but it does have some negative consequences. Soil conditions deteriorate as autumn progresses – lower soil temperatures can reduce seed germination, and variable weather conditions reduce the chances of grazing the new sward. The opportunity to apply a post-emergence spray in autumn is also reduced as ground conditions are often unsuitable for machinery.

Spring reseeding offers more flexibility. One of the most important aspects of spring reseeding is that the total grass production from a spring reseed is as much, if not more than, old permanent pasture. Establishing clover in a spring reseed is more reliable than autumn due to the stability of soil temperatures in late spring. Post-emergence spraying for weed control is usually very successful with spring reseeding due to favourable weather conditions in summer. Whether reseeding in spring or autumn, it generally takes a sward around 11 months to fully establish and settle down, so good grazing management in that early growth phase is very important.

Cultivar choice

Grass cultivars should be selected from the Irish (Republic or Northern) Recommended Lists. These varieties have been tested under Irish conditions. The Teagasc Pasture Profit Index is also a valuable tool to select the most suitable grass cultivars for your farm. Teagasc recommendations are to sow 35 kg seed/ha (14 kg/ac) to ensure good establishment of the sward. It is also advised to sow a minimum of 3 kg of each cultivar within a mixture, and no more than three or four cultivars per mix.

Management of reseeds

Weed control is an essential element in both direct reseeding and over-sowing. Weeds in new reseeds are best controlled when grass is at the 2-3 leaf stage. Docks and chickweed are two of the most critical weeds to control in new reseeds; it is important to control these at the seedling stage by applying the herbicide before the first grazing. When clover is included in the sward a clover safe herbicide must be used. When over-sowing clover into existing grass swards, it may be better to control established weeds before over-sowing. If you are considering this, it is important to consider the residue time from application of the spray to over-sowing the clover, as it can vary from one month to four months. It is important to contact your local advisor or merchant if doing this. All pesticides users should comply with the regulations as outlined in the Sustainable Use Directive (SUD).

Care needs to be taken when grazing newly reseeded swards. The sward should be grazed as soon as the new grass plants roots are strong enough to withstand grazing (root stays anchored in the ground when pulled). Early grazing is important to allow light to the base of the plant to encourage tillering and, where relevant, clover establishment. Grazing by lighter animals such as calves, weanlings or sheep is preferred as ground conditions may still be somewhat fragile, depending on the seedbed preparation method used. The first grazing of a new reseed can be completed at a pre-grazing yield of approximately 700 – 1,000 kg DM/ha. Frequent grazing of the reseeds at light pre-grazing yields (<1,400 kg DM/ha or less than 8 cm) during the first year post-establishment will have a beneficial effect on the sward. The aim is to produce a uniform, well tillered, dense sward. If possible, reseeded swards should not be closed for silage in their first year of production as the shading effect of heavy covers of grass will inhibit tillering of the grass plant and clover establishment resulting in an open sward which is liable to weed ingress.

Conclusion

The timing of reseeding will be influenced by feed budgets and weather conditions. There is little difference between reseeding methods once a firm seed bed is established and good seed-soil contact is achieved. White clover can be established in swards at reseeding or can be successfully incorporated into existing swards by over-sowing. Whether it is a full reseed or over-sowing, management after sowing has the biggest impact on the successful establishment and production potential of swards.

Important Event

Teagasc BETTER Sheep Farm Walk

A Teagasc BETTER Sheep Farm Walk will take place on the farm of Brian Nicholson, Tullyvolty, Johnstown, Co. Kilkenny on Wednesday July 26th at 2.00pm. Teagasc advisers and specialists will discuss grassland management, breeding, flock performance and farm profitability. The Nicholson farm has a flock of over 1,000 ewes which is managed to a very high standard.

This event is approved by DAFM for the Knowledge Transfer programme. The farm will be signposted from Johnstown village. All are welcome.

