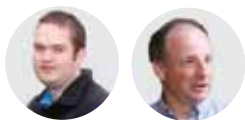




# Reseeding, productivity, profit

New swards yield high-quality grass, just when sheep farmers need it



**Philip Creighton & Michael Gottstein**  
Teagasc Animal and Grassland Research and Innovation Programme

**A** grazing ewe and her lamb(s) will eat just under one tonne (900kg) of grass dry matter in a single year. On lowland farm systems, grass production lies within

the 6t to 14t DM/ha range.

To optimise lamb production and profitability from a grass-based system, you should estimate the actual and potential production from your grass swards.

Where there is scope to increase grass growth (very few farms are reaching their maximum potential), extra production will offer the possibility to raise stocking rates and improve profitability.

If your output is at the lower end of the grass output range, you may be able to make significant progress by improving soil fertility (N, P, K and pH), management (grazing divisions, autumn closing and grazing management), soil structure (drainage) and weed control.

If your goal is to increase grass growth further, there is the option to

reseed pastures. Reseeding is expensive and you should only consider it where the above points have already been optimised and the stocking rate on the farm is such that extra grass will be utilised. Good-quality grass can reduce the need for meal.

### Cultivar choice

Select grass cultivars from the Irish recommended lists. These varieties have been tested under our conditions. The Teagasc Pasture Profit Index is also a valuable tool when selecting grass cultivars for your farm.

The key variety traits to consider:

- High seasonal production (especially during spring).
- High quality figures.
- Late heading.

Demand for grass is very high on sheep farms early in the year, so se-



Continued on p10

lect varieties that exhibit good spring growth. Varieties with high quality figures will be easier to manage and will result in better lamb thrive, especially in the period immediately before and after weaning.

Choose late heading varieties, as these won't go to seed until close to weaning for most mid-season lambing flocks. Early or intermediate heading varieties will start to head out from early May onwards, so avoid those.

Early heading makes grazing management difficult because it leads to lower-quality swards when lambs are starting to consume larger quantities of grass.

As already stated, late heading varieties do not mean lower total spring growth. You can select late heading varieties with high spring growth from the recommended list and the PPI. Further information is available at [www.teagasc.ie/crops/grassland/pasture-profit-index](http://www.teagasc.ie/crops/grassland/pasture-profit-index).

The Teagasc recommendation is to sow 35kg seed/ha (14kg/ac) to ensure good establishment of the sward. We also recommend a minimum of 3kg of each cultivar within a mixture and no more than three or four cultivars per mix. Include 60% to 70% diploid grasses and 30% to 40% tetraploid.

On heavier soils, in particular where cattle will also be grazing, the sward shouldn't go above 30% to 35% tetraploid in the mix, as it results in a more open sward and can lead to greater sward damage in wet weather. Those on drier ground or in an all-sheep situation can go closer to a 50:50 split if desired.

#### Formulating a grass mixture

- Minimum of 3kg of an individual cultivar (any less is very unlikely to contribute anything to the sward and is diluting the positive effects of other varieties in the mix).
- Less than seven-day range in heading date between cultivars.
- Cultivars exhibiting high simulated grazing yields in recommended lists.
- High seasonal growth to extend grazing season.
- High values for digestibility.
- 35% to 50% tetraploid – depending on soil type.
- Small leaf clovers for sheep

#### Establishment methods

How ground is reseeded will depend on soil type, amount of underlying stone and machine/contractor availability. There are many different cultivation and sowing methods available. All methods, when implemented correctly, are equally effective.

#### Timing of reseed

Timing of reseed depends very much on current weather conditions,



grass supply and whether or not you have planned for reseed.

Surveys suggest that grassland farmers focus their reseed on 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 uncertain, as ground conditions are often unsuitable for machinery.

Aim to get reseed completed as early in the year as possible. On sheep farms, July is a good month to target as grass demand will fall post-weaning.

#### Key points

- Spray off old sward.
- Graze sward tightly or mow to minimise surface trash.
- Apply lime.
- Choose a method that suits your farm.
- Soil test.
- Firm fine seedbed with good seed/soil contact is essential.
- Roll after sowing.

the first grazing. Use a clover-safe herbicide if there is clover in the sward.

If over-sowing, it may be better to control established weeds beforehand. If planning this, consider the residue period from application to over-sowing the clover, as it can vary from one to four months.

All pesticide users should comply with the regulations outlined in the sustainable use directive (SUD).

It generally takes a reseeded sward around 11 months to establish fully. Reseeded swards should be grazed as soon as the new grass plant roots are strong enough to withstand grazing (root stays anchored in the ground when pulled).

Early grazing allows light to reach the base of the plant, encouraging tillering and, where relevant, clover establishment.

A new reseed can be grazed at a pre-grazing yield of 700kg to 1,000kg DM/ha. Frequent grazing of reseeded at low covers (< 1,400kg DM/ha or <8cm) during the first year will aid establishment.

If possible, avoid closing reseeded swards for silage in their first year of production. The shading effect will inhibit tillering and clover establishment.

The new reseed will be back in the rotation when grass demand increases again in the autumn for finishing lambs and building grass covers for ewes into the winter.

#### Management of reseed

Weeds in new reseeded are best controlled in the seedling stage, before

**Table 1:** Differences between diploid and tetraploid cultivars

Tetraploid cultivars	Diploid cultivars
Tall upright growth habit.	Prostrate growth habit.
Create more 'open' sward.	Create a denser sward with less 'open' spaces.
Higher digestibility value.	Generally lower digestibility and yield.
More palatable = higher intakes.	

**Table 2:** Cultivation techniques

	Dos	Don'ts
<b>Ploughing</b>	Shallow plough. Develop a fine, firm and level seedbed.	Plough too deep (>15cm). Cloddy, loose seedbed.
<b>Discing</b>	Graze tight, apply lime. Three or four runs in angled directions.	Forward speed too fast – rough, uneven seedbed.
<b>One-pass</b>	Graze tight, apply lime. Slow forward speed at cultivation.	Forward speed too fast – rough, patchy seedbed.
<b>Direct drill</b>	Graze tight, apply lime and slug pellets. Wait for moist ground conditions (slight cut in ground).	'Trashy' seedbed - no seed/soil contact. Use when ground is dry and hard.

## FARMER PROFILE



Edward Gavin farms over 200 acres near Goresbridge, Co Kilkenny. His Teagasc advisor is Hugh Mahon. Half the land produces spring and winter cereals, the remainder is in pasture grazed by over 300 ewes and beef cattle.

The ewes are Suffolk-Texel-cross, with the majority of the progeny sold to the factory and the remainder through marts. Replacement ewes are bought in. Charollais and Texel rams are used.

"Our aim is to sell more lambs off grass with minimal meal input," says Gavin. "Reseeding has played a big part in that. We've reseeded nearly three-quarters of the pastures in the last five years, including tillage ground we've brought into lamb production to achieve higher margins."

Gross output on the farm in 2018 exceeded €1,700/ha and with variable costs at around €600, the gross margin came in at comfortably over €1,100/ha.

"Reseeding means we have more, and better-quality grass in the spring and autumn, which has allowed us to increase stocking rate and keep input costs manageable," concludes Gavin.



Gavin with his Teagasc advisor is Hugh Mahon.