

# Get more grass for your money

If you're planning to use less fertiliser, simple grassland management techniques can help maintain the farm's stocking rate, as well as replenishing winter feed stocks.

**Philip Creighton**  
Sheep Enterprise Leader,  
Mellows Centre, Athenry.



**Damien Costello**  
Sheep specialist, Teagasc  
Animal and Grassland  
Research and Innovation  
Programme.



**S**et stocking/continuous grazing systems, where sheep graze the same grassland area throughout the season, are still used on Irish sheep farms. Rotational grazing systems offer greater flexibility in grassland management by providing increased control over sward structure, grazing severity, regrowth periods and overall pasture supply.

To provide a constant supply of high-quality grass to ewes and lambs throughout the grazing season, a useful rule of thumb is to grow the grass in three weeks and graze it in three days. The reason is that the grass plant will only ever have three live leaves at any one time.

During the main grazing season, the grass plant produces a new leaf every five to seven days. Once the plant is grazed or cut, it will begin to form its first new leaf (fresh regrowth) after about three days. This leaf will be fully formed after seven days.

This process repeats itself for the second and third leaf. If the plant is not grazed at this point (three weeks/21 days since cutting or grazing), the first leaf that had been produced will die and the process begins again.

This wastes energy and nutrients and results in a drop in sward quality, as there will be more dead material present in the bottom of the sward.



In a rotational grazing system, the grass plant has the opportunity to fully express its natural growth cycle. By moving animals every two to three days, you are protecting the regrowths (the first new leaf developing) and allowing the plant to maximise its growth potential.

By grazing every three weeks, you are also maximising the quality of the grass being grazed. This also means you are making the best use of the nutrients in fertiliser or slurry.

Rotational grazing involves dividing the grassland area into a number of paddocks, which are then grazed, fertilised and rested in turn.

Take a farm with a flock of 100 ewes stocked at 10 ewes/ha for example. There should be a minimum of five

paddocks of 2ha (5ac) each per grazing group. This can then be further divided using temporary fencing as required.

By subdividing the paddocks, sheep are moving every two to three days. This keeps fresh, high-quality, grass in front of the sheep and allows the area to be grazed quickly, meaning grass can begin growing again.

#### Grassland management at turnout

The strategic closing up of paddocks in autumn largely determines the grass supply available to ewes and lambs at turnout. The ultimate goal is to turn out ewes and lambs to grass covers that will meet their feed requirements with little or no concentrate supplementation.



On farms operating a rotational grazing system, the aim should be to group up most ewes and lambs into larger grazing groups as quickly as is practical, usually by two weeks post-turnout.

It's a good idea to have a paddock for the group of ewes and lambs that have had 'issues' and require close observation and/or further treatment.

Factors determining optimum grazing group size include:

- Number of divisions available.
- Average size of paddocks and whether there is an option to sub-divide paddocks with temporary fencing.

•The maximum group size of ewes with their lambs which the sheep handling unit can accommodate.

- Overall flock size.
- Whether the farm is all in one block or is a fragmented holding.

### Grass measurement

Grass measurement and budgeting need not be complicated or expensive. There are a number of methods that can be used to measure grass supply on farms.

Sward sticks, rising plate meters and the quadrant and shears method, are all commonly used.

The important thing is that some

form of measurement is carried out on a regular basis which can be used to aid management decisions.

In a year when feed and fertiliser input prices have increased substantially, information to help make accurate and informed decisions is essential.

Grass measurement and budgeting can allow strategic supplementation to take place when required, but will also allow you to remove supplementation, with confidence, once growth improves.

By identifying strong grass growth and surpluses, fertiliser applications can be adapted/reduced to suit the current feed requirement.

## Farmer experience

Francis Gonley and his family run an all sheep farm on the outskirts of Sligo town. The soil on the home farm (17.9ha) is largely good-quality but can be described as 'heavy'.

It accommodates the lowland ewe flock, which Francis has been steadily expanding in recent years. The out farm, which is 8km from the home farm, is located on Benbulbin in the picturesque area near Glencar Lake and the famous Glencar Waterfall.

This block is home to a Scottish Black-face hill flock and comprises reasonable quality green ground adjoining a large area of commonage. Since joining the Teagasc BETTER farm sheep programme in 2017, priorities for the home farm are:

- Improving soil fertility through liming and where necessary building P and K levels.
- Adding both permanent and temporary fencing to increase number of grazing divisions.
- Reducing the number of grazing groups on the home farm to two.
- Weekly grass measuring and entry of results onto PastureBase Ireland.

### Grassland performance indicators 2017 v 2021

Post-turnout, the ewes and lambs are grouped up as quickly as is practical into two grazing groups.

One group consists of mature ewes and lambs; ewe lambs rearing lambs run as a group up to weaning.

Since 2017, the permanent divisions on the home block have increased from

nine to 12 paddocks. When further subdivision is counted in, up to 18 grazing divisions are available during the main grass growing season.

In terms of grass grown, PastureBase Ireland data confirms a huge improvement. In 2017, the farm grew 7.9t of grass dry matter per hectare on the home block – this increased to over 12t per hectare last year.

"I was very sceptical at the start about the use of paddocks, but now I would never go back," says Francis. "By measuring the grass covers, I have confidence to take out surplus paddocks.

"Our stocking rate has been increasing steadily and we are now able to take hill lambs to the home farm for finishing. In short, we grow more grass with less fertiliser," Francis says.