



By Liz Genever, EBLEX Beef and Sheep Scientist
Thinking about earlier turnout

1. Planning is important

Monitoring fields from late winter is important, so decisions can be made about grass availability. It is likely that the south facing fields that were not grazed from late September/October with good soil structure and fertility would be ones most likely to be suitable for earlier turnout. In a perfect world, these would be close to buildings or handling facilities, in case animals need to be brought back in.

A common complaint with earlier turnout is that the grass just disappears once the cattle are out. Unsurprisingly, it is all about supply and demand. Growing cattle should be allocated at least 3% of their bodyweight, so a 300kg growing animal needs around 9kg DM per day and in March grass may be growing 5-15 kg DM per ha per day, which indicates the required stocking rate if a wedge of grass is not built up.

2. Measure and monitor sward heights

Based on standard sward heights, the ideal pre-graze sward height for beef cattle early in the season is 8-10cm, with 5-6cm being the ideal post-grazing sward height. These are targets for rotational grazing. For set stocking, 5-6cm is the target. But care is needed to make sure the stocking rate fits the growth.

A compressed sward stick (available from BRP) can be used to assess pasture cover in kg DM per ha. It works like a plate meter and measures the density of the sward. It is very useful when allocating grass based on intakes. For example, if a field is measured at 2,000kg DM per ha (around 8cm) and the target residual is 1,500kg DM per ha (around 5cm) then there is 500kg DM of available grass, which means each ha would support 10 growing cattle for nearly six days (500 divided by 9 = 56, 56 divided by 10 growing cattle = 5.6 days). This approach can be used when planning how many animals to turn out on to what area.

Sward heights should be assessed weekly as the situation can change very rapidly, especially if the weather becomes colder.

3. Avoid sward damage

The crucial aspect of earlier turnout is to do everything possible to prevent damage to the sward through poaching, so matching stock type (weight and size) and stocking density to the soil conditions of the fields is extremely important, i.e. the heavier the soil, the lighter the stock. Growing cattle, perhaps weaned calves, have the highest priority due to their smaller size and high feed conversion efficiency, then older growing cattle, replacement heifers, cows and calves, with dry cows having the lowest priority. Consider keeping animals that are less than 100kg from their finishing weight housed, but this will depend on feed availability.

4. Consider rotational grazing

It is important when grazing earlier to rotate animals around fields as it allows grass to recover once the animals have been moved to the next field. It is important to ensure good utilisation of the grass, which can be achieved by adjusting stocking density while watching for sward damage. The speed of the rotation will depend on grass growth and the wedge that has been built. A rotation calculator is available from BRP, which will help plan rotations.

For example, if 10ha (25 acres) is available and grass growth was around 10kg DM per ha per day. The pre-graze cover is 2,000kg DM/ha and target residue is 1,500kg DM/ha, with an utilisation rate of around 75%. If the area could be split into four paddocks (either with electric fencing or by using established field boundaries), each of around 2.5ha (~6 acre) and each grazed for seven days, it could support seventeen 300kg growing cattle (allocated 9kg DM per day) for 28 days. So if this was started in March, it could last until beginning of April and it is likely that grass growth will increase in line with their increasing demand as they get heavier. It may be that the animals need to move through the fields faster as paddocks may be getting away by the time it is time to graze them. This means leaving the residual higher. There are a variety of solutions to this problem, but always remember it is all about supply and demand.

5. Strategic use of fertiliser

Strategic application of nitrogen fertiliser or slurry in late February/early March will help to stimulate early growth and will be most cost-effective on swards with a high proportion of ryegrass, because it uses nitrogen more efficiently than other species. Temperature drives the response to nitrogen, with soil temperatures higher than 5°C for five days leading to a good response to nitrogen – around 12kg DM per 1kg N. An application of around 50kg N/ha (40 units/acre) to areas that favour early growth, i.e. not grazed hard over the winter, south facing slopes, well-drained, light soils with good fertility, will achieve the best results.

6. Think about grazing silage fields

During the winter, ryegrass produces a new leaf around every 30 days so it takes 90 days or three months for all its leaves to be replaced. The leaves grown during the winter tend to be less efficient at capturing sunlight. It should be considered whether all fields should be grazed to stimulate growth and then fields can be shut up for conservation when appropriate.

Research from Northern Ireland has shown that grazing until the beginning of March has no impact on silage yield or quality. Grazing until mid-March, late March and mid-April will reduce silage yield by around 0.3, 0.65 and 1.3t DM per ha and a 5%, 10% and 21% reduction in silage quality respectively. This suggests that grazing silage fields until mid-March should not have a major impact on silage yield or quality.