

SHEEP

March 2023

Grassland

Edited by
Ciaran Lynch,
Sheep Specialist

Aim for a pre-grazing cover of 1,000-1,200kg DM/ha (7-8cm). Graze down to a residual of 3.5cm in the first round. Avoid grazing for prolonged periods at low covers. Once grass height goes below 4cm the ewe is no longer able to meet its daily intake requirements and supplementation will be needed. Early March-lambing flocks should aim to have 60% of ground grazed by the start of April, with their first rotation finished by mid April. Getting a grazing rotation established early will allow for faster fresh grass regrowth in closed paddocks, thereby building covers for the start of the second rotation.

For those who haven't yet applied their first round of fertiliser, aim to spread between 15kg and 25kg nitrogen (N)/ha (one-third to half a bag per acre) of protected urea (if available) depending on demand once conditions are suitable. This will provide a necessary boost to grass supplies that will coincide with the high demand from the ewe flock during this key period. Don't forget about phosphorus (P) and potassium (K). Read more about the importance of optimising soil fertility and how to make better use of slurry in the Signpost Programme update included in this newsletter.

Sheep Conference

The National Sheep Conferences 2023, which took place earlier this year, featured four excellent papers, and highlighted relevant and topical areas of interest to the Irish lowland sheep farming sector. A video of each talk is available on the Teagasc YouTube channel. Scan the QR code to start watching.



12 STEPS TO REDUCING EMISSIONS



Over 12 months, the Teagasc advisory newsletters will outline actions farmers can take to reduce their emissions.

Step 3: Optimise soil P and K

How does this reduce emissions?

When soil fertility levels are good (i.e., index 3 for P and K) N is used more efficiently in the soil. If N is used more efficiently, there is scope to reduce the quantity that needs to be applied, leading to lower nitrous oxide (N₂O) emissions. Low-P soils have been shown to have significantly higher N₂O emissions. N₂O is one of the main greenhouse gases we need to reduce.

Is there a gain for me?

On many farms, sub-optimal soil fertility is leading to a drop in output and income. Correct your soil fertility and grow up to 25% more grass. Two-thirds of farms are deficient in lime, P or K but this can be easily fixed.

What action do I take?

The starting point to reducing chemical N fertiliser use is to know the fertility status of the farm. Soil sample every two years or more often. Complete a nutrient management plan with your local advisor. This will help you to target fertiliser use where best results can be achieved in terms of grass/crop growth and consequently avoid waste.

Step 4: Make better use of slurry

How does this reduce emissions?

Applying slurry in spring using low-emission slurry spreading (LESS) increases the available N in the slurry by six units per 1,000 gallons compared to summer application with a splash plate. Due to an increased availability of N in the slurry, chemical N can be reduced by a similar amount. Chemical N is a source of N₂O. The use of LESS is also important in reducing ammonia losses during application.

Is there a gain for me?

Where a grass silage crop receives 3,000 gallons/acre in spring using LESS, this will supply 33kg/ha N that is fully available. When applied in summer with a splash plate, this will only supply 10kg/ha N. This offers a chemical fertiliser N saving of ~€60/ha. Other benefits include: quicker return to grazing; more even application; the opportunity to apply slurry into larger grass covers; smell reduction; and, more even distribution of nutrients across spread width.

What action do I take?

Ask your contractor to apply all slurry using LESS. Apply as much slurry as possible in spring under suitable soil and weather conditions. As you capture more N from slurry, reduce chemical N use by the corresponding amount.

Colostrum

Making sure lambs receive adequate colostrum is vital. It serves three main functions.

1. Provides a dense source of energy and nutrients.
2. Source of maternally derived antibodies that provide the lambs with passive immunity.
3. Acts as a laxative to help clean the digestive tract.

Lambs should receive 50ml per kg within the first six hours of life, increasing to 200ml per kg within the first 24 hours of life. A guideline amount for lambs is summarised in **Table 1**. The birth weights are a guide to what the average might be for singles, twins and triplets.

Where ewes have insufficient colostrum an alternative needs to be sought. Ideally this would be surplus from another freshly lambed ewe or number of ewes. Cow colostrum is another alternative; however, it is recommended to mix it from a number of cows to avoid anaemia and it should be supplemented at a higher rate (30% more) than recommended sheep levels. There are a number of artificial colostrum products on the market; these should be used according to manufacturer's instructions. Even when doing this, always try to ensure that each lamb receives some of its own mother's colostrum to facilitate transfer of passive immunity.

Table 1: Colostrum feeding rates for newborn lambs.

Birth type	Birth weight (kg)	First feed	First 24 hours
Single	6	300ml	1,200ml
Twin	5	250ml	1,000ml
Triplet	4	200ml	800ml

BETTER FARM UPDATE

Scanning

FRANK CAMPION, Animal & Grassland Research and Innovation Centre, Athenry, Co. Galway reports on scanning of yearling ewes and the hill flocks.

The flocks lambing yearling ewes pregnancy scanned these in February and the results are presented in **Table 2**, with good results overall. These yearling ewes are currently being managed separately in the run-up to lambing. This will remain the case after lambing also, right up until weaning time.

All of the lowland flocks have been aiming to

spread fertiliser once weather and ground conditions are suitable pre lambing, with the target being 15-20 units of N per acre in the form of protected urea. Fertiliser usage will be monitored carefully throughout the year and the first application before lambing commences is an essential one for spring grass supplies.

The Teagasc BETTER hill sheep flocks pregnancy scanned their ewes during February, with the results from three of the flocks presented in **Table 3**. Pregnancy rates across the flocks are on target (>90%) this year, with litter sizes also within the

targets for the three flocks presented. Some of the flocks with harsher hills and more restricted green ground are targeting a scanned litter size of 1.2 to maximise the amount of singles available to go to

the hill early in the summer. Others with more green ground are happy to scan around 1.4, as there is more land available for twins after lambing.

Table 2: Pregnancy scanning results from yearling ewes on the BETTER farm sheep flocks.

Location	Sligo	Roscommon	Kerry
Scanned litter size	1.59	1.62	1.46
Scanned pregnancy rate (%)	90.6	78.8	91.9
Scanning rate	1.44	1.3	1.3

Table 3: Pregnancy scanning results from the BETTER farm hill sheep flocks.

Location	Donegal	Sligo	Wicklow
Scanned litter size	1.4	1.4	1.2
Scanned pregnancy rate (%)	92.6	96.1	96.9
Scanning rate	1.3	1.3	1.2

RESEARCH UPDATE

Hopeful growth will improve

PHILIP CREIGHTON, Animal & Grassland Research and Innovation Centre, Teagasc Athenry, Co. Galway reports on scanning and grass growth rates on the Sheep Research Demonstration Farm.

Ewes were scanned in early January. Preliminary analysis shows an overall scan rate of 1.94 lambs per ewe put to the ram. Barren rate was 3% after a five-week mating period. The breakdown of singles, twins and triplets across the flock is 21%, 61% and 18%, respectively. Lambing is due to commence on March 4. Ewes are in good body condition, averaging 3.3 at scanning. Ewes are now being offered grass silage (72 DMD, 13.1% crude protein (CP)) and have been grouped according to scanned litter size and lambing date

as predicted by raddle colour, and are being offered concentrates. Single-bearing ewes will receive a total of 11kg of concentrate, twin-bearing 24kg and triplet-bearing 34kg, respectively, in late pregnancy. Over winter grass growth has been low, averaging approximately 3kg/ha/day for December and January. N in the form of protected urea (15 units/ac) was applied in mid February to anything with a grass cover above 5cm (~500kg DM/ha). Ground conditions were good and soil temperature was averaging just over 7°C for the two weeks previous. Average farm cover is approximately 500kg/ha (~5cm) across the farm, which is lower than we would like. Hopefully, swards will respond to applied N and we will close the gap to our target opening cover of ~750kg DM/ha. We will monitor the situation as we approach lambing and supplement to make up any shortfall if necessary.

