

SHEEP

January 2023

Grassland management

Edited by
Michael Gottstein,
Head of Sheep Knowledge Transfer

Happy new year to all our readers. January is the month to mind grass and take steps to start growing grass for the coming spring. Don't be tempted to graze covers in January or allow sheep to run over the farm.

The savings in terms of silage and bedding will be small compared to the huge cost that this action will have on grass supply after lambing time, which is when ewes and lambs will need grass most.

Sheep census

The sheep census takes place annually on December 31. Every flock owner must count the number of sheep on their holding on that day and notify the number to the Department of Agriculture, Food and the Marine (DAFM). In 2023, flock owners have the option of

submitting the census online (deadline February 14) or alternatively, they can submit a paper version by post (deadline January 31). Submitting the annual census is a legal requirement, and it also has implications for eligibility for various schemes.

Fertiliser and feed costs

Both fertiliser and feed costs remain at an all-time high. Not using adequate feed or fertiliser can have significant negative impacts on grass growth and animal performance. Similar to last year the

best advice is to do a budget for what money can be spent on both feed and fertiliser. Then look at what products offer the best value for money and where they will be best used.

Lime

January is a good time to put out lime. If soil conditions allow and you have areas of the farm that need lime, then avail of this opportunity.

Lime will repay itself over and over again in terms of maximising the fertiliser use efficiency and also freeing up nutrients trapped in the soil.

BETTER FARM UPDATE

Silage quality is tested

FRANK CAMPION, Animal & Grassland Research and Innovation Centre, Teagasc Athenry, reports from the farms in the BETTER Farm programme.

All of the lowland flocks have ewes housed at this stage, with most housing pre Christmas. Careful attention is being paid to ewe body condition score (BCS) since housing with some flocks having a higher than desired level of thin ewes at mating and with the comparatively wet conditions during mating making grass utilisation difficult, some felt BCS slipped during this time. Ewes were assessed for BCS at housing and any time they have been handled since (vaccination, scanning, etc.). Thin ewes (less than BCS 3.0) are being given preferential treatment (e.g., thin singles being penned with twins). It is important to prevent excess BCS loss in the run-up to lambing to ensure ewes have sufficient body reserves in early lactation.

Results from silage analysis from the farms is being completed at time of writing and the

results to date are summarised in **Table 1**. Dry matter percentage is ahead of last year on average by 3.5% with DMD up by 2% on 2021. However, aside from this the figures are relatively similar to 2021. Different batches of silage bales were marked during the summer so the best quality silage could be identified for feeding in the final six to eight weeks pre lambing and most flocks have sufficient quantities of 70 DMD and greater available for late pregnancy feeding. The forage analysis will be used when developing the concentrate feeding plan for the flocks in the run-up to lambing. The flocks with silage in excess of 75% DMD will be able to feed singles only soya pre lambing and will only introduce concentrates to twins from four weeks out. However, these low concentrate feeding levels require excellent feed and flock management to be successful.

Table 1: Results to date from silage quality tests on baled silage on the BETTER sheep farms.

	2022 Mean	Min	Max	2021 Mean	Diff
DM (%)	37.1	20.7	60.7	33.5	3.5
PH	4.6	4	5.74	4.6	0.0
NH ₃	5.9	1.5	18.1	6.7	-0.8
Protein (% DM)	14.0	8.9	17.8	13.6	0.4
ME (Mj/kg DM)	10.6	9.97	11.7	10.2	0.5
DMD (% DM)	72.9	60.2	79.65	70.8	2.1

Teagasc National Sheep Conferences

- Tuesday January 24, Hillgrove Hotel Old Armagh Rd, Latlorcan, Monaghan, H18 RK15.
- Thursday January 26, Brandon House Hotel Southknock, Chambersland, New Ross, Co. Wexford, Y34 KR62.

Both start at 7.00pm.

Topics and speakers

1. Parasites of sheep and resistance to drenches – a New Zealand perspective – Dr Dave Leathwick, AgResearch, New Zealand.
2. Organic sheep farming – factors to consider and producing lamb on an organic farm – Elaine Leavy, Organic Specialist, Teagasc, and Amy Jackson, Organic Sheep Farmer.
3. Greenhouse gas – intensity of average sheep systems in Ireland – Dr Jonathan Herron, Teagasc.
4. The addition of clovers or herbs to a perennial ryegrass sward on animal and sward performance – Lisa McGrane, Teagasc.

DEMONSTRATION FARM UPDATE

Hoping for good scans

PHILIP CREIGHTON, Animal & Grassland Research and Innovation Centre, Teagasc Athenry, Co. Galway, reports from the Sheep Research Demonstration Farm in Athenry.

Sward production for 2022 and lamb drafting pattern are shown in **Tables 2** and **3**. We had to introduce concentrate supplementation at a rate of 300g/hd/day in mid October due to low grass DM content and declining lamb average daily gain (ADG). Any lambs remaining on the farm in late October were housed due to the very wet conditions and to conserve grass for ewes. These lambs were built up to *ad lib* concentrates with access to high quality baled silage. As can be

seen in **Table 3** the majority of lambs have now been drafted. Closing of paddocks commenced in mid October to build grass for next spring. We currently have approximately 90% of the farmlets closed for the winter. Most of the ewes were housed by Christmas. Rams were removed from ewes in mid November following a five-week mating period. There were very few repeats observed so hopefully we will have a good scan in January.

Table 2: Average DM yield 2022 to date.

Treatment	Grass only	Grass clover	Grass clover
	125kg N/ha	125kg N/ha	75kg N/ha
DM yield (tons DM/ha)	11.6	12.2	11.5

Table 3: Lamb drafting pattern autumn 2022.

	% lambs drafted end October*	% lambs drafted end November	% lambs drafted mid December
Grass only	75	91	94
Grass clover	85	94	99

*Remaining lambs housed.

RESEARCH UPDATE

Silage feed value



Tim Keady, Animal & Grassland Research and Innovation Centre, Teagasc Athenry, Co. Galway examines factors influencing silage feed value.

The main factor influencing silage feed value is digestibility (DMD) (see **Figure 1**). Increasing DMD increased silage intake during weeks -10 to -6 prior to lambing. When concentrate supplementation was initiated (week -6) the intake of medium DMD (70% DMD) silage remained relatively unchanged up to lambing, while that of the high DMD (79% DMD) silage declined as concentrate feed level increased. Concentrate displaced the high DMD silage in the diet. Increasing silage DMD increased metabolisable energy (ME) intake by 53% during the final six weeks of pregnancy. The ewes offered the high DMD silage were 10kg heavier and had a one unit higher BCS at lambing. At pasture, between lambing and weaning, the ewes that had been offered the high DMD silage lost 0.5 units BCS (sacrificed body reserves in favour of milk production) while those offered the medium DMD silage gained 0.2 units BCS (partitioned energy intake to replenish their own body reserves rather than to milk production). At weaning, the

BCS of the ewes offered the medium and high DMD silages were 3.1 and 3.5, respectively. The lambs from ewes offered the high DMD silage were 0.5kg heavier at birth, 1.9 kg heavier at weaning and 17 days younger at slaughter. A reduction of 17 days at slaughter is equivalent to the response expected from feeding 19kg concentrate per lamb from birth to slaughter. As each ewe in the study reared 1.75 lambs, this would equate to 33kg concentrate/ewe – equivalent to approximately €15/ewe.

Conclusion

1. Each five percentage point increase in silage DMD increases ewe weight post lambing by 6.5kg and lamb birth weight by 0.25kg.
2. Ensure ewes have access to fresh silage 24 hours daily.
3. Remove silage residue twice weekly.
4. Construct a plan with the aim of increasing next year's silage DMD by at least five percentage units.

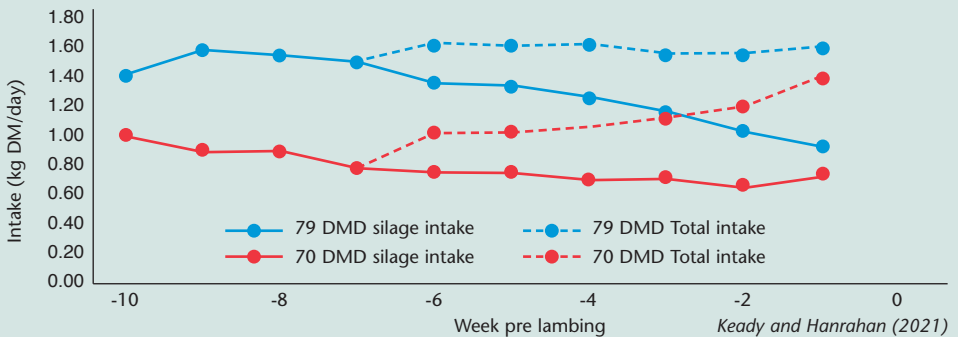


FIGURE 1: Effect of silage feed value (DMD) on food intake in late pregnancy.