

The benefits of looking closely at ewe diets

Kate Phillips, independent nutritionist

I have been working with Richard Seed from Chipping in Lancashire since he approached AHDB Beef & Lamb at North Sheep last June. He lost ewes at lambing with explosive prolapses and had several cases of twin lamb disease. He was after solutions to improve ewe nutrition around lambing to reduce these issues.



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To evaluate conditions on farm, I used information gathered from Richard's system as part of a BRP ewe rationing workshop I delivered.

Richard has 400 ewes (300 Texel-cross Mules and 100 Mules) plus 90 ewe lambs, and he uses Texel and Beltex rams. The ewes were on target for body condition at tupping, achieving a score of 3 to 3.5. The ewes normally scan around 200% and the ewe lambs around 140%. Lambing takes place from the third week of February.

Ewes are mated at home and then away-wintered near Preston on dairy grazing and return at the end of January in very good condition. Historically, they have been supplied with energy buckets at away grazing. They are scanned at the dairy farm and triplets are brought back home earlier than twins and singles.

Once the ewes are back they are fed haylage and compound feed outside, on grass. They are housed approximately three weeks pre-lambing, depending on the weather. Previously the ewes have been offered around 1-1.5 kg of compound cake for triplets and just under 1 kg for twins, in one feed. Singles had access to energy buckets only and forage was not analysed. Inside, haylage was fed in walk-through troughs or big-bale feeders and the compound fed on the floor. Once turned out, all ewes received 1 kg of compound and haylage post lambing, until grass supplies were adequate.

It is my opinion that the ewes were too fit as they approached lambing, which may have reduced appetite and a lack of forage feed space could have been limiting intake. In addition, one large feed of compound could have caused sub-clinical/clinical acidosis and twin lamb disease in some ewes.

Before the ewe workshop, forage was analysed and the clamp silage had the best results. (Table 1). This should be reserved for feed close to lambing to reduce compound feed costs.

	Clamp	Big bale silage	Big bale haylage
Dry matter %	34.8	42.9	67.6
Crude protein %	13.6	12.8	11.1
Ammonia %	5	5	3
pH	4.1	4.5	4.5
D value	66.8	64.5	59.9
ME (MJ/kgDM)	10.7	10.3	9.6

Table 1: Silage analysis for Richard Seed's farm

At the workshop, I calculated some possible rations using the clamp (Table 2) and the big-bale silage (Table 3), which demonstrated the value of higher quality forage on the amount of compound required. If the clamp silage or big bales are used, there could be a 45% or 18% reduction respectively in the amount of compound fed over the pre-lambing period compared to previous feeding levels. This is partially due to mobilising some of their body condition, but mainly due to acting upon forage analysis. The ewes should be body condition scored again when they return home to help adjust the start of feeding and calculate levels of compound required.

	Weeks from lambing	Feed rate (fresh weight of silage and kg per head of compound)					Total pre-lambing (kg)
		8	6	4	2	1	
Singles	Clamp silage	3.5 to 4 kg					
	Compound 18%	-	-	-	0.25	0.25	5
Twins	Clamp silage	3.3 to 4 kg					
	Compound feed	-	-	0.15	0.45	0.60	16
Triplets	Clamp silage	3 to 3.8 kg					
	Compound feed	-	0.10	0.3	0.65	0.85	25

Table 2: Rations using clamp silage

	Weeks before lambing	Feed rate (fresh weight of silage and kg per head of compound)					Total pre-lambing (kg)
		8	6	4	2	1	
Singles	Big bale silage	2.5 to 3 kg					
	Compound 18%	-	-	0.1	0.25	0.30	8
Twins	Big bale silage	2.2 to 2.8 kg					
	Compound feed	-	0.1	0.35	0.65	0.80	25
Triplets	Big bale silage	2 to 2.8 kg					
	Compound feed	-	0.2	0.5	0.85	1.0	34

Table 3: Rations using big bale silage

During the workshop I identified the following actions to take:

- Check body condition at scanning
- Consider bringing the ewes home from keep sooner to slim them down on poorer haylage
- Act on the forage analysis and maximise forage intake
- Rearrange sheds to provide enough space for access to forage (15cm/ewe) and lying (1.3 m²/ewe)
- Buy better quality compound feed, so less can be fed and for fewer weeks before lambing
- Ensure compound feed for twins is reduced from 0.5 to 0.75 kg/head to 0.15 to 0.6 kg/head four weeks prior to lambing according to forage analysis
- Ensure compound feed for triplets is reduced from 0.5 to 1.2 kg/head to 0.1 to 0.85 kg/head six weeks prior to lambing according to forage analysis
- Split compound feeds, so no more than 0.5 kg is fed per feed

I would also encourage him to investigate ways of improving his silage quality in the future.

It will be interesting to catch up with Richard after this lambing to see if the problems he experienced last year have improved. It will also be interesting to hear whether he has made savings on his compound feed bill as a result of better forage utilisation.

You can read about how Richard got on this season in future editions of Grazing Club News.

For more information on ewe nutrition and silage have a look at the BRP manuals [Improving Ewe Nutrition for Better Returns](#) and [Making Grass Silage for Better Returns](#)