

Incorporating undegradable protein into ewes' winter diet helps cut Mid Wales farmers feed costs

Farming Connect held a series of ewe nutrition events in February focusing on meeting the ewe's needs and maximising lamb performance, minimising lamb losses and managing ewes in different levels of body condition.

Amongst the attendees was a Mid Wales farmer who told how he has saved thousands of pounds on his winter feed bill by feeding protected proteins to in-lamb ewes.

Since implementing a new feeding regime for twin-bearing ewes in 2015, William Evans, of Hendreseifion, Llanwrin, Machynlleth, has saved more than £6,000 or £12 per ewe on his winter feed bills.

The 550 ewes are fed high quality baled silage, analysed at 474g/kg DM, 10.8ME and 11.9% crude protein – along with 100g/day of formaldehyde treated soya. Ewes are fed 1.3kg of silage DM/day, with fit animals - body condition score (BCS) of 2.5 and above - on 14.5MJ/ME/day for the last month and thins ones (BCS of 2 and below) 17.6MJ/day.

The previous supplementary diet of concentrates and mineral blocks cost £16.63 per ewe. However, William estimates that this year the cost per ewe will be just £4.15, comprised of £1.93 for the treated soya, £1.57 for whole oats (fed at 300g/day to thin ewes only) and 65p for mineral powder.

William said: "When we came out of organic at the end of 2014, I didn't feel that the ewes were performing as well as they could be, so nutrition was something that had to be sorted out properly. I got in touch with John Vipond, who I had heard speaking at previous Farming Connect events before and he suggested feeding Dietary Undegradable Protein (DUP) in the form of treated soya. It was a big leap of faith, but I knew that there was plenty of evidence behind it, so I thought 'just go for it' and it's been very successful for us."

DUP helps correct the deficit between an animal's protein requirements and the rumen's ability to produce microbial protein. The rumen can only turn around 1% of crude protein into microbial protein per MJ of ME in the diet. Any excess crude protein is wasted, but the balance can be redressed by using DUP. Soya is one of the best sources of DUP, although when fed with high quality forage, it is better to use a treated soya product, such as Sopralin, Soypass or Ultrasoy. William feeds Sopralin, which contains about 48% crude protein, of which 85-90% is undegradable.

As well as the cost benefits, William believes the new diet has also been beneficial to the health of the ewes.

"I think the ewes are healthier somehow since changing the diet, we have certainly had fewer prolapses," he added.





"There is also a difference in the lambs. With last year's twins we had two good, even sized lambs instead of one that's a bit stronger than the other. The ewes must have more colostrum and it seems to be better quality because the twins do so well.

"I've been very surprised with the triplets too. We had been taking one off and bucket feeding them, but it was costly and time consuming. But since changing the diet I find the ewes can rear the three perfectly well by herself."

Hendreseifion farm extends to 320 acres with 1,000 acres of open mountain and the sheep are split into three groups – purebred Welsh, Lleyn crossbreds and draft Welsh ewes.

William is also feeding 246 of the draft ewes that are kept out in the field a DUP block along with silage for two weeks prior to lambing and two weeks afterwards.

William says the new system saves a lot of time as he can feed the ewes every other day and he does not spend as long bucket feeding or adopting.

