# Feeding crimp to sheep improves health and cuts costs

**Feeding crimped cereals and high-quality silage to ewes at lambing has cut out bagged feed and improved performance on a mixed Welsh farm.**

Sheep and beef producers, Martyn and Gruff Jones turned to feeding crimped cereals to their sheep after three years of using the moist preserved feed for their beef. They'd seen how the home-grown product could cut out purchased feeds, improve animal health and ratchet up performance and hoped comparable improvements could be made in their 500 Welsh Mule ewes.

So, when they had a surplus of grain – brought about when they purchased extra land last year – they decided to crimp all they had grown, and then consider how best to use the additional feed.

"We could see we had more than enough crimp in the bunkers so we thought we'd look into feeding it to sheep," says Martyn, who was already equipped with a Murska 350 crimper and a Kuhn tub mixer he used for the beef.

Farming at Plas Onn Farm near Welshpool in Powys, the father and son team initially considered feeding a total mixed ration, so consulted independent nutritionist, Stephen Caldwell from SC Nutrition (UK) & Grass Science, to guide them with this switch.

But he said: "Successfully feeding stock comes down to 40% nutrition and 60% the practicalities of feeding, and I could see there wasn't enough feed face on this farm to feed the ewes a TMR."

▲ *Part of the Plas Onn Farm flock.*



*Independent nutritionist, Stephen Caldwell from SC Nutrition (UK) & Grass Science.* ▶

Insisting a TMR requires enough trough space for all of the ewes to feed at the same time, instead he suggested feeding a crimp-based, home-mixed concentrate at up to 0.8kg/day (0.1kg/day for ewes bearing singles), and offering it with ad lib silage.

The plan was put into immediate action this spring and high-quality silage, preserved with Safesil Pro, and crimped wheat and barley, preserved with CrimpSafe 300, was fed to the ewes as they were housed around a month to five weeks before lambing. A 50:50 mix of crimped wheat and barley was mixed with a blend (comprising rapeseed meal, distillers grains and bespoke minerals) in a 60:40 ratio, and fed with buckets.

Lambing in batches from the first week of March, the ewes gained condition once they came inside and on to the ration. This made up for the difficult, dry conditions last summer and autumn when grass was in short supply, which had hit both ewe condition and lambing percent.

◀ *Gruff and Martyn Jones.*

"The ewes picked up really well on it, it cost far less than the bought-in nuts we were previously using – which have been as much as £380 a tonne – and we noticed they were really content," says Martyn.

"We also had far fewer prolapses – only four this year compared with 20 the year before – and although it's too early to attribute this to the new diet, we think it could have played a part," adds Gruff.

Considering this from a nutritional perspective, Stephen explains two ways in which the crimp was likely to be improving ewe health.

"Feeding 0.8kg of crimp creates less acid load in the rumen than feeding 0.8kg of dried rolled cereals, so improves the ewes' digestion," he says.

Furthermore, the smaller drop of pH in the rumen has a knock-on effect on the ewes' capacity to eat forage, which is higher after they've eaten moist crimp than dry grain.

"This has the effect of increasing forage consumption - something that's essential in achieving rumen fill and helping to avoid a range of problems, and that's likely to include prolapses," he adds, potentially explaining the substantial drop in cases seen this year on the crimp.

Also suggesting Martyn and Gruff had a better understanding of feeding stock under the new system, he said the quality of feed was also far higher than anything they'd previously purchased in the bag.

"A normal compound feed contains around 15 different ingredients, but all we have with this is four - two grown on the farm and all of known origin and high quality," he says.

The net result for the ewes was a concentrate with a metabolisable energy of 13-13.5MJ/kg DM and protein of 18-18.5%.

"Consistency is just as important as numbers and using these two Kelvin Cave products ensures the feed is of a consistently high quality," he adds.

This comes down to using chemical preservatives, which are the safest route to successful forage conservation and crimping, rather than bacterial inoculants.

Michael Carpenter, technical director for Kelvin Cave Ltd explains: "Both Safesil and CrimpSafe 300 are chemical preservatives so they directly inhibit undesirable microorganisms and give long-term aerobic stability.

"This is why farmers so often report stone cold forage and feeds when using either of these products," he says.

However, equally important – and related to these preservatives' efficient fermentation – is their effect on cutting dry matter losses compared with bacterial inoculants.

"Many inoculants on the market – those known as hetero-fermenters – work by ultimately converting sugars into acetic acid to stabilise the feed," he explains. "The inescapable by-products of this fermentation pathway are water and carbon dioxide.

"It is this pathway which is so inefficient and wasteful, can cause high dry matter loss and inevitably increases carbon footprint," he says.

Also favouring the simplicity of the new ration, the Joneses note that the lack of shaking feed bags around the ewes also keeps the shed calm, and although they can no longer feed in the fields with a quad bike and snacker, the system encourages better checks to be made on the ewes and lambs as they're fed crimp from the bucket.

*Ewes and lambs at Plas Onn are benefiting from a crimp based blend.*

Michael adds: "Many people in sheep production just reach for the feed bag, which in some situations, can be the only option.

"They don't always realise crimp is such a good feed for sheep, even if they're using it to feed other stock.

"But in fact, using the same basic ingredients to feed sheep, with their own bespoke minerals, can create a really simple and cost-effective ration and method of feeding, especially for those who are already crimping for dairy or beef cattle.

"Furthermore, there's a growing interest in trading crimp from farm to farm which is very stable if correctly preserved," he adds.

Martyn and Gruff say the system suits them well and will be continued as long as they have enough crimp to feed.

"It's essential that we don't run out of crimp for the cattle as the business now depends on it, but we will crimp all the cereals we grow this year, which will extend to around 60 acres."