

Feed Management Key to Driving Efficiency

Feed is one of the biggest costs associated with beef production and feed management is a key driver of profitability in all beef enterprises.

Improvements in feed use efficiency will not only result in increased financial margins, but will also lower the environmental footprint of beef cattle production.

There are numerous animal and management factors that influence efficient feed use. Feed management is one particular contributor to feed efficiency which is often overlooked. Much feed can be wasted during harvest, transport, storage and feed out, and attention to detail during these stages is critical.

Researchers in Ireland have estimated that 15-30% DM of silage never reaches the animal it was intended for, which represents a huge loss to the beef producer. Furthermore, the digestibility of silage can be 0-7% units below the digestibility of the sward. The main sources of these losses include poor fermentation, failure to seal and maintain clamps/bales fully, excessive exposure to air across the silage pit face and waste at the feed barrier.

Table 1 shows the quantity and quality losses that can occur on a sward yielding 6 tonnes per hectare (6 tonnes dry matter). Yield loss varied between 16% and 30% DM depending on whether management of silage making was excellent or poor and resulted in over 80 fewer animal feeds per hectare. Furthermore, poor management resulted in loss of 4% units of digestibility which equates to an extra 1kg concentrate/



Management	Quantity loss	Edible silage/ha	Quality loss
Excellent	-16%	5,040 kg	-0% DMD
Good	-23%	4,620 kg	-1.5% DMD
Poor	-30%	4,200 kg	-4% DMD

animal fed every day to make up the lost feed value.

*Table 1: Silage losses throughout silage making and feed out from a sward yielding 6,000kg DM per hectare
DMD = Dry Matter Digestibility*

Now is the time when we should be focusing on trying to reduce losses when opening clamps and feeding silage. The British Grassland Society state that there are 5 simple things to focus on when trying to reduce waste, these include:

1. Silage quality in the clamp can change throughout the winter so aim to get the silage cored and analysed every 4-6 weeks over winter so that rations can be re-formulated appropriately.
2. When opening the clamp only pull back the top sheet as far as is necessary to expose the silage that is needed on a daily basis
3. Try and take the clamp face back at least 2m a week and aim to get across the face every 3-7 days using a block cutter or shear grab
4. When using a total mixed ration system, do not leave silage in the mixer wagon overnight as this

AHDB Beef & Lamb is working with Dr Dave Davis of Silage Solutions Ltd to evaluate the management factors which can impact on silage quality and subsequent animal performance.

More information on silage making is available in the BRP manual

[Making grass silage for Better Returns](#)