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How good is your silage and what current feeds are best value to balance it?

Each year is different and the early growing season of 2014 saw grass growing unchecked from early in the new year right through until silage making where, as in 2013 fields were still bare on 1st April. That means first cut was harvesting 5 months growth this year but only 2 months last year. Quantity was higher this year but at the expense of quality.

National results for Trouw Nutrition who run one of the largest silage analysis labs confirm reduced quality on first cut but many second cut silage are better than 1st cut.

	2014 1st cut	2014 2nd cut	2013 1st cut
Dry Matter	28.6	33.4	32.4
Protein	13.1	13.6	14.0
ME	10.5	10.6	11.0
D Value	65	66	69
NDF	50	47	46.8

The variation is enormous, ME ranging from 5.5 (worse than straw) to 12.1 (as good as many beef compound feeds). Stage of growth and length of growing period to cutting is key- no seed heads on 1st cut and 5-6 week re-growths will deliver 11ME silage. Leys will be much higher in yield and energy than worn out leys or permanent pasture. Reseeding is money well spent, still time to get IRG in this autumn.

Maize silage is also going to be variable in quality, it's all down to cob to stem ratio and with many crops yielding over 20t/ac, the starch contents will be lower than usual on some crops.

Message is - get silage analysed so you can balance it effectively.

How much supplement and which feeds to balance your silage?

Feed intake is determined largely by fibre (NDF) intake. Fibre is the more slowly digested part of the feed so high fibre silage shows lower feed intakes, so watch NDF levels in feeds. If your silage has a high NDF then avoid high NDF supplements (eg brewers grains, beet pulp, soya hulls) as the cattle will struggle to eat as much as you would like.

How much silage DM will your cattle eat? As a rough guide you can expect them to eat between 1.8 to 2.5% of bodyweight, low end of this range with poor silage, top end with good silage. That means with a 9.5ME silage a 400kg animal will eat 7.2kg silage DM. The same animal would eat 10kg DM of an 11ME silage. That gives weight gains of 0.5kg and 1.2kg respectively before any concentrates are fed, which affects cost per kg weight gain dramatically.

Do not get hung up on protein contents, if the protein is over 12% that will be good enough for finishing cattle, may need slightly more for finishing bulls. Growing cattle will need more protein, perhaps up to 15% in the overall diet.

This year cereals are relatively cheap so supplements need to focus on use of grain. Time to dust down that roller mill at the back of the barn or find out who supplies mobile milling services in your area, either a full mill/mix plant or a crimper. See <http://www.naac.co.uk/> for list of your local mobile millers.

When processing cereals you only need to crack each grain so the rumen bugs can get through the seed coat, don't mill it to dust which will cause acidosis. You could caustic treat but it is expensive and time consuming.

Currently, (October 2014) cereal prices are around £100/t, so in the region of £110-120/t processed ready to feed. This is the baseline on which to compare all other feeds. Must compare on a £/t DM and make allowances for different energy and protein contents.

A guide to good buys would be:

Feed	DM %	ME MJ/kg DM	Crude Protein	Breakeven value £/t fresh
Trafford Gold	50	13	21	78.44
Bread	67	13	10	85.37
Brewers grains	26	11.6	22	38.66
Crimped maize	65	13.5	9	83.60
Fodder beet	21	13.3	7	25.56
Maize Gluten	88	12.5	22	137
Beef nuts (16% CP)	87	12.5	18.5	127.29*

*Add £5 to this value as it will be mineralised.

If you can buy any feed in this table for less than the breakeven value you are saving money compared to using a mix of wheat and rape at £120 and £180/t respectively.

How does this relate to the costs of silage? If you take silage growing costs in to account including a notional rent of £100/acre and allowing for 5 year reseeding with a 2 cut system and grazing then silage will cost around £80/t DM compared to barley today at £100/t fresh, £117/t DM. On an energy basis with silage at 10.5ME and barley at 12.9ME then energy from silage cost 7.6p/MJ and from barley cost 9p/MJ.

These costs are closer than we have probably ever seen them before. You may have the silage but don't be afraid to feed the concentrates and get cattle gone sooner – it will use less total feed.