

Programme Update

The Beef Feed Efficiency Programme is a £1.75 million DEFRA/AHDB-funded initiative that aims to demonstrate the ability to measure feed efficiency traits on specially equipped commercial farms. The output will include genetic parameters required for the development of breeding values for traits associated with feed efficiency. Initially, the programme is targeting Limousin-bred cattle, but the ambition is to establish a sustainable system for recording feed efficiency that can be extended to other cattle breeds in the future.



Cattle recorded at the SRUC facility

Feed intake records are currently being collected for the third batch of beef cattle at Scotland's Rural College (SRUC). The aim is to collect 500 cattle records through this unit over five batches. To date, two batches totalling 211 cattle have been completed, with the third batch of 131 due to complete in July.

A summary of the results for batch two are shown in Table 1. Residual feed intake (RFI) or net feed efficiency (NFE) as it is also known, is a measure of an animal's dry matter intake in relation to its predicted intake. It is independent of liveweight and growth rate, and identifies cattle that eat less than predicted without any effect on rate of liveweight gain.

Actual intake of the more feed efficient cattle (low RFI) in batch two was 10% lower than the less-efficient cattle (high RFI), yet growth rate was similar.

Table 1: Batch 2 Summary results (119 Limousin-cross steers, representing 15 sires)

	Residual Feed Intake (RFI)		
	Low RFI	Med RFI	High RFI
Start liveweight, kg	337	321	325
Average growth rate, kg/day	1.24	1.18	1.27
Actual DM intake, kg/day	6.45	6.54	7.16
Residual feed intake, kg DMI/day	-0.39	0	0.39
Feed conversion ratio, kg DMI:kg DLWG	5.3:1	5.7:1	5.7:1

Commercial feed recording units

Assessment of applications for the commercial recording units has been completed and two farms have been contracted, one located in Dorset and the other in North Yorkshire. Both farms have capacity for batches of around 120 cattle. Each unit will be fitted with specialised equipment to measure feed intake and cattle are currently being sought to take part in the trial. Both units also offer the opportunity to finish the cattle after they have been on test, allowing valuable carcass data to be fed into the genetic evaluation.

Limousin or Limousin-cross steer calves required

The programme is looking for Limousin-sired calves to purchase, or acquire on a retained ownership arrangement, from dairy or beef herds.

Suitable calves will:

- Originate from a farm that is able to supply four to sixteen steer calves from the same, currently (or previously) registered Limousin bull/AI sire
- Be suitable for entry to a rearing unit (two to four weeks of age)
or
- Be weaned and aged up to seven months old.

Market prices will be paid for any selected cattle. Alternatively, cattle can be provided on a retained ownership arrangement.

For more information, please contact Natalie Cormack on 07866 934563 / 01890 781006 or email natalie.cormack@ahdb.org.uk.

