



SAC Dairy Research Centre Farm Notes

Crichton Royal Farm

Update February 2006

Home grown feeds

A group of cows at Acrehead are being fed a complete diet, including our home-grown grain maize and lupins. The diet is: 36%DM.

	<u>TMR total</u>	<u>Silage</u>	<u>Mix 1</u>	<u>Grain Maize</u>	<u>Lupins</u>	<u>Alkalage</u>	Min
Kg DM	19.7	11.2	2.31	3.6	1.1	1.3	0.2
Kg Fresh	52.8	40.0	2.60	6.00	2	2	0.2

The cows are eating 53 kg DM/day with an average yield of 31 litres/day.

Further information from: Jenni Bell or Hugh McClymont

Energy costs

The electricity and fuel use at Crichton will be audited over the next two months, as the first phase of a plan to improve our energy efficiency. Scottish Enterprise is funding the audit as one of their case studies and the information will be available to local businesses.

Substantial increases in energy costs have been included in the farm budget for 2006/07. The budgeted increase in costs for next year are:

Fertiliser	10% increase with an emphasis on more efficient use of slurry.
Electricity	80% increase from a very competitive contract
Fuel	40% increase

Further information from: Dave Roberts.

Revision due: April 06

Feed barrier design

Fiona Lang, a postgraduate student, started her first experiment in February. The background to Fiona's work is that feed barrier design and feed presentation has an effect on feed intake, cow performance and welfare. The first experiment is evaluating three different feed face lengths (0.34, 0.68, and 1.36 meters/cow) all with the simple strap barrier (The NDFAS Farm Assurance Standard is 0.68 meters/cow). Cow behaviour is being videoed and feed intake recorded.

Further information from: Fiona Lang, Dave Roberts or Marie Haskell.

Green Dairy project

The EU Intereg project to improve the efficiency of nitrogen (N) use will end this year. The project includes 10 pilot farms – the main effect on their farms is the same as the pilot farms in Eire and France, that is, to improve the utilisation of slurry and reduce purchased nitrogen. The main limiting factors are the lack of storage for slurry and lack of farm specific information on the fertiliser value of slurry. At a recent workshop at Crichton the equipment for determining the N value of slurry was demonstrated and it was estimated that 60% of the material in the tank was water and only 40% slurry. The farmer group are visiting the Netherlands on 22nd/23rd February, to discuss how they cope with the EU and government legislation, with Dutch dairy farmers and researchers.

Further information from; Désirée Römer, Paul Mardell

Milking practice

A meeting was recently held between the farm staff involved in milking, technicians, Colin Mason (SAC Dumfries VI Centre manager) and our practice vet, to review the milking routine. Whilst cell counts and bactoscan are acceptable, there is a concern about mastitis levels.

The January 06 bactoscan and cell counts were exactly the same for Acrehead and Crichton Main Steading Units.

Bactoscan 15 (000/ml)
Cell count 131 (000/ml)

The main conclusions were:

To change the parlour routine to include pre-dipping.

To ensure that the clusters from dump buckets are disinfected after milking mastitic cows.

To introduce the use of a dry disinfectant for the cubicle beds at Acrehead.

To monitor recurrent clinical cases of mastitis and discuss individual treatment and control measures for these cows with veterinary staff.

Further information from: Hugh McClymont and Colin Mason