

## » Management Tips

- Aim to make high quality silage. Harvest early provided there is at least 7 weeks from slurry and fertiliser applications. Wilt if possible to 25-30% DM. Consolidate grass and seal quickly.
- Even at current fertiliser prices it is important to apply sufficient N to ensure good grass yields. For second cut balance slurry nutrients with fertiliser input.
- Apply 2.5-3 bags per acre of high N and K compound fertiliser. Do not apply P unless there is a need based on soil analysis results. Use a compound containing sulphur for second cut.
- Spread slurry immediately after first cut if using an inverted splash plate. Alternatively look at trailing shoe, band spreading or injection as a more nutrient efficient method. Farm Demo's on alternative slurry spreading are planned for June. See local agricultural press for details.
- At a time of increasing costs, you need to produce milk on your farm efficiently. Benchmark the dairy business to establish profitability.

**Current CAFRE Farm Walks are highlighting the importance of grass in all dairy systems. The emphasis will be on growing and utilising high quality grass making effective use of our best natural resource.**



## Rising Costs

The cost of producing milk has risen substantially since this time last year with increases of over £100 per tonne in dairy rations and a doubling of fertiliser prices. A typical benchmark farm produces 6800 litres per cow from a concentrate input of 2 tonnes and nitrogen usage of 100kgs (200units) per cow. For the year ending March 2007 variable costs were typically 6.8 pence per litre or £460 per cow. If performance on farm remains the same then variable costs at current prices are likely to have risen to around 10 pence per litre or £680 per cow. Rises in fuel and related costs such as silage contracting will further increase overhead costs of milk production.

Technical efficiency of many dairy farms has slipped over the last few years. If performance particularly from forage returned to the levels achieved in 2001/2002, a saving of over £80 per cow on average could be made.

This year farmers must look carefully at the performance of their own herds.

There continues to be massive variation between farms even on the same system. Do not automatically assume that the average figure applies to you. If you benchmark your herd, it will give you an indication of where savings can be made on your farm. This year, more than ever, efficiency will pay!

### **Benchmarking**

Benchmarking is “comparing the performance of your farm business with that of other dairy farms.” It provides farmers with an opportunity to identify strengths and weaknesses within their farm business and to make the necessary changes so that farm profit can be improved.

To carry out benchmarking, the farmer collects information including milk and calf sales, concentrate and fertiliser purchases and overhead costs. These figures are entered into a computer programme which calculates the costs of production per unit. A report is generated showing the dairy herd performance on a per litre, cow and hectare basis. The average results for all other dairy businesses that have also benchmarked are provided for comparison.

The comparisons with other herds are confidential but cover many aspects of the business including all key financial and physical details. Comparison of farms with similar feeding systems, calving pattern or using own machinery or contractors can all be considered.

Nearly 300 dairy farmers in Northern Ireland have been using the Greenmount Benchmarking System each year. They agree it is essential to know their herd performance compared to other dairy farmers and to identify areas for improvement. You can benchmark your own herd at [www.ruralni.gov.uk](http://www.ruralni.gov.uk) or contact your local CAFRE Dairying Development Adviser for details.



### **Quality First Cut Silage**

With the rising price of concentrates, making high quality first cut silage must be a priority for all dairy farmers. It will have a major influence on controlling the cost of milk production next winter.

### **Cutting Date**

The most important factor in determining silage quality is the maturity of the grass at cutting. The leafier the grass, the higher the feeding value of the silage and the less supplementation required over the winter. Slurry and fertiliser application have been delayed this spring due to the wet weather. It is advisable to allow 7-8 weeks before cutting to ensure an adequate sugar content in the grass. Grass samples can be analysed by AFBI Hillsborough to determine the suitability of the crop for ensiling.

### **Wilting**

Where grass is wilted to 25-30% dry matter and then ensiled, not only is silage effluent reduced but the intake of silage will be increased. It is important that wilting should be carried out rapidly in less than 24 hours to minimise field losses. The weather forecast should be closely monitored and the grass cut when conditions are favourable. Grass sugar levels are higher in the afternoon and evening. Grass cut with a mower-conditioner will wilt up to 20% faster than an unconditioned crop assuming dry and sunny conditions. Tedding the sward immediately after cutting doubles the rate of wilting resulting in a drier silage at little extra cost.

## Silage Additives

In the present economic climate these are only justified if they improve animal performance or reduce losses during ensilage or when feeding silage. Research studies from AFBI Hillsborough have shown that effective bacterial inoculant additives will produce an economic response in animal performance under a wide range of conditions. However, not all inoculant additives are equally effective and only those with well proven results from independent research trials, with UKASTA accreditation, should be used.

## Clamp Management

Attention to detail when ensiling grass is critical in order to produce high quality silage with minimal losses. Silos should be filled quickly with the grass being well consolidated during filling. If silage cutting is disrupted due to wet weather, clamps should be sheeted temporarily. Waste on top of the silo can be virtually eliminated by covering the grass with two sheets of polythene which are well weighed down.



## Preparation for Second Cut Silage

Plan ahead to decide which fertilisers to apply for second cut. Soil fertility and slurry usage are major factors influencing this choice. Legislation requires the demonstration of crop need and it is necessary to have soil analysis result within the past 4 years, otherwise the application of

phosphate fertiliser is not permitted.

The cost of nitrogen fertiliser has increased substantially from last year but does still give a return of £3 for every £1 spent in terms of quality grass output.

## Volume of slurry

Where possible most of the farms slurry should be applied to silage ground. When applying different rates of slurry, fertiliser levels can be adjusted accordingly.



The table overleaf indicates the nutritive value of slurry which must be taken into consideration when selecting type and quality of fertiliser sown for second cut.

An application of cattle slurry after first cut at a rate of 1000 gallons/acre should provide 5.4 units of nitrogen (N) per acre, 11 units of phosphate (P) per acre and 28 units of potash (K).

If a slurry tanker with an inverted splash plate is being used, slurry should be spread immediately after cutting to avoid contamination of grass regrowth. However when application is by trailing shoe then the timing is less critical, as slurry is deposited directly at the base of the sward.

## Fertiliser

Silage fields with a typical soil analysis of index 2 for P and index 1 for K require 20 units of P/acre and 80 units K/acre for second cut silage. The recommended dressing of N for second cut silage is 80 units/acre. Slurry applied at 2000 gallons/acre will supply all P requirement and reduce N requirement to 69 units/acre and K requirement to 24 units/acre. A high N and high K fertiliser with no P should be applied at 2.5-3 bags/acre. Many farms particularly in the West have been shown to be deficient in sulphur, leading to a loss in grass production for second cut silage. Therefore a fertiliser containing sulphur should be applied where necessary.

**Farm Demo's will be held in June to demonstrate alternative methods of spreading slurry. The emphasis will be on:**

- **grass growth**
- **efficient slurry usage**
- **trailing shoe spreading**
- **reducing costs**

## Available nutrient value of slurry

Slurry Type	N (units / 1000gals)			P (units / 1000gals)	K (units / 1000gals)
	Spring	Summer	Autumn		
Beef	7.2	4.1	3.1	11	22
Dairy	9.5	5.4	4	11	28
Pig	18	10.8	7.2	18	20