

Improved grassland productivity pays dividends

Over the past three years a focus on grassland improvement, with advice and support from the Grassright Group, has enabled Lancashire dairy farmer Richard Corlett to improve sward quality and production. This has boosted cow performance and herd margins.

Despite the dry summer of 2010 reducing grass growth, herd milk yields have still averaged 9,200 litres per cow, a rise of 850 litres from 2007, with only a small increase in the amount of concentrate fed. And with a higher quantity and quality of grazed grass, Richard Corlett has been able to increase stocking rates by 0.5 cows per hectare.

The majority of the yield increase has come from improved grazing and forage supplies. On a per hectare basis, milk from forage has increased by 20% (from 4,396 litres/ha to 5,350 litres/ha) and the margin over purchased feeds has doubled from £1,734/ha to £3,526/ha.

At Home Farm near Ormskirk in Lancashire, Richard uses purchased concentrates selectively to drive the yield forward on a set feeding plan of summer grazing and winter feeding.

The availability of grass has been pivotal to his success, as without this the higher yields would only have been achieved from bought in feedstuffs. And in the current climate of high feed prices, this would have had a detrimental impact on herd margins.

Richard began receiving help and support from the Grassright Group at the start of 2008.



Richard Corlett has increased stocking rates and production per hectare.

“Reseeding frequency had slipped, and many leys were old, and had low productivity,” he explains. “I was stuck in a circle of not having enough grazing available to take a field out of production to reseed it.”

The Grassright Group evaluated the condition of the swards in all the fields and set about helping Richard to improve them over a three year period. Leys were subsoiled using an Opico Sward-Lifter to remove compaction and

improve drainage. With drier ground, this enabled an earlier turnout and lengthened the grazing season.

After slurry analysis and soil testing, GrowHow’s Encompass programme was used to work out the optimum formulation of compound fertiliser to apply to make up nutrient shortfalls. As a result, Richard changed from using NPKS compounds primarily. He dropped the phosphate for NKS and straight nitrogen—which saved money in the process.

Herbicide treatments were targeted to the specific weed problems in different fields. Docks had already been controlled and existing leys were oversown with pelleted clover using a harrow and seeder combination. This boosted the protein content of the sward and allowed fertiliser applications

Home Farm’s dairy herd yearly performance—2007 to 2010

	Rolling 12 month figures			
	2007	2008	2009	2010
Yield per cow (litres)	8,346	8,904	9,797	9,192
Yield from forage per cow (litres)	3,040	3,208	2,995	2,503
Concentrate use per litre (kg)	0.31	0.32	0.33	0.34
Stocking rate (cows/hectare)	1.45	1.38	2.13	2.14
Milk from forage per hectare (litres)	4,396	4,427	6,374	5,350
MOPF per hectare (£)	1,734	2,556	3,972	3,526



Overseeding has replenished clover levels in grass leys and rejuvenated old leys without the need to take a field out of production.

to be cut back. New leys were sown too.

The herd is fed as one in winter on a partial TMR with feeding to yield in the parlour. But in summer the lows are grazed hard to maximise output from forage while the highs are buffer fed with a mix of grass and maize silages and concentrate.

The buffer feeding allows cows to stay in good condition until they have given their peak output and are well in-calf. It then allows the use of good quality grass to support the back end of the lactation.

The cold spring in 2010 and the dry June and July created grazing and forage shortages for many farmers, including Richard. It forced a change of plan—and explains the dip in the 2010 figures—compared with those in 2009. The herd was averaging 9,800 litres in 2009 but with the challenging conditions for grass growth this fell in 2010 to an average 9,100 litres/cow.

Richard explains: “Due to

the lack of grass we had to buy in extra concentrate and buffer feed the low yielders as well as the high yielders. This ensured adequate energy supplies for the cows and protected the herd yield and fertility—but lowered our milk yields and milk from forage figures.”

Through BOCM Pauls, the Kingshay Dairy Manager’s farm costings system is used to evaluate the economic performance of the herd (see table). Richard’s wife Dawn forwards monthly data for inputting into the programme on milk production and quality, livestock numbers, purchased feedstuffs—and the actual forages and concentrate feeds fed to the herd that month.

At Home Farm, grass and maize silages make up the forage portion of the ration. All bought-in feeds—concentrate and blends—are taken into account in the costings. This ensures the grass and forage intakes and their value are never over estimated and an accurate account of the herd’s



Richard has been able to make savings in fertiliser when results from soil and slurry tests were entered into GrowHow’s Encompass programme.

performance and economics are achieved.

BOCM Pauls’ Gary Stones comments: “Compared with the average herd, Richard achieves an extra 1,000 litres of milk per cow from forage over the year, the majority of which comes from grazed grass in the summer.

“In Lancashire and Cumbria, the average yield for all producers using this costings analysis is 7,966 litres per cow with the top 10% of producers averaging 9,546 litres/cow.

“The average yield produced from forage in this region sits at 2,256 litres with the top 10% of producers achieving 2,531 litres/cow. In both cases, 0.32 kg/litre of bought-in feed is used to achieve this. So with 2,503 litres of milk produced from forage per cow,

Richard is in the top 10%.

“All in all, this means Richard’s concentrate feeding levels are approximately 250kg per cow lower than they would be if he didn’t have the grass supply and manage the grazing as well as he does. The cost to the business this coming summer, with feed prices likely to be north of £230 per tonne, would be in the region of £60 per cow in lost margin.

“Moreover, the higher dry matter yields have enabled more milk from a smaller grass and forage area. On a per hectare basis, Richard’s improved grass supply supports 5,350 litres of milk per hectare. And despite the current higher feed prices compared with three years ago, Richard has doubled the margin over purchased feeds to £3,529/hectare.”

The Grassright Group is a collaboration of four companies—GrowHow, Limagrain, Opico and United Phosphorous—with the aim of helping livestock farmers capitalise on the cheap energy source that is grazed grass. More information on the Group’s activities, and best practice grassland management, can be found on the new Grassright website—www.grassright.co.uk.