

The ability to adapt quickly to change is a must for modern dairying systems

Four 'reasons' in one day

Managing cows that yield 40 litres on a grass-based system may seem like a thing of the past, but a herd in County Antrim is showing how grazing high yielding cows is possible and allows costs to be controlled – essential with milk prices so low.

text **Allison Matthews**

The nutritional value of grass is often beyond producers' control and with the current average growth at 65kg dry matter per hectare, the seasonal averages are not being met.

At Cafre (Greenmount Campus), where theory is put into practice, dairy technologist Alastair Boyle explains that there is no blueprint to follow this year. "In May the Greenmount Future herd would usually achieve maintenance plus 25 litres. But, unfortunately, this year is proving to be a challenge and currently cows are in two groups; full- and a part-time grazing.

"At the moment a total of 94 autumn calving cows are at grass full time, producing a daily average of 27 litres per cow. The high yielding portion of this group has settled at 41 litres after being turned out for half days on April 9. Both batches are grazed together and the high yielding cows are automatically drafted out after evening milking and given access to a TMR. Daily dry matter intakes for this group can reach 25kg per cow per day," explains Dr Boyle.

Realistic feeding

With an estimated value of £60 per tonne, when conditions are suitable, grass can provide the cheapest form of utilisable dry matter. With the current poor milk price there is a great temptation to recoup margins during the summer months and Thompsons' dairy specialist Mary-Jane Robinson explains how this can be achieved. "Calculating potential milk supply from



Mary-Jane Robinson: "Intakes must be managed or cow health and condition will not be maintained"

grass needs to be adjusted accordingly given grazing conditions. Overestimating milk from grass will lead to a depletion of body reserves and result in a drop in body condition. Realistic feeding according to the stage of lactation and grass capabilities will be vital if long-term profits are to be made."

Flexible forage

Alastair Boyle says that adapting to daily – and sometimes hourly – changes in the suitability of the grazing conditions is what gives the herd the opportunity to make the most of the season. "Flexibility in grazing management has been crucial, both in terms of good field access to minimise poaching and in using additional temporary fences. Adaptability has also been important in terms of taking decisions based on ground and weather conditions, which include when to house and whether to



Full-time grazing: it can be difficult, but it's achievable



The CAFRE team (from left to right): Alastair Boyle, dairying technologist; Jim Fulton, assistant farm manager; and Philip Higginson, dairy herdsman

feed additional blend or silage. “All cows are fed to yield in the milking parlour using herd management software. Cows and heifers grazing full time are fed for maintenance plus 20 litres and 17 litres respectively. This reflects the current weather and grazing conditions. Normally in good conditions during May and June these figures would be higher to maximise milk from grass. The supplementation rate is set at 0.45kg of concentrate per litre of milk above maintenance,” adds Dr Boyle.

Grass rotation

Across the country heavy rainfall has altered turn-out plans as stocking rates have been reduced from five to four cows per hectare to avoid poaching and minimise sward damage. Mary-Jane Robinson explains that using the ‘three-leaf system’ to assess grass cover can be an effective way of maximising milk production and quality during the summer months. “This system uses the emergence of ryegrass leaves to estimate both plant productivity and maturity. Before grazing, the ryegrass should ideally have at least two and a half fresh leaves, which would indicate an availability of 2,800kg of dry matter per

hectare with an optimum residual cover of 1,500kg of dry matter – up to 5cm high.

“This should give a rotation time frame of no more than 20 days in early spring and up to 25 days as the season progresses. If the opening cover exceeds 3000kg/ha wastage can be increased and it might prove more beneficial to take that ground out of rotation and round bale it to maintain an ideal grazing wedge. Analysed grass is showing a dry matter level of 14.7%, which has a significant impact on the physical amount of grass the cow has to consume. When dry matter falls to lower than expected levels – below 18% reduces intakes by 0.34kg per 1% drop in dry matter – the situation must be managed to ensure that cow health and condition is not affected,” warns Miss Robinson. Greenmount is aiming for a target of 4,000 litres from forage and monitors grass cover weekly to ensure this is achieved. “By walking all the paddocks across the grazing platform every week we have the data available to enter into our grazing management programme. We want to ensure that cows graze high quality grass, so this routine aids our herd management decisions.

“With pre-grazing covers up to 3,000kg of dry matter per hectare, maintenance-plus settings are assessed and adjusted accordingly, based on sward quality, grazing conditions and cow body condition score,” adds Dr Boyle.

The management of cows at grass is difficult but achievable. By monitoring body condition scores and fertility producers can ensure that there is not a negative knock on effect to winter performance,” concludes Miss Robinson. |

Table 1: Future Herd 12-month rolling average performance data

average performance data	
milk yield (litres/cow)	8,986
milk from forage (litres/cow)	3,026
milk solids (kg/cow)	672
concentrates (kg/cow)	2,682
concentrates/litre (kg/litre)	0.30
butterfat (%)	4.17
protein (%)	3.30