

Look closely at your sward

How to limit turnout's impact on the bulk tank reading

It's a common scenario – the herd goes out to lush young grass and the bulk tank reading goes down. So what has happened and how can you prevent it? We spoke to two nutritionists to find out how to maintain yields.

Lush young grass does not suit some of your cows and you need to, literally, get down on your knees to find out why. That's the view shared by dairy consultant Fred Gordon and Thompson's nutritionist James Black.

"During the past few grazing seasons we have witnessed the increased use of buffer feeding and an increase in the number of herds grazed by day and fed TMR when housed at night," says Professor Gordon. "But care must be taken to ensure that those cows that are suited to graze do so, and those that are not stay on a complete housed ration."

This sounds like a lot of extra work at a busy time of year, but Mr Black outlines what should be both practical and achievable.

"A semi paddock grazing set up or a system of grazing small fields, which accommodate the herd on a daily or every three to four milkings, are ideal," he says.

"Sound management during the early part of the grass season is crucial. Poor management can have a negative impact on the sward – and the amount of milk available from grazed grass – for the rest of the grazing season.

"To make changes we really must examine – on our



Fred Gordon and James Black assess the bottom of the sward for grazing quality

conditions are poor then I would suggest that grazing is not the place for these cows. Within the same herd though there will be cows that grazed grass will suit and high quality grazed grass and modest levels of concentrates will sustain yield with mid- to late-lactation cows."

A simple identification system, such as tail tapes, can be a solution for those herds where size or desire does not necessitate batching. A single batch can be fed through the same parlour with three colours of tail tape or automatic concentrate feeding will allow for three batches to be set up on the computer according to stage of lactation.

"The feed rates shown will cover 80% of weather conditions experienced by cows. In a period of very wet weather, the concentrate feed level can be increased by 2kg/day until grass dry matter intakes increase," says Mr Black

"Buffer feeding should be the last resort for mid- to late-lactation cows, as highlighted in Table 1. Forage of any sort will substitute grass intake both in real terms and time spent grazing."

"High quality grass has enormous potential to both sustain yield and improve profit by increasing milk from forage figures in all mid- to late-lactation cows," adds Professor Gordon. "Start the grazing season as early as possible with the stale cows, get down on your knees to monitor sward quality and resist the temptation to buffer these cows with forage. Concentrates offer less substitution of grass while improving nutrient intake."

Allison Matthews

lactation stage	season	ration
days 0-120	spring and summer	winter diet or grass +8/10kg conc.
	autumn	winter diet
days 120-240	spring and summer	grass + 4kg conc.
	autumn	grass + 6kg conc.
days 240+	spring and summer	grass + 1kg conc.
	autumn	grass +3kg conc.

Table 1: Ideal dairy cow rations according to stage of lactation

knees in the field – what the cow is being asked to consume.

"A casual walk through a field of grass cannot assess the quality of the feed, so we must get down to sward level and pay particular attention to what is in the bottom 8cm of the sward," stresses Mr Black.

Grazing intervals

"Take a close look at a perennial ryegrass sward and you will see that it consists of a number of grass plants each with a large number of tillers. Each tiller usually has no more than three 'living' leaves."

When the fourth leaf emerges – in peak season new leaves emerge every six to eight days – the oldest leaf starts to die and the stem of the tiller starts to elongate.

"And it is at this stage that the quality of this sward is rapidly deteriorating. We are moving from a sward that is almost 100% green leaf, with an extremely high digestibility and intake potential, to

one containing a mixture of living leaf, green stem and dead leaf material."

"The inclusion of the latter two components not only reduces the digestibility of the grass for the cow, but also considerably reduces her intake potential," adds Professor Gordon.

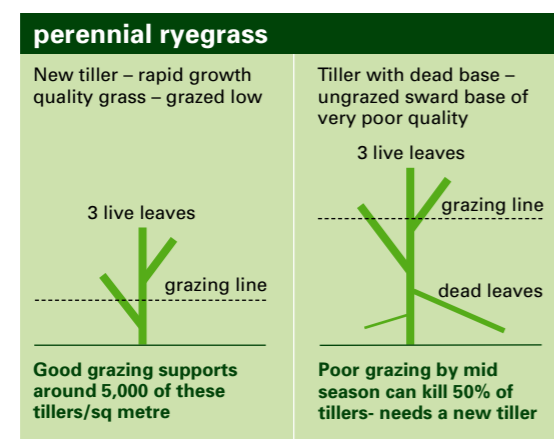
"So stocking rates must be sufficiently high at first grazing to ensure that post-grazing heights are no more than 5cm. Subsequent grazing intervals should be timed to not allow the plant to reach the four-leaf stage, which triggers a decline in quality.

"In early season this should be no more than 20 days extending to between 24 and 25 days as the season proceeds. Stocking rates associated with this need to be at least five cows per hectare in early season and fall to just four cows in mid to late summer."

Fresh cows

James Black stresses that cows must also be fed according to their stage of lactation. "If the top third of your herd peaks above 33 litres and weather

Figure 1: The effects of good grazing and poor grazing on tillers



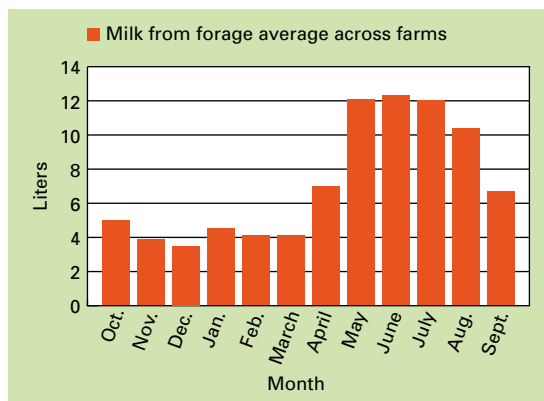


Figure 2: Average of 3 years figures from Thompsons costing service