## Formulate buffer feed to exploit value of grazing

etting the most from grazing will be a priority this spring, so while it will be important to ensure cows are given every opportunity to maximise grass intakes and utilise it effectively, it also means attention needs to be paid to the formulation and delivery of buffer feeds.

Georgina Chapman, of ED&F Man, says intakes will be influenced by grass quality, so it is important to feed grass at the most nutritious three-leaf stage and avoid overmature grass which can be more of an issue as the season progresses.

## Feed value

But, she adds, very early-season grass can also have a lower feed value.

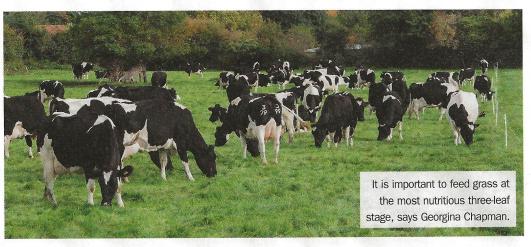
"Sugar and protein contents typically only begin to peak from late April onwards, while fibre can be higher if the sward contains overwintered material that has the potential to depress intakes."

According to Grasswatch, grazing in early April last year was only worth between maintenance+5 to maintenance+10 litres depending on the region.

"Grazing activity is also a key factor in determining grazing intakes. The amount of time cows spend grazing, and therefore their intakes, increase as the number of daylight hours extend. All these factors influence how the formulation of buffer feeds is optimised, particularly in early season."

Ms Chapman says the role of buffer feeds is to complement grazed grass and balance nutrient supply without compromising grazing intakes.

Anything that displaces grazing from the total diet, whether



**66**A correctly formulated buffer can help improve grass utilisation by stimulating the rumen microbes

**GEORGINA CHAPMAN** 

a buffer or compounds, has a negative effect on margins.

A correctly formulated buffer can help improve grass utilisation by stimulating the rumen microbes to digest feed more efficiently. She adds that silages normally form the basis of buffer feeds but is concerned that forage shortages may mean this is not possible this year.

"We have already seen herds turned out earlier than usual to conserve forage stocks, so it is important to look at possible alternatives to provide a nutritional balance and meet the various objectives of a buffer feed."

She advises that in the first part of the grazing season, cows

on high-quality spring grass will be consuming high quantities of low-fibre, highly degradable protein and high-sugar forage, which pass through cows quickly.

"At this stage, the buffer should contain a source of fibre to help slow down the rumen and optimise grass digestion with the aim of maximising nutrient uptake.

"It will also need to contain a supply of bypass protein to balance the rapidly degraded protein in the grass.

"Typically, this would be oilseed rape or soyabean, but with both these ingredients trading at high prices, it will be essential to ensure they are included at the levels needed to meet the cows' requirements, yet without increasing costs."

## Silage replacement

Research carried out at Kingshay shows a proportion of silage can be replaced in a buffer feed with a mix of straw and blended molasses to extend forage stocks, and Ms Chapman says this could be a useful option this spring.

Straw can provide the fibre needed to optimise rumen flow rates and help improve butterfats, which will help maintain milk price.

The molasses in the blend is rich in six carbon sugars such as sucrose and glucose, which are proven to be beneficial to cows as they are more highly fermentable in the rumen, increase microbial protein production and stimulate rumen microbes to improve fibre digestion.

Promoting faster and more efficient fermentation will also stimulate dry matter intakes.

## **Fine-tuning**

"As grazing quality changes during the season, it will be possible to fine tune the balance of ingredients in the buffer to maintain high levels of grazing utilisation and margins."

She says the way buffer feed is managed can also have an impact on grazing intakes. She advises feeding buffer feed at afternoon milking, explaining that feeding at this time has less of an impact on total grazing hours and therefore grass intakes.

"Finally, watch out for buffer feed heating up. In hot weather, avoid mixing the buffer early in the day and leaving it, as this will allow it to heat up and depress intakes. Mix as late as possible prior to feeding and consider adding a ration conditioner."