A spring spruce up will help to reduce the risk of mastitis during the summer

# Keep 'em clean

Repairing cow tracks, gateways and any other poached areas will help to avoid an 'environmental' disaster this coming grazing season. Read on to find out why so many herds' udder health status took a dive during one of the wettest summers on record.

text **Rachael Porter**

*Hugh Black: "I'm a huge fan of pre-dipping teats, with a licensed product"*

Extremely wet weather in summer 2012 didn't just play havoc with grazing, silage stocks, milk yields and fertility. To add insult to injury, an increase in the number of cases of environmental mastitis was another unwelcome side effect.

NMR data shows that somatic cell counts rose in the six months between May and October 2012 – a period that usually sees figures dip slightly. And many producers certainly reported increased SCCs as well as significantly more cases of clinical mastitis.

## Rates doubled

In fact some grazing herds saw the rate of new cases of mastitis double in July alone, according to Cornwall-based dairy vet Phil Elkins, director of Westpoint Veterinary Group's Winnard's Perch practice.

With 40 dairy clients, managing a total of 12,000 cows and an average herd size of 300 cows, he saw a significant increase in environmental mastitis caused by Ecoli and Strep Uberis, between May and September, caused by the wet weather.

"We saw between 30% and 40% more cases of mastitis in summer 2012 among our grazing herds than we would in a typical year. The herd hardest hit saw twice the number of cases in July 2012, compared with the same month in 2011."

At an average of £250 a case, these producers suffered significant financial losses, as well as the knock-on effect of raised somatic cell counts and the increased risk of repeat cases in the same lactation.

Mr Elkins says that he also saw far too many freshly calved cows picking up Ecoli mastitis when out at grass. "Conditions were perfect for the bacteria – they don't do so well when the ground is dry.

"Herds were out grazing one day and then back inside the next. Fields were poached and muddy and the cows were dirty. Dirty feet and legs means dirty udders and that results in an increase in environmental mastitis," he says.

"So now is the time to take a close look at cow tracks, gateways and any other areas prone to poaching. Preventing environmental mastitis is all about keeping cows clean. Clean cows means clean udders."

He adds that a clean teat end will harbour around 150,000 bacteria.

"A thorough teat preparation routine – a warm pre-dip followed by a dry wipe – should reduce this by around 90% and that's the best you can expect.

"A dirty teat end will be host to around a million bacteria and the same cleaning routine will also reduce this by 90%, but that leave 100,000 still on the teat," he explains. So keeping cows and teats clean is vital when trying to control mastitis in the summer."

## Clean cows

DairyCo extension officer Hugh Black agrees that keeping cows clean is key to reducing the risk of mastitis during the summer. "Around 94% of mastitis cases are caused by environmental pathogens. Just 6% are caused by contagious bugs. So there's huge potential to make a difference here by keeping cows clean and by putting a thorough teat-cleaning system in place in the milking parlour," he says.

"The latter is extremely important,

*Phil Elkins: "One of our herds saw twice the usual number of mastitis cases in July 2012"*

particularly when cows are outside, because research has shown that Strep Uberis can survive in the soil for up to four weeks. If cows are kicking up mud in wet, poached fields then they're spreading it about.

"So avoid set stocking for more than two weeks and always let pasture 'rest' for a month. Churned up soil is a risk factor, as are puddles and boggy areas of fields and cow tracks. Any area where cows congregate, such as under trees in hot weather, can pose a risk."

Mr Black would also like to see grazing fields with multiple entrances and exits, to avoid poaching. He likes to see cow tracks laid on a camber to allow water to drain off, rather than create pools. "Any areas that creates a splash – be it water, mud or slurry – is a risk and producers should look to eliminate these wherever possible."

That's no easy task, but the cleaner the cows are when they enter the parlour, the more effective a pre-dip and teat cleaning programme will be.

"I'm a huge fan of pre-dipping, with a licensed product that offers a 30 to 40 second contact kill time. In fact, I think that pre-dipping is more important than post dipping in herds with a severe environmental mastitis problem."

## Mastitis data

Something else he'd like to see more producers doing is recording more accurate clinical mastitis data and then analysing it with their vet and/or their DairyCo mastitis control plan deliverer.

"The same problems often occur at the same time every year and recording data allows a pattern to emerge. It's the only way to pin point what's causing mastitis problems and then tackle them head on."

Mr Elkins adds that, if 2013 also proves to be a wet year, producers also need to remember one other word – consistency.

"Cows don't cope well with inconsistency – it stresses them and stress can lower immunity. So, if you re-house your herd because conditions are too wet, keep them inside for a month or up to six weeks. This will give the ground plenty of time to dry out and avoid poaching."

It also avoids the stress of frequent changes in the ration. "Large dietary changes – for example 10kgDM grass one day followed by grass silage the next – can be a huge shock to the rumen. Nutritional stress can also suppress cow immunity, making her more prone to infections such as mastitis."

Herd somatic cell counts and mastitis rates have only just started to settle down again. The knock-on effects of the increased prevalence in the summer were still being felt in December and January, according to Mr Elkins.

"So that's something else to keep in mind if conditions are wet again in 2013. Make a decision early, stick to it and avoid the misery of environmental mastitis." |

*For more information, visit www.dairyco.org.uk/mastitis*