

RUMENCO



TEETHING TROUBLES TACKLED ON NEW GREENFIELD UNIT

Expectations were high when the dairy herd at Crutchley Farms in Nettlecombe, Dorset, was moved to a new, greenfield unit in 2007. Every aspect of its design had been carefully considered and state-of-the-art technology was combined with measures to improve both cow and worker comfort. There was the 40/40 rapid exit Fullwood parlour with its pipework entirely concealed in easy-clean stainless steel cabinets; there was the Kraiburg rubber matting in the parlour to improve cow confidence and reduce slippage and potential injury; and there was a carefully constructed viewing area from which visitors could witness the smooth and seamless process of milking 400 cows in around three hours.

But beneath the surface problems were brewing. A mastitis issue – a legacy of the traditional, loose-housed unit the cows had left – seemed to be getting worse; nutritional problems had inexplicably arisen and were proving stubbornly difficult to overcome; and fertility targets were being missed as the head-count expanded towards 450.

But teething problems are hardly a surprise on a brand new unit, and farm manager Anthony Butler together with herd manager Nigel Waterman, who joined the team only 18 months ago, have worked tirelessly to overcome them.

“It was a steep learning curve,” recalls Anthony, who describes how yields dropped and levelled at around 8,400kg during the first year as cows from three separate groups – the farm’s two existing herds totalling 260 head and a bought-in herd of 128 – were brought together. “There was the stress of mixing the herds; there were also a lot of heifers coming in and it was all made worse by the weather and a very wet year.”

Mastitis and cell counts were amongst the first things to be tackled, and high cell count cows were retained rather than culled wherever possible, in what Nigel describes as a ‘salvage operation’.

Admitting that the worst cell count peak for the herd exceeded 400, he says that much of the cure was in standard good practice in the milking routine.

“When we first dealt with the problem we would pre-spray with a combination of paracetic acid, Dermisan Plus for teat conditioning and water to dilute,” says Nigel, who also paper

towel wiped and checked fore-milk to pick up mastitis cases early. “But now we’ve got on top of the problem the routine has changed to using a teat foam, which we use as a pre- and post-milking spray.”

The parlour itself has also had a positive impact offering good working conditions and good visibility with cattle standing at 90 degrees to the milker. Plenty of natural light floods through large areas of perspex in the roof of the exceptionally large and airy building in which the parlour is housed.

“And the staff are happy and committed too, which helps a lot,” adds Nigel.

At drying off the new routine is to use Cepravin Dry Cow long acting antibiotic for high cell count cows (more than 200) and a shorter acting and cheaper antibiotic for those with lower cell counts, with a teat sealant on them all. And the net result has been to dramatically reduce herd cell counts to a consistent and impressive 117, while Bactoscans now run at 15.

Meanwhile, outside the parlour another problem was becoming apparent as cows which were previously in strawed yards, had to get used to cubicles in the two 72 metre sheds totalling 440 cow places, which were bedded with sawdust over mattresses.

“Many of them wouldn’t stay in the cubicles and had to be tied in place – which was done every night by herd owner Victor Crutchley – until they got used to the idea,” says Nigel. “This was not only impacting on cleanliness and cell counts, but standing in passages was also causing laminitis.

“They are no trouble at all now,” he says. “And now I routinely train the heifers by bringing them into a cubicle house for a few weeks before calving.”

But while the mastitis and high cell counts were being reduced, a problem was becoming apparent in the cows’ nutrition.

“The cows were regurgitating their cuds,” explains Nigel. “It wasn’t just a few; it was a great mess that was really noticeable in front of each bed.”

Calling in Pete Kelly, their regular nutritionist from Green and Kelly to assess the situation, he said that never had he seen this problem so pronounced.

“When you see regurgitation across a herd, it’s normally a sign of acidosis,” he says. “On this farm, we were feeding a lot of blend as we were chasing yield and my concern was that we were overdoing the concentrates.”

But closer analysis of the ration revealed that concentrates and starch levels were not too high, so attention then turned to the quality of forage.

“As it transpired, it was the maize silage that was harvested wet and immature, and its pH at 3.7 was almost as low as you would ever see,” says Pete.

Buffering products were rapidly brought into the ration, with sodium bicarbonate chosen as the first line of attack for its expected quick response, later to be followed by ground limestone as a longer term approach.

But neither had any discernible effect, and nor did the extra chop length straw which was also added to the ration.

“This was very unusual,” remarks Pete. “My experience from other farms is that bicarb and limestone should have sorted the problem out.”

It was at this point that Diamond V XPLS, a fully fermented yeast culture from Rumenco was introduced, firstly to a trial group and later across the whole herd.

“The impact was immediate,” recalls Nigel, who included the product in the TMR at a rate of 60g/cow. “The trial group stopped regurgitating cuds within days and their yields – which were also being separately monitored – saw sustained increases throughout the lactation.

“When I saw the effect it was having on cudging I knew it was benefiting the rumen, and this was also reflected in better dung consistency and would also impact on wider health issues. Longer term, we have seen both body and coat condition improving and have had far less milk fever and no displaced abomasums.”

The yeast culture has now been introduced across the whole milking herd and has also been added to dry cow rations three weeks before calving and the calf ration for up to 12 weeks, where it is having a noticeable impact on digestion.

“The next line of attack will be on fertility,” says Nigel. “We already have indications from the pedometers that we had been inseminating too early, so now we’ll be waiting for around 12 hours after the first signs of bulling activity before we AI.”

Today, the picture painted by the herd is one of utter contentment and optimal health as the cattle belie the difficult transition they had into the new unit. Quiet cudging is a feature of both cubicle sheds and parlour; projected 305 day production is up to 9,200kg at 4.01 percent fat and 3.31 percent protein (2x); and the team has every confidence that financial

performance will significantly improve as the cows begin to recoup the substantial capital outlay.

Farm Facts

- Crutchley Farms comprise 1860 acres (750 ha) and include arable and beef enterprises as well as the dairy.
- Two existing herds were moved to the new greenfield unit and numbers were increased to 400, rising to 450.
- The new unit features three 72 metre long sheds, two housing the cubicles and one housing the parlour and cattle handling facilities.
- The parlour is a state-of-the-art Fullwood 40/40 rapid exit with all piping concealed in stainless steel cabinets and grooved rubber matting for flooring.
- Rubber matting is also used across four 72m x 5m loafing areas up to the feed face to improve cow comfort, lameness and bullying behaviour in the cubicle sheds.
- Teething problems of mastitis have been cured through good parlour and drying off routine.
- Persistent digestive disorders have been cured through the use of Diamond XPLS yeast culture.
- The TMR is based on grass and maize silage with wholecrop wheat or oats.
- Attention is now turning to fertility issues with suspicions that pedometers were picking up heats so early that insemination was taking place too soon.
- Yield dropped when the cows first entered the new unit but has now risen to 9,200kg at 4.01% fat and 3.31% protein (305d) on twice a day milking.

Pictures Supplied:

1. Crutchley Farms manager Anthony Bolton with Alison Bond of Rumenco

Rumenco nutritionist Alison Bond discusses the cudging issue with farm manager Anthony Butler. The introduction of Diamond V XPLS fully fermented yeast culture within the TMR has improved rumen function and cow health significantly.

2. Cows at Crutchley Farms

3. The new 40/40 rapid exit Fullwood parlour with its pipework entirely concealed in easy-clean stainless steel cabinets. (see inset picture).

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