

'Robust' is the key word when it comes to proper Johne's disease control programmes

Johne's control – make it count

Leicestershire-based producers Martin and Carol Beaumont and their vet Peter Orpin, from the Park Vet Group, left no stone unturned when it came to controlling Johne's disease in the Birchbury Holstein herd. Now they are now reaping the benefits of a five-year robust control plan.

text **Karen Wright**

Five years ago Martin Beaumont, from Twycross in Leicestershire, bought in 20 good strong third-lactation cows as part of his herd expansion plans. These were from a local herd that was being dispersed. But within a year 20% of these cows had 'crashed'. "I did wonder what I'd bought into the herd," he says. "I always considered myself a discerning buyer and would never buy from markets. "Local farms seemed a safe option

and allowed us to grow the herd to our targeted 250 cows." Appreciating the potential dangers of – and damage caused by – disease outbreaks, particularly Johne's, Martin followed his vet Peter Orpin's advice and carried out a risk assessment of the herd. "We used the MyHealthyHerd programme to scrutinise the risk of disease entry and spread of Johne's within our herd and this highlighted, neatly, the likely disease risks for the



Martin and Carol Beaumont and (right) Peter Orpin are following a 'robust' plan

herd and provided a logical framework for surveillance and control."

No Cinderella enterprise

Included in the plan was quarterly Herdwise milk testing of all cows and tagging any test positive cattle. Those with two or more positive tests are culled prior to drying off.

"The main focus of the initial control plan was to block Johne's transmission from cow to calf in the maternity areas," adds Peter. "Infected cows can very easily infect their calves and then the damage is done."

Martin invested in calf hutches and this created increased space for the maternity pens for calving cows. This allowed any infected cows to be penned separately and reduced the risks for all calving cows.

Colostrum management has also been fine tuned by using a colostrum ensuring only the best quality colostrum

is stored. Immediately after a calf is born a bag in thawed out in a warm, rotating water bath and four litres fed to the calf in the first hour of life.

"This way we know that the calf is getting high quality colostrum," says Carol, who has taken calf rearing firmly under her wing. "We used to pool colostrum, but not anymore and we never feed colostrum from an infected cow. Calves from 'red' cows are snatched at birth and fed 'green' cow colostrum." After birth, the dam is milked at the next milking and the calf goes into a calf hutch. Providing the dam is Johne's clear, her colostrum is fed to the calf for the first three days. After that a quality milk replacer is fed twice a day from an automated milk taxi, best described as a motorised trolley with tank holding 200 litres of warm milk.

"We take great pride in our youngstock," adds Martin. "It's no Cinderella enterprise. We're confident that they haven't come into contact with the Johne's disease bug at any point."

Reduced disease entry risk

Martin has no doubt that their commitment to Johne's control has paid off. "We have reduced our risk of disease entry from red to amber and of disease spread within the herd from amber to green." The current status in the herd at Shorn Hill Farm, Twycross is show in Figure 1.

Figure 2 shows a fall in the number of red – or heavily infected – cows from 14 red cows in 2009 to five cases in the past 12 months with no red cows in the most recent test. "And there are no red cows in our heifer group either, which is just how it should be."

Beef heifer calves are reared up to 18 months then are sold to a beef herd as recipient mothers for bought-in embryos.

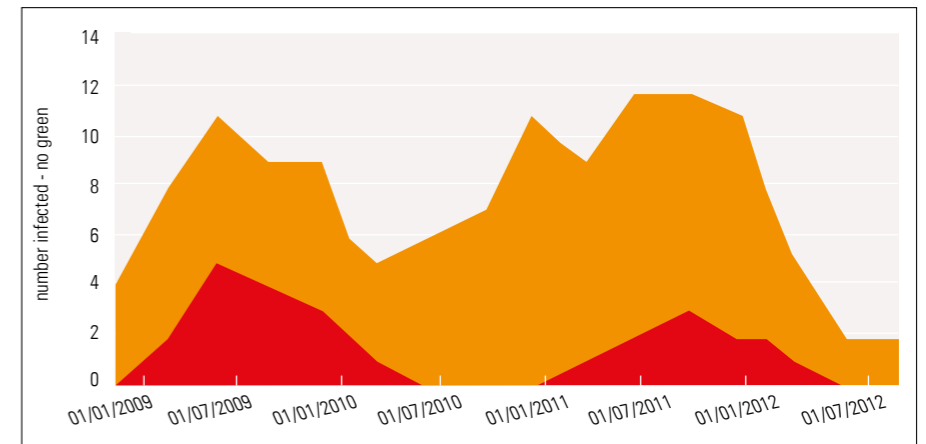


Figure 1: Current status for Johne's disease at Shorn Hill Farm

"This producer wants cows of known health status and he pays a premium for ours. We typically get £100 above the market rate as he wants Johne's low-risk heifers. In time our milk buyer Arla/ASDA may reward milk from herds of known Johne's disease status." Premiums aside, the control plan means that Johne's cows can be managed efficiently. These infected cows can then be removed from the herd to secure the most cost beneficial value.

Martin admits that he had no idea whether there was any Johne's in the herd pre 2007. "It may have been rumbling around, but any problem was accelerated by purchasing infected cows. "We have completed our herd expansion. The 250 cows are averaging 9,000kg of milk with a calving index of 381 days. Health status is well under control – cows are vaccinated for BVD and calves are tagged and tested at birth. We can now sell surplus heifers with confidence." I

Figure 2: Incidence of Johne's disease over time at Shorn Hill



Test but no control? No logic in this route

Increased awareness of Johne's disease and screening programmes are good news but Peter Orpin has concerns that in many cases producers are not adopting robust enough control programmes. "Some might just be treating it as a box ticking exercise and others are only partially controlling the disease. Testing is not controlling," he warns.

The most important starting point is getting the detail right with your vet. "Work out how vulnerable the herd is to disease entry and then also to disease

spread within the herd. Link this to Johne's disease test results and from there the vet can help to develop a robust control plan. Regular screening with robust control in place should, over time, see the Johne's health status improve."

MyHealthyHerd program includes a comprehensive Johne's module, which predicts the future prevalence and cross checks the control plan to make sure it is robust and effective.

"A low-risk herd will come out as 'green'

and this will alter the predicted or future prevalence of the herd to Johne's disease. Conversely, results for a high risk, or 'red' herd, may not predict an immediate reduction in prevalence within the herd. However, over time, infection levels should track downwards if robust controls can be maintained.

"It's so important to remember that testing is part of the process and it makes control easier. Risk management and husbandry are the key points," he adds.



Great pride is taken in rearing youngstock