

There can be no half measures when it comes to Johne's disease control

Focus on Johne's yields progress

Calving time presents the greatest risk of Johne's disease transmission, with calves exposed to an environment that is potentially contaminated with highly infectious bacteria. Accurate screening and recording, combined with scrupulous attention to detail, are key to keeping one step ahead of Johne's, as shown by two of 2015's NMR HerdWise competition finalists.

text **Karen Wright**

Organic producer Tim Downes farms with wife Louise and his parents John and Chris at Longnor in Shropshire. Together, with three full-time staff, they run a 300-cow spring-calving herd of NZ Friesians and Scandinavian crossbreds and sell their milk to OMSCo. The Downes have been screening

quarterly for Johne's with the HerdWise programme for the past four years. A growing interest in Johne's control from his milk buyer, and the fact that he had bought in young stock of unknown status, prompted Tim to monitor his Johne's status and, with the help of his vet Nathan Loewenstein from Shropshire



Louise and Tim Downes: "Only 3% of our cows are now in a risk category"

Farm Vets, actively controls the disease in his herd.

In the first year of HerdWise screening just under 10% of the herd fell into the red (high risk) and amber (medium risk) category.

"Having developed a protocol to manage these cows, particularly around calving time, that everyone understands and follows, only 3% of our cows are now in the risk categories and less than 1% are red cows," says Tim.

Risky cows isolated

All known red and amber cows are bred to beef and are isolated in a separate yard during the dry period to avoid faecal contamination of the 'clean' calving pens. "If a cow flags up as a red or amber animal after serving to a dairy insemination we will plan to snatch the

Calves from Tim and Louise Downes spring calving cross bred herd that is now closed to minimise disease risk



calf at birth,” he explains. These cows are clearly identified and CCTV in all three of the farm’s calving yards allow Tim and his staff to carefully monitor the close-up calvers.

“Snatched calves are delivered onto a clean towel and transferred immediately to the calf trailer and put into a clean calf pen where they will be given two, three-litre feeds of stored colostrum from known low risk – or green – cows.” All frozen colostrum is labelled with the cow’s number and the recipient calf’s number is also recorded so that they can trace any animals that were fed from a cow that subsequently goes red or amber on a screen.

“As an organic producer we are required to feed whole milk to our calves for 12 weeks, so the potential for Johne’s spread in our young stock is considerable if infectious cows go undetected,” he stresses.

Two strikes policy

After calving, milk from known red and amber cows is excluded from the calf milk pool. “First-time calving heifers are also an unknown entity, so we let them feed their calves once and then discard the rest of this first milk to minimise the risk of infection. We have considered pasteurisation, but it is expensive and goes against our organic principles of feeding a natural product,” he argues.

Tim and his team now run a closed herd and while it is not practical to cull red Johne’s cows routinely, they are managed out of the herd if they start to have health or productivity issues. “Instead of three strikes and you’re out, we have a two strikes policy with the red cows,” says Tim.

Johne’s is very difficult to get ahead of because of the long latent period and its tendency to drop below the screening radar even in infected cows. But Tim feels that it is important to be proactive. “As organic producers, we owe it to our consumers and to our cows to control a disease that can have such an impact on animal health,” he concludes.

Somerset-based producer Kari Dunford has been a HerdWise user since she took over the running of Southwood Common Farm, at Evercreech near Shepton Mallet, five years ago, following the death of her husband. As a vet and with the help of her five staff members she has thrown herself into improving the health status of both her spring- and autumn-block-calving herds, totalling just under 500 cross-bred cows.

“Before my husband passed away, the herds underwent a period of rapid expansion with cattle introduced from numerous sources in the UK, France and Romania. So I was very conscious that we were likely to have been exposed to Johne’s disease,” Kari explains.

She particularly likes the flexibility of the HerdWise service, which allows her to carry out two consecutive monthly screens in March/April and September/October so that she can catch all the cows after calving but before serving. “This allows us to only breed ‘green’ cows to dairy and to know, well in advance, which cows have to be isolated at calving time,” she adds.

Any cow with two consecutively high results is ‘red tagged’ for life and gets a red ankle strap. A ‘J’ is also added to her identity number in InterHerd. “It also means that we can accelerate culling if these cows show up as problem breeders or have mastitis issues.”

Red tags on calves

Any cow that slips through the net and goes ‘red’ after serving is kept in a separate barn and the calf is snatched after birth and fed stored colostrum from known ‘green’ cows. All heifer calves born to red cows are also red tagged so that they can be monitored throughout their life.

“Knowing the Johne’s status of the cows has become even more important as we



Kari Dunford: “Herds ignoring Johne’s are storing up problems”

have started vaccinating for Rotavirus, which is given to the cows and then transferred to the calves via colostrum. Colostrum is pooled for three days after their initial two bags of colostrum on day one,” explains Kari.

“Progress is frustratingly slow, but using our current protocols we can keep the Johne’s situation under control. We have closed the herds and a year ago about 8% of the herd were red tagged cows and that is now down to 4%. In spite of the frustrations, doing nothing is not an option and herds that ignore Johne’s are storing up a lot of problems in the future.” |

Finalists in the 2016 HerdWise competition will be named in June and the winner will be announced at the Livestock Event on July 6, NEC, Birmingham.

Calves from ‘red’ cows are identified at birth on Kari Dunford’s farm

