"Johne's disease was costing us a fortune - due to one or two infected cows"

Campaign to cut Johne's costs in national herd

A stark but true message on the impact of Johne's disease in Lyndon Edwards' Chepstow-based herd. Taking the bull by the horns and committing to a long-term control plan, he now has the disease well under control. The huge cost and impact on herd progress is being reinforced by NMR vet and technical group chair of the National Johne's Action Group Karen Bond. text Karen Wright

yndon Edwards feels passionately that producers need to face up to Johne's if they haven't already done so. As chairman of the Johne's Action Group – a voluntary group set up by Dairy UK

that includes wide representation from the likes of farming unions, DairyCo, vets and producers – he uses his own experiences to get the message home. "Six years ago we realised we had a problem," says Mr Edwards, who runs a 200-cow pedigree Holstein and Brown Swiss herd. "As a typical organic herd we were calving a lot of cows in spring and

Figure 1: Average lifetime daily yield according to percentage infected (red) cows, NMR Herdwise herds



seeing an unacceptable proportion lose body condition in early lactation. Yields dropped and basically the cows looked unwell."

Taboo subject

Blood tests across the herd revealed Johne's and subsequent heifer blood tests showed that 20% of young stock were infected. "To pick up the Johne's causing pathogen in young stock isn't always easy, but for us it highlighted the problem that we were facing."

The 'mistake', unbeknown to Mr Edwards, occurred when he bought in a few infected cows to replace TB losses. "One or two of these, we subsequently discovered, were Johne's positive. We 'fanned the flames' by calving in groups and pooling colostrum. Also, in an organic herd, milk is fed for 12 weeks. So the chances were that these infected cows were spreading the disease to their own calves, any calves getting their milk and to calves born at roughly the same time."

Mr Edwards feels that his case wasn't – and still isn't - unusual in many herds and particularly those that have bought in even just one or two cows.

"Six or so years ago I would stand up and talk about Johne's at meetings and no one admitted having similar problems in their herds. Johne's was a taboo subject. But when I got home the phone would ring with producers keen to share notes and ask me how I was tackling the disease.

"And I think that one of the problems was that there was no common 'hymn sheet' for Johne's. Vets and advisers were saying different things and, as a result, very few producers did anything about it, even if they suspected Johne's was a problem."

No 'quick-fix'

Sharing his drive for the need to develop a common approach to dealing with the disease has resulted in the Johne's Action Group's six-strand approach. "We've now got a common template to help vets and producers tackle the disease," says Karen Bond. "But it's not a 'quick fix' – any serious attempt to assess and manage Johne's needs long term commitment and it's vital that we get this message across. Two or three years then giving up won't work."

But before producers shy away from taking Johne's more seriously, Mr Edwards points out that control isn't difficult or expensive. "We assessed the



Karen Bond: "Johne's disease seriously limits herd progress"

Johne's status through blood tests, but it's now possible to use individual milk samples to pick up antibodies to Johne's. A 30-cow milk sample screen selecting the highest risk cows will often be the route suggested by vets for initial screening."

Strict protocols were then put in place at Sevendale Farm with any infected cows calved in isolation and the calf removed at birth. Pens were thoroughly cleaned and disinfected between calvings.

"One investment we made was a pasteuriser for colostrum and milk for feeding the calves. And any bought-in animals are tested for Johne's before they arrive on the farm. Only those with a clean bill of health are purchased, and all enter our quarterly screening programme when they arrive.

"This surveillance plan is particularly important. We use NMR Herdwise to test individual cow milk samples four times a year and we will continue to do this, maybe twice a year, if improvements continue. It's easy and cost-effective. In 2013 all young stock were blood tested and the results were negative, which is great. But we know that they may still be infected and show up as they get older. We can't say that we are Johne's free but we're certainly heading that way."

Johne's-free label

Apart from a 'Johne's-free' label – that both Mr Edwards and Mrs Bond can see being a prerequisite of cattle purchases for many producers – controlling the disease is clearly reflected in better cow performance. "Reduced longevity and involuntary culling are often seen as the main consequences of Johne's infection in a herd," says Mrs Bond.

"When it comes to culling, Johne's infected cows are more likely to have depressed yields, reduced fertility,



Lyndon Edwards: "Johne's isn't difficult or expensive to control"

higher cell counts and more cases of mastitis. So these cows find themselves high on the cull list. They are involuntary culls and will leave the herd early – some before they have even covered their rearing costs. This is clearly reflected in the lifetime yields in Johne's infected cows.

"Producers looking to progress their herds need to be selecting cows for culling based on their genetics and profitability. Unfortunately there is little opportunity for this to happen in herds infected with Johne's."

Figure 1 shows the average lifetime daily yield in Herdwise monitored herds according to the percentage of red cows. "It is clear from this that the more infected cows there are in the herd the lower the average LDY is," adds Mrs Bond.

Although he's feeling confident that Johne's disease is now under control, Mr Edwards is far from complacent. "During the past 10 years we've lost 70 cows to TB, but I know that Johne's has cost us much more. We will never relax the protocols that are now integrated into everyday herd management."

Tackling costs

And it's the hidden costs of the disease that Karen Bond will be talking to producers about this summer, starting with the Farm Health Planning seminar at the Livestock Show on July 2 and July 3 when the six-strand control programme will be rolled out.

"We need producers and vets to assess the Johne's status of the herd and their infection risk then commit to a control programme. This programme won't be the same for all herds, of course, but we are advocating a range of practical control options from which producers, in conjunction with their vet, can choose the most appropriate for their situation."