Resolve and enthusiasm are key to successful disease control

Enough is enough

A consistent and uncompromising approach to Johne's control has seen one Wiltshire-based herd – and its vet – receive awards and rewards for disease-prevention protocols. We spoke to them to find out more.

text **Rachael Porter**

Johne's update

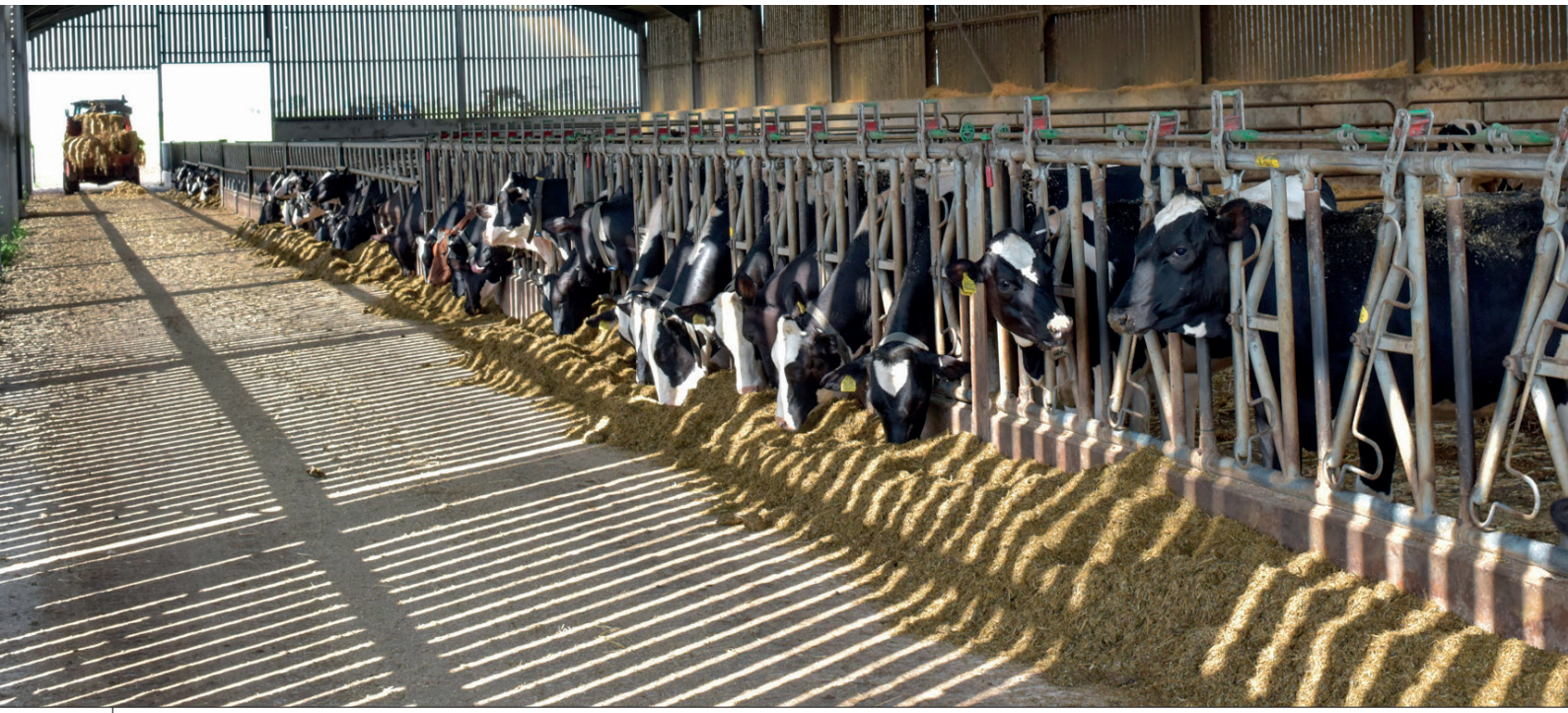
By October 31, 2018, all producers supplying purchaser members of the NJMP (National Johne's Management Plan) will need to have assessed their risks and herd status and have a written Johne's management plan in place.
And this must all be confirmed by a veterinary signed declaration.
Milk collected by purchaser members of NJMP accounts for more than 85% of UK milk production.
The target is to have 95% of UK dairy herds committed to a Johne's control plan by this date.

Watching one of his best cows waste away before his own eyes was the catalyst that saw one Wiltshire-based producer, and his vet, decide to tackle Johne's disease head on. "I decided that enough was enough," says herdsman James Smith. "We knew the disease was there and we had seen a few full-blown cases in the herd. But this was a pivotal moment for me."
That was almost three years ago and this year the herd, which is owned by William Hawking, scooped the HerdWise 'best practice' award for Johne's control. And the herd's vet, Ian Cardiff from Malmesbury's George Vet Group, was also presented with an award for his impressive work. "It's a team effort – that's for sure – but it all hinges on the HerdWise data. It's what we've done with that data that's important and that's what's making a difference in terms of controlling the spread of Johne's and taking successful steps towards eliminating it from the herd," says James.

Organic system

James manages the organic herd of 240 milkers, plus 160 young stock, on a unit near Chippenham. The herd average yield is 9,200 litres of milk at 4.1% butterfat and 3.2% protein, with a somatic cell count of 129,000 cells/ml. Calving interval stands at 376 days.
Cows are turned out, onto grass/clover swards, as early as possible in the spring – typically at the end of March. Grazing extends into late October, if conditions allow. The herd produces around 3,000 litres of milk from forage and James would like to increase that. "We're always looking to improve efficiency and part of that is producing more milk from home-grown grass and silage – the cheapest feeds available. But it's about balance. Cow health and fertility are our main priorities and any increase in yield should not come at a cost."
The winter ration comprises grass silage and home-grown wholecrop barley, as well as home-grown organic cereals and some bought-in organic soya. Calving is all year round and the herd is managed in two groups – high and low yielders. Milk is sold, on an organic contract, to Muller and the herd is milked twice a day through a 23:46 herringbone parlour.

Organic system: the 240-cow herd is fed a TMR during the winter, which comprises home-grown wholecrop and cereals



Health plan: making use of data is helping to control Johne's disease

James Smith

By working closely with his herd's vet, this herdsman has made huge strides in controlling Johne's. And it all starts with monitoring the disease

Herd size:	**240 cows**
Average yield:	**9,200 litres**

Key to the successful management of any dairy system, particularly an organic one, is working closely with the herd's vet. "So working closely with Ian was something that we were already doing and drawing up and following a Johne's plan seemed like the next logical step for us," says James.

Top priority

"Cow health is top of our list of priorities. Production diseases, such as lameness and mastitis, are all under control, and a foot trimmer visits the herd every two months. We routinely give cows a pedicure at drying off and also treat lame cows," adds James. "We locomotion score on a regular basis and the herd also walks through a formalin footbath every morning after milking."

The herd are vaccinated for Leptospirosis and BVD, and calves are vaccinated to protect them from pneumonia. James instigated tackling Johne's. "I was fed up of seeing good cows calve down and, within a matter of weeks, having to cull them as they start to fade away. It was wasting good cattle and also meant that we were not able to cull cows in a more planned way. At one point 30% of culls were due to Johne's – not necessarily clinical cases, but certainly carriers."

The farm started using NMR's HerdWise in 2012. "The information was there, but we weren't really tapping into it," he admits. A more proactive approach began in 2016. "We realised that this data was the key to knowing what was really going on in our herd, in terms of Johne's disease. So we really stepped things up.

"Our starting point was to treat both 'amber' and 'red' cows as 'red' animals," explains James. "We decided we didn't want any replacements from them so they're all bred with beef semen. And any cow that comes back with a HerdWise milk test score of more than 60 is culled at the end of her lactation."

He then set up separate calving sheds – one for 'amber' and 'red' cows and one for 'green' – to prevent heifer calves from being infected with the disease at birth.

Any heifers born to positive cows are given a red tag and then treated as Johne's positive for the rest of their life. They will also be bred to beef sires and they're reared separately from 'green' calves, up until weaning.

"These are all solid practical steps that have really worked to get Johne's under control – and to give us a degree of control over the disease. It's just a case of following protocols and making the commitment to give the control measures the additional management time that's required.

All calves receive three litres of pasteurised colostrum, taken from 'green' cows, within two hours of birth and another three litres six hours later. Calves are then fed whole milk (six litres per day in two feeds), again from 'green' cows in the milking herd. This milk is pasteurised, after every milking, before being fed. Although a time-consuming step, it is paying dividends when it comes to improved calf health and growth rates – and controlling Johne's disease. "And it's also considerably cheaper than buying in organic calf milk replacer," adds James.

Drawing up and following protocols is one thing. But sending off a good cow that's Johne's positive for culling is still something that James struggles with. "We have to set aside sentimentality and focus on the bigger picture, and think about the damage that the cow could inflict on the rest of the herd."

Management practices

Good progress and encouraging results have held the team's resolve and enthusiasm when it comes to Johne's control.

"There's definitely an overwhelming commitment to address Johne's disease on this unit," says vet Ian Cardiff. "We've worked on strategies and control protocols to drive this progress and looked at the whole Johne's picture, rather than just concentrating on single areas.

"And we've all taken the national Johne's campaign on board and looked at the recommended protocols," adds Ian.

"Also, we've discussed and evaluated many management practices and worked out the best one for this farm."

He adds that good communication between farm staff allowed these changes to be implemented and ensured a robust and consistent approach.

"We have been particularly pleased with the introduction of the colostrum pasteuriser," says Ian. The farm topped the practice's colostrum quality ranking with the highest levels of calf total proteins in a recent benchmarking study. Already, just two years down the line, there has been a 50% reduction in infected cows with a 28% decrease in 'red' cows. "This is the result of the attention to detail and consistency shown by James," adds Ian. "He has ensured that the management changes have been implemented and performed without compromise." |