

# They tackled Johne's head-on

This farm decided to take on Johne's and reduce its grip on their herd . . . and it worked in a big way.

—by Sarah Jackson—

ONE month, your best cow may look as healthy as can be. The next, she may be down in milk and quickly losing weight, although she continues to eat plenty. What is going on here? Very likely a blood test will show that this cow has Johne's disease. And, once one cow has Johne's, there is a good chance that others have it, too. Then, only through careful management and attention to detail can you lessen the spread of Johne's in your herd.

It can be done. A 700-cow dairy operation in Dane, Wis., has Johne's control down to a science. Ripp Dairy Valley belongs to brothers Chuck, Gary, and Troy Ripp. The 500-acre dairy has been in the family since 1962, and the trio took over the farm as a limited liability corporation in 2004 after the sudden death of their father, Roy.

In 1991, the brothers expanded their operation from 350 cows to its current size. A second phase of the expansion included building a new transition cow barn in 2001 which would also house dry cows, a hospital area, and maternity pens.

## An unexpected surprise . . .

A year later, Mike Collins at the University of Wisconsin suggested that the farm get involved in a pilot program, funded by the Wisconsin Milk Marketing Board and the U.S. Department of Agriculture-APHIS-CS, on reducing the occurrence of Johne's disease. Since the expansion, the Ripp had been adding purchased springer heifers to their herd and were curious to see if Johne's was even on their farm. To be included in the program, the herd had to have a 10 percent incidence of Johne's. When the herd was first tested for Johne's, 72 cows had some form of the disease.

"It was bad that we qualified for the program, but good for getting educated," Troy said.

They immediately began implementing a Johne's culling and control program. The entire herd was tested with the ELISA test, and Johne's cows were marked by putting a zip tie through their ear vaccination tag. Cows testing as suspects were given yellow zip ties, blue for low-positive, pink for positive, and red for strong-positive. The cows would keep those zip ties through the end of their current lactation or until they were culled. The 72 cows with some form of Johne's were culled within a couple years.

The brothers observed that cows with Johne's had low milk production, udders that looked different somehow, and some had baggy chins. Of course, none of this is scientific, simply their observations. Chuck said cows testing strong-positive would look normal for a week to a month after calving, still eating a lot. Then, milk production would plummet. In their observation, stress tends to bring on the clinical signs of Johne's, the Ripp said.

According to Chuck, the hardest part of the program was when cows producing 35,000 or 40,000 pounds of milk tested strong-positive. The cows were kept until the end of their current lactation and were culled only after repeated strong-posi-

tive test results.

"Dairying is very rewarding and, at times, very frustrating," Chuck said.

Today, cows are ELISA tested two to three months before dry-off. Based on the test results, cows are marked with a zip tie after test results come back. While testing can be pricey, Chuck and Troy agreed that in the long run, they are saving money. Gary says blood sampling is essential to the program's success because Johne's symptoms are not always visible. In addition to the zip ties, the brothers use Dairy Comp to track marked cows.

"We usually don't make a big fuss about it," Troy said.

At calving, cows stay in the free stalls until the calf's feet are seen and then moved to the maternity pen. Very few calves are born in the free stalls. Any cows with positive Johne's test calve in a separate hospital barn away from the other cows to cut down the Johne's spread. Protocols have employees monitoring the maternity pen 24 hours a day. Calves are removed from the cow in the first hour of life. Chuck and Troy said this practice has helped



A COLOR-CODED ZIP TIE inserted through the ear vaccination tag is used to note a cow's Johne's status.

improve overall herd health, particularly cutting down on Johne's, salmonella, and clostridia.

"We keep positive cows away from clean cows and calves, especially when they are calving," Chuck said.

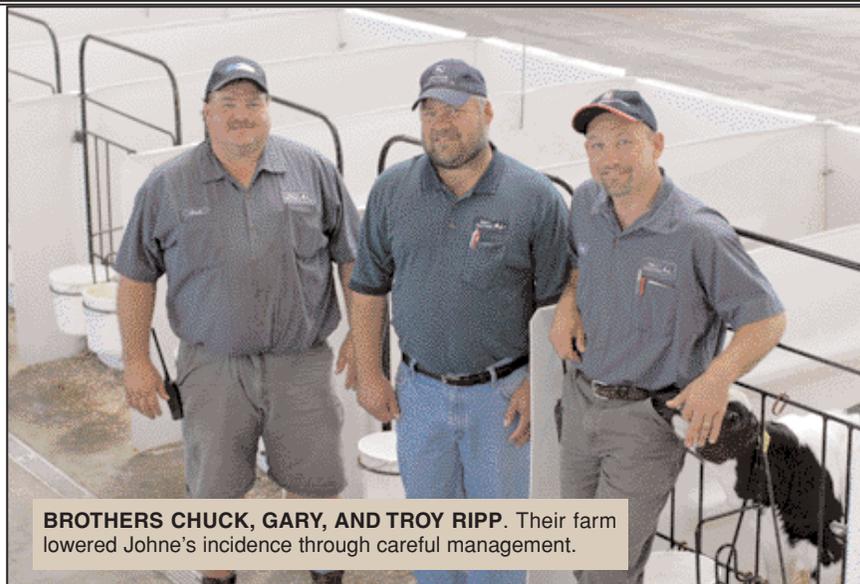
Cows are moved to the fresh cow pen less than 48 hours after calving. The trio has noticed that this also reduces the number of problems they have with fresh cows.

"We try not to move cows in too many pens after they freshen," says Troy. "The fewer pen moves a cow makes, the less stress she has in her life."

Employees at Ripp Dairy Valley are thoroughly educated on the importance of monitoring maternity pens hourly. The brothers make sure employees, especially their nine Hispanic workers, understand this. Chuck and Troy said that their night shift is particularly good about it.

"It's tough to leave the cows, but 24 hours a day makes a difference. Everyone has to buy into it," Troy said.

Calves then are taken to the Ripp's new calf barn. The barn's design lets a lot of light in, and Troy says the brightness and fresh air gives the barn a healthier feel for the calves. After wean-



BROTHERS CHUCK, GARY, AND TROY RIPP. Their farm lowered Johne's incidence through careful management.

ing, calf pens are broken down, and the area is power washed. The area is kept vacant for two weeks before new calves are brought in. Last year, calf death loss rate was 1 percent.

Another priority is not feeding colostrum from cows with Johne's to newborn calves. Heifer calves receive colostrum from Johne's negative cows only. Before October 2006, the Ripp brothers had thrown out all colostrum and waste milk from suspect or low-positive tested cows. Now, milk is pasteurized before being put into the nonsalable bulk tank.

"The pasteurizer is so simple to use, it's scary. You can teach pretty much anyone how to use it," Troy said. The brothers said that using the pasteurizer saves money on buying milk replacer for calves.

"We do a lot of preventive things," Chuck said.

Troy agreed, "No cow is left behind."

Although they have not added any new cows into the herd for a year and a half, they had developed a standard procedure for any cattle entering the herd. The brothers were very particular about only buying from herds that have similar Johne's methods in place and that were recommended to them by Collins or their herd veterinarian, Ross Maurer. They try to buy only first-calf heifers two months before freshening, and heifers always undergo ELISA testing.

"First-calf heifers seem to adapt better," Troy said.

## Marked in computer, in ear . . .

Heifers born out of Johne's cows are marked on Dairy Comp records. The heifer gets a zip tie in her ear that is the same color as her mother's zip tie. When the heifer has been ELISA tested, she is marked accordingly.

The Ripp said that their local vet has been a big help to their Johne's reduction campaign. Maurer has worked with the farm through the Waunakee Veterinary Clinic for the past 20 years, helping them during their expansion.

"He's really easy to work with. We share all our information with him. We only work with people we can trust. He's part of the team," Chuck said. Maurer was also instrumental in helping the Ripp design protocols for dealing with Johne's and took blood and fecal samples every six weeks for ELISA testing. The vet comes to Ripp Dairy Valley every Thursday to do routine pregnancy checks and attend to any other veterinary needs the dairy may have. Their herdsman, Tim Blankenship, also assists with all other cow health issues.

## What they have learned . . .

Within two years of starting the program, the dairy had a rolling herd average of 24,000 pounds on 3x milking with a somatic cell count of 158,000.

Chuck said he believes participating in programs such as the Johne's disease project is a win-win situation. It takes a lot of commitment, but, in the long run, herd size is easily maintained.

The author is a senior in ag journalism at the University of Missouri-Columbia. She was the 2007 Hoard's Dairyman editorial intern.