Johne's testing: *a small investment with big benefits*

■ If you plan on building a healthy, productive herd, implement a sound biosecurity program.

by JoDee Sattler

At Selz-Pralle Dairy of Humbird, Wisconsin, a year's worth of Johne's testing cost the business less than what they spent on one consignment sale purchase. And, that purchased animal came back positive with Johne's Disease.

"We invested $1,900 in Johne's testing during 2000 for our 400-cow herd," Pam Selz-Pralle explained. "Of three consignment sale purchases, two turned clinical with Johne's – costing us $6,900." She noted that the Wisconsin Department of Agriculture, Trade and Consumer Protection now offers a rebate program to offset Johne's testing costs when you state certify your herd.

"That $1,900 in testing costs is the same value as a springing heifer and her calf," Selz-Pralle continued. "We're willing to give up the value of one heifer and her calf to potentially protect many others in our herd." That $1,900 does not include loss in future milk production, purchasing another replacement and the intangible cost of potentially contaminating other animals.

Selz-Pralle continued, "We view Johne's testing as yet another management tool. It answers our primary questions we pose to all technologies."

Working With Johne's

The Selz-Pralle team tests all cows for Johne's at dry off. "It's a convenient time and aids in determining colostrum infection," said Pralle. Should a positive result, the cow is retested prior to freshening.

"Experiences is a good teacher," Pralle explained. Three calves were born receiving presumed high quality colostrum from a mature cow. Unfortunately, that was a purchased cow which later tested high positive for Johne's. Her calf and one other born that day now test low positive for Johne's. It was either manure contamination or the colostrum. "When those calves were born, we never thought of having Johne's. Others had it. We assumed we were clean, because we never diagnosed one. We were wrong," Pralle stated. Now, animals testing any form of positive at dry off are retested. If again

Selz-Pralle Dairy considers any technology or practice that will:

- Increase milk production
- Decrease cost of production
- Increase efficiency
- Reduce replacement costs (culling rate)
- Increase value of cattle
- Improve herd health

A key member of their management team, Dr. Al Harmening routinely visits with Scott Pralle regarding herd health status and recommended practices.

positive, a fecal test is run. Any animal still testing positive for Johne's dons a spray painted "J" on her rump and head.

Today, the 420-cow herd has six Johne's-positive animals – four are purchased animals. Though a small sample, summarizing Johne's testing history at Selz-Pralle Dairy has some interesting footnotes. Of 22 animals testing positive, 17 were purchased. The 266 animals purchased from two herds averaged a 5% infection rate, with two becoming clinical.

In handling Johne's-positive animals, the Pralles strictly manage those cows. The maternity pen is thoroughly cleaned – a standard operating procedure – after their departure. That pen remains empty for at least one day before the next prefresh cow enters. Johne's-positive cows' colostrum is dumped. Calves born from Johne's-positive dams receive colostrum from an older herdmate that has consistently tested Johne's-negative.

In addition, the Pralles take this health status into consideration as part of the culling hierarchy. "We use Johne's results as a 'guide'," Pralle noted. "We also consider other factors, such as somatic cell count and ability to breed back."

Being a high profile registered Holstein herd, the Pralles admit that the decision to test or not to test for Johne's was not an easy one. "We just didn't want to compromise our base herd or our image," said Selz-Pralle. "Plus, we wanted to maintain our herd's high milk production level." Selz-Pralle Dairy has a rolling herd average of 28,244 pounds of milk, 1,010 pounds of fat and 844 pounds of protein. They concluded there was too much at risk to not test.

Selz-Pralle noted they've heard mixed reactions about their willingness to test for Johne's and make those results known. Selling numerous service sires, they advertise their bulls as Johne's-negative (the bulls' dams tested negative). The Pralles cull any bulls born from a Johne's-positive dam. "Now we see others marketing bulls as Johne's-negative. This is a positive step for the industry in managing Johne's."

She continued, "There's a subtle demand for biosecure animals. Via word of mouth or reading articles, we've had dairy producers call from southwestern states, the Dakotas and agents representing foreign interests inquiring about replacements and bulls from a tested, biosecure farm. That turns Johne's testing into real dollars."

Is testing necessary? "We need to pose the question to dairy producers who don't think they need to test, 'Will you be a better manager knowing the infection status of your herd?' That applies to everything," Selz-Pralle commented. Johne's is just one venue of infection that can eat away at our profitability. We need to manage all hidden 'profit stealers.' Margins are too small to let the 'unknown' steal easy profits."

Taking a proactive approach to disease prevention, Scott Pralle and Pam Selz-Pralle follow a written biosecurity plan for their home herd and purchased animals.

Beyond Johne's

Even though Johne's testing is an integral part of the Selz-Pralle biosecurity plan, it includes several other components. Before they buy a cow or herd of cows, Pralles run a bulk tank test. "We expect zero mycoplasma; otherwise, we won't buy," Pralle stated. They require three negative mycoplasma bulk tank test results.

"If we find low environmental mastitis through bulk tank testing, it's okay to buy the cows," Pralle noted. "Through management – such as keeping manure out of the milking system or fixing a parlor clamp that's not working – you can usually overcome environmental mastitis problems." However, they refuse to buy high SCC cows and/or those with highly contagious infections.

For PI-BVD (persistently infected BVD), the Pralles test all animals and adhere to a strict vaccination program. Thus far, they haven't culled any positives. What they can do is sell verified negative cattle to customers.

"Work with your veterinarian to develop a vaccination and testing program that's right for you and your dairy herd," Pralle recom-

FYI

- To learn more about the Wisconsin Reimbursement of Johne's Testing Costs, request a copy of the Emergency Rule from Robert Ehlenfeldt of the Wisconsin Department of Agriculture, Trade and Consumer Protection at robert.ehlenfeldt@datcp.state.wi.us.
- Dr. Al Harmening of Grassland Veterinary Services may be reached at 715-238-7686.

mended. When new animals arrive, they give booster vaccinations – J5, Nasalgen®, Bovi-Shield™ (for open females or bred more than seven months) or CattleMaster® (for those bred one day to seven months). Dry cows receive ScourGuard 3® (K)/C.

Utilizing A Compatible Vet

Until 1998, Pralles utilized a more traditional veterinarian – one that focused more on herd health checks and treating sick animals. Today's modern dairies require more proactive practices and herd health analysis.

"Your herd health program is only as good as your veterinarian," Pralle stated. "Consequently, you need a vet that is compatible with where you're going. Look at your vet as a consultant. Make sure he (she) challenges you and your management level."

When Pralles started expanding their herd, they realized their veterinarian didn't provide several services, such as milk testing, quick lab testing, vaccination protocols and detailed herd health monitoring, that they needed. "It was a tough decision to change veterinarians," Selz-Pralle commented. "Our previous vet was economical and devoted to the herd. But, we needed more."

She continued, "Our current vet is pro vaccination." In less than a year after switching veterinarians, they saw improved performance in corpora lutea quality, conception rate, calf health and calf mortality. "We saw improvement visually and on paper."

Selz-Pralle stated, "Today's vet must work in concert with the herd nutritionist and other consultants. His (her) business depends on successful, profitable customers."

As part of their advisory team, Dr. Al Harmening of Grassland Veterinary Service tracks Selz-Pralle Dairy's biosecurity measures and herd health status. "They've (the veterinary clinic) invested in computer programs, so you don't have to," Pralle noted.

Selz-Pralle noted that despite a sound vaccination and testing program, animals – especially new cattle – may get sick. The stress of change, combined with being exposed to new viral strains may cause them to break with a disease.

Besides vaccinating and testing, Selz-Pralle Dairy utilizes several other proactive herd health measures. Calf pails – both feed and water/milk – are sanitized with hot water (as hot as you can stand), soap and chlorine. "After each feeding, we sanitize all the calf pails. It's a matter of healthy calves," Selz-Pralle stated. "Sanitation is a matter of routine at Selz-Pralle Dairy."

Furthermore, feed refusals are not fed to animals less than 8 months old. Maternity pens are monitored, with someone checking at least every six hours. "If a calf is expected, we're there," said Pralle.

Even though the Pralles' reasons for a sound biosecurity program may seem somewhat selfish, they feel guidelines like these will benefit the entire dairy industry. "I think the 'new' true type cow will be resistant to diseases," Selz-Pralle commented. "Our success will be our ability to minimize turnover (reduce the culling rate). Simultaneously, we want to increase milk production and have more replacements available to sell."

Having positioned the dairy as a biosecure source of natural service sires, the Pralles are positioning their dairy as a source of biosecure milk. "Consumers need to believe that the milk they drink is biosecure," Selz-Pralle stated. "It's a position that the entire dairy industry needs to take."

Selz-Pralle added, "Today's marketplace issue is BSE. Tomorrow it may be Crohn's Disease. When McDonald's or Kraft tell their wholesale houses they want milk from Johne's-test-negative farms, we'll be ready to capitalize on that opportunity." ■

Selz-Pralle's requirements for purchasing females

- Negative Johne's ELISA test
- Test negative for PI-BVD
- Negative mycoplasma bulk tank test
- Sustain low SCC
- Low level of contagious mastitis
- Interview vet(s) regarding health status and management practices (a routine practice in the swine and poultry industries)

Health testing advantages

- Insurance – one infection can reduce the herd's value and cripple what years of hard work took to achieve.
- Awareness – knowing your herd's status, probable causes and corrective measures will help you fine-tune your herd health program.
- Protocols – maintaining healthy protocols increases profitability and deters other bacterial and/or viral transmissions.

Selz-Pralle Dairy cows calve in a clean, dry and draft-free pen.