

Lessons Learned from the Montana BVD-PI Herd Screening Project

By Clint Peck

As summer winds down we're evaluating the first phase of the Montana BVD-PI Herd Screening Project and looking ahead to fall activities. The focus of the project is to investigate the role of screening cattle herds for animals persistently infected (PI) with the bovine viral diarrhea (BVD) virus.

The objective is to improve the overall health of Montana's cow herd and add value to the state's calf crop. The PI project managers are Dr. John Paterson, Bozeman, Montana State University Extension beef specialist, and Clint Peck, Billings, senior editor of BEEF magazine and advisor to the Montana BQA program.

API as a Collaborator

Project collaborators include Animal Profiling International, which conducts all testing an analysis of ear notch samples and returns test results to project participants. API was selected as the contract laboratory after submitting bids to several labs in the U.S.

Their selection criteria included:

- Cost of testing.
- Turnaround time.
- Availability of technical assistance.

The selection of API as the contract lab could not have worked out better for this project. Cost of testing is competitive with any other lab in the country. And, "next business day" turn-around time for screening results has been as promised. Rapid return of test results is critical to ranchers and the management of their herds – whether they have PI animals or not.

Third, the availability of Dr. Bruce Hoffman for technical assistance has been invaluable. He's been especially valuable in helping educate and inform us as program managers, as well as individual participants about BVD and the PI process.

Results to Date

By late August 2006 more than 30,000 head of cattle from about 55 Montana ranches had been screened for BVD PI status through the project. Of these 77% were calves, 20% replacement heifers and the rest were bulls and mature cows. Of the cattle tested, 23 head were PIs. And, PIs were found on only 3 ranches.

While this is good news, we suspect there are more PI cattle out there that need to be found and eliminated from Montana cattle herds.

Also, we're not recommending perpetual testing for PIs from a cow-calf management standpoint. We're saying that once a rancher screens his herd according to our protocol (whole herd screening), that there can be *reasonable assurances* of PI-free cattle with the following management:

- A vaccination protocol using modified-live vaccines.
- A sound biosecurity program.
- Testing any new additions to the herd.

Tim and Kristin Larson of Sidney, Mont., are ranchers and cattle buyers working to help promote the idea of PI screening. Kristin is also a member of the board of directors of the Montana Stockgrowers Association, a co-sponsor of the project with MSU.

Kristin says she's seeing interest from order buyers and cattle feeders around the region who want to locate herds that are PI free. She sees PI screening as a concept that could develop into an added-value market for ranchers who participate in a screening program.

Justifications for Screening

There may be justification on a herd-by-herd basis for testing calves from younger cows (2s & 3s) if there are minor breaches in biosecurity (fence line contact or the neighbor's bull getting in) or a rancher suspects he could be at risk for other reasons (suspect vaccination efficacy, in-common grazing situations, unusual sickness rates, etc). These younger cows, even with vaccination, might simply have not achieved enough immunity to BVD to adequately protect them from the virus.

Of course, aborted fetuses, dead calves, deformed calves, heifers that won't breed or stay bred, or other suspect cattle should be tested routinely unless cause of death is known.

But that said, there are cattle feeders screening all calves coming into their feedyards. Some are asking ranchers to screen their herds before shipping. In fact, we just entered a ranch into our project that was encouraged by his feeder to screen about 900 calves before shipping next month.

We've also seen Montana PI project calves show up on the Superior Livestock Auction video sale listings and website as being "PI" screened. We expect more post-weaning screening activity as the fall progresses.

We had a very telling comment from a consulting feedyard vet who would like to see more calves screened for PI status prior to shipping. In fact, he's working for one feedyard client who wants to seek out more PI-screened cattle.

In 2005 the vet's client purchased 4,000 head of calves purchased out of a Montana sale barn through an order buyer. The feedlot owner ended up with 19 head out of the 4,000 head as confirmed PI.

Here's what the vet had to say:

"Last year BVD had a very heavy impact on the performance and health of this feedlot as it immunosuppressed a large number of cattle and caused a Salmonella break that lasted 45 days not to mention decreased performance," says Ben Wileman, DVM, Belle Fourche, SD. "Suffice it to say that the owner is extremely interested in testing or buying already tested calves this year to avoid as best as possible what happened last year."