

Welcome to the Age of Ranch Biosecurity

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Quality control is an important part of everyday business. Certainly livestock production and meat animal food production is not resistant to the perquisites of quality control. Managing the quality of the end-products meat animals yield and protecting their health are two separate but related ranch production issues. When properly addressed and tailored to the operation's goals and objectives, health management and quality management can result in, 1) reduced costs and minimized risk, and, 2) improved price and premium opportunities.

The reality in today's beef management world is if a producer doesn't manage for "quality" –at some level and to some degree–there's little hope for price premiums or, more apt in today's ever-changing cattle marketing environment –there's a chance for significant, if not severe, price discounts. Comments made by Dr. Gary Smith, Colorado State University meats scientist, and arguably the world's foremost authority on beef supply chain management, when he visited Montana last spring underscore the link between animal health and beef quality management programs.

"Each time you treat an animal for a sickness in a feedyard, you run the risk of losing a quality grade and a tenderness score," Smith says.

He puts it even more succinctly.

"If you're going to sell commodity cattle, you'd better expect to receive commodity prices."

Therefore, increasingly, ranchers are adopting standard operating procedures (SOP) and good management practices (GMP) to help reduce the many variables that exist in the ranching environment. Many of these practices and procedures are aimed directly at adding value

and/or reducing the chance of discounts down the road.

Using these principles, ranchers can also help the overall beef industry by alleviating concerns over food wholesomeness and safety. It's critical that the consuming public know the beef they eat is safe, wholesome and can be a nutritious and healthy component of their diet. From ranch to retailer, and even when product is handed off to the next link in the chain, there is no reason or excuse not to make quality control measures a part of your everyday ranching activities.

HACCP Gone Beef

Beef Quality Assurance (BQA) programs are not new. The concept was born in 1982 on a national scale by beef producers aiming to address the government's concern for an organized approach to avoid violative residues in food. At its inception beef had the lowest residue rate of all red meats—well below government targets for other foods. That low residue rate has even gotten lower and is literally non-existent in finished fed beef today.

Because the majority of beef is still raised in this country by small independent producers in a vast variety of environmental climates, the BQA program has been modified and adapted to meet the needs of a wide range of production and marketing circumstances. In Montana and elsewhere, the principles of BQA are the same as those developed by Pillsbury for the quality control program they developed for supplying food to the NASA space program. Their program, the Hazard Analysis, Critical Control Point program (HACCP), gained USDA acceptance and is presently the dominant outline for quality assurance programs in processed foods.

In addition, all federally and state inspected meat packing plants in the U.S. have developed HACCP programs. **All foreign plants** exporting beef to the U.S. – and to their other international customers – must have HACCP or HACCP-type programs in place in order to maintain their export certification. All plants, domestic or otherwise, are subject to unannounced premises inspection, including documentation of all production procedures.

Accountability and Traceability

Whether you call it BQA or HACCP, at the ranch level, quality assurance means figuring out what could go wrong (when, where and how), plan to avoid it and document what you have done. The stark reality of today's food production business, including the cattle business, is that producers are being held accountable for what they grow and put into the marketplace. And, it's no longer acceptable to just "say so." You have to prove it.

Processors, retailers and foodservice companies are putting pressure on their supply chain managers to have quality assurance or HACCP systems in place. This demand that originates with the consumer extends to the agricultural operation and even back through farm and ranch suppliers. But, the additional step that's being asked more and more of our industry is validation or verification.

And, understand that the business of traceability does not have to be rocket science. It's been demonstrated time and again here in Montana that our brand system can be an excellent and acceptable vehicle for group-lot traceability. Many ranchers though, are taking the initiative and getting relatively high-tech with their traceability systems.

It's understandable that ranchers are concerned about the complexity of developing site-specific quality control plans, the paperwork (or computer work) required to maintain the system, and the need for a third-party audit to verify its effective-

ness. More often than not, here and around the country, we see market-driven application of ID systems becoming the rule rather than the exception. Today it's up to the individual to decide just when and how far to get their traceability oars into the water.

New Paradigms in BQA

In addition, the HACCP approach used adjunct to BQA programs has great potential in the security and biosecurity concerns of livestock operations. A central objective in the HACCP system is to prevent, eliminate or reduce to an acceptable level a production practice that will negatively impact profitability and end-product quality. In livestock management terms, genetics/reproduction, nutrition, health/well being and animal handling are all areas where HACCP can be applied to improve profitability and quality.

From a health management standpoint, breaches in biosecurity are often the root of livestock disease and infection. Applied biosecurity management and practices can prevent, minimize and/or control cross-contamination of body fluids (feces, urine, saliva, etc.) between animals, animals to feed and animals to equipment that may directly or indirectly contacts animals. Biosecurity means preventing the spread of disease by minimizing the movement of biologic organisms (viruses, bacteria, rodents, etc.) onto and within an operation.

But biosecurity can be very difficult to maintain because the interrelationships between management, biologic organisms and biosecurity are very complex, points out Dee Griffin, veterinarian with the University of Nebraska-Lincoln Great Plains Veterinary Educational Center. While developing and maintaining biosecurity is difficult, it is the cheapest, most effective means of disease control available and no disease prevention program will work without it.

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Therefore, beyond and in addition to the traditional BQA efforts, a focus of the Montana BQA program, from here forward will be on programs designed to demonstrate how biosecurity-security can be applied to meet the specific needs of Montana livestock operations, adjusted to the different ages of cattle handled or targeted diseases.

Speaking of which... the BVD-PI Screening Project

The Montana BVD-PI Herd Screening Project is being initiated to investigate the role of BVD PI screening in improving the overall health of Montana's cow herd and adding value to the state's calf crop. The project is one example of a "management-over- medicine" approach to the lessons being taught by Drs. Smith and Griffin. At press time, and about half-way through the first year's spring-phase of the project, managers and participants were facing a "good news, bad news"

scenario indicating how important biosecurity is to preventing BVD and the "production" of persistently infected calves.

It appears there will be 25,000-30,000 bulls, heifers and new crop calves screened by the end of the 2006 traditional branding period. We expect another 10,000 head of calves to be screened by mid-fall. Preliminary reports of the project will be available by mid-summer, with release of the first year results in December.

The project is designed to:

- Gauge the prevalence of BVD PI in the state.
- Demonstrate innovative screening/diagnostic techniques.
- Investigate the economics of BVD PI elimination on a herd-by-herd basis.

If you're interested in learning more about the project, please call John Paterson at 406-994-5562.