

Managing Herd Health When Times are Bad...or Good

Veterinarian recommends producers implement health practices when they will deliver maximum benefit, not based on convenience.

by Troy Smith



Most agricultural economists say key indicators suggest better times ahead for people in the cow business. Declining U.S. cattle numbers mean more limited beef supplies, which should push beef and cattle prices higher. Complicating things is this worldwide economic recession, which has dampened demand for beef domestically and in foreign markets. But now the pundits claim the recession is starting to turn around. When it does, fundamental economics ought to work again, in favor of beef producers.



Cow people are ready for better times. For many, profitability has been an increasingly challenging pursuit. Even when cattle prices were higher, producers watched much of their revenue go toward higher production costs. Fuel, feed and fertilizer prices soared. Land costs, including pasture rental rates and real estate taxes, kept climbing. And for several years now, drought has severely reduced forage production in various parts of the country, putting another obstacle in the path toward profitability.

Pressured to tighten their belts, plenty of producers have looked for ways to improve efficiency. They're scrutinizing expenditures more carefully and looking for opportunities to trim production costs. Cutting unnecessary expenses is wise at any time, but some folks tend to avoid buckling down to do it until survival of their business is in jeopardy. When looking for ways to cut costs, producers often focus on feed, which can account for 70-80% of a cow-calf operation's total expenditures. They might also look hard for ways to trim expenses associated with an animal health program.

Some producers probably could cut some waste from their health management programs. Others might realize much benefit from upgrading their practices. There is, however, no such thing as a one-size-fits-all herd health protocol. It's largely a matter of managing risk. And the risks associated with animal disease and parasites vary among herds for a lot of reasons, including differences in location, climate and management goals. Consequently, it's appropriate for managers of different operations to implement different practices.

To illustrate the point, consider a couple of family operations in Oklahoma. Both Langford Herefords, near Okmulgee, and Jacobs Ranch, near Sulphur,

depend heavily on native range dominated by tall grass species, and the average annual precipitation at both locations is similar — about 40 inches (in.) per year. Both operations consult with local veterinarians on matters of animal health, but they take very different, customized approaches to managing herd health.

"My granddad and my dad always told me you can't starve a profit out of a cow," says Watson Langford, who partners with parents, Leon and Suzy, in their registered seedstock operation. "I'd say the same logic applies to a health program. It's not a place where I'm willing to skimp. Cutting corners could cost us a lot more money later on."

Langford says health practices applied to their 400 registered cows and each year's calf crop emphasize disease prevention, to minimize treatment costs and losses associated with compromised performance and deaths.

For breeding females, Langford explains, it's all about helping enhance reproductive performance and the passive disease immunity delivered to calves through colostrum. Prior to the spring breeding season, the regimen includes vaccinations for viral respiratory diseases, including infectious bovine rhinotracheitis (IBR) and bovine viral diarrhea (BVD), which can contribute to embryonic death and abortion. Langford also vaccinates against vibriosis and leptospirosis, diseases that also threaten pregnancy. Vitamin injections and dewormer also are administered prior to breeding. When females are pregnancy tested, deworming is repeated and a leptospirosis booster is given.

Langford says the area's relatively high rainfall, and an abundance of standing water poses an increased risk of exposure to leptospirosis. Anaplasmosis, spread by ticks, flies and mosquitoes, also can be a problem in the region, so chorotetracycline (antibiotic) delivered through a mineral supplement to battle infection during the insect season. Vaccination against anaplasmosis has also been used on an experimental basis.

Calf vaccinations initiated at branding, when calves are about 3 months of age, include blackleg and other clostridial



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diseases (7-way), the viral respiratory diseases mentioned earlier and pinkeye. Calves are dewormed at branding and again at weaning when another round of 7-way and viral vaccinations are given. Booster vaccinations are given to calves three weeks after weaning. Heifer calves also receive leptospirosis vaccinations at weaning and a subsequent booster shot. From there, replacement heifers fall under the same routine as the cows and are processed pre-breeding and again when pregnancy tested.

“It’s a pretty extensive program and it’s not cheap,” Langford says. “But I’d much rather spend a little up front, on prevention, than have high treatment costs and losses later.”

As with most registered seedstock operations, investment in sought-after genetics and technologies, including artificial insemination (AI) and embryo transfer (ET), means individual animals represent considerable potential value. Failure to realize that potential, due to hampered performance or death, represents considerable loss.

“On this place, a decent bull calf is going to be worth around \$2,500. That amount of money would pay for a lot of vaccine,” Langford says.

Jason Jacobs says he doesn’t want to underestimate potential health challenges. He believes a “good” vaccination program addresses significant challenges, but is affordable. Along with his father, Bill, Jacobs manages a commercial herd of about 1,000 Hereford-Angus crossbred cows. Their calves are sold at weaning.

“I think you can over-spend for products you may not need and do things that you won’t get paid for,” Jacobs offers. “I think you have to weigh the risk — the potential for loss — and that’s different for everybody. You determine if, for every dollar you spend, you’re going to get that dollar and more back.”

Jacobs says the costs associated with time and labor, as well as products, have to be considered when implementing a practical health program. As a result Jacobs Ranch currently applies a protocol requiring mature cows to be processed only once per year, when pregnancy testing occurs. Calves too are vaccinated only once, at branding time.

The exceptions are heifers retained as replacements, which are dewormed and vaccinated a second time, at weaning, for clostridial and viral respiratory diseases. Heifers aren’t touched again until they enter the herd with a calf at side. Then, they receive injectable dewormer and vaccinations against vibriosis and leptospirosis annually, when examined for pregnancy. The

cows are actually dewormed in both spring and fall, with an injectable product while in the chute and once with an oral product delivered through a mineral supplement.

“Our biggest concern is with diseases that interfere with conception and delivery of a live calf,” Jacobs explains. “We want to build a good foundation in the first-calf heifers, but we believe lepto and vibrio pose the most significant risks to reproduction in mature cows.”

Interestingly, however, the younger Jacobs also runs another group of his own cows separately from the Jacobs Ranch herd. For that set of cows, the health program is more extensive and they visit the processing chute more often.

“The health program is different because they are managed with different goals in mind,” Jacobs explains. “Jacobs Ranch raises all of its own replacements and is not expanding. The other herd is still growing, with a high rate of replacement. Artificial insemination is applied intensively and there is a considerable difference in the value, per head, of females in the different herds. The risks are different.”



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The Jacobs and Langford operations are cited here only as examples of how different producers must adopt health programs that fit their circumstances. Texas AgriLife Extension Veterinarian Buddy Faries advises producers to take advantage of their veterinarian’s expertise when evaluating risk and determining which health management practices will benefit their individual operations. Together, they can focus on practices that will be cost-effective.

“A practice is cost-effective if it prevents losses greater than its cost, or if the producer gets paid for it through increased animal performance or marketability,” Faries says. “But not all practices are cost-effective in every situation.”

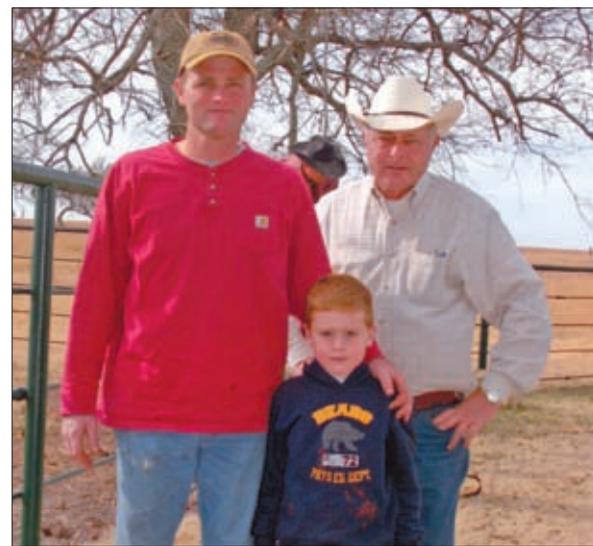
For example, Faries says disease and parasite challenges common to areas of high precipitation may pose little risk in arid regions. Stocking density influences relative risk too. Cattle dispersed thinly over large areas are less likely to transmit infections to one another, than

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on more densely populated operations. In a closed herd, or one where only virgin replacement animals are introduced, there is no opportunity for the spread of sexually transmitted disease, like vibriosis or trichomoniasis. Well, there is no opportunity as long as the producer’s cattle and those belonging to neighbors stay on their respective side of the fence.

Even when vaccination against certain diseases or parasite control is determined to be cost-effective for a given operation, the producer wastes time and money when doing the



Three generations of Jacobs family: Jason, John West and Bill.

tasks generally depends on a producer’s calving season. Relative to when calving occurs, management practices can be scheduled for pre-calving, during the calving season, post-calving, pre-breeding, during the breeding season, at weaning time or whenever implementation is most beneficial.

Faries also emphasizes the role proper nutrition plays in managing herd health. If nutritional status is not up to snuff, vaccination programs will be less effective and cattle are less likely to mount an adequate immune response to vaccination. Faries says minerals are particularly important to proper immune function.

“The presence of calcium and phosphorus, in the right ratio, is really important. Supplementation of those and other minerals is usually needed on most ranches. It depends on the levels present in the feed and water. Only through analysis can a producer know if key elements are lacking and should be supplemented,” Faries explains.

When times are tough and even when they are pretty good, Faries advises producers to remember that changes in weather patterns, forage resources and management or marketing practices can influence a health program. He recommends good recordkeeping and working with a trusted veterinarian to regularly evaluate health risks and their potential economic impact. Some health management practices may always be cost-effective, while others may not.

“I don’t think a producer can lock in a program and just do the same things year after year. Risks vary and so will the economic benefits of vaccinating against certain diseases or controlling internal and external parasites. Things change and you have to change with them,” Faries says. “You’re wasting your money if you’re doing things that aren’t cost-effective, or doing them at the wrong time. Do the right things, for your individual operation, and do them at the right time.” **HW**