Vet Call

► by **Bob Larson,** *Kansas State University*

Commitment to excellence in herd health

Beef producers have many demands on their time and attention. One of those demands is to achieve excellent health for their herd. In general, cattle are very tough and can remain healthy in a wide variety of environments and when under a variety of stresses. However, young calves, cows around the time of calving, and cows and their fetuses in the early stages of pregnancy are more at-risk for experiencing health problems than cattle of other ages. In addition, individuals or herds that have to deal with more than one problem at the same time can have severe health problems.

Focus on husbandry

In my opinion, the secret to excellence in herd health is to focus on time-tested aspects of animal husbandry while utilizing some aspects of more modern technology.

The term "animal husbandry" may have gone out of favor in some circles, but it describes the care and feeding of livestock based on good observation skills and a daily commitment to the health and welfare of the animals. Focusing on maintaining good forage availability, good body condition of cattle and a clean environment that allows for protection from severe weather and predators are long-standing attributes of the best cattle producers.

In the past century, additional tools have become available to help improve cattle health. These include advancements in forage management, feed evaluation, internal and external parasite control, vaccines for disease prevention and control, tests for the identification of cattle carrying contagious organisms, and genetic selection to reduce the risk of calving difficulty and other common problems. Combining these modern technologies with age-old husbandry skills allows today's beef producers to achieve a level of health for their cattle herds that was not possible in the past.

Forage foundation

Good herd nutrition is built on the foundation of good forage production and management. Abundant green, growing grass is a fantastic feed that usually results in excellent health of grazing cattle. Cattle can use a wide variety of plants for a healthy diet, but if drought or overstocking reduces the amount of forage that cattle can consume, health problems are likely to follow.

All forages are deficient in salt, and providing salt throughout the year is necessary in all parts of the United States. Other minerals are also needed in cattle diets, but in many areas the available forages provide all or most of a herd's other mineral needs. In areas or pastures with known mineral deficiencies, specific minerals such as phosphorus, copper, zinc, selenium or other minerals will need to be supplied.

During the winter or other times of the year when forage is dormant, protein and other nutrients may need to be supplemented to ensure that the herd is receiving an adequate diet to maintain body weight and optimum health. Research at universities and other locations during the past several decades has provided nutritionists and veterinarians with valuable information and tools to balance forage-based diets for cattle at different stages of production, such as growth, pregnancy and lactation.

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In addition to a commitment to provide adequate forage and supplements, the other aspect of animal husbandry excellence that has been passed down through the ages is to provide an environment that is clean and gives protection from weather and other stresses. Because cattle are housed outdoors, the natural occurrences of dust and mud are not completely avoidable; but, throughout time, the best animal caretakers provided excellent environments for their cattle given the rainfall, snowstorms and other weather events that are common for their area.

Environmental focus

The best mud-control strategy for cattle on pasture is to make sure that cattle spread out and do not congregate in an area where the combination of rainwater or snowmelt and the hoof action of cattle result in deep mud. The amount of space needed to minimize the risk of problems due to mud will depend on the expected rainfall patterns for an area. Making sure that shelter and water, salt and feed sources are spread to various parts of a pasture will keep cattle from spending too much time as a group in a small area.

Mud-control strategies for cattle that are housed in drylots include good design and construction of pens to allow water drainage, and frequent scraping to maintain a good pen surface. In areas of the country that can experience severe winter storms, cattle need to be able to find natural or man-made windbreaks and to have access to areas with good drainage that are free of standing water and mud.

One of the greatest advancements for cattle and cattle producers that modern technology has provided has been in the area of parasite control. Throughout history, worms (or internal parasites) and flies and other insects have caused tremendous discomfort, disease risk and production loss for cattle. Appropriate use of chemicals to interfere with the life cycles of parasites allows cattle producers to remove much of the negative effect of these pests. Because parasites are very numerous and have the ability to adapt to changing environments and risks, they continue to cause health and production problems.

Internal parasites cause more severe problems in young cattle and in cattle that live in warmer parts of the country that have larger parasite populations because they lack the benefit of killing winter temperatures. By working closely with a veterinarian, cattle producers can implement strategies to control parasites for the short term while making sure they don't contribute to the development of pests that resist chemical control.

The knowledge and technologies that

make accurate expected progeny differences (EPDs) possible provide a tremendous benefit to cattle producers by giving them tools to reduce the risk of calving difficulty. The period of time with the greatest risk for both calves and their dams is at and shortly after calving.

Difficult births cause direct problems for both the dam and the calf. Even if a calf survives a difficult birth, the stress of that event and reduced colostrum intake combine to increase its risk of death due to scours, navel ill or pneumonia during the first few months of life. Through good bull selection and heifer selection and development, modern beef producers have tools to reduce the risk of difficult calving that earlier generations would envy.

Finally, an overarching strategy to achieve excellence in herd health includes using vaccines to reduce the risk and severity of some important cattle diseases, and antibiotics and other modern drugs to treat illnesses and injuries that affect cattle. These advancements in disease treatment and prevention options are valuable, but they must be used correctly and as enhancements and not replacements for good cattle husbandry.

Following Beef Quality Assurance (BQA) guidelines to ensure that all products are administered using the proper injection sites, injection routes (under the skin, in the muscle, into the vein, etc.), and dosages and withdrawal times is a critical step when beef producers commit to excellence in herd health.

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