



Vet Call

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

Animal welfare

Ensuring that your cattle are healthy, well-fed and well cared for, especially during times of inclement weather, are the foundations for good animal welfare. Fortunately, these goals also aid in high productivity and reduced disease risk. From my viewpoint as a veterinarian, I believe the most important management tools to protect cattle welfare are nutrition, sanitation, parasite control, biosecurity and vaccination.

Nutrition

One of the “Five Freedoms” that is sometimes used as a gauge for animal welfare is “freedom from thirst, hunger and malnutrition.” While details such as how long cattle can be without access to food or water without being a welfare problem are a matter of differing opinions, the concept that cattle need an adequate diet is widely accepted. Poor forage growth due to drought or inadequate forage production for the grazing pressure in the case of overstocking can cause inadequate energy intake and poor body condition of cow herds.

Diets based on dormant forages and harvested forages may need supplemental protein or energy depending on the quality of the base forage and the production status of the cattle. Monitoring body condition of mature cattle and rate of weight gain for growing animals are good measurements to indicate whether or not cattle are receiving an adequate diet.

Periods of weather stress, including storms, droughts and catastrophes, are critical times to evaluate body condition and weight to ensure that cattle are receiving enough energy and protein in their diets to maintain good health, as well as good welfare. In addition, any time that cattle are consuming dormant or harvested forages, body condition and weight should be monitored because the base forage for these diets is less likely to provide all the needed nutrients compared to diets based on green, growing forage.

Sanitation

A clean environment is usually not a problem for grazing adult bulls and cows; however, housing calves in pastures, as well as housing any cattle in drylots can lead to levels of mud that contribute to disease risk. Calves are most susceptible to scours the first three weeks of their lives and being exposed to



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mud and excessive manure during this time of their lives can lead to serious outbreaks of scours.

Adults are more resistant to scours, but wet, muddy conditions can contribute to many different types of disease. Dispersing calves over a wide area on grass rather than dirt and using age-segregation strategies, such as the Sandhills Calving System, will maintain a sanitary environment for young calves. Use of mounds, frequent scraping, concrete, rock and bedding when appropriate based on rainfall, animal density and other factors will allow good sanitation for cattle housed on dirt-floor pens.

Disease control

An important animal-welfare role for veterinarians on cattle operations is to develop herd-specific strategies to reduce the risk of disease due to viruses, bacteria and parasites. Your veterinarian can help you reduce the risk of importing disease agents with herd replacements or from contact with neighboring cattle herds or wildlife by using disease testing and isolation of new cattle, as well as vaccinations.

Although we do not have effective vaccines for all the important cattle diseases, a well-designed program to increase herd immunity at specific times of the year will greatly reduce the risk of serious disease outbreaks. In order for vaccines to be the most effective, they must be handled properly and administered at the optimum times of the production cycle. Because vaccination alone is not able

to completely protect cattle from disease, these products must be part of an overall strategy to provide adequate nutrition, good sanitation and parasite control.

Both internal parasites (worms) and external parasites such as flies and lice can carry disease agents, as well as cause weight loss, animal discomfort and welfare concerns. It is important to work with your veterinarian to develop a strategy to use deworming and fly-control products, pasture management, and other tools to minimize the damage that these parasites can inflict on a herd. Because parasites can become resistant to chemical tools for control, these products must be used wisely and in conjunction with other management tools.

Planning

Nearly all ranches and feedlots provide good animal comfort and well-being in most situations, but any cattle operation can find it difficult to maintain that high level of care when cattle are exposed to extreme or prolonged weather stress. It is important that every producer have a plan to provide adequate feed, water, shelter and disease control when situations are tough.

Heavy snow, prolonged rain, drought, tornadoes, hurricanes and other weather events can lead to reduced animal welfare to the point of seriously affecting health and life. It is the responsibility of every cattle producer to reduce the effects of these challenges as much as possible.

Excellent animal husbandry is important to all cattle producers because ensuring good nutrition, sanitation and health for cattle results in job satisfaction from properly caring for the animals with which we enjoy working, supports optimum production of the herd and confirms in consumers' minds that cattle producers are caring stewards of our livestock.

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