

# Neonatal Care

As the old adage says, an ounce of prevention is worth a pound of cure.



PHOTO BY SHAUNA ROSE HERMEL

by Barb Baylor Anderson

**M**any veterinarians would tend to agree that prevention is the best strategy, especially when it comes to neonatal care in the cow herd. From clean calving environments to cow-calf nutrition to preventive health care, Angus producers who follow a commonsense routine can enhance calving opportunities in the cow herd.

"The biggest problem with cow-calf operations in the Midwest is the calving environment and potential exposure to pathogens," says Dan Grooms, Extension veterinarian at Michigan State University, East Lansing. "We advise using calving pens or clean outdoor areas to get calves off on the right foot."

Grooms adjusts his calving environment recommendations based on the time of the year. During the winter when cows calve in barns, good ventilation is the key to preventing any problems with pneumonia, he says. In the spring, cows still can calve in the pens, as long as they are well-bedded between births and unsoiled. Once the snow

is gone, cows can calve outside in clean pastures, he adds, then mothers and babies can be moved to another pasture.

"The No. 1 thing that producers can do is provide a calving environment that is as stress-free as possible and consider calving in that environment during the least stressful season," says Jerry Stokka, Extension beef veterinarian at Kansas State University, Manhattan. "In Kansas I might recommend pushing calving from February or March to April or May."

Pastures that hold cows during the winter should not be used for calving, says Extension veterinarian Bob Larson, University of Missouri, Columbia. He recommends that producers establish a nursery pasture, free from mud, that can be used strictly for birthing. "Young calves should be kept from older calves," he says. "This can be accomplished by moving to a new nursery pasture every two weeks. Calves need to be segregated the first two months of their lives."



► Above: To minimize neonatal health problems, producers should provide a stress-free calving environment and consider calving during the least stressful season.

## Watch for breakdowns

Larson warns that a breakdown in sanitation can lead to viral and bacterial growth, which causes calf scours.

"Scours is very common in unclean environments," he says. "We also see septicemia cases develop, where bacteria get into the blood stream and infect the calf's whole system. The result is swollen joints, navel ill and pneumonia."

Producers should be alert to possible signs of septicemia and should not confuse the bacterial blood infection with scours, says Allen Roussel, associate department head, large animal medicine and surgery, at the Texas A&M University College of Veterinary Medicine, College Station.

"Septicemia usually occurs in the first two weeks of life and can be treated," he says. "If a healthy calf suddenly becomes lethargic or starts limping, get immediate attention from a veterinarian. You may think the cow stepped on the calf or kicked the calf, but it is likely septicemia that requires medical treatment."

Veterinarians recommend that such calving-environment decisions be made well in advance of calving time so producers can direct adequate attention to cow health during gestation, another primary neonatal care concern.

## Prep the dam

"One of the first things producers should do is evaluate whether the mothers in their herd are genetically capable of having calves with as little human intervention as possible," Stokka says. "Calving ease, fertility, mothering ability, and proper conformation of udders and teats are fundamental considerations before cows are bred."

Larson agrees that cows must be assessed for potential calving difficulty. "Dystocia can lead to calf death and also problems with colostrum transfer. Controlling birth is the best way to enhance colostrum intake," he says.

Also important to colostrum development is proper cow nutrition during gestation. Producers must maintain proper protein, energy and mineral rations because the nutrients are needed — especially during late gestation, Roussel says.

"Cows, especially heifers, on a suboptimal diet with low protein or energy levels will generally have weaker calves that are less vigorous at nursing. There is also not as much colostrum produced," Roussel says. "Producers sometimes fear that feeding heifers means that the heifers will deliver calves that are too big for them when, in reality, a good diet will allow the heifers to continue to grow and adequately handle the delivery of bigger calves."

Roussel also encourages producers to

check cow body condition scores (BCS) routinely during gestation to be sure no condition is lost. “Ensuring an appropriate cow diet helps prevent calf mortality,” he says. “Once born, colostrum management is vital to proper and healthy calf development.”

“The calf must nurse the cow for its lifeblood, and there can be no interference with that,” Stokka adds.

### **Prepare for problems**

Grooms advises producers not to assume that every calf will nurse. “You need to make sure young calves will nurse to protect themselves from disease,” he says. “Calves need two to four quarts of colostrum within

four hours of birth, so if the calf won’t nurse, have an alternative plan.”

Producers should obtain colostrum from mother cows when possible and keep a frozen supply. “Freeze colostrum from your herd or buy it from a dairy,” Grooms says.

If you purchase colostrum from a dairy operation, Roussel warns that it may contain fewer antibodies than colostrum from a beef herd. “You may have to feed twice as much to the calf to get proper protection,” he explains. “Also, if you have biosecurity concerns, the bacteria or viruses in the colostrum from dairy cows may cause infection in beef calves.”

Roussel advises producers to milk the

mother of any calf that can’t nurse and get at least one quart of colostrum. “Use an esophageal feeder to deliver the colostrum, because obviously these calves tend not to nurse too vigorously,” he says. “The feeder tube is safe to use as long as it is used according to directions.”

In addition to the protection offered by colostrum, veterinarians encourage producers to put a preventive disease program in place.

“Make decisions ahead of time, and have a vaccination program in place,” Stokka says. “If you follow all of the rest of these (neonatal care) steps and stay with the program, you can avoid most problems.”