## INFO SHEET Veterinary Services

## United States Department of Agriculture Animal and Plant Health Inspection Service May 1998

## Calving Management in Beef Cow-Calf Herds

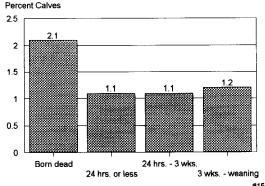
For a beef cow-calf producer to make money, cows and heifers need to become pregnant, deliver calves, provide maternal care, rebreed, and wean calves. Critical points in this progression are calving and the neonatal period (birth - 3 weeks).

The USDA's National Animal Health Monitoring System (NAHMS) collected data on calving management and morbidity and mortality of calves in a 1997 national study. The NAHMS Beef '97 Study included 2,713 producers from 23 of the leading cow-calf states<sup>1</sup>. This study represented 85.7 percent of U.S. beef cows on January 1, 1997, and 77.6 prcent of U.S. operations with beef cows.

Stillbirths and deaths of neonatal calves accounted for 4.3 percent of the 1996 calf crop (Figure 1). Minimizing these deaths can help improve a producer's profitability.

Nearly 14 percent of unweaned calf death losses in 1996 were directly related to calving problems (Figure 2). By focusing appropriate management on the calving period, producers can minimize calving death loss.

Figure 1 Calves Born Dead, Died, or Were Lost During 1996 as a Percent of Calves Born in 1996 by Age



Overall, 16.7 percent of heifers required calving assistance in 1996 (Figure 3). Most producers (55.7 percent) observed their calving heifers less than three times per day (Figure 4).

Figure 2 Percent of Calf Losses in 1996 by Perceived Cause

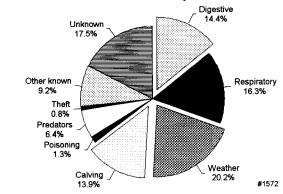


Figure 3 Percent of Females Requiring Various Levels of Assistance During Calving

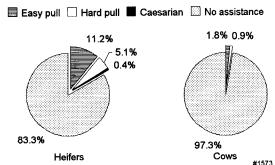
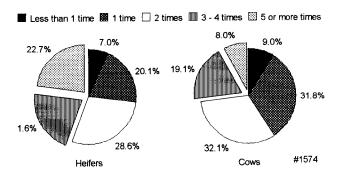


Figure 4
Percent of Operations by Number of Times Females
Were Observed Per Day When Calving

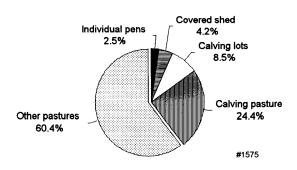


<sup>&</sup>lt;sup>1</sup> Alabama, Arkansas, California, Colorado, Florida, Georgia, Illinois, Iowa, Kansas, Kentucky, Mississippi, Missouri, Montana, Nebraska, New Mexico, North Dakota, Oklahoma, Oregon, South Dakota, Tennessee, Texas, Virginia, and Wyoming.

Many producers may not have had the opportunity to observe their calving females as often as they would have liked. Overall, 60.4 percent of females were calved in pastures that did not allow for improved observation (Figure 5). Management changes that allow for better observation of calving females may be beneficial.

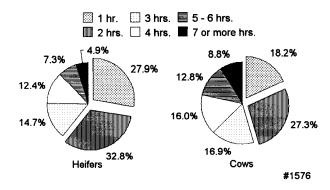
Figure 5

Percent of Calvings by Calving Location



Most health experts recommend that heifers and cows should be given assistance if they are in active labor for over 2 hours. To do this, females must be observed on a frequent basis and assistance given when needed. Almost 40 percent of operations allowed heifers to be in labor for over 2 hours before intervening (Figure 6). By assisting these heifers earlier, the producer has a greater chance of obtaining a live calf that will survive to weaning.

Figure 6
Percent of Operations by Number of Hours Females
Were in Labor Before Given Assistance



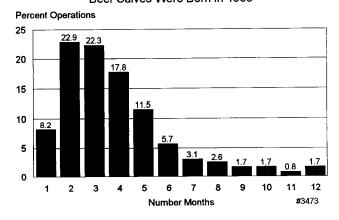
Besides the immediate risk of death from dystocia (difficult birth), calves that experienced a traumatic birth are slower to stand and nurse. Calves that do not consume colostrum right away are more susceptible to diseases such as diarrhea or pneumonia. Research has shown that these calves may lag behind their peers all the way through the feedlot phase of production<sup>2</sup>. These effects are usually due to increased incidence of disease and a decreased rate of gain.

Dystocia is not the only reason for neonatal calf losses. The number one cause of death loss in calves in 1996 was adverse weather (20.2 percent, Figure 2). One option to minimize weather losses is to change the calving season to a time when the possibility of severe weather is decreased. Besides avoiding storms, some producers can also take advantage of grazing forages by changing their calving season to match the growing season. This change will allow cow-calf pairs to spread out, thereby decreasing the incidence of some communicable diseases. Losses due to digestive diseases (14.4 percent) were also a significant problem for calves. By dispersing pairs on pasture sooner, transmission of these diseases can be decreased.

Most producers (53.6 percent) were unable to manipulate their calving season because they did not have a set breeding season. A defined breeding season also allows control of the length of calving. Over 46 percent of producers had some calves born in four or more months during the year (Figure 7). Narrowing the calving season decreases the time required for calving observation and assistance. This decrease allows the producer to give the calving females the attention they need and still not neglect the rest of the operation.

Figure 7

Percent of Operations by Number of Months in Which
Beef Calves Were Born in 1996



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<sup>&</sup>lt;sup>2</sup> Wittum TE, Perino LJ. 1995. Passive immune status of postpartum hour 24 and long-term health and performance of calves. American Journal of Veterinary Research, 56(9): 1149-1154.