

# Vet Call

## Preparing for the Calving Season

Few things in the cattle business generate more enthusiasm than the anticipation of the next calf crop. A great deal of time, effort, management and money goes into providing that next calf the opportunity to full express its potential.

Studies show that difficult delivery calves are four times more likely to die than normal delivery calves. It's also been documented that three times as many calves die during the first week of life than during the second week through weaning.

Adequate planning for animal care, supplies, equipment, facilities and personnel training prior to the delivery of the first calf will aid in optimizing your calf survival.

### Animal care

Calving involves the well-being of two individuals: the calf and the dam. Calving goals for the dam involve not only the delivery of the offspring, but nourishment of the calf and ability to rebreed within 83 days. Calving goals for the calf are to survive the calving process and to optimize growth and vigor.

The importance of dam nutrition, pre-calving and post-calving, has been well established. All females should be fed to calve in a body condition score of 5 or 6 (1-9 scoring system with a 6 being smooth in appearance, some fat over the tailhead, and the ribs and backbone not visible). First calf heifers and older cows should probably be gaining 0.5 to 0.75 pounds per day after calving.

Adjusting feeding schedules to optimize daylight deliveries should be considered. Feeding once a day in the late afternoon for at least three weeks prior to calving enhances the number of deliveries born during daylight hours.

Make an assessment of previous calving seasons disease problems. Preventing metabolic disorders in the cow, such as grass tetany, is preferable to treatment.

If infectious disease problems, such as E.Coli scours, have hit your calves consider a pre-calving vaccination for your cow herd. Many of these vaccinations may require two injections, six and three weeks before calving; one dose if previously immunized.

Vaccines are best used by following the manufacturer's specific directions. Remember, vaccines are a management tool to deal with disease. They do not guarantee the total elimination of disease. Your local veterinarian is the best source of advice, as he or she is familiar with your

conditions and concerns.

It is wise to avoid unnecessary handling of pregnant females within two weeks of calving. Excess stress may initiate an early delivery. Don't move brood cows, particularly first-calf heifers, to other locations within 30 days of delivery. Residing at the same maternity site for at least 30 days exposes cows to environmental organisms, which enhance the quality of the colostrum for their calves.

### Supplies

1. Iodine. The first item to reach for following natural delivery of a live calf is tincture of iodine. Apply it (2 or 7 percent), at least once, as soon after birth as possible. Apply it within the membranous covering of the umbilical vessels instead of on the outside. Care should be taken to avoid forcing fluid above the hairline, particularly with 7 percent iodine tincture. Excessive tissue reaction may occur. Avoid calf skin contact.

2. Colostrum. Colostrum should be given to those calves not vigorous enough to nurse their dams adequately in the first six hours of life. Logically, the prime source is the dam herself. If sufficient quantity (1-2 quarts) is lacking, however, have some frozen colostrum on hand. The best source is from another cow in the herd; next best, a local dairy. Freeze it in 1 pint or 1 quart plastic bottles.

3. Lubrication for calving assistance. Items that can be used include: carboxymethylcellulose, J-lube, petrolatum, K-Y or sterile lubricating jelly, Crisco solid shortening, or slurries of Dreft or Ivory Snow Flakes in water.

The ability to lubricate the birth canal is important, but the ability to clean the premises and the person(s) providing assistance should also be considered.

Other items to keep on hand adequate water source, preferably warm; soaps to cleanse the vulva area (dishwashing liquids, povidone-iodine scrubs or other disinfecting scrubs); plastic sleeves; medications and injectables (stored properly and not expired); and syringes and needles.

Breeders with recordkeeping requirements should have a supply of eag tags and/or tattoo ink.

### Equipment

No matter how complete your calving assistance equipment list is, the first prerequisite is the equipment should be **clean**. If it's been hanging in the barn or stuffed in a cupboard or drawer uncovered for several months, by all means, wash

and dry it thoroughly with a disinfecting soap. Alternative: wash with dishwashing liquid and soak or rinse with Clorox before final rinsing with water and drying.

Applying traction to deliver a calf is frequently performed with obstetrical chains of varying lengths. If these are broken or rusted, replace them with newer chains. A light coating of mineral oil after each use, heat drying, and an adequate storage container can prolong their usefulness. Check chain handles, as well.

Alternatives: Nylon obstetrical straps or cotton clothesline. Any non-metal material will require more care in disinfecting between calf deliveries. Keep several on hand.

A fetal head snare and fetal extractor (calf puller or jack) are also useful equipment. Take time to learn their function and proper use before the new calving season starts.

Additional equipment to keep on hand: calf-feeding bottle with a nipple; esophageal feeder to administer colostrum to calf; dispenser bottle for iodine (with a secure, leak-proof cap); hair clippers with sharpened blades (in case of Caesarean delivery); and an adjustable rope halter to restrain dam. Tip: be sure to tie animal low to ground, as she may lay down during assistance.

### Facilities

For the calf, dam and attendant providing assistance at calving, shelter from the elements is most desirable. A clean, dry and draft-free shelter reduces stress. Choose not only a clean maternity area, but one that can be cleaned following delivery (at least change of bedding).

Avoid the squeeze chute. The worst of all scenarios for performing obstetrical maneuvers is in a squeeze chute. Any force applied at delivery will encourage the cow to lay down. Once she is down in the chute, effective options for delivery are reduced. If the squeeze chute can't be popped open, or if the head catch can cause strangulation, life threatening situations may occur.

If a head catch is used, it should have straight sides all the way to the floor, or a quick head release in case the animal goes down. The sides of the chute should be designed to swing freely to either side with sufficient room to the sides and rear to allow three adults and a fetal extractor. Don't overlook installing overhead lighting.

A calving stall is ideal for isolating the pair to enhance bonding. It also provides

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the opportunity to observe the cow for placenta passage and to observe the calf for nursing vigor. Access to water and hay and/or grain is essential. Optimum confinement time is one to two days. Extending this confinement period may expose the calf to unnecessary disease.

#### **Personnel Training**

The importance of calving assistance training can't be over-emphasized. The best time for training is not always in the midst of a difficult delivery. Review the stages of labor, guidelines for intervention, tests for delivery, amount of traction, direction of pull, and proper aftercare of the dam and calf. It is all necessary for optimal survival.

Your best source and consultant for calving information is your local veterinarian. Call him or her today!

***This month's Vet Call column was written by David Morris, DVM, and Robert Mortimer, DVM, of Colorado State University's College of Veterinary Medicine & Biomedical Sciences, Fort Collins.***

## **Feeding Vitamin E Helps Retain Fresh Beef Color**

Researchers at the University of Wisconsin, Madison, say feeding cattle a supplement of vitamin E could be one way to maintain color stability in fresh beef at the retail level. The checkoff-funded research was published in a recent issue of the *Journal of Food Science*.

Results from the study showed that supplementing a ration with vitamin E stabilized the color pigments in the muscle, resulting in steaks that maintained red color longer than steaks from non-supplemented cattle.

In the study, muscle samples from 34 Holstein steers were utilized; 17 animals were fed rations supplemented with vitamin E, the other 17 were used as the control. Samples from both the experimental and control groups were observed to have a similar color following slaughter, but samples from the supplemented cattle maintained acceptable color for a longer period of time.

In related work, the researchers also found that vitamin E supplementation may also have possibilities in delaying the off-flavor development in pre-cooked meat. Steaks from supplemented animals possessed less of the oxidation compound that can lead to off-flavors in cooked meats.

"Color is one of the first ways consumers judge beef freshness at the retail meat case," said Bill Carmichael, chairman, beef product development subcommittee of the Meat Board. "If we can find ways of extending the visual appeal of fresh beef cuts, we'll increase sales opportunities and improve consumer perception of our products."

The study was partially funded by the Cattlemen's Beef Promotion and Research Board in cooperation with the Beef Industry Council of the Meat Board. Additional funding was also provided by the Wisconsin Beef Council.

## **Houston Livestock Show**

The 1990 Houston Livestock Show's open division will feature an extensive variety of shows and sales, highlighting some of the finest animal exhibits in the world.

A total of 21 different cattle shows will be featured during the Houston Show's first week of livestock competition, February 17-25. This first competitive week, called the open show, is generally devoted to animals shown by professional breeders and ranchers from throughout the world.

Scheduled for the open show division

of the upcoming Houston Livestock Show are the following cattle shows: **Angus**, Blonde d'Aquitaine, Braford, Brahman, Brahmousin, Bralers, Brangus, Charolais, Gelbvieh, Hereford, Limousin, Maine-Anjou, Polled Hereford, Red Brangus, Red Poll, Romagnola, Santa Gertrudis, Shorthorn, Simbrah, Simmental and Zebu.

The Braford and Ramagnola open cattle shows are new to the Houston Show for 1990.

Choosing Houston as the best show site possible, the following breed associations will hold their international shows in conjunction with the 1990 Houston Livestock Show: Brahman, Brangus, Simbrah and Simmental.

Premium list books are now available and may be obtained by writing the Livestock Department, Houston Livestock Show and Rodeo, P.O. Box 20070, Houston, Texas 77225; or by calling the department at (713) 791-9000.

Open show entries will be accepted after the December 10 deadline if space is available. Open show entries post-marked after the December 10 deadline or entries that are hand delivered to the Houston Livestock Show office after this date will be required to pay a \$10 late fee.

Houston Livestock Show and horse show competition begins Thursday, February 15, in the Astroarena followed by other livestock competition in the Astrotrohall starting Saturday, February 17.

Rodeo competition will be held in the Astrodome starting Sunday, February 18. All events conclude March 4.

## **Granada's New A.I. Beef Sire Directory Hot Off the Press**

Granada's Sire Services Division, Wheelock, Texas, has just published their 1990 A.I. Beef Sire Directory featuring more than 80 sires from 14 different breeds. The firm stocks semen from more than 300 popular bulls which is available for immediate delivery or can be purchased from Granada's mobile unit.

Granada is a distributor for Genetic Horizons, Tri-State Breeders, Sculpture Cattle Co. and New Breeds Industries and is a full-service company offering semen collection, warehousing, distribution and sales, as well as fitting services, consultation, A.I. schools and supplies.

For a complimentary copy of Granada's new 1990 directory, contact: Granada Sire Services, P.O. Box 99, Wheelock, Texas 77882; or call (409) 828-5156; FAX (409) 828-5946.

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