

BEEF TIPS



February 1996

Cooperative Extension Service

Kansas State University

83rd
ANNUAL

**CATTLEMEN'S
DAY**
FRIDAY,
MARCH 1,
1996
BRANDBERRY
SPORTS
COMPLEX

**ANNUAL
SPECIAL "K"
BULL SALE**
WEBER
ARENA
see details inside

Steps to Adding Value

(second in a 5-part series of how we can add value to calves or products produced at a cow-calf operation.)

STEP 3. Take Full Advantage of Marketing Cull Animals

Another overlooked area of a cow-calf program is the economic importance of the cull animals. Traditionally, cull cows and cull bulls represent approximately 14 to 18 percent of the gross cattle sales of a cow-calf operation. Anything that can be done to add value to these cattle merits being considered. Let's consider a few of these.

Adding value to cull cows. In a traditional cow culling program, the cattle are pregnancy checked and all open cows, or those with bad eyes, bad udders, etc., are marketed. Since approximately 70 to 75 percent of cows are in a spring-calving program, the traditional marketing of cull cows occurs in November. This is also the seasonal price low for cull cow prices. Recently, more producers are starting to look at ways of managing cull cows so they can improve value and gross dollars. This can be accomplished by both added weight and flesh, and by marketing the culls to take advantage of the seasonality of the cull cow market. Another opportunity is to pregnancy check early in the fall and cull open cows in September, rather than waiting until the market hits its bottom in November or December.

Adding value to cull bulls. Just as with cull cows, it may be advantageous with bulls to add flesh and weight at the end of the breeding season and put the bulls on the market. Just as with cull cows, there tends to be seasonality in the price of bulls.

Another opportunity is that even though the
continued on page 2

Keep the Calf Alive

The single most important avenue for increasing herd income is improving the number of calves weaned and sold relative to the number of cows in the operation. According to the results of large scale studies, the two most important causes of decreased reproductive performance are cows that fail to become pregnant and calves that die within the first two to three weeks after birth.

FACT #1 Cows, especially replacement heifers should have appropriate prepartum nutrition to ensure adequate growth and body condition maintenance.

1. Laboratory analyses of forages and feedstuffs will ensure nutritional requirements are being attained.
2. Mineral composition of feedstuffs also have an impact on calf survival. There is increasing evidence trace mineral deficiencies and imbalances are common problems in range cows.
3. Heifers and thinner mature cows should be fed separately from the cow herd to more appropriately target dietary needs.

FACT #2 Dystocia (disproportion between size of calf and pelvic size of dam) is the number one contributor to calf death.

1. Selection of heifers for breeding should include an assessment of overall size and pelvic dimensions.
2. Selection of bulls for breeding, especially to replacement heifers should include a heavy emphasis on calving ease.

FACT #3 Even with the occurrence of dystocia, calf survival can be enhanced by appropriate calving management procedures.

continued on page 3

Adding Value,
continued from page 1

bull may have outlived his usefulness in your cow herd, he may have value as a herd sire in another cow-calf operation. Don't overlook the potential of marketing your cull bulls as herd sires.

Treat problems and sell cull animals when healthy. Traditionally, most residue and condemnations tend to occur in cull breeding cattle. If at all possible, it's highly advantageous to treat problems and only market the animals when they are in a healthy condition.

Don't overlook management tips that could be profitable with cull cows. Two management practices that may improve the weight gains of cull cows is to utilize a deworming program and implanting. Deworming of cull cows traditionally will improve weight gain, and research has shown that cull cows give an

excellent response to the traditional implants used with heifers. In addition, research at Kansas State University has shown an excellent response when the testosterone implant (trembolone acetate) is used in combination with an estrogen implant with cull cows.

STEP 4. Sell Higher Priced Products to Generate Cashflow and Replace with Cheaper Products

To generate additional cashflow, more operations need to look at the market potential of all the products produced on that ranch/farm. For example, as the dairy and feedlot industries in Kansas expand, there is increasing market potential for the alfalfa hay being raised on many cow-calf operations. Though alfalfa is an excellent protein and roughage source, the utilization of by-products, such as corn gluten meal, sunflower meal, or wheat midds may become a considerably better buy in terms of the cost/unit of protein supplied. For example, comparing wheat midds at \$80/ton and alfalfa at \$80/ton, the following examples clearly show how the wheat midds have additional value through their added energy, and high phosphorus content in a cow-calf program, making the midds (at the same price/ton) considerably more valuable as a protein source than alfalfa hay.

*Larry Corah, Extension State Leader
Animal Sciences & Industry*

Expand Use of By-products

Example--wheat midds (\$80) versus alfalfa hay (\$80)

TDN	Value
4 lbs midds x 70% TDN = 2.8 lbs	+4.2 cents
4 lbs alfalfa x 55% TDN = 2.2 lbs	
Phosphorus	
4 lbs midds x 1% phosphorus = 18.2 grams	5.5 cents
4 lbs alfalfa x .18% phosphorus = 3.3 grams	
	<hr/>
	9.7 cents

Winter

9.7 cents x 150 days = \$14.55

EIGHTY-THIRD ANNUAL CATTLEMEN'S DAY

FRIDAY, MARCH 1, 1996

Brandeberry Sports Complex (southwest of KSU Stadium)
ANNUAL SPECIAL "K" BULL SALE—Weber Arena

8:00—REGISTRATION & BROWSING

- Coffee and Donuts, Mallinckrodt Veterinary, Inc.
- University and Commercial Booths and Exhibits

10:15—TIMELY TOPICS

Moderator—Twig Marston

- Welcome!—Jack Riley
- Processing Strategies for Stressed Calves—Gerald Stokka
- Opportunities for Cutting Production Costs—Danny Simms
- Utilization of Alternative Feedstuffs—Jim Drouillard
- Steam Pasteurization of Beef Carcasses—Dave Schafer

11:15—GENERAL PROGRAM

Moderator—Jack Riley

- Surviving and Thriving in the Cattle Business—Burke Teichert, General Manager, Rex Ranch, Ashby, Nebraska
- Prospering Through Partnerships—Mike Sweat, Vice President, Feed Division, Farmland Industries, Kansas City
- Beef Industry Update—Jim Meetz, President, Kansas Livestock Association
- Questions and Answers

**12:30—ROAST BEEF LUNCHEON,
Compliments of Commercial Exhibitors
EXHIBIT VIEWING & PRIZES**

2:00—OPEN HOUSE

at KSU Beef Research Unit

Demonstrations and exhibits of current research on beef production, forage utilization and cattle management topics including:

- Grain Content and Nutritional Value of Whole-plant Grain Sorghum Silages—Mark Young and Keith Bolsen
- Agronomic and Quality Traits of Winter Cereal Silages—Mary Kay Siefers and Keith Bolsen
- Economics of Sealing Bunker and Trench Silos—Keith Bolsen and Lance Huck
- Particle Size of Dry Rolled Milo on Digestibility and Performance of Growing Calves—Tim Kessen, Danny Simms, and Gerry Kuhl
- By-product Feeds for Growing Cattle—Jim Drouillard
- Identifying Sick Cattle—Gerald Stokka
- Sunflower Meal and Soybean Meal for Finishing Steers—Todd Milton and Evan Titgemeyer
- Liver Abscesses in Feedlot Cattle—T.G. Nagaraja

- Revalor-G®, Ralgro® and Synovex® for Grazing Cattle, and Subsequent Finishing Performance and Carcass Merit—Gerry Kuhl and Dale Blasi

- Assessing Nutrient Composition and Digestibility of Tallgrass Prairie Hay—K.C. Olson and Bob Cochran
- Vitamin E Supplementation of Beef Cows—Juliana Coalson and Larry Corah
- New Synchronization Method for Cows—Larry Corah and Cody Wright
- Calf Presence and Milking Twice Daily Prolongs Postpartum Anestrus—Cliff Lamb, J.M. Lynch and Jeff Stevenson

4:30—ANNUAL SPECIAL "K" BULL AND HEIFER SALE, WEBER ARENA

1996 STOCKMEN'S DINNER

Manhattan Holiday Inn Holidome, 530 Richards Dr.

THURSDAY, FEBRUARY 29

Social 5:45 p.m. • Dinner 6:30 p.m.
Bob Dickinson Appreciation Evening

Please send reservations and checks (\$17 per person) made out to the Stockmen's Dinner by February 22 to:
Livestock and Meat Industry Council, Inc.
134 Weber Hall
Kansas State University
Manhattan, KS 66506-0201

Colostrum—Step 1 to Calf Survival

Extensive research has shown that more than 50 percent of the calf losses occur within 24 hours of birth and 70 percent occur within the first few days of life.

The keys to calf survivability are avoiding calving difficulty and ensuring the calf nurses quickly after birth. Let's review one of these areas, and the importance of the calf acquiring colostrum rapidly.

- < The newborn calf is born with virtually no immunity. It acquires that immunity, referred to as passive immunity, from antibodies (Immunoglobins) in the cow's first milk (colostrum). The ability of the calf to absorb these immunoglobins from the colostrum decreases rapidly and linearly after birth. As shown in the table below, a calf that nurses 12 hours after calving will only absorb about one-half of the immunoglobins compared to a calf that nurses within a few minutes of calving.
- < Another important contribution that colostrum makes is that it is the calf's immediate source of energy—so critical when calves have to contend with the environmental conditions often present in Kansas at calving time. Colostrum contains about 22 percent solids which compares to about 12 percent solids in normal whole milk.
- < Numerous factors influence the quality and quantity of colostrum produced. Traditionally, heifers have both poorer quality and quantity of colostrum when compared to mature cows.
- < In both heifers and cows, the nutrition program before calving can have a major influence on how quickly the calf will nurse and on its ability to acquire passive immunity rapidly after birth. Extensive research at

Colorado State University has shown that both energy and protein deprivation prior to calving can have a major influence on the amount and quality of colostrum produced and the calf's ability to acquire passive immunity after parturition.

- < How much colostrum does a calf need? Often, only a small amount of colostrum milked out of the cow and bottle fed to the calf can get them started. Ideally, an 80-pound calf will need approximately 1½ to 2 quarts of colostrum per feeding.
- < The mother's milk is the best source of colostrum, but in the event supplemental colostrum is needed, dairy colostrum or commercial colostrum formulations can be used as a supplement.
- < Calves born in assisted calvings are particularly susceptible to a colostrum deficiency. These calves are usually slower to nurse and often in a stressed condition making the need for colostrum even more important than in unassisted births.

*Larry Corah, Extension State Leader,
Animal Sciences & Industry*

Effect of Time of Colostrum Feeding (hours after birth) on Total Immunoglobulin Absorption in Baby Calves

Time of Feeding (hours after birth)	Plasma Concentration (mg/ml) 24 hours after feeding	Absorption (%)
6	52.7	66
12	37.5	47
24	9.2	12
36	5.4	7
48	4.8	6

*Source: Selk, OSU Fact sheet.

Keeping the Calf Alive, *continued from page 1*

1. Cows and heifers should be checked a minimum of every three hours.
2. Prompt delivery assistance is extremely beneficial. Intervention may be necessary if the delivery exceeds 60 to 90 minutes, or earlier if steady progress is not observed.

FACT #4

Dystocia can affect calves severely enough to cause mortality directly, or can contribute to other problems and indirectly increase calf death.

1. Survivability can be substantially improved if problems are detected early and calves are properly cared for.
2. Supportive care procedures for these calves include warming and drying, providing shelter, administration of high quality

colostrum, encouraging maternal attention and bonding and supplemental feeding in some cases

FACT #5

Environmental conditions such as cold, wind and moisture increase calf death.

1. Calving location and time of year of the calving season are particularly important management issues.
2. During bad weather, calves require additional shelter, but close confinement may contribute to the spread of infectious disease.

Excerpted from papers by Garry (1995) and Mortimer (1993)

*Dale A. Blasi, Extension Specialist,
Livestock Production, South Central*

Kansas Feedlot Performance and Feed Cost Summary*

Gerry Kuhl, Extension Feedlot Specialist, Kansas State University



December, 1995 Closeout Information**

Sex/No.	Final Weight	Avg. Days on Feed	Avg. Daily Gain	Feed/Gain (Dry Basis)	% Death Loss	Avg. Cost of Gain/Cwt	Projected Cost of Jan.-Placed Cattle
Steers: 12,600	1,282	138 (120-157)	3.45 (3.24-3.67)	6.16 (5.85-6.44)	0.51	\$59.46 (57.64-60.70)	\$66.42 (65.00-68.00)
Heifers: 11,730	1,141	140 (121-170)	3.18 (2.84-3.51)	6.03 (5.72-6.57)	0.87	\$59.26 (55.73-61.97)	\$68.54 (66.00-70.00)

Current Feed Inventory Costs: January 15 Avg. Prices

	Range	No. Yards
Corn	\$ 3.49-3.90	7
Milo	\$ 5.70-5.70	1
Ground Alfalfa Hay	\$75.00-94.88	6

*Appreciation is expressed to these Kansas Feedyards: Brookover Feed Yards, Brookover Ranch Feedyards, Decatur County Feed Yard, Fairleigh Feed Yards, Kearny County Feeders, Pawnee Valley Feeders, and Supreme Feeders.

**Closeout figures are the means of individual feedyard monthly averages and include feed, yardage, processing, medication, death loss and usually sold FOB the feedlot with a 4% pencil shrink. Interest charges are not normally included.



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KSU, County Extension Councils and U.S. Department of Agriculture Cooperating.
 All educational programs and materials available without discrimination on the basis of color, race, national origin, sex, age, or disability.

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