



February 2001 Department of Animal Sciences and Industry

Late spring is decision time for cow-calf managers

Twig Marston, beef specialist

As winter subsides and spring weather begins, cattle producers are faced with some important management decisions. Most of the spring calving is done, so calf survival, calf performance, and reproduction are paramount issues to producers.

Last year's drought greatly affected winter feed supplies. If you are one of those producers caught with short feed supplies and days or weeks of feeding cows before turning them out to pasture, you may need to decide whether to buy extra feed, reduce herd inventory, extend grazing, or a combination of these.

The worst decision is to underfeed cows. Feeding cows at protein and energy levels less than their maintenance and production needs certainly will be reflected by inflated numbers of open cows next fall and lighter than expected weaning weights. Underfeeding before calving will also extend the time from calving to first estrus, which will delay breeding. Research shows that not meeting a cow's protein and energy requirements

compromises heat production ability of the newborn calf and increases the time for it to stand and nurse. Finally, limited nutrient intake during early lactation will decrease a cow's milk production. Weaning weight this fall may suffer from limited milk intake, which is an obvious factor in pounds of calf produced per cow. But lower pregnancy rates and delayed breedings will be the most serious economic production traits effected by poor nutrition before and after calving.

Several factors should be considered in deciding what feeds to purchase: time until pasture turnout (how much to buy); what cows have been eating (what to buy); supplies available (what can be bought); and economic considerations (the least cost, best return investment).

Assuming cows have been on a forage-based diet throughout the winter, producers should first consider buying more forage and forage supplements that will maximize the utilization of the forage. Buy low- and medium-quality forages, and supplement with protein to increase their digestibility

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Corn gluten feed reduces on-farm costs, studies say

Research from several U.S. universities is providing further proof that a popular corn by-product is not only an "excellent" feedstuff for livestock, but also can save money for beef producers.

Details are outlined in a new bulletin, titled *Corn Gluten Feed*, just released by Kansas State University. From the milling process to storage issues, ranchers should

be able to answer their questions easily with this bulletin, said K-State Research and Extension animal scientist Dale Blasi.

In 1999, Kansas farmers produced 419 million bushels of corn on 3 million acres. Blasi estimates the value of corn in Kansas at \$800 million, based on the

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Cattlemen's Day is March 2. Plan to attend. Details inside.

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Often, feed ingredients that are high in crude protein carry a hefty price tag, and comparing cost on a per pound of protein basis is the best way to determine value.

and intake. Those protein supplements that first come to mind are grain and oilseed by-products as well as commercial supplements. Wheat middlings, soybean hulls, corn gluten feed, and other soy, cottonseed and cereal grain products are available. High protein supplements from soybean, cottonseed, sunflower or other sources may be the best alternative. For others, the medium protein supplements, such as wheat middlings and corn gluten feed, are advantageous. Alfalfa hay and other high quality forages may be the best purchase alternative.

Pushing a sharp pencil is the best formula for success. To determine the cost of protein, simply divide the ton cost of a feedstuff by 2,000 times the percent crude protein. This will equal the cost of the crude protein on a per pound basis for comparison between different feedstuffs. Often, feed ingredients that are high in crude protein carry a hefty price tag, and comparing cost on a per pound of protein basis is the best way to determine value. Avoid high urea and animal-sourced proteins because of their detrimental effects on forage intake and digestibility.

Mixing different quality of forages can be used to extend your forage feed supply. Grinding and mixing low-, medium- and high-quality forages may buy producers enough time to make it to green pastures.

Grain feeding is probably the final alternative, but will be of limited effectiveness if grain is fed only for a duration of 30 days or less. This is because the rumen takes time to adjust to the grain diet and then back to a grass diet. The yo-yo effect on the rumen microbial population will most likely limit animal performance.

Silage is an excellent cow feed if you have the equipment and facilities to handle it. Silages are typically sufficient in energy and protein to carry lactating cows to summer pasture season.

Wheat grazing should be considered by some producers. Yes, grain production will be sacrificed, but if limited acreages or weedy fields can be grazed out by cattle, more economic benefit may be derived from beef production than from grain production.

One trap not to get caught in is turning out too early on native grass pastures, something called “early grass green-up syndrome.” Producers tempted to turn cows out before there is sufficient grass to satisfy cattle needs will see animal performance suffer. Cows spend time running from one green spear of grass to another and exercise off much of the energy they are consuming.

For sure, the best solution will not be the same for all ranches within the state or even within a county. The best solution is one that supplies the nutrient requirements of the cows at the most affordable cost.

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current average price of a bushel. This year, the number of acres planted to corn in Kansas exceeded wheat acres. According to Blasi, the increase of corn production in the state has farmers and cattlemen looking for by-products that increase the crop's value and lower feed costs.

Corn gluten feed, also known by CGF, is produced from the wet corn milling process. Blasi said that corn gluten feed offers “significant amounts” of energy, crude protein, digestible fiber and minerals. It can be fed to dairy cattle, cattle on grass, or in finishing diets.

According to Blasi, corn gluten feed can help beef and dairy producers reduce costs “dramatically” if it is readily accessible and priced competitively.

Currently CGF is milled in Nebraska and Iowa; there are no milling facilities in Kansas.

K-State's *Corn Gluten Feed* bulletin was funded by the Kansas Corn Commission and K-State Research and Extension. For more information on corn gluten feed or to obtain a copy of the bulletin, contact the local extension office. The publication is also available on the World Wide Web at <http://www.oznet.ksu.edu/library>.

88th Annual



March 2, 2001 • Brandeberry Sports Complex

Southwest of KSU Stadium • Manhattan, Kansas

8:00 a.m. Registration and Browsing

KSU Brandeberry Sports Complex

- **Commercial Trade Show**
- **Educational Displays and Exhibits**
- **Student Poster Competition**
- **A Sampling of New Value-Added Beef Products**

Welcome 10:00 a.m. — Jack Riley

- **Research Update** — Brad Johnson, Moderator

Cow-Calf Research — Twig Marston

Stocker Cattle Research — Dale Blasi

Growing and Finishing Cattle Research — Jim Drouillard

Carcass Traits: Breed EPDs and DNA Markers — Michael Dikeman

- **Industry Remarks**

Challenges Facing Our Industry — Don Hineman,
President, Kansas Livestock Association

**Keynote Address — Future of the Retail Meat Case —
Chuck Jolley, publisher, Meat and Poultry Magazine**

12:00 Beef Luncheon

Compliments of Exhibitors

View Commercial & Educational Exhibits

1:00 p.m. Youth Speech Contest, Call Hall

Topic: "The Role of Cattle Producers in Improving
Demand for Beef."

2:00 p.m. Focus Sessions, Weber Hall

- **Actions to Prevent BSE in the United States Beef Industry** — Kevin Varner, Jim Marsden, and Jerry Stokka
- **Electronic Data Management in the Palm of Your Hand** — Dale Blasi and Ben Brent
- **Beef Carcass Grading** — John Unruh

- **Environmental Regulations Affecting Cow-Calf, Stocker, and Feedlot Operators** — Joe Harner and Pat Murphy

3:00 p.m. Focus Sessions, Weber Hall

- **Individual Animal Data Management Systems — An Answer to Information Overload** — Bruce Young, Global Animal Mgt.
- **Shipping Fever and Mycoplasmal Arthritis** — Jerome Nietfeld and Jerry Stokka
- **New Strategies for Estrus Detection and Synchronization** — Jeff Stevenson and Sandy Johnson

2:00 p.m. Demonstrations

K-State Beef Cattle Research Center

3115 College Avenue

- **By-products for Beef Production** — Steve Paisley, Justin Sindt and Sean Montgomery
- **So How Do They Make Those Molasses Blocks, Anyway?—**Allen Trater and Nathan Pike
- **Feeding Your Cows by Body Condition** — Twig Marston and Frank Brazle
- **A Tour of the Rumen** — Bob Cochran and Evan Titgemeyer
- **Getting a Closer Look with Necropsy** — George Kennedy and Brad DeBey

4:20 p.m. Awards Presentation, Weber Arena

Winners of the Youth Speech Contest, Cow Body Condition Scoring Contest, and Graduate Student Poster Competition will be announced.

**4:30 p.m. Special "K" Bull & Heifer Sale
Weber Arena**

75 performance-tested yearling Angus, Hereford and Simmental bulls. Choice of six pairs of heifers.

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Kansas Feedlot Performance and Feed Cost Summary*

Gerry Kuhl, Feedlot Specialist, Kansas State University

December 2000 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/12,383	1,267	136	3.59	5.87	1.48	\$44.65	\$44.80
		(118-160)	(3.27-3.86)	(5.55-6.50)		(41.23-49.84)	(42.00-47.00)
Heifers/24,222	1,150	140	3.20	6.15	.96	\$46.78	\$46.60
		(115-154)	(2.83-3.61)	(5.68-6.70)		(43.72-49.85)	(44.00-49.00)

Current Feed Inventory Costs: Mid-September Avg. Prices Range No. Yards

Corn	\$ 2.26/bu	\$ 2.00-2.39	7
Ground Alfalfa Hay	\$95.52/ton	\$75.00-115.00	7

*Appreciation is expressed to these Kansas feedyards: Brookover Ranch Feed Yard, Decatur County Feed Yard, Fairleigh Feed Yard, Hy-Plains Feed Yard, Kearny County Feeders, Pawnee Valley Feeders, and Supreme Cattle Feeders.

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

K-State, County Extension Councils, Extension Districts, and U.S. Department of Agriculture Cooperating.

All educational programs and materials available without discrimination on the basis of race, color, religion, national origin, sex, age, or disability.

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