

# BEEF Q & A

BEEF QUESTIONS AND ANSWERS



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## Checkoff-funded Beefmobile offers innovative foundation for communications

By Charlene Schuster, Executive Director



A unique and respected beef checkoff-funded program that reaches both producers and consumers with fact-based information is on the road for the third year.



The Beefmobile makes a stop at the Billings Livestock Commission in Billings, MT on December 8, 2005. Photo courtesy of Charlene Schuster.



The Beefmobile makes an appearance at the Stevenson Basin Angus Sale and Event in Hobson, MT on November 28-29, 2005. Photo courtesy of Charlene Schuster.

The Beefmobile was launched in 2004 to carry the word about beef and the beef checkoff to producers and consumers. Its dual-audience approach provided producers with important facts about what their \$1-per-head checkoff was doing on their behalf and information about beef safety and nutrition to consumers at the retail level.

The Beefmobile program is coordinated on behalf of the Cattlemen's Beef Board by the National Livestock Producers Association (NLPA). NLPA serves as one of the Beef Board's contractors for checkoff-funded programs.

During the last two years, the Beefmobile's "Wranglers" visited with producers and consumers in 38 states, making more than 100 producer stops in 2005 alone. The effort not only met its goals but also earned last year's prestigious National Agri-Marketing Association (NAMA) award for the best producer-funded public relations program to agricultural audiences in the nation.

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**Beef: Questions & Answers** is a joint project between MSU Extension and the Montana Beef Council. This column informs producers about current consumer education, promotion and research projects funded through the \$1 per head checkoff. For more information, contact the Montana Beef Council at (406) 442-5111 or at [beefcncl@mt.net](mailto:beefcncl@mt.net)



## Alternative Winter Nutritional Management Strategies

By Janna Kincheloe, Extension Agent, Montana State University and Ron Hathaway, Extension Agent, Oregon State University



**This is the second installment of a two-part series**

*Last time we looked at how swath or windrow grazing, winter grazing and crop residue might impact your strategies. Here are some other options you might consider.*

One of the main challenges to beef producers in the western U.S. is to develop a cost-effective, winter feeding program while still maintaining acceptable levels of beef cattle production. Many producers in the Pacific Northwest and Intermountain West feed between two and four tons of hay to their mature cows during the winter feeding period. Feed and supplement costs account for an estimated 50 to 70 percent of total production costs. Therefore, a producer's ability to compete with other regions depends in large part on his or her ability to reduce these costs. Producers have a variety of management alternatives to consider as they develop economical alternatives to feeding harvested forages.

### **Substituting Grain for Hay**

Hay often costs 50-100 percent more than grain per unit of energy. If forage supplies are limited due to price and/or availability, grain can be substituted for hay as an economical alternative energy source. The purpose of this feeding program is to reduce feed costs as much as possible. Therefore, only a minimum amount of hay is provided. The minimum amount of roughage that should be fed is 0.5 percent of body weight (6 lbs. roughage for a 1,200 lb. cow) in order to maintain proper digestive function. Straw or other low quality roughage may be used rather than providing additional hay.

The amount of grain necessary depends on weight and body condition of cows. In general, one pound of grain or other concentrate is equal

in energy to two pounds of hay. It is important to realize the difference between substitution and supplementation.

Energy supplements containing high levels of starch are rapidly fermented in the rumen, resulting in a lower rumen pH. This has negative effects on fibrolytic or fiber-digesting microbes in the rumen, and may decrease forage intake and digestibility if concentrates are fed at levels greater than about 0.5 percent of body weight. If the primary goal is to make up for energy deficiencies in forage, grain may not be the most efficient option. In this management approach, diets should be grain-based, using hay as a supplement. Protein and mineral supplements should be provided.

There are also several management considerations in limit-feeding grain that need to be carefully examined. High-concentrate diets require increased levels of management to ensure consistent feed consumption and avoid digestive disturbances such as acidosis and bloat. In order to prevent waste, cattle should be fed in bunks, with at least 24- to 30- inches of bunk space per head. It may be a good idea to sort the herd into smaller groups, based on nutritional requirements, to minimize competition due to social interactions. In addition, producers must have adequate facilities to control hungry cattle.

Researchers at Ohio State University have examined the efficacy of limit-feeding, grain-based diets as an alternative to hay for gestating beef cows (Loerch, 1996; Schoonmaker et al., 2003). Results indicated that a limit-fed, corn-based diet had no detrimental effects on cow performance, conception rates or calf weaning weights compared to cows fed ad-libitum hay or stockpiled

orchardgrass. In addition, cost of feeding hay was nearly double that of limit-feeding a corn-based diet. With appropriate management strategies in place, the practice of limit-feeding grain could serve as an economically viable way for producers to meet animal performance goals.

### Feeding By-products

By-product feeds offer significant potential to help producers increase animal performance and reduce feed costs. The by-products of food and fiber are commonly referred to as *coproducts* because they have significant value as a feed while lowering the cost of feed input. Due to increased grain processing and expansion of the ethanol industry, coproducts are readily available to livestock producers in many areas.

Many of these feeds are very palatable and relatively easy to mix into rations. These include grain coproducts (e.g. corn screenings, wheat midds, corn gluten feed); oilseeds and oilseed coproducts (e.g. canola, safflower meal, soybean hulls); and ethanol coproducts (e.g. wet and dry distillers grains, condensed distillers solubles).

Coproducts have a variety of uses in beef cow diets. High fiber coproducts such as beet pulp and soy hulls can be used to replace forage at 20 to 30 percent of forage dry matter in the diet. Many oilseed coproducts, such as canola and safflower meal, are good sources of escape or bypass protein. Ethanol coproducts can be fed at 10 to 15 percent of diet dry matter in backgrounding and finishing diets as a protein source or fed at higher levels as an energy source. These products may also be used in forage-based diets for beef cows as a source of supplemental protein and energy. Amount of coproduct to be fed depends on economics, desired performance levels, nutrient analysis of the forage and individual feeding restrictions of each product.

There are many factors that should be considered when feeding by-products including availability, shipping and storage costs, and seasonal price variation. There can be significant variation in nutrient content of by-product feeds due to different processing procedures; therefore,

it is important to formulate rations based on a guaranteed laboratory analysis of each lot of feed. Unfamiliar feeds should be used with caution and introduced into rations gradually. When using liquids or wet products, such as wet distillers grains, spoilage can occur rapidly and additional feed handling equipment may need to be purchased. Additional labor and equipment costs for by-products may offset any cost savings resulting from the use of by-products.

### Grass Seed Residues

Another alternative to traditional winter management is the use of grass seed residues produced as a byproduct of the grass seed industry. Only about 50 percent of these residues appear to be a viable livestock feed resource due to quality factors and problems with endophyte fungus. However, there are several benefits to using these feeds as part of a winter feeding program. First, many of the grass species are perennial forages (Kentucky bluegrass, tall fescue, perennial ryegrass, etc.) and have higher feeding value than annual cereal grain straws. In addition, grass seed residues are an economical feed source. In a 1997-'98 Oregon study, grass seed straw was delivered 250- to 300- miles from the source for approximately \$40 to \$50 per ton (total cost; straw plus shipping).

Grass seed residues are relatively weed free and germination of perennial seeds from grass residues may be beneficial to winter feeding sites. Also, feeding residues represents an increase in nutrients added to the site and may result in decreased fertilizer needs and improved organic matter of soil.

In most cases, grass seed residues should not be considered a complete feed for wintering mature beef cows. Instead, grass seed straws should be analyzed for nutrient content and supplements should be formulated to maximize the use of low-quality roughage. The nutrient needs of mature, non-lactating beef cows can often be met by supplementing grass seed residues with alfalfa hay (Chamberlain and DelCurto, 1991; Turner et al., 1995).

*continued on next page*

**Alternative Winter Nutritional Management Strategies, cont.****Conclusions**

There are a variety of potential tools or management strategies that may help reduce winter feed costs. Obviously, whatever strategy producers choose should emphasize minimizing costs while meeting animal performance goals. It is not always economical to feed cattle to meet all of their nutritional requirements throughout the year. The most critical times to ensure that requirements are met are during the last one-third of pregnancy and the first 60 days of lactation. Failing to do so may cause decreased conception rates, increased postpartum intervals, increased calf death loss and reduced calf weaning weights. Regardless of whether producers choose to adopt an alternative winter feeding strategy or continue using traditional methods, it is imperative to design a system that ensures health and productivity of livestock while returning a profit.

Cost is not the only factor that influences nutritional programs. When determining an alternative strategy to traditional winter feeding programs, producers should consider forage quality and quantity, labor and equipment requirements, kind and class of livestock and risks associated with each strategy. Many supplementation and substitution strategies are dynamic and can be adapted to fit a particular environment or production situation. Producers must take the time to evaluate their options and determine what will best fit their individual operations and management style. For further assistance and information, contact your local county extension agent or nutritionist.

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# Montana Livestock Forum and Nutrition Conference

April 11-12, 2006 • GranTree Inn, Bozeman, MT

The beef cattle industry is faced with a variety of challenges and changes including the globalization of the industry, export market requirements, additional niche market opportunities, which include age and source verification, and new research on feedstuffs and supplementation strategies.

The 2006 Montana Livestock Forum and Nutrition Conference is proud to present international, national and local experts to address the changes in U.S. beef production, the future of marketing and the economics of niche markets. However, with all the changes, we can't forget to take care of the factory. Presentations will focus on crossbreeding and heifer development and the economics of natural beef programs. The nutrition section is aimed at byproduct utilization, protein supplementation and grazing management of beef cattle.

The keynote speaker will be the popular radio personality Rick Haines who will address "The Seeds of Change." Rick is famous for getting across important messages through the use of cowboy humor. This conference will help you position your ranch for future marketing opportunities.

Please join us for this informative conference. It

will bring you up close and personal with experts from around the country as we shed some light on the industry's latest and largest challenges.

## Speakers

- **Mr. Paul Colman**, Cactus Feeders, Amarillo, TX
- **Dr. Tim DelCurto**, Oregon State University
- **Mr. Austin Genereux**, Genereux Ranch, Big Sandy, MT
- **Dr. Wayne Gipp**, Montana State University
- **Mr. Kim Hager**, CHS, Billings, MT
- **Mr. Rick Haines**, Northern Ag Network, Idaho Falls, ID
- **Dr. Patrick Hatfield**, Montana State University
- **Dr. Patsy Houghton**, Heartland Cattle, McCook, NE
- **Dr. Terry Klopfenstein**, University of Nebraska
- **Ms. Shari Lee Kroon**, North American Salt and President, Montana Feed Association
- **Dr. Bill Mies**, eMerge Interactive
- **Dr. John Paterson**, Montana State University
- **Mr. Bud Patterson**, Patterson Consulting, Sterling, CO
- **Dr. Trey Patterson**, Padlock Ranch
- **Dr. John Scanga**, Colorado State University
- **Mr. Don Schiefelbein**, Schiefelbein Farms, MN
- **Dr. Gary Smith**, Colorado State University

## The Montana Livestock Forum and Nutrition Conference Schedule of Events

### Tuesday April 11, 2006

11:00-12:30 Registration

12:30 Welcome –**Kim Hager**

### What is happening to the Beef Industry?

12:35-1:15 How USA beef production is changing –**Gary Smith**

1:15-2:00 How will marketing be changed in the future? –**Bill Mies**

2:00-2:45 How Cactus Feeders plan to adapt to industry changes –**Paul Colman**

2:45-3:00 Break

### Taking Care of the Factory

3:00-3:45 The economics of natural and organic branded beef programs: Does it pay?  
–**John Scanga**

3:45-4:30 The future of heifer development  
–**Patsy Houghton**

4:30-5:15 Have we forgotten about crossbreeding in MT?  
–**Don Schiefelbein**

5:15-5:45 Controlling your marketing destiny: One producer's perspective  
–**Austin Genereux**

5:45-6:15 Cash Bar

6:30-8:00 Evening program  
• Feed Association scholarships  
• Keynote: Seeds of Change  
–**Rick Haines**

## Research Notes

The following research summaries are courtesy of the extension beef specialists from Michigan State University.

### Profitability of Calves Sired by Terminal Versus Maternal Breeds of Bulls

Colorado State University scientists used 80 steer progeny produced by mating British cross females to one of three terminal sires (Charolais) or one of five maternal sires (three Angus and two Red Angus-Composites) to compare the effects of sire type (terminal vs. maternal) on performance, carcass traits and profitability.

Steers sired by terminal bulls were significantly heavier at most stages of production, from birth to harvest. They grew faster from birth to weaning than steers sired by maternal bulls. Terminal-sired steers consumed significantly more feed, but there were no differences between sire types in feed conversion or cost of gain. Carcasses sired by terminal bulls were significantly heavier than those sired by maternal bulls, but other carcass traits did not differ.

Profitability was compared using two different marketing scenarios—selling calves at weaning and retaining ownership through harvest. When sold at weaning, terminal-sired calves generated \$39.52 more net return than maternal-sired calves. When retained through harvest, terminal-sired calves generated \$83.62 more net return than maternal-sired calves. These results suggest that for commercial cow-calf producers who routinely retain ownership of their calves through harvest and who have access to a reliable source of affordable females, the use of a terminal crossbreeding system may be a viable strategy for enhancing profitability (Schneider et al. 2005. Colorado State University Beef Report).

### Substituting Limit-Fed Barley for Forage on Growth and Reproduction of Heifers

Grain is often a more economical source of dietary energy than forage. The objective of this

University of Idaho study was to evaluate the effects of substituting barley for forage on growth and reproduction of heifer calves. Forty crossbred heifers (701 lbs.) were allotted to four dietary treatments: 1) conventional forage; 2) forage with barley provided in the AM; 3) same as treatment 2 except that barley was fed in the PM; and 4) barley fed in the AM as a pressed pellet. In all treatments, heifers were fed amounts of their diets to provide equivalent levels of energy so as to limit average daily gain to 1.6 lb/day. After 105 days, heifers were commingled, fed a common diet, estrus synchronized and bred AI upon detection of estrus.

There were no significant differences among treatments in body condition score, number of corpora lutea at the time of second prostaglandin injection or serum progesterone. Furthermore, there were no differences among treatments in pregnancy rate. The authors concluded that these results indicate that substituting barley for forage in limit-feeding systems is a feasible method of meeting dietary energy requirements without jeopardizing reproduction (Szasz et al. 200. J. Anim. Sci. 88 [Suppl. 1]: Abstract T168).

### Feedlot Cattle Getting Fatter in the Wrong Places

Cattle-Fax™ analysts recently reported that the percent of Yield Grade 4 cattle has been increasing at a rate of about one percentage point per year since 2001. In 2005, it averaged about 7 percent, compared to only 2 percent in 2001. If this rate continues, the percent of Yield Grade 4 cattle could reach 12 percent by 2010. Equally alarming is the fact that the percent of Choice grade cattle has remained relatively flat during the same 2001-2005 period. In other words, carcasses are getting fatter on the outside, but marbling is not keeping pace with external fat. Heavier carcass weights are also contributing to the increase in Yield Grade 4's.



## ASK JOHN A NUTRITION QUESTION:

**This month's question: Can I restrict hay intake without hurting cow or calf performance?**

Researchers from the University of Illinois reported that limiting the time cows had access to large round bales of medium quality for 4, 8 or 24 hours did not alter calf performance but did reduce manure production.

In their study, 72 Simmental cows with calves were used to evaluate restricting time of access to high-quality hay stored inside. Four replications were used to evaluate three treatments of access to hay restricted to 4, 8 or 24 hours per day. An analysis of the hay fed is described in table 1. Table 2 presents the performance of the cows. Final cow body weight tended ( $P < .06$ ) to be heavier as hay access times increased. Calf performance did not differ among treatments and milk production estimates were similar ( $P < .77$ ) among treatments.

Hay disappearance increased ( $P < .01$ ) as the time allowed for consumption increased (data not shown). Manure production increased with

increasing time of access to hay. These results indicate restricting intake of at least average quality hay resulted in a desirable level of cow and calf performance, while reducing hay waste, manure production and manure nutrient output.

(From: T. C. Cunningham, D. B. Faulkner, A. J. Miller, J. M. Dahlquist, 2005 Professional Animal Scientist, p 182)

**Table 1. Hay analysis for Experiment 1**

Item	Exp. 1
Crude Protein, %	19.56
TDN, %a	63.79
Calcium, %	1.12
Phosphorus, %	0.23
Magnesium, %	0.20
Potassium, %	2.00
Sulfur, %	0.23

**Table 2. Effects of feeding round bales of hay for four, eight or twenty-four hours each day on cow and calf performance, and milk production.**

Item	Treatments			P-value
	4-hour	8-hour	24-hour	Linear
Initial cow wt, lb	1371	1319	1382	.47
Final BW, kg	1245	1256	1338	.06
Final BCS	5.4	5.5	6.1	.04
Weight change, lb	-125	-61	-44	.08
Initial calf BW, lb <sup>b</sup>	100	99	101	.64
Final calf BW, lb	255	251	260	.72
Calf ADG, lb/day	2.2	2.2	2.2	.77
Milk prod. <sup>c</sup>	9.9	9.9	10.1	.70

<sup>a</sup> Body condition score (1 to 9 scale). <sup>b</sup> Calf birth BW used as calf initial BW. <sup>c</sup> Milk production estimate obtained using a 12-hour weigh-suckle-weigh technique.

Do you have a question for this column? Give John Paterson a call: 406-994-5562 or email at [johnp@montana.edu](mailto:johnp@montana.edu)

## Ranch Profile The Bair Ranch, Martinsdale, Montana

By Sarah Hamblen, County Agent, Meagher County



Charles M. Bair first brought his sheep operation to Martinsdale, MT in 1913. After losing his leases on the Crow Reservation in 1910, Bair, a prominent sheep man and entrepreneur, recognized the potential of the land along the Musselshell River. Ninety-three years after his initial investment on the Musselshell, the ranch continues to support a vibrant livestock operation. However, the day-to-day management of the operation has changed dramatically.

Charlie Bair amassed a significant fortune through both his ranching and entrepreneurial endeavors. His death in 1943 left operations of the ranch in the hands of his

daughters, Marguerite and Alberta. Alberta, known for her business sense, managed the livestock operation until her death in 1993. At that time, the Bair Trust, managed by US Bank in Billings, MT, was charged with overseeing the operations.

Jim Murphy, who began working for Alberta Bair in 1991, was named ranch manager. In 1998, the Trust formed The Bair Ranch Foundation, an educational research foundation, with the intent of partnering with universities to conduct applied research projects on a working ranch. The universities originally involved in research projects on the Bair Ranch include Montana

State University (livestock and range), University of Montana (timber), and Rocky Mountain College (geology, ornithology, and ecology). However, the Bair Ranch Foundation does not prohibit other educational institutions from coming forward with proposed

projects as demonstrated by a current feeding trial taking place at the University of Illinois. There was also a cooperative E. Coli research project carried out in 2005 with the University of Nebraska.

Today, the Bair Ranch consists of about 60,000 acres, more than 850 head of cattle, and more than 2,000 sheep. The ranch also produces 1,500 acres of hay per year with 500 acres of center pivot irrigation, 500 acres of flood irrigation and roughly 500 acres of sub irrigated hay ground.

Like any ranch manager, Murphy is charged with maintaining a balanced operation. He works with his counter-part in US Bank to establish ranch budgets and financial objectives. Currently, his goals are focused on increasing herd sizes. In addition to increased moisture in the past year, Murphy applied Spike, a herbicide, to approximately 2,000 acres of sagebrush. The



Graduate students collecting samples as part of an E. coli experiment



*The Bair Ranch*

sagebrush reduction and overall increased grass production resulted in a current grass surplus. Murphy estimates that the ranch should support 1,000 head of cattle and approximately 2,400 sheep. By holding back animals, he estimates he will come close to reaching those herd numbers this year.

However, for Murphy, the complex structure of the ranch means being open to constant change and new challenges. Because the ranch is structured as a research foundation, Murphy occasionally has to compromise his visions for the ranch to accommodate new projects and perspectives. As an example, Murphy spent several years building an Angus herd on the Bair Ranch. This year, research being conducted by Montana State University resulted in artificially inseminating the heifers and part of the cowherd to Simmental. Notes Murphy, “As a semi-cross, Angus/Simmental makes sense. But it’s hard to do when I’ve wanted to build exclusively Angus bloodlines in the herd.”

Murphy is joined on the ranch by full-time MSU research associate Harv VanWagoner. In addition to focusing on ranch operations, Murphy and VanWagoner must ensure that the ranch is safe for university students and researchers. The MSU College of Agriculture calving management class brings undergraduate students to the ranch each year to assist in the heifer calving operations. Harv manages the students and provides the educational components, but a lot of work is

completed prior to their arrival. For instance, the ranch recently erected state-of-the-art corral systems to minimize injuries when working animals and calving. Also, Murphy notes that, in addition to productivity, disposition of cows must also be considered when culling. Because students are helping to calve, aggressive animals present risks to both the students and the ranch.

While occasionally challenging, Murphy recognizes the value of research being conducted on the ranch. A former agronomist and researcher himself, no one could be better suited for balancing the everyday demands of the ranch against the research requests by various universities. Murphy notes that several successful research projects on the Bair Ranch continue to benefit producers today. One of the most notable is the MSU weaning pellet, developed by John Paterson through research conducted at the Bair Ranch.

Overall, Murphy is optimistic about the future of both the ranch and the respective livestock industries. He views continued population growth as a key driver in long-term beef demand, and while he recognizes the cyclical nature of the industry, he is bullish in his long-term outlook for beef prices. Similarly, he anticipates higher sheep prices going forward as increasing ethnic populations in the United States drive demand for meat products. He anticipates steady wool prices.

The Bair Ranch provided significant contributions to the history of ranching in Montana. Now, coordinating ranch interests with applied research projects, the Bair Ranch promises a future of ranching and education for Montana unlike any other facility in the state.

Some of the current projects on the ranch include: 1) evaluation of various electronic ear tags; 2) evaluation of a production software program to determine profitability of the cowherd; 3) a new method of removing pine tree encroachment; 4) comparison of different bull progeny to determine genetic basis for improved feed conversions; and 5) comparison of high marbling vs. high yield grading sires on reproduction and carcass traits.

# Welcome to the Age of Ranch Biosecurity

By Lisa Duffey, Montana Beef Network Coordinator with Clint Peck, Senior editor, BEEF Magazine.



We've all grown up with the common sense adage that good fences make good neighbors. That's probably as good an approach to ranch biosecurity, literally and figuratively as we can suggest. Good fences *are* the best way to keep out unwanted "visitors."

Go into town, and there's hardly a business enterprise today that doesn't have some type of intrusion deterring system. Certainly, locked doors are a fact of life. You might also find security fencing, surveillance cameras and even regular patrols included in a business' security plan. But, few ranching operations have gone beyond the "good fences" concept – and put barriers in place to keep out organisms smaller than the wife's cousin's toy poodle.

But, some ranchers and cattle feeders are beginning to take the concept of "fences" to a new level. They are thinking more in terms of forming a (bio) security shield around their operations.

"Biosecurity and security are different production issues, but both are important and must be properly addressed to protect the health of livestock in an operation," says Dr. Dee Griffin of the University of Nebraska-Lincoln Great Plains Veterinary Educational Center.

"The introduction of disease-causing organisms into a livestock operation can either be intentionally, as would be the situation in bioterrorism," Dr. Griffin says. "Or, it can be unintentionally introduced, as is often the case with improper biosecurity application procedures." The biosecurity and security needs of each production location should be reevaluated on a regularly scheduled basis.

"Biosecurity management and practices are designed to prevent the spread of disease by minimizing the movement of biologic organisms

(viruses, bacteria, rodents, etc.) onto and within an operation. "Biosecurity can be very difficult to maintain because the interrelationships between management, biologic organisms and biosecurity are very complex," Dr. Griffin adds. "While developing and maintaining biosecurity is difficult, it is the cheapest, most effective means of disease control available and no disease prevention program will work without it."

## The BVD Virus Example

The bovine viral diarrhea (BVD) virus is a major viral disease impacting beef cattle reproduction and performance. The key source of BVD virus infection is the persistently infected (PI) animal. PIs are the result of fetal exposure to the virus prior to the development of its immune system. BVD not only lessens reproductive performance but also produces disease in cattle including diarrhea, respiratory insult, mucosal ulcers and death. Increasingly, veterinarians and cattle feeders are finding that the BVD virus suppresses the immune system, making the animal more susceptible to infection by other viruses and bacteria.

There has been only limited work done on associating an economic cost with herds infected with BVD. But, feedlot studies suggest the cost \$7.60/cwt. or approximately \$30/animal that is expected to gain 400 lbs. during the feeding period. PI calves are very efficient at spreading the BVD virus to other animals. Current initiatives to develop effective BVD control programs are underway by the American Association of Bovine Practitioners, the Academy of Veterinary Consultants and state livestock associations.

## The Colorado "PI-Free" Program

The Colorado State University Veterinary Diagnostic Laboratory and Colorado Department

of Agriculture have been working with Colorado ranchers and cattle feeders to bring this disease under control. Two years ago, Colorado initiated a multilevel program hinging on removal of the PI animal to eliminate the most important source of exposure, effective vaccination programs and herd level biosecurity. This voluntary program is garnering significant attention around the cattle feeding community as a vehicle providing a source of “certified BVD PI-free” calves.

The architect of Colorado’s BVD Control Program is Dr. Jim Kennedy, director of the Veterinary Diagnostic Lab, College of Veterinary Medicine and Biomedical Sciences, at Rocky Ford, Colo. He says that when implementing a BVD control program some assumptions have to be made.

- ❑ **First:** The assumption that BVD is economically important to the cattle industry in a state or region. With the variability of market conditions and the predicted downturn in cattle prices, the need to return every dollar back to an operation during lean times is equally important as during robust market conditions.
- ❑ **Second:** The assumption that the PI animal is the primary source of BVD infection. The current hypothesis of BVD researchers is that without the PI there would be no BVD virus present. If we accept this hypothesis then a test and slaughter process would eliminate BVD virus infections from our cowherds.
- ❑ **Third:** The assumption that we can design a biosecurity program that can protect the cowherd from infection. A BVD biosecurity program should include quarantining and testing new entries, minimizing contact with other animals including the neighbors’ and wildlife, effective vaccinations and monitoring and evaluating our herd for the success of the program.
- ❑ **Fourth:** The assumption we can test effectively in a timely and affordable manner for

BVD and most importantly BVD PI’s. Because of the low prevalence figures ( only 1 percent of all cattle in the U.S. and 4 percent of all herds contain PI’s), large numbers of cattle are tested without identifying any PI’s.

### **Montana Agroterrorism Briefing**

When compared to other states, Montana has been identified as being uniquely vulnerable to acts of agroterrorism due to:

- ❑ The length and porosity of the sparsely-populated Montana/Canada border.
- ❑ Significant portions of Montana’s agricultural output are exported.
- ❑ Few firewalls are in place in to detect or contain an agroterrorism event.

Be alert to the possibility of agroterrorism, but don’t panic. This was the bottom-line message repeated often at a national conference recently held on agroterrorism.

### **Beefmobile offers innovative foundation for communications, continued from page 1.**

The Beefmobile spent more than two-weeks in Montana during December, visiting Stevenson’s Sale, Sitz Angus Sale, Headwaters Livestock Auction, Billings Livestock Auction Market and the Montana Stockgrowers Convention.

The Beefmobile program also was evaluated for the beef checkoff evaluation program by independent authorities. These evaluation professionals concluded that the program provided value to producers paying into the \$1-per-head checkoff. Cattlemen have also said that the program has helped them learn more about their checkoff.

Building on its accomplishments to date, the Beefmobile program will double its capacity in 2006, with two eye-catching vans traveling the country to spread the word.



Montana Livestock Forum and Nutrition Conference, cont.

**Wednesday, April 12, 2006**

7:00-8:00 Continental breakfast  
Graduate Student Poster Competition

**Nutritional Considerations**

- 8:00-8:30 Ration formulation program for sheep –**Pat Hatfield**  
8:30- 9:15 The do's and don'ts of byproduct feedstuffs for beef cattle  
–**Bud Patterson and Trey Patterson**  
9:15-10:00 Protein supplementation of grazing cattle: What's new? –**Terry Klopfenstein**  
10:00-10:30 Break  
10:30-11:15 Beef cattle diets and forage optimization strategies on western range lands  
–**Tim DelCurto**  
11:15-11:25 Presentation of graduate poster winners –**Wayne Gipp**  
11:25-11:45 Summary of the conference –**John Paterson**  
11:45 Adjourn

**Don't Forget**  
**MSU Collegiate**  
**Cattlemen**  
**Annual Educational**  
**Forum Tuesday,**  
**April 11, 10 a.m.**

**Keynote Speaker:**  
**Dr. Connie Larson,**  
**Zinpro Corporation**

For additional  
information please call  
Ms. Lisa Duffey at (406)  
994-4323 or  
John Paterson at  
581-3492



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