Notes from the Range



Nearly 700 producers braved the weather to gather at "The Ranch," the Larimer County Fairgrounds and Events Complex, Fort Collins, Colo., Dec. 11-13, 2007, for the Range Beef Cow Symposium XX (RBCS). The biennial event is sponsored by the Cooperative Extension Service and animal science departments of South Dakota State University, Colorado State University, the University of Wyoming and the University of Nebraska.

Angus Productions Inc. (API) provided online coverage of the event at www.rangebeefcow.com. Though the Midwest's December ice storm preempted a satellite link the first morning of the conference, API coordinated with the University

of Nebraska-Lincoln's (UNL's) electronic media team to provide a live feed during the remainder of the conference. Currently, the site's newsroom features API-generated summaries of each of the presentations, along with the PowerPoint and proceedings paper accompanying each presentation, if available.

The biennial symposium upheld its reputation of being an excellent educational program, offering practical production management information since the first symposium in Chadron, Neb., in 1969 (see Table 1, page 58). Unique to the RBCS, evening "bull pen" sessions provided time for attendees to discuss topics (Continued on page 58)

Left: Honored for their continued attendance at the Range Beef Cow Symposium are (from left) Richard Cross of Wyoming, who has attended all 20 symposiums; Don Huls of Nebraska, 18 meetings; Don Clanton of Colorado, 17 meetings; and Maurice Lempke of South Dakota, 11 meetings.

RBCS XX CONTINUED FROM PAGE 56

in greater depth with speakers and fellow attendees.

Subject matter

Speakers and attendees explored ways to improve the management of grazing

land during the pre-symposium workshop hosted Dec. 10 by Crystalyx. "Don't Fence Me In: Using Animal Behavior and Low-Moisture Block Supplements to Manage Pastures" featured research from authorities on animal behavior and livestock nutrition, as well as producers who have used modified grazing distribution successfully.

The three-day RBCS program featured segments on industry issues; consumers, products and markets; cow-calf nutrition;

management practices; reproductive management; animal health; cattle selection and genetics; range and forage management; and markets and marketing.

Tuesday speakers focused on effects of the 2007 Farm Bill, corn/ethanol policy, alternative energy and international markets; improving human health with beef products; success stories for marketing beef; feeding byproducts to the cow herd; and effects of cow condition on reproductive performance.

Wednesday featured June calving, choosing a production system, early weaning, artificial insemination (AI) and synchronization, heifer development, nutrition during gestation, the immune system, the Sandhills Calving System, selection based on ultrasound, genetesting for carcass traits, using expected progeny differences (EPDs), and heterosis.

Monitoring grazing lands, working with federal agencies, delivering supplements, getting rewarded for value and a market outlook concluded the conference Thursday.

Coverage

In the following section of the February *Angus Beef Bulletin*, API presents summaries for several of these sessions. More will follow in the March issue. Visit *www.rangebeefcow.com* for API's complete coverage of the event.

UNL's electronic media team is offering a DVD, which synchronizes the audio to the PowerPoint presentation, for each speaker. An order form can be downloaded from the Newsroom at www.rangebeefcow.com.

Table 1: Dates and locations of the Range Beef Cow Symposium

Chadron, Neb. 1969 1971 Cheyenne, Wyo. 1973 Rapid City, S.D. 1975 Denver, Colo. 1977 Chadron, Neb. 1979 Cheyenne, Wyo. 1981 Rapid City, S.D. 1983 Sterling, Colo. 1985 Chadron, Neb. 1987 Cheyenne, Wyo. Rapid City, S.D. 1989 1991 Fort Collins, Colo. 1993 Cheyenne, Wyo. 1995 Gering, Neb. Rapid City, S.D. 1997 1999 Greeley, Colo. 2001 Casper, Wyo. 2003 Mitchell, Neb. 2005 Rapid City, S.D. 2007 Fort Collins, Colo.

Four C's to Watch in the 2007 Farm Bill

The cost of

implementing

country-of-origin

labeling is still

a widely debated

range, with

estimates from

\$150 million

to \$6 billion.

Brad Lubben

University of Nebraska-Lincoln ag economist Brad Lubben offered a straight-shooting analysis of the issues cattlemen need to be cognizant of in the proposed 2007 Farm Bill during his opening remarks to Range Beef Cow Symposium XX (RBCS) attendees Dec. 11, 2007. Lubben replaced Colorado Democratic

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Senator Ken Salazar on the speaker list for the conference, as Salazar was still in Washington, D.C., with Congress in session.

Lubben focused his remarks on how the beef industry may be affected by pending Farm Bill legislation. He acknowledged that this Farm Bill will be unique due to present drivers such as record net farm income nationally, a tight federal budget, trade issues and continual changes in the political arena.

That said, Lubben identified four C's worth focusing on for cattlemen — country-of-origin labeling (often referred to as COL or COOL), competition, conservation and commodities. He shared these remarks on those four issues:

Country-of-origin labeling. "COOL is coming, whether this Farm Bill is passed or not. Mandatory COOL is on the way Sept. 1," Lubben said. He noted that there are revisions within current

country-of-origin labeling language that will make it different than earlier proposals. Namely, there is a revision in how a product may be labeled, now allowing for a pure USA product, a label indicating a mix of product from the USA and foreign countries, and a label for product purely of foreign origin.

He also noted that the proposed country-oforigin labeling legislation includes a grandfather clause that would allow

everything in the United States on Jan. 1, 2008, to be grandfathered in as being of U.S. origin. "That is significant as it eases some of



Brad Lubben

the burden for producing back records," Lubben explained. He indicated that this clause would also allow for the U.S. Department of Agriculture (USDA) to write rules this spring that could then allow for a September implementation.

Regarding recordkeeping, Lubben explained that the proposed rules offer a little more insight as to what type of records will be expected from retailers, wholesalers and packers in the event of an audit. But, he said, it is still vague as to what records suppliers may want from producers.

Likewise, Lubben admitted that the cost of implementing country-

of-origin labeling is still a widely debated range, with estimates from \$150 million to \$6 billion.

"It's still a debatable question as to what this will cost and what consumers are willing to pay. And we really won't know until we test this and have implemented COOL for a couple years," he surmised. Cost aside, Lubben indicated that

Cost aside, Lubben indicated that country-of-origin labeling is just the beginning of the traceability and process-verified programs (PVP) that some retailers are beginning to demand. "In the end, traceability and PVP will trump COOL. The demand for those systems is growing," Lubben said.

Competition. Lubben suggested the proposed ban on packer ownership of cattle may not be beneficial to producers or consumers. Packer-owned cattle are a small percentage of the beef market, with the beef industry still being a largely spot-driven market, he said. That said, if packers have some market power and control of supplies, it may allow them economies of scale, which in turn translates to efficiency across the industry and more competitive prices.

"The benefits of economies of scale outweigh the detriments of packer ownership," Lubben concluded, and added that he

U.S. Cattle Industry Sees Shift with Ethanol Era

The ethanol industry boom and subsequent higher corn prices are shifting fundamentals in the U.S. cattle industry. And, Andrew Gottschalk, senior vice president of R.J. O'Brien & Associates and owner of HedgersEdge.com LLC, Englewood, Colo., said those changes aren't going away. Corn used for ethanol is expected to expand from 2.125 billion bushels (bu.), or 20% of annual production, to 4.3 billion bu. in 2009-2010, or about 30% of annual production.

"The immediate impact of the Renewable Fuels Standard (RFS) is the sharp increase in corn prices resulting from increased corn demand for ethanol production. It has substantially increased the cost of corn to all users," he said. "The sector of our industry most susceptible to the adverse impact of a sharp increase in corn prices is the cow-calf sector.



Andrew Gottschalk

Higher corn or feedgrain prices will ultimately limit the price the fed sector will pay for calves and feeders."

Not all regions of the beef industry will be affected to the same

degree. Gottschalk noted ethanol production capacity is concentrated in an area that encompasses Iowa, Nebraska, Illinois, South Dakota, Minnesota, Indiana and Wisconsin. That capacity is attracting more cattle feeding.

"The move follows decades of decline, as cheap feedgrain prices and relatively cheap transportation costs had encouraged the growth of cattle feeding in the Southern Plains," he said. "The advantage in the Midwest (with availability of dried distillers' grains, or DDGs, for feed) can reduce feeding gain costs by as much as \$10 per hundredweight (cwt.). For cattle expected to gain 500 pounds (lb.) while on feed, the cost savings can approach \$50 per head."

In the short to intermediate term, Gottschalk said that Midwest cowcalf producers and stocker operations will see additional demand for feeders and calves on feed. Some of the feed gain cost advantage can be passed on via higher prices. Producers can also reduce feeding costs for cows. Wet distillers' grain (WDG) can cut daily winter costs by 40% or more. Distillers' grain can be fed at 10% to 15% of the ration on a drymatter (DM) basis in backgrounding operations.

At the same time, additional regional feedlot expansion will only exacerbate the current feeder and calf shortfall. "The Midwest is also limited by a lack of fed-cattle daily harvest capacity," he said. "The differential in capacity is already being realized. Price premiums for Iowa/Nebraska fed cattle over Texas have eroded from 50¢ to \$1.00 per hundredweight to a 75¢- to \$1.30-per-hundredweight discount."

Ultimately, Gottschalk said, the price of fed cattle will be determined

anticipates this proposal will be dropped from the final Farm Bill product.

Conservation. Lubben noted that several programs such as the Conservation Reserve Program (CRP), the Environmental Quality Incentives Program (EQIP), and more recently the Conservation Security Program (CSP) have been beneficial to agriculture. But he cautioned beef producers to be watchful of how these programs are funded in the future.

Currently, the House and Senate are at odds over funding for EQIP, which the Houses favors and which is more beneficial to livestock producers. The Senate proposes more money for CSP. This bears paying attention to, he told attendees

Commodities. In his final remarks, Lubben emphasized how crop production and energy policy have greatly affected the livestock industry. "If a renewable fuels bill is passed, we could see more competition for commodities," he said.

Currently, the United States is using 7.5 billion gallons (gal.) of ethanol, he said. If that goes to 15 billion gal. it will require 25 million acres of corn. Additionally, if cellulosic ethanol becomes a reality, it could require 40 million to 115 million acres of forages. As a result, Lubben said, cattle producers may be competing with ethanol for forage as well as for corn acres.

— by Kindra Gordon

by consumers. "If fed cattle prices cannot increase to offset higher feeding costs, the necessity to ensure a profit margin to the fed sector will force the price of other inputs to adjust lower," he said. "Higher corn or feedgrain prices will limit the price the fed sector will pay for calves and feeders."

Gottschalk predicted herd expansion is likely to be limited. Expansion in current ethanol mandates would also intensify competition for land.

"Price differentials will eventually reduce some of the gain realized by Midwest producers," he said. "Long term, structural requirements are likely to lead to more ethanol plant expansion closer to end users. While such action will temper the advantage garnered by Midwest producers, it will not negate the advantage. Public perception and government ethanol programs will not likely concern themselves with any impact on the cattle industry. But these impacts will not be invisible, nor unsubstantial."

— by Barb Baylor Anderson

Antagonisms, Protagonisms of Alternative Energy

During recent years, discussion of renewable energy sources often revolves around corn ethanol. However, Leanne Stevenson told Tuesday morning's RBCS audience that another answer is blowing in the wind.

While many rural areas need more infrastructure for large-scale developments, he said, there is considerable opportunity for smaller, community-based wind-generation projects.

-John Stulp

Stevenson, manager of the Wyoming Department of Agriculture's Natural Resources and Policy Division, said total wind energy used in the United States increased by 800% from 1989 to 2005. Preliminary data from the Energy Information suggests it increased by another 45% in 2006.

"Don't cuss the wind. It has value for more than just pumping water for cows," Stevenson said. "Wind power generation is increasing faster than any of the other alternative energy sources." The leasing of development rights to wind energy developers represents another way that landowners can diversify their ranching operations.

Stevenson encouraged producers to consider several factors, including whether they are located in an area that provides the right kind of wind at sustained speeds, before becoming involved in utility-scale wind energy projects. Other factors, she said, include the available market for wind energy, transmission access and capacity, environmental impact, and community response. She advised ranchers to consider which factors might be antagonisms or protagonisms before signing development rights over to developers.

Marketing options include negotiating with developers directly or through a "wind association" of several landowners representing a block of land identified as having good wind potential. The association can then entertain bids from developers.

Colorado Commissioner of Agriculture John Stulp said ranchers often are better off to work through a group. He advised producers to do their homework first, particularly since lease contracts usually are long-term agreements that may affect heirs or other subsequent owners of the property involved.

Stulp said the largest single factor limiting wind energy development may be the lack of high-voltage transmission lines to carry generated electricity to the large load centers. While many rural areas need more infrastructure for large-scale developments, he said, there is considerable opportunity for smaller, community-based wind-generation projects.

"And there is growing opportunity for ranchers to improve profitability," Stulp agreed. "Wind is a winner as an environmentally friendly renewable energy source. It uses no water, there



Leanne Stevenson

are no carbon emissions and there is potential value in the sale of carbon credits."

- by Troy Smith

(Continued on page 62)

Global Options for U.S. Beef Exports

Japan, Mexico, Canada and South Korea offer the greatest potential to expand U.S. beef exports, said Brett Stuart, international market analyst for Cattle-Fax.

During his presentation at the opening session of the 2007 RBCS, Stuart said these "tier-one markets" have more short-and medium-term growth potential than anywhere else. For example, Japan has the most dollar value and tonnage value for U.S. beef exports in the future. He also pointed out that the United States can compete very well against Australian beef on quality and exchange rate on beef exports to Japan.

The Mexico market has slowed down, but shows very good potential long-term, while Canada bought 38% more beef than a year ago due to a stronger Canadian dollar. South Korea is the wild card of the group, because it has signed a free-trade agreement (FTA) with the United States, but Stuart wasn't sure when it would be fully implemented.

In addition to these markets, he said



Brett Stuart

that Russia, China and some specialty niche markets offer promise for U.S. beef exports. Russia just re-opened its markets in November 2007, so it will take some time to export more beef to that country. Stuart noted that U.S. beef shipments were about 94% liver, but that business was shifted to Egypt. Plus,

The U.S. market will continue to deal with protectionist policies in countries such as China and declining U.S. beef production, which is a big hindrance for growth.

-Brett Stuart

South American countries own 90% of the Russian beef export market by offering cheap, low-value cuts of beef.

As for China, hotels, restaurants and fast-food chains offer the biggest potential for U.S. beef exports. A big challenge is that only a small percentage of China's 1.3 billion people can afford to eat in restaurants that use imported products. Per capita income for China's rural residents was only about \$300 in

2003, and urban income barely topped \$1,000 per year. However, the top 15% of China's urban dwellers make \$5,000 or more per year, which allows these consumers to better afford Westernized food. Another obstacle for exports to China is the lack of refrigerated trucking and knowledge of handling U.S. beef cuts.

While the opportunities are there for U.S. beef exports in the global market, there's plenty of work ahead. One of the driving factors will be expanding incomes, Stuart said. As people's income grows, they tend to eat more meat. He noted that 2008 offers a huge opportunity for U.S. beef exports to recover, especially if the Japanese and South Korean markets open up. On the downside, the U.S. market will continue to deal with protectionist policies in countries such as China and declining U.S. beef production, which is a big hindrance for growth.

- by Jane Messenger



RANGE BEEF COW SYMPOSIUM XX — CONSUMERS, PRODUCTS & MARKETS

Beef's Role in a Healthy Lifestyle

We've all heard the slogan "Beef. It's what's for dinner." But in the future, consumers may also want to remind themselves that "Beef does a body good."

Marilyn Schnepf, chair of the Nutrition and Health Sciences Department at the University of Nebraska-Lincoln, provided an overview of beef's healthful attributes to attendees of the Range Beef Cow Symposium (RBCS) XX in Fort Collins, Colo., Dec. 11, 2007.

"Beef is an excellent source of essential nutrients," Schnepf said, as she listed protein, phosphorus (P), selenium (Se), iron (Fe), zinc (Zn) and vitamin B_{12} among the essential nutrients that beef provides.

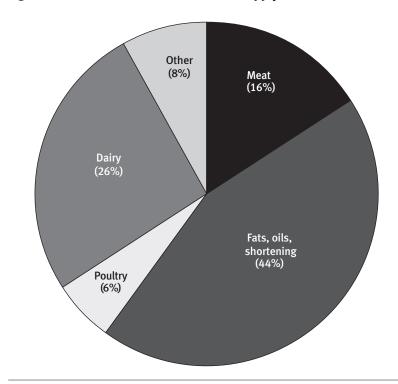
Schnepf noted that in the past the downfall of beef for those seeking a healthy lifestyle was the perception of its fat content. But, she explained, that negative perception is changing as the nutrition community is learning more about fat.

"We've learned that all saturated fat is not created equal," she told meeting attendees. Schnepf cited research trials that have found some beneficial properties of stearic acid from beef sources. Likewise, research into conjugated linoleic acid (CLA), another type of fat found in beef, appears to offer some health benefits.

Schnepf said more research is needed to clarify just how these fats, and how much of these fats, may fit into a healthy lifestyle, but it is a step forward for the beef industry in being recognized for additional attributes.

In closing, Schnepf cautioned that messages on good and bad fat can get confusing to consumers. "We used to think all fats were bad, and that's not true," she reiterated.

Fig. 1: Saturated fat sources in U.S. food supply, 2004



"We are learning more all the time."

She concluded, "The fat we find in beef has unique properties,

and more research is being conducted to learn about people's fat requirements. ... We know that fat cells are more than storage for fat; they have a real metabolic use in producing things for the body."

Until we know more, she said, the best advice is that which most of us already know:

- 1. Eat a variety of foods.
- 2. Eat those foods in moderation to balance calories consumed with calories expended.

If we balance what we eat with the energy we expend, we would all be much better off, Schnepf remarked.

— by Kindra Gordon

Selling Beef Successfully in the Restaurant

John Pickerel probably has stronger ties to the livestock business than most restaurant owners. His father was a professional bull rider who later had several livestock-related businesses, including operating a stockyard and being an order buyer. Pickerel jokingly told Tuesday's RBCS crowd that his dad always had a bull rider's business philosophy: "Try to get rich in eight seconds."



John Pickerel

Pickerel lives by a different credo in running Buckhorn Steakhouse and Roadhouse. In all, Pickerel operates 10 restaurants located in the San Francisco Bay area. He has devoted years to "doing meat right" and promoting Buckhorn's signature high-quality beef. He caters to the beef lover in every potential customer.

"If we do our job right, we can convert die-hard vegetarians, stubborn children and skeptical Texans. They will talk about the experience and return for more," Pickerel stated.

The Buckhorn menu has expanded, but Pickerel started his first restaurant with "beef on a bun" and just a little au jus. The business grew by always offering a reliable product — premium Choice beef, wet-aged, carefully seasoned and cooked medium-rare "edge to edge."

"We're fanatical about it," Pickerel said. "We take quality very seriously and promote the flavor of red and pink beef. We're aggressive about explaining to the customer why they should and will enjoy it."

Why premium Choice beef? Pickerel said he wanted restaurant reviews to tell more about his fare than that the portions

"If we do our job right, we can convert die-hard vegetarians, stubborn children and skeptical Texans."

— John Pickerel

were ample. He followed the example of other successful, high-end restaurants that served the *Certified Angus Beef*® (CAB®) brand and attracted line-up business.

Pickerel employs his own meat cutter to cut beef to customer specifications. Servers must be "certified" after completing Buckhorn's own "Cow School," which trains employees with regard to differences in meat cuts, as well as the differences in beef quality, aging, marinating and preparation methods. The restaurants also promote their fare through sampling, offering customers a taste of new entrées to pique their appetites.

Annually, Buckhorn restaurants serve 500,000 pounds (lb.) of CAB brand beef to more than 100,000 patrons.

— by Troy Smith

Beef is an excellent source of five essential nutrients:

- protein
- selenium
- vitamin B₁₂
- zinc
- phosporus

Beef is a good source of four essential nutrients:

- niacin
- iron
- riboflavin
- vitamin B₆

Selling Beef Successfully at Wholesale

Charlie Winters from Costco Wholesale Corp., Issaquah, Wash., led a discussion of the success Costco sees from selling beef as a retailer. Winters revealed that Costco's main focus is the quality products it brings to cardholding members.

Costco is the fourth-largest retailer in the United States, is eighth-largest in the world and ranks 29th among Fortune 500 companies. The company has 527 warehouses nationwide, including buildings in Canada, the United Kingdom, Mexico, Korea, Japan and Taiwan.

Although the company is large in numbers and profits, Winters said its No. 1 focus is and has always been its customers.

"Our mission at Costco is to continually provide our members with quality goods and services at the lowest possible price, and that will never change," he said.

Costco has been providing USDA Choice beef to its consumers for 20 years. The company has seen \$63 billion in sales thus far in 2007 with 53 million cardholding members.

It expected to end the year with an additional \$50 million for the holiday season. Winters listed the following strengths embedded in Costco's promise to its customers:

- 53 million loyal cardholding members;
- 86% membership renewal;
- absolute pricing authority;
- fantastic employees; and
- merchandise that speaks for itself.

Winters said Costco believes it sets the pace within the retail industry on product prices. "The main competitors Costco has are Sam's Wholesale and Wal-Mart's Wholesale markets," he

explained, "but our Choice beef never

goes out of style."

Costco beef has a better palatability, Winters said, because the warehouses use a mechanical tenderizer to give it a consistent bite no matter the amount of marbling. Costco is the largest buyer of USDA Choice beef in the world, as well as the largest buyer of salmon and lamb.

"We sell 1 billion pounds of fresh meat yearly, with 700 million of that to



Charlie Winters

the U.S. alone," Winters said. "We are one of the best custodians of red meat. We have seen that with the rising cost in corn, fuel and transportation, the cost of meat has risen as well. Now all the proteins are fighting for value."

Price may be a deciding factor for some consumers; however, Costco's detail and manner in how meat is processed is proof that quality outweighs price in most cases.

Although Costco is large in numbers and profits, its No. 1 focus is and has always been its customers.

-Charlie Winters

"With Costco you receive 100% edible product on your plate," Winters said. "We remove bone felt from muscle cuts, back strap from rib cuts, and we never place the first cut in a package for sale, which is something our competitors never do."

Costco has continued its success in the beef retail business because of its focus on quality, along with quantity. Through warehouse-produced testing and customer analysis, Costco does what is necessary to ensure product quality.

— by Tosha Powell

(Continued on page 66)

RBCS XX — CONSUMERS. PRODUCTS & MARKETS CONTINUED FROM PAGE 65

Success as Ranch-to-Retail Alliance

"We weren't going broke in ranching yet, but we could kind of see it coming," said Doc Hatfield, during the Tuesday afternoon session. Hatfield said that's why he and his wife, Connie, took a hard look at their Brothers, Ore., cattle operation and decided to break out of the commodity beef business.

In 1986, the Hatfields spurred the formation of an alliance with 14 other

ranch families who also embraced the concept of producing beef to meet specific consumer needs and wants. They formed Country Natural Beef, a cooperative that would merchandise beef to consumers seeking beef grown without added hormones and antibiotics. They also capitalized on their target clientele's interest in the families that produced that beef

The cooperative now includes more than 100 ranches owning more than 100,000 mother cows. From the marketing of three to five animals per week in 1986, Country Natural Beef has grown to where 2007 sales will include more than 50,000 head. Through the cooperative's partnership with an Oregon feedlot and a Washington state beef processor, memberranchers retain ownership and control of the cattle until the beef reaches a retail partner's coolers. Retail outlets include natural food retailers in several states.

According to Connie Hatfield, all retailers are promoting Country Natural Beef beyond the brand name by emphasizing the connection between products and the cooperative's producer families. Consumers also find appeal in learning that the beef they buy was raised in environmentally friendly production systems and under low-stress conditions. It's a merchandising step that adds



Doc Hatfield

an emotional connection and further differentiates Country Natural Beef in the marketplace.

Accordingly, rancher members must agree to deliver cattle that are committed to the program 12-18 months in advance. They attend two three-day membership meetings per year. They agree to spend one weekend in the city promoting Country Natural Beef, and devote at least one day to hosting customers attending an "appreciation day" on the ranch or a

Country Natural Meats defines itself to consumers this way:

Our product is more than beef — It's the smell of sage after a summer thunderstorm, the cool shade of a Ponderosa Pine forest.

It's the 80-year-old weathered hands saddling a horse in the Blue Mountains, the future of a 6-year-old in a one-room school on the High Desert.

It's a trout in a beaver-built pond, haystacks on an Aspen-framed meadow.

It's the hardy quail running to join the cattle for a meal, the welcome ring of a dinner bell at dusk.



Connie Hatfield

rancher-sponsored tour. Requirements also include Food Alliance certification for humane animal handling and management principles.

"That's what we've done — formed a ranch-to-retail alliance. It provides more value to the customer and more pride and meaning to our ranchers' work," Doc Hatfield said. "It's simple, but it isn't always easy."

— by Troy Smith

Finding Their Market

Who is our customer? What do they want? Those were just two of the questions that Robbie LeValley asked before starting Colorado Homestead Ranches (CHR). Started in 1995, CHR is a partnership of six ranches that own their own U.S. Department of Agriculture (USDA) packing plant and market their natural beef, pork and lamb directly to

A speaker at the 2007 RBCS, LeValley was charged with explaining how CHR has been able to successfully market beef to consumers.

In 2004, CHR received a USDA rural development value-added grant and contracted with Colorado State University (CSU) to conduct market research to find out what customers really wanted. The research identified five "clusters" that were named based on how they vary in terms of demographics, buying behavior and attitudes about the important factors in meat production, LeValley explained.

The first cluster, labeled *Quality Seekers*, accounted for about 12% of



Robbie LeValley

those surveyed. This group looks for a wide variety of more extensive items in one shop. *Health and Natural Consumers*, comprising 13.2% of the market, value natural production practices.

Moderate Consumers — those who look for a wide variety of products available at competitive prices — accounted for 29.6% of those surveyed.

"If the product is created with the target consumer in mind during all stages of production, you're more likely to have success."

- Robbie LeValley

Empathetic Value Seekers, representing 22.6%, are similar to Moderates, but they are more willing to purchase halves and quarters of a beef carcass since they are offered at affordable prices.

The final group, the *Price Conscious*, searches for the best prices and usually buys in bulk. This group accounted for 22.1% of those surveyed.

After identifying these five groups, LeValley said, a marketing plan was made for each one of them.

(Continued on page 68)

RBCS XX — CONSUMERS, PRODUCTS & MARKETS CONTINUED FROM PAGE 67

"If the product is created with the target consumer in mind during all stages of production, you're more likely to have success," LeValley said.

In 2002, CHR bought a USDA-

inspected packing plant and continued to produce its beef. "We have no antibiotics in feed, no growth hormones [and] no animal byproducts. It's a USDA-inspected product; it's aged and dry-aged on the rail for 14 days. It is local, and it is traceable," LeValley said. "That is what is on our PQC (partial quality control) for our label."

Since CHR's packing plant is one of

two in western Colorado, two-thirds of the work they do is for custom packing. The other one-third is for the CHR beef.

"That's what helps pay the bills," LeValley said. "We're not in this to take a commodity price; we're in this to even out the cash flow for the next year and make sure that we can pay the bills. Custom work helps pay the bills, and then there is the strong demand for our local product."

"We have no antibiotics in feed, no growth hormones [and] no animal byproducts.

It's a USDA-inspected product; it's aged and dryaged on the rail for 14 days. It is local, and it is traceable.

That is what is on our PQC (partial quality control) for our label."

-Robbie LeValley

CHR is continuing to work on the future. They have begun to partner with appliance stores that sell grills and freezers. LeValley explained that through the partnership, they give beef with the purchase of a grill. That way consumers know what they have to offer.

LeValley offered this advice to anyone considering their own partnerships: "Why does this work? We laugh a lot and work toward a consensus."

It's not always easy, LeValley said. Partners have disagreements, but they work things out. In the end, "we base this off the bottom line," she said. "We're not in this for our health."

But, LeValley said, when she sells some beef and helps a consumer by explaining to them how to prepare it correctly, then they come back and tell her it's the best steak they've ever had, it's a good feeling.

— by Mathew Elliott





COW SYMPOSIUM XX — COW-CALF NUTRITION

Using Byproduct Feeds in Cow-Calf Programs

Leading off Tuesday afternoon's discussion of cow-calf nutrition at the 20th Range Beef Cow Symposium (RBCS) in Fort Collins, Colo., University of Nebraska Extension Beef Specialist Ivan Rush offered producers tips for choosing and using various byproduct feeds.

Most commonly, Rush said, byproducts of the oilseed and corn-milling industries have been considered as sources of protein to supplement cows consuming diets consisting of low-quality roughages. However, in many cases corn-milling byproducts may serve as sources of protein and energy.

Rush emphasized the importance of knowing the nutrient content of any byproduct feed, including levels of protein, energy and minerals. It's also important to know the moisture content.

"The thing that many producers don't pay enough attention to is amount of water in the byproduct. Small variations in moisture content can change the true feeding value dramatically. That can make a big economic difference," Rush explained. "All feeds should be priced on a dry-matter (DM) basis."

Rush said crude protein (CP) value is usually listed on a feed sack tag or included in a laboratory analysis, but that doesn't tell the whole protein story. It doesn't tell



the amount of protein that is available for digestion in the rumen and how much might be bypass protein. A consulting nutritionist can help determine the true value of crude protein. An accurate estimation of energy [total digestible nutrients (TDN) and net energy (NE)] is also advisable.

Corn byproducts have gained popularity, particularly in areas near processors. According to Rush, these feeds can fit almost any diet for growing cattle, developing heifers and cows. Along with

"Small variations in moisture content can change the true feeding value dramatically. That can make a big economic difference. All feeds should be priced on a dry-matter basis."

— Ivan Rush

being excellent sources of protein, energy and phosphorus (P), they do not lower digestibility of forages, unlike feed sources that are high in starch. For this reason, higher levels of distillers' grains (DG), for example, can be fed when more energy is needed or as a substitute for part of the forage in cow diets.

"Dried distillers' grains (DDGs) complement wintering programs based on low-quality hay quite well. One to three pounds (30% protein) will usually meet cow requirements for protein," Rush said.

The product handles and stores reasonably well, whether it's in pellet, cube or meal form. Many ranchers report very little waste when feeding on frozen

ground, even with meal. And even if 10%-15% were wasted, the price may be competitive with alternative feeds. Wet product is priced lower per ton, but it contains a considerable amount of water. That adds to freight costs, and wet product presents challenges for storing and feeding.

With regard to oilseed byproducts, Rush said, cottonseed products have been fed by generations of ranchers. Cottonseed remains one of the best protein supplements for range cows, but is not as economical as in the past. Soybean meal provides high-quality protein, but demands a relatively high price.

Sunflower meal has become more plentiful and is being used in commercial range cubes. Rush says sunflower meal tends to be variable in nutrient content, and protein quality usually is not as high as in other oilseed byproducts unless all of the hulls have been removed.

Which byproduct should ranchers choose? Rush advised use of least-cost analysis based on delivered prices. Often, he added, a good decision can be made by concentrating on the cost of the most needed nutrient and figuring the cost per unit of that nutrient.

— by Troy Smith

The Basics of Scoring Body Condition



Julie Walker

Want a historical perspective of how a cow herd has been managed? Take an inventory of cow body condition scores (BCS), said South Dakota State University's Julie

"Body condition scoring is an effective management tool to estimate the energy reserves of a cow," Walker said during her remarks Dec. 11 at the 2007 RBCS. Walker added that monitoring BCS is a tool that doesn't cost producers anything to use since it doesn't require any equipment, just a trained

eye. It can be an important tool for ensuring that cows breed back annually.

"We've heard that the more uniform a set of calves, the better prices they bring," Walker said. To get uniform calf weaning weights, producers are aiming to have calves

Source: Pruitt and Momont, 1988.

born in a 45- to 60-day time period, which means cows must be bred during a 45- to 60-day breeding season, she explained.

For cows to have a short postpartum interval (the length of time from parturition until the first estrus), research has shown that a

Table 1: BCS at parturition on postpartum interval (PPI)

BCS	PPI, days
3	88.5
4	69.7
5	59.4
6	51.7
7	30.6

Source: Adapted from Houghton et al., 1990.

Table 2: Effect of BCS on percentage of cows cycling at the start of the breeding season

		% cycling		
BCS*	No. of cows	May	June	July
	E	arly-calving cows	;	
≤4	45	10.0	28.2	70.5
5	84	17.8	43.5	85.6
6	43	41.9	77.5	97.5
≥7	25	45.9	76.6	94.7
	Li	ate-calving cows		
≤4	14	0.0	0.0	44.7
5	41	0.0	26.0	74.4
6	22	0.0	35.3	98.5
≥7	6	0.0	65.8	99.1





BCS 5-6 (on a 9-point scale) at calving is necessary. Walker cited research that has shown if cows are in BCS 3 at calving, only an average of 43% will breed back. Additional research shows that a BCS 7 may yield a high breed-back percentage, but, Walker questioned, "What did it cost to get that?"

Thus, the moderate BCS 5-6 is typically recommended. South Dakota research has found that early-calving cows can be slightly thinner than late-calving cows because they have additional time to initiate estrous cycles prior to the breeding season.

Walker provided a quick review of the 1-to-9 scoring system used for estimating cow BCS. A BCS 3 means the upper skeletal structures, including the ribs and spine, are visible. A BCS 5 has

For cows to have a short postpartum interval (the length of time from parturition until the first estrus), research has shown that a BCS 5-6 (on a 9-point scale) at calving is necessary.

the last two ribs slightly visible with the tailhead filled, but not mounded by fat. A BCS 7 would have the "finished steer" look, Walker said, with fat around the tailhead, in the brisket and possibly in the udder as well.

- Julie Walker

In closing, Walker cited new research done at New Mexico State University that has looked at young cows with a BCS lower than 5. By supplementing glucogenic precursors to these cows, the ranch managers have been able to maintain a 90%-plus fall pregnancy rate within a 60-day or less breeding season.

Walker concluded that this research may provide some valuable management options for managing thin cows that are not at their optimum BCS, but additional trials need to be conducted to see if this research is applicable in the Northern Plains.

Walker reiterated the importance of monitoring BCS in the herd, and she added that early evaluation is essential so that management changes can be made to approach calving season with cows at an appropriate BCS that translates into a successful breeding season.

For more information about how to score body condition, visit www.cowbcs.info.

— by Kindra Gordon



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Breeding Success Is in the Details

Attention to detail is the secret to a successful herd synchronization and artificial insemination (AI) program.

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It doesn't really matter which synchronization or AI protocol you choose to use. The key to getting cows bred is paying attention to the management details, University of Minnesota animal scientist Cliff Lamb said Dec. 12, 2007, at the Range Beef Cow Symposium XX (RBCS), in Fort Collins, Colo.

Lamb offered several key points on which producers should focus to enhance reproductive efficiency within their herds. Foremost, he "Don't think that
a synchronization
program will get
cows cycling if they've
had poor nutrition."

— Cliff Lamb

said, is emphasis on nutritional management among heifers and cows

"Don't think that a synchronization program will get cows cycling if they've had poor nutrition," Lamb said. "You'll struggle and be disappointed if your cows aren't in good body condition at the start of breeding."

REPRODUCTION

He suggested the common rule of thumb that cows be in a body condition score (BCS) of 5 or 6 on a 9-point scale at breeding. He cited research indicating that for good fertility rates it is more important that females be gaining condition prior to breeding, as opposed to simply maintaining.



Cliff Lamb

Likewise, Lamb shared research indicating that fat heifers (BCS 7 or higher) tend to struggle with fertility if they lose condition and then have to regain it to start cycling again. "It takes them longer to start cycling," he said.

Lamb also stressed the importance of having cows in appropriate condition at calving.

"Condition in which cows calve is a critical indicator of when they'll come back into heat," he said. For instance, a cow with a BCS 3 at calving will, on average, take 89 days before she'll begin to start cycling for breed back; whereas, cows with a BCS 5 or 6 will typically cycle within the first 60 days after calving.

"Don't starve your cows through winter and plan to get them to gain body condition after calving," Lamb said. "It's too late." If they are in a BCS 5-5.5 at calving, they will respond better to estrus synchronization programs at breeding.

As final points for the breeding season, Lamb offered these recommendations:

◆ Minimize stress on the herd. "Stress affects pregnancy rates, ovulation and embryo survival," he said. Appropriate facilities can help decrease stress to both people and the cattle. He especially suggested the use of a breeding box.

▶ Follow the synchronization protocols outlined in the AI catalogs. Choose the protocol that suits your operation, and plan ahead because many of the protocols are 31-33 days in length.

◆ AI all cows. Even if the protocol you use requires heat detection, run all synchronized cows that have not shown heat through the chute and AI them at 72-84 hours. "It will increase overall pregnancy rates by 10%-15%," Lamb said.

"Synchronization will do a great job in herds where the details have been taken care of up front," he concluded.

— by Kindra Gordon

Re-evaluate Traditional Postweaning Heifer Development

Traditional approaches to postweaning development of replacement heifers during the last several decades have primarily focused on feeding heifers to achieve or exceed a target weight to maximize pregnancy rates. But changes in cattle genetics, economics and research may suggest it's time to re-evaluate those traditional approaches.

"Intensive heifer development systems may maximize pregnancy rates, but not necessarily optimize profit or sustainability," Rick Funston of the University of Nebraska West Central Research and Extension Center at North Platte told RBCS attendees Dec. 12.

"Developing heifers in this manner requires significant use of fuel and feed, and high capital investment in equipment and facilities," Funston continued. "The fuel requirement to harvest and deliver feed to cattle creates high energy demands in the system. Cereal grains used in heifer diets detract from the system's sustainability due to growing demand for human food and ethanol production."

Studies in numerous species provide evidence that diet during development can partially control physiological changes necessary for puberty. Energy balance and other nutritional factors influence reproductive performance in heifers and cows. In addition, previous research indicated that rate of postweaning growth was thought to be an important factor affecting age of puberty, which in turn influenced pregnancy rates.

The universal thought process has been that "puberty occurs at a genetically predetermined size.

Only when heifers reach their target weight can high pregnancy rates be obtained," he said. "Replacement heifers have been fed to achieve 60% to 65% of expected mature body weight by the time breeding started in order to reach puberty."

Fast-forward three decades, and more contemporary

research has shown the pattern of growth heifers experience prior to achieving critical target weight could be varied. In fact, heifers may be developed to lighter-than-traditional target weights without any negative effects on profitability or future productivity.

"Numerous studies have been performed to determine how energy inputs affect heifer development program success," he said. "Limited research has been performed to determine whether inherent differences in development systems affect reproductive efficiency or future productivity of heifers ... And some studies provide evidence that heifer development systems can influence reproductive performance, but do not provide evidence of effects independent of energy intake and/or

Heifers may be
developed to lighterthan-traditional
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without any negative
effects on profitability
or future productivity.

Rick Funston

that heifer development systems of influence reproductive performan but do not provide evidence of effindependent of energy intake and growth rate."

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growth rate."

Funston said producers can decrease feed costs by altering rate and timing of gain, which

creates periods
of compensatory
growth and allows
producers to limit
supplementation
to critical periods.
Total energy intake,
and possibly costs,
may be reduced by
limiting heifer gain
early postweaning
celerated gains before

followed by accelerated gains before breeding season.

"Ongoing research evaluating lifetime productivity of heifers developed with either unlimited or restricted access to feed during postweaning supports the potential to reduce target weights when developing replacement heifers," he said. "Age at the beginning of the breeding season may be more critical for a successful pregnancy than body weight."

— by Barb Baylor Anderson

Nutrition During Gestation & Fetal Programming

The concept of fetal programming suggests that environmental stimuli during pregnancy establish permanent responses by the fetus, which are likely to be expressed at birth and even later in life. The study of long-term effects on offspring due to a mother's nutritional status began in the human health arena, but it also has application for livestock production.

During the Dec. 12 RBCS discussion of reproductive management topics, North Dakota State University animal scientist Kim Vonnahme said the theory of fetal programming has been challenged and verified using multiple animal models. From the earliest stages of embryonic life, an unborn calf is sensitive to the dietary intake of its dam. A nutrient-restricted diet results in an undernourished fetus, which may be "programmed" for susceptibility to disease and poor performance at birth and later in life.



Kim Vonnahme

"While variations in the duration and severity of maternal undernutrition do not always result in a reduced birth weight, physiologic alterations such as glucose intolerance, skewed growth patterns and even alterations in carcass characteristics have been reported," Vonnahme said.

In a pregnant bovine, development of the fetal/placental vascular system begins around Day 90 of gestation. Subjecting the cow to nutritional insult during this early development period can affect the ability of the fetus to acquire proper amounts of nutrients and oxygen. While it is true that 75% of the growth of a ruminant fetus occurs during the last two months of gestation, Vonnahme said the early phase of development is critical to growth of the placenta and subsequent fetal development.

Studies suggest a low-protein diet can result in lifelong elevations in blood pressure of offspring, which may compromise lung development in late gestation. Reduced lung function could then make calves more susceptible to respiratory disease. Vonnahme said that while the timing and the exact nutrients

involved are not yet clearly delineated, it appears that multiple physiological systems, including skeletal muscle

development, may be affected at different times during pregnancy. Further research is needed to better explain how maternal nutrition affects economical traits in beef cattle.

- by Troy Smith



RANGE BEEF COW SYMPOSIUM XX — ANIMAL HEALTH

Prepare the Immune System

With understanding of diseases, response to treatment and the role of the immune system, producers can improve animal health and minimize long-term costs. That was the message Gordon Brumbaugh, veterinary specialist for Pfizer Animal Health, carried to attendees of the 2007 Range Beef Cow Symposium (RBCS) in Fort Collins, Colo., Dec. 12, 2007.

Brumbaugh called attention to the often-overlooked costs of disease. Despite producers' best efforts, some animals will become sick and require treatment. Calves with bovine respiratory disease (BRD) that require more than one treatment may exhibit reduced performance, decreased carcass quality and lower economic returns than calves that did not develop BRD or those that responded to one treatment.

Brumbaugh said that illustrates why the health of young stock requires attention.

He explained that treatment with antibiotics serves only one purpose: to overcome the disease organism. It's then up to the animal's immune system to clean up, repair and restore function to damaged tissue.

"What can producers do to help prepare the immune system to participate in healing? Most important are the simple things that we sometimes don't want to do," Brumbaugh stated.

Preparation starts with reducing exposure to infectious organisms. Cleanliness of feeders, water troughs or tanks, bedding, and handling facilities can reduce the number of organisms to which animals are exposed. Enhancement of the immune system usually concentrates

on vaccination against diseases. Appropriate use of biologics in the calf and the cow herd is necessary to prepare them for the challenges of infectious agents.

Preparation may start long before animals are eligible for vaccination, Brumbaugh added. Studies have identified genetic contributors to disease resistance. As more is learned about particular genetic markers, selection for resistance to specific diseases may be possible.

Phenotypic profiles are now being used to identify cattle with desirable performance characteristics and those that are at greater risk of contracting BRD. Behavioral traits are outward expressions (phenotypic traits) that have been shown to be associated with relative risk of illness, as well as performance characteristics.



Gordon Brumbaugh

"There is exciting potential for 'profiling' and managing cattle based on that risk," Brumbaugh said. "Targeted selection and management could lead to development of appropriate expectations for health care programs and could substantively enhance judicious use of medication."

— by Troy Smith

Applying the Principles of the Sandhills Calving System

"The later a calf

is born in the

season, the more

likely it is to die

from scours."

- Dave Smith

David Smith shared with producers attending the RBCS animal health session the principles

used in the Sandhills Calving System to minimize the risk of calves developing scours. Smith is professor and Extension dairy/beef veterinarian with the Department of Veterinary and Biomedical Sciences at the University of Nebraska–Lincoln (UNL).

"There are numerous infectious agents that cause calf diarrhea," Smith said. "Probably too much time [is] spent in knowing the name of the agent responsible for the calf's illness or death, even though that knowledge rarely explains the outbreak or provides a solution for treatment, control or prevention."

Calves that typically become ill or die from diarrhea do so within one or two weeks of age, Smith added. Regardless of the reason for this narrow range of age, the first seven to 14 days defines the age of susceptibility as well as the age calves are most likely to become infective and shed the agents in their feces.

The dam's age also explains a young calf's risk for diarrhea, Smith said. Calves born to heifers are at

higher risk for diarrhea and have lower maternal antibody levels than calves born to older cows. Researchers suggest calves born to heifers are probably more susceptible to disease, because heifers produce a lower volume and quality of colostrum, they don't have good mothering skills, and they are more likely to

experience calving difficulty.

Although the adult cow herd likely serves as the source of calf scour pathogens from year to year, Smith said, the average amount of pathogen exposure to calves is likely to increase later in the calving season, because calves infected earlier serve as pathogen multipliers and become the primary source of exposure to younger calves. This multiplier effect can result in higher infection rates and widespread environmental contamination.

While biosecurity is the total of actions producers can take to prevent the introduction of a disease agent into a pen or herd, that is not possible with scours since the pathogens for scours are already present in the herd. Biocontainment describes the actions taken to control a pathogen already present in the population, Smith said.

Various biocontainment systems for beef herds have been developed to prevent calf diarrhea. Each of these strategies, including the Sandhills Calving System, are designed to manage cattle in a way that prevents calves from having effective contacts with pathogens by reducing opportunities for exposure and transmission.

"The later a calf is born in the season, the more likely it is to die from scours," Smith said. "This is due to the calf's lower level of immunity and its higher level of exposure." The two management actions that will prevent or limit scours in beef calves are:

1. segregating calves by age to prevent direct and indirect transmission of pathogens from older to younger calves; and

2. scheduling movement of pregnant cows to clean calving pastures to minimize the pathogen multiplier effect in the environment and to limit contact time between calves and the larger portion of the herd



David Smith

"We try to recreate those conditions that exist at the beginning of the calving season," Smith said. Producers using the Sandhills Calving System or a similar management system or strategy to control or prevent exposure have observed meaningful and sustained reductions in sickness and death due to calf scours and greatly reduced use of medications.

Biocontainment systems or strategies are not new ideas, Smith added, showing a textbook from the 1930s that suggested good hygiene was most important in maintaining calf health.

— by Linda Robbins



RANGE BEEF COW SYMPOSIUM XX — RANGE MANAGEMENT

Monitoring Grazing Lands

Charged with telling the Range Beef Cow Symposium (RBCS) audience about the "how, why, when and what?" of monitoring grazing lands, Colorado State University rangeland specialist Paul Meiman said ranchers first needed to understand what grazing lands monitoring is.

"Monitoring is the orderly collection, analysis and interpretation of information and data used to make short- and long-term management decisions. It's trouble-shooting your system to see if things are working," Meiman said. "But it's more than just collection of information."

The reason why ranchers should monitor grazing lands is to test their management decisions.

- Paul Meiman

The information and data collected as part of a monitoring effort must be put to use to support management decisions. Meiman said that requires analysis and interpretation relative to management objectives. Monitoring

serves little purpose in the absence of management objectives.

According to Meiman, the reason why ranchers should monitor grazing lands is to test their management decisions. It's not about proving that certain management decisions were right. Rather, it's about finding out if they are bringing the operation closer to management objectives and whether management practices could be changed for the better.

Steps toward initiating a monitoring system start with identifying objectives for the land, such as increasing plant cover or increasing the abundance of desirable plants while reducing that of less-



Paul Meiman

desirable species. For example, a rancher might want to increase perennial grass cover on his range by 20%-40% during the next 10 years. Owners of private land can find help to set realistic objectives by consulting with natural resource specialists. On public lands, objectives will be influenced by the government land management agencies.

"Once objectives have been identified, consideration can be given to the types of information and data that need to be collected, when they should be collected and where monitoring should occur," Meiman said. "If the objective were to increase cover of perennial grasses over the next 10 years, the monitoring program must include measurement of perennial grass cover."

Monitoring influences short- and long-term decisions. Short-term monitoring often focuses on factors influencing plant growth during a given year. Long-term monitoring focuses on trends, or how plants have responded to factors over a period of years. Consideration of short- and long-term information, together, provides opportunity to detect changes in grazing lands and identify the effectiveness of management.

Meiman said it is often impossible to measure all of the land, so smaller monitoring locations must be identified. "Representative" areas are chosen to represent a larger unit. A "key" area is one that is monitored because its management might be slightly different than those that surround it. "Critical" areas are those so different from the larger unit that special management is required.

"Monitoring is a process that does require time, but the potential benefits are great," Meiman said. "Most individuals who have implemented monitoring programs feel the investment of time has been well worth it. Many of these folks agree that the best time to start monitoring was 10 years ago, but believe the second-best time is right now."

Partner with Federal Agencies for a Win-Win Outcome

A wide range of relationships exist between ranchers and various federal agencies in terms of the quality and complexity of those relationships. Any good relationship can, at a minimum, build on the two partners' shared interest in high-quality, sustainable resources.

"The list of reasons for differences in the quality of relationships can be lengthy," Eric Peterson told attendees of Thursday's session on range and forage management at the 2007 RBCS. Peterson is the area natural resource education specialist for the Wyoming Cooperative Extension Service Mountain West Extension Area. "It should be heartening to know that thoughtful management of those relationships can yield positive results. You can build win-win programs."

While many agency programs are "prebuilt" or already established programs, Peterson said other programs that benefit your resources can be structured through the right partnership. He stressed four factors that must be understood to move forward:

- everybody likes success;
- the relationship must service the interests of both parties;
- you must focus on interests, rather than positions; and
- the relationship must be fair interests and resources must be satisfied for both sides.

"One important point often overlooked, particularly by producers, is that when entering into a negotiation with a federal agency, producers are motivated by whatever they believe the relationship can offer. They likely have a financial stake, a focus on stewardship/sustainability and personal interests," he said. "On the other side of the table, the agency representative is motivated by professional responsibility, personal values and professional success."

With those motivations in mind, producers and agencies must use sound negotiation skills. "Potential partners have something to offer, and each has something they wish to gain," Peterson explained. "Honesty and openness are almost always the best policies. Gamesmanship and hardball are poor strategies for reaching solutions when you work toward win-win programs with a federal partner. One of the outcomes of negotiation must be a durable, healthy relationship."

Peterson encouraged producers to focus on interest-based problem solving rather than preconceived solutions or position-based tactics. When all parties value and respect each other's interests and the related issues, a variety of solutions are more likely to develop.

"Four simple elements serve as program builders, including focusing on interests," he said. "Others



Eric Peterson

include separating the people from the problem, considering a variety of possibilities before deciding what to do, and insisting that the result be based on some objective standard."

Peterson continued, "When you can build on the journey you take with the partner and come out on the other end with a great deal of respect for that partner, it's a program that's going to last. These techniques stimulate openness and trust in a relationship, which, when coupled with the program's probability of achieving the goals, assure a durable and successful winwin program."

— by Barb Baylor Anderson

Boosting Grazing Diets

Kenneth Olson of South Dakota State University offered some cowboy economics and a little philosophy on the delivery and implementation of a rangeland supplementation program during the 2007 RBCS.

Cows plus a forage resource equals a fixed cost that will affect cow performance, Olson said. Ideally, a forage supply is abundant and the crude protein levels are above 5%, but that is not always the case. When nutrients are lacking, a supplementation program must be implemented.

With that in mind, Olson offered two goals: (1) reduce the cost of supplementation delivery, and (2) ensure the feedstuff is consumed as uniformly as possible by all cows in the herd.

There are generally two ways to supplement — hand-feeding or self-feeding, Olson said. Producers must decide which method provides the most nutrients and is the most cost-efficient.

Hand-fed supplements will be consumed at the rate they are delivered. Olson noted several studies showing the differences in hand-fed supplementation by frequency of delivery. He focused on Bohnert et. al. (2002) in which cows were supplemented daily, every third day or every sixth day.

The results showed increased performance as delivery frequency increased, Olson said. One advantage with increased delivery frequency was decreased influence of dominance, or competition, providing a more consistent intake. Other advantages were positive results shown by all feeding frequency increases, not just for the daily regimen, indicating you don't have to deliver supplements every day to get improved performance.

"Simple cowboy economics show us that if you deliver less [often], you save money," Olson said, noting the labor, fuel and equipment savings. "We see opportunities to decrease delivery and an opportunity to help improve nutrition."

Self-feeders are also an option in supplementation. Self-feeders reduce delivery requirements, allowing the animals to come and go as they choose. Most self-feeders incorporate some type of intake limiter, such as the hardness of a lick tub, to limit the intake in a single setting.

Self-feeders do have a large variation, Olson explained, from hardness to crude protein, forage quality, familiarity with the supplement, and social interaction/ dominance. However, if placed correctly, self-feeders could help increase forage utilization in some underutilized areas.

Olson warns that while self-feeders will cost more initially, delivery will be less expensive. That will save money through delivery equipment (truck or tractor); labor; and, depending on traveling distance, gas and/or diesel fuel.

Whether hand-feeding or self-feeding

supplements, Olson advised putting a pencil and paper to it, looking at what works best for your operation. Look at what protein and energy supplementation is needed and what resources you have to provide the supplements.

"Think about whether or not the cost balances for you," Olson said.

"Opportunities to make costs change exist."

— by Mathew Elliott

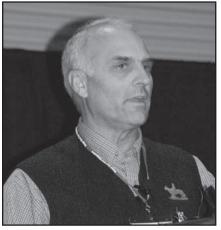


RANGE BEËF COW SYMPOSIUM

Creating Value and Being Rewarded

The days when U.S. beef producers could expect consumers to blindly trust them have ended, said Tim Davis of CowSense information management systems. Speaking to the Range Beef Cow Symposium (RBCS) crowd Dec. 13, 2007, in Fort Collins, Colo., Davis said the beginning of the end came with a "Christmas cow" discovered to have bovine spongiform encephalopathy (BSE) in December 2003.

"Now consumers, internationally and domestically, want higher standards and better verification of beef marketing claims," Davis said. "That can be a good thing. While beef producers generally



Jim Lerwick

are committed to producing a good product, they're being stimulated to hold themselves to higher standards and do an even better job.

Davis said the beef industry has responded through changes that are market-driven. Export markets have enacted requirements on beef shipments from the U.S., and domestic branded beef programs also require suppliers to meet verifiable specifications. As producers consider adding value to their production through Quality Systems Assessment (QSA) program practices required for exported beef, or process-, age- and source-verification programs required by the branded beef market, they must consider whether adoption of required practices fits their management capabilities and the potential return on investment (ROI).

In virtually every case, Davis said, a key to success is documentation of production practices required for program compliance. The recordkeeping practices might also have additional value as an aid in better managing their operations.

"Better records can reveal opportunities to make improvements through genetic selection for economically important traits," Davis said. "They may want to consider what differences in their cow's calving intervals are costing. Or, what differences in return are associated with marketing calves at weaning, as yearlings or at harvest.'

Wyoming cattleman Jim Lerwick told the audience that his objective is to maximize revenue by creating measurable or perceived value. He also wants to know what input costs produce the greatest margin potential and reduce those costs that are not contributors.

Management to enhance value includes improving performance potential and market appeal of calves, either for sale or retained ownership, through attention to genetics and animal health programs.

Lerwick said crossbreeding can't be ignored in his production system. His records indicate breeding Charolais sires to black baldie cows results in calves that return \$70-\$100 more, during their lifetime, than do straightbreds. About half of that difference is garnered prior to weaning, Lerwick said, and the other half afterward.

Other value-enhancing management areas include timing the sale of cattle with periods of historically favorable prices and pursuit of premiums through source and age verification.

"Source and age verification [have] added \$25 to \$34 [per head] to the endvalue of cattle for us," Lerwick said. "There are many ways to add value. However, without measurement of cost



Tim Davis

and return of each opportunity, invalid conclusions may hide the reality of the

Along with cash costs, Lerwick said opportunity costs must be considered. And there are noneconomic costs that may not have a dollar value but still may be a deciding factor in the sustainability of an enterprise. Examples include quality of life and conservation benefits.

Sustainability of the business depends on enhancing value and cost control, balanced by personal and business goals," Lerwick concluded.

— by Troy Smith

Market Changes Bring Market Opportunity

More opportunity exists in the cattle industry today than ever, in large part due to changes in the supply and demand fundamentals of the cattle market and outside forces. Randy Blach, executive vice president of Cattle-Fax, said that in order to be successful, the industry needs to embrace the globalization of the marketplace and learn how to thrive in it.

"This is not a supply-driven market. It is a market that will impact everyone in the cattle system," he told attendees of Thursday's RBCS sessions on markets and marketing. "This is a tremendous opportunity for beef producers, but we have to have access to these international markets. It is a much different ballgame with globalization and higher corn prices, and not the same business that we grew up with."

Blach noted world beef production is growing, but the lion's share of the growth is happening in places like Brazil, China, Argentina and Uruguay.

"We need to understand what it takes to be part of that market and to be a viable industry in the future. We need to export more of our beef production," he said. "That means getting back the markets we lost in 2003, Korea and Japan, and adding China. Those markets would add \$85 per head to what producers receive today."



Randy Blach

The weakest dollar in U.S. history also makes U.S. beef more attractive overseas.

"As the dollar weakens, corn and wheat prices go up and there is more international buying power from places with more wealth, like in China and India," he said. "At the same time, we can't build a strong U.S. economy on a weak dollar. We are likely to continue to see slowdowns in our economy, which will impact our business.'

Blach said that despite profitability within the cow-calf sector for the last decade, herd expansion is not occurring.

"We have record-high feed prices," he explained. "Cow-calf costs are up 20% to 25% over the last three years. It is going to cost more to produce calves every year, and I see no change in that on the horizon."

In addition, growth within the herd has been limited by drought, higher land values, growing ethanol production, alternative land uses,

urban sprawl and more.

Blach acknowledged that even with a stable herd size, U.S. beef production is rising to meet demand. "We are producing more beef from fewer cows. Production will increase 1.5% to 2% next year, even though the size of the factory hasn't changed. Carcass weights will be up 15 to 20 pounds," he said. "We were fortunate that fed cattle, retail and wholesale prices were higher this year."

For the next 12 months, Blach predicted, fed prices may average in the \$92-\$94 range, calves in the \$117-\$120 range, and feeders at \$105-\$106.

"Producers in the West and Southeast will have to be more efficient to stay competitive with the Central U.S.," he concluded. "Stockers and the cow-calf sector are profitable, but cattle feeders and packers are in the red. Globalization is here, and we need to figure out how to participate."

– by Barb Baylor Anderson