



Range Beef Cow Symposium Highlights

The 2015 Range Beef Cow Symposium provides cattle and ranch management tools.

by **Troy Smith**

Cattle folk are a diverse lot, representing a variety of production methods and markets. But for much of the past 50 years, one of the most consistent sources of practical information about many aspects of cattle and ranch management has been the biennial Range Beef Cow Symposium. A collaborative effort of the Extension and Animal Science Departments of the University of Wyoming, South Dakota State University, the University of Nebraska and Colorado State University, the event site rotates among the four states. It was Colorado's turn to play host for the 24th Range Beef Cow Symposium, Nov. 16-19, in Loveland, Colo.

The registration count exceeded 750, with producers representing 25 states and three foreign countries present. They

came to hear and to participate in discussions on a wide range of topics, including beef quality assurance, stockmanship, animal welfare, the sustainability of agriculture, genetic selection, reproduction, nutrition, cow efficiency and more. Speakers included producers from each beef industry segment, academia and allied industries.

Weather update

Meteorologist Brian Bledsoe's presentation held the audience's attention while he was discussing long-term weather trends that do not bode well for a large share of Great Plains producers. The Colorado Springs TV weatherman and consultant advised them to prepare for the return of drought.

Explaining how sea surface temperature anomalies in the Pacific and Atlantic Oceans can dramatically influence weather patterns, Bledsoe said a cool

temperature phase in the Pacific, often referred to as La Niña, typically brings dry weather to much of the western United States. A warm Pacific sea surface temperature phase, or El Niño, relaxes drought conditions. El Niño is present now, but Bledsoe expects it to end by late spring 2016. A cool Pacific coupled with a warmer Atlantic likely means drier conditions during the next few years.

"My message is that, going forward, wet periods are likely to be shorter and less frequent. Periods of drier conditions will become normal," Bledsoe states, saying driest conditions should prevail south of Interstate 80 and especially south of Interstate 70. "My advice," Bledsoe added, "Have a drought plan."

Cattle handling

Discussion of beef quality assurance included a cattle-

handling demonstration, on foot and from horseback, by Montana rancher and stockmanship consultant Curt Pate. He lamented that too many producers dread working cattle when, in fact, it should be fun. It won't be, however, unless handlers learn to "read" cattle and keep honing their stockmanship skills.

"The more you think, and work at it, and analyze your efforts," Pate said, "the better you'll become, and it will improve your quality of life and improve our quality of beef."

Pate said success comes with understanding how animals react to pressure, explaining, "It's all about putting yourself in the right place at the right time, to apply the right amount of pressure, and then releasing pressure to allow animals to do what you've asked them to do."

Cattle feeder Anne Burkholder talked about the benefits of

Feed efficiency

During a Range Beef Cow Symposium discussion of cow efficiency, Douglas Olsen described his family's diversified operation located near Harrisburg, Neb. Along with its registered Hereford and commercial cow herds, Olsen Ranches has a feedlot enterprise and offers custom services including cattle finishing, progeny testing and artificial insemination.

Utilizing GrowSafe technology, Olsen Ranches collects feed intake data on home-owned and custom-fed cattle, including steers involved in the American Hereford Association's National Reference Sire Program progeny tests.

Olsen acknowledged that cow-calf producers and cattle feeders sometimes have differing views regarding efficiency of production. In the feedlot, efficiency is often expressed simply as a feed-to-gain ratio. For the beef cow, said Olsen, efficiency has many facets. Cow efficiency really is a whole life cycle. For that reason and because a cow typically consumes a forage-based diet, Olsen knows that some people question the validity of feed efficiency research utilizing cattle fed grain-based diets.

"Our experience suggests that effects on feed efficiency of grain diets versus forage diets are not going to be exactly the same," Olsen stated, "but they are not far different."

To those who claim cow efficiency can be improved most easily through selection based on phenotype, Olsen said the genetic component of cow efficiency cannot be determined through visual appraisal.

"You can't see the differences between more- and less-efficient cows. You can't tell by looking," Olsen insisted, illustrating the point with lifetime production records and photographs of cows from his own commercial herd.

"The more data we can capture about traits that affect weaning rate and cow efficiency, and the more feed intake data that is collected, the greater the opportunity to increase the production efficiency of the nation's cow herd," Olsen said. **HW**



Douglas Olsen



applying more effective stockmanship techniques at her family's Cozad, Neb., operation. She explained her own transition from a non-ag background to manager of the feedyard founded by her father-in-law. Burkholder said cattle handling is every bit as important to her business as savvy cattle procurement, nutrition and health management.

Burkholder emphasized the importance of acclimating newly arriving cattle and teaching them to walk with confidence at the handler's direction and to recognize and feel comfortable in their home pen. More comfortable cattle exhibit more efficient feed conversion and yield higher-quality beef, she said, adding that acclimated cattle are quieter and easier to handle, enhancing worker safety and enjoyment. Citing the need for producers to keep improving upon their roles as livestock caretakers, Burkholder said effective, low-stress stockmanship is a requirement for a sustainable future in the cattle business.

Sustainability and the beef industry

Sustainability, unfortunately, means different things to different people. What Cameron Bruett finds infuriating is the attempt to use the term as a means of vilifying agriculture. Sustainability can't be accurately defined from an environmental impact perspective only. There is more to it, said Bruett, who is head of corporate affairs for meat packing giant JBS USA and also presides over the Global Roundtable for Sustainable Beef.

"At its core, sustainability means doing more with less," Bruett explained. "Sustainability is environmentally sound, economically viable and socially responsible."

Bruett said the ability to produce more food with fewer inputs will be essential as world population growth creates a demand for 70% more food by 2050. He warned, however, that wrongheaded notions about sustainability are robbing agriculture of production efficiency and, therefore, threatening its economic viability.

"Agriculture must be more efficient if we are going to feed everyone," Bruett stated, "and technology must be used."

University of Florida reproductive physiologist Cliff Lamb told the symposium audience how implementation of technologies helped to improve production and efficiency economic return for the North Florida Research & Education Center's beef herd. Since 2008 every breeding female has been exposed to estrus synchronization and artificial

insemination (AI) followed by clean-up bulls. Only females that become pregnant within the first 25 days of the breeding season are allowed to remain in the breeding herd. Since pregnancy became the chief determinant of female selection, calf weaning weights have increased, cow longevity has improved and the Center has experienced an increase in herd value of approximately \$50,000 annually.

Lamb fears many producers focus on achieving high rates of pregnancy to AI when the greatest value from estrus synchronization is getting more females pregnant early, whether by AI or clean-up bulls.

"To me," Lamb said, "the most important thing is what percent of the herd is bred within the first 21 to 30 days, so you can calve more calves in the first 30 days of the calving season."

Sire selection

During a presentation addressing genetic selection, University of Nebraska geneticist Matt Spangler advised producers to approach sire selection with three questions in mind:

- 1) What are my breeding and marketing goals?
- 2) What traits directly impact the profitability of my enterprise?
- 3) Are there environmental constraints that limit levels of performance for any certain traits?

Spangler allowed that sire selection would be simpler if there were only a few genetic characteristics to worry about instead of a multitude of traits. Spangler said multiple-trait selection is critical to profitability and is made less cumbersome by the use of an economic index – a single value representing a collection of EPDs for traits relevant to a specific breeding objective.

"Selection indices are a powerful tool, but you have to use an index that's appropriate for your breeding objective," Spangler emphasized, adding that the choice of index will be determined by each producer's answers to the three questions posed earlier.

Spangler said selection indices could be made even more powerful by increasing the number of economically relevant traits having EPDs that can be used in their calculation. He expressed concern that many economically relevant traits are not currently evaluated or that relative data is not collected routinely by the seedstock sector.

South Dakota State University geneticist Michael Gonda said much has been said about the ability to increase the accuracy of genetic prediction through genomics, or DNA testing. And genomic tests are

available for commercial cattle as well as for purebreds. Gonda allowed that more information does improve accuracy, but he reminded producers that genomic tests do not perfectly predict genetic merit.

Gonda explained that genomic tests used by purebred cattle breeders are breed specific. Results are reported to respective breed associations, so the genomic prediction is incorporated into each animal's genomic-enhanced EPD. Some genomic tests for commercial cattle also are breed specific and others are applicable to all *Bos taurus* animals. The results of commercial tests are reported directly to the producer.

To choose a genomic test, Gonda advised commercial producers to first identify which economically important traits are most important – the traits most influencing profit in the herd. This will help determine which genomic test may be most helpful.

Gonda said consideration must also be given to which animals will be tested. Assume, for example, that replacement heifers are sorted into three groups – a top group of keepers, a bottom group that will be sold, and a middle group about which the producer is undecided. According to Gonda, DNA-testing that middle group could be a way to obtain more information in order to make better-informed selection decisions.

Market outlook

Economist Jim Robb of the Denver-based Livestock Market Information Center advised the symposium audience to expect a return to the "more normal" seasonal price patterns. That doesn't mean there won't be jumps and stumbles along the way, as reaction or over-reaction to events creates price volatility. However, Robb said supply and demand fundamentals still work, and the seasonality of cattle prices should again be the general rule.

Over, said Robb, is the trend toward ever-higher calf prices, which culminated in the record-high calf prices of 2014. He looks for prices to trend lower, at least through 2018. Unfortunately, production costs are still increasing, especially pasture rents, pushing annual production costs to as much as \$900 per cow.

"Net return to cow-calf producers is way down compared to 2014," Robb stated, "but it's still the second-highest rate of return ever."

According to Robb, the U.S. economy remains in better shape than the economies of many countries around the world. Recession is a reality for many countries that are important markets for U.S. beef. As

a consequence, U.S. beef export sales declined in 2015, and Robb sees little opportunity for growth in 2016. U.S. beef producers should be beneficiaries, however, of a rebound in global beef demand that could occur in 2017.

Domestically, per capita consumption of beef has declined a bit, but Robb reminded the audience that lower consumption does not equate to lower demand for beef. Rather, demand is a function of consumption and price. U.S. beef consumers remain willing to pay relatively high prices for beef.

"The really good news is that beef's demand profile remains pretty solid," Robb said.

Organizers of this year's symposium put extra emphasis on providing program content for the benefit of young and aspiring beef producers. Among the program presenters asked to tell how he has solidified his position as a rancher was Zach Thode, of Livermore, Colo. Describing himself as the child of Colorado hippies, Thode found a connection while working on a ranch as a teen.

Thode sought an engineering degree but achieved his true aspiration by establishing a 500-cow ranch. He advised would-be ranchers to look for opportunities and to cultivate a willingness to take calculated risks. He also recommended working extra hard at keeping input costs low.

"Never pay full price for anything," Thode said, who moonlights as a representative for an online auction service. "I find cheaper used equipment and have it fixed. It's almost always less costly than buying new."

Thode also talked about cultivating win-win relationships, such as trading hunting rights for fence building. He said conservation easements also foster good relations and help him find cost-share assistance for improvements such as fence, stock water or irrigation projects. Thode said much good comes from cooperating with others for the purpose of educating people about the value of ranching.

Thode said the best advice he could pass along to new producers is to leave their pride at the door. More specifically, they should understand the difference between "needs" and "wants."

"Owning a lot of stuff won't make you successful. Don't own things with no cost-benefit balance," Thode stated, also reminding his audience of the importance of integrity. "Being honorable is always better than making a quick buck. Don't abuse your situation. Respect and improve the range, and do all you can to keep your neighbors happy. Take care of your faith, family and nobility." **HW**