

# Highlights of BIF 2016

*Experts discuss the beef industry and its customers with cattlemen at the 2016 Beef Improvement Federation Symposium.*



by **Troy Smith**

The annual Beef Improvement Federation (BIF) Symposium routinely attracts a large and diverse group of leading seedstock and commercial beef producers, along with members of academia and allied industries. With more than 600 people in attendance, the 2016 BIF conference, held June 14-17 in Manhattan Kan., was no exception. Discussion topics focused on how the beef industry can enhance value across production levels and, particularly, through genetic improvement across a range of attributes.

## **Economics**

The current status of the beef industry and opportunities for improvement during the next 20 years were addressed by the first round of general session speakers. Providing a tag team talk about opportunities for growth of the North American beef market were Kansas State University economists Glynn Tonsor and Ted Schroeder. Leading off, Tonsor noted the United States' competitive advantage due to a well-developed infrastructure and a reputation for both quality and safety.

According to Tonsor, the U.S. is at a disadvantage relative to cost of production. He also noted the decline in research funding and breakdowns in communication and coordination within the beef industry as weaknesses.

"The industry is fragmented in its support for traceability systems and its focus on current and future beef demand," Tonsor warned.



**Glynn Tonsor**



**David Lalman**

to consider whether emphasis on genetic selection for growth has been profitable. Admitting that dramatic changes have been made in post-weaning growth, carcass weight and marbling, Lalman said all available benchmarking data suggest that the productivity of the "average" cow-calf operation has not improved.

"There has been no substantial change in productivity of the nation's commercial cow herd, over the past 24 years, when

viewed from a sell-at-weaning enterprise context," Lalman stated.

He explained that, on average, minimal improvement in weaning weight and no improvement in reproductive efficiency have been achieved over that time period. In Lalman's opinion, cost management is the "low-hanging fruit." He advised producers to shift their emphasis to reducing production costs without sacrificing current production levels.

"Fortunately, selection indexes as well as relatively new EPD's (expected progeny differences) more directly related to profitability, input costs and fertility are becoming available," Lalman stated, citing the American Hereford Association's new Sustained Fertility EPD as an example.

"Over the next 20 years, these tools should help curb the appetite for traits that result in increased cow costs such as increased mature cow weight, milk yield, and extremes in growth."

## **Efficiency matters**

Also addressing ways to become more efficient and profitable in the future, Clay Mathis said increasing costs of production, labor challenges and uncontrollable patterns of precipitation are likely to remain as leading concerns of cow-calf producers. The director of Texas A&M's King Ranch Institute for Ranch Management advised ranchers to focus on "high-leverage interventions" at the production system level.

Like Lalman, Mathis lamented the cow-calf industry's failure to increase reproductive performance over the last two decades. He noted the lack of any significant improvements to overall pregnancy rate, weaning rate or total pounds of calf weaned per cow exposed.

"I think we have more opportunity for improvement in management than in genetics. That doesn't mean genetics are not important," stated Mathis, adding that opportunity certainly exists to better utilize advanced genetics in this country's collective commercial cow herd. "But I believe there is greater opportunity for improving efficiency and profit, for most operations, through management."

Mathis stated his belief that future improvements to efficiency and profitability will come from "optimizing" expenses and performance in production systems yielding the lowest unit cost of production for the most valuable calf that can be produced in a given environment. He recommended pursuit of an additive effect achieved through long-term selection and strategic inputs that yield small improvements.



**Clay Mathis**

## **Consumer focused**

Ted Schroeder advised beef producers to keep their eyes trained on consumers, the only source of new revenue. He noted the country's increasing cultural diversity attributed to growing Hispanic and multi-racial family influences. Looking 20 years down the road, Schroeder predicted a U.S. beef industry comprised of fewer cattle operations that produce more beef with greater efficiency. He expects export markets to claim a larger share of total beef production, provided workable international trade agreements can foster market growth.

Echoing the call for sharper consumer focus was Brad Morgan, with Performance Food Group (PFG), a national distributor providing meat and other food products to restaurants, hotels and other foodservice customers. Morgan said his customers' clientele "crave red meat," but want to know more about where and how it is produced. Despite increased cultural diversity and the influence of Millennials' tastes, Morgan doesn't expect the preferred consumer diet to change much in the next 20 years. More likely to change is who provides the food, with consumers following providers offering more choices and delivery options while maintaining high levels of quality and service.



**Brad Morgan**

## **Enhancing profitability**

During the second general session, speakers shared opinions on things commercial cow-calf producers could do to enhance their profitability position in coming years. First up, Oklahoma State University animal scientist David Lalman challenged the commercial cow-calf industry



**Ted Schroeder**

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However, Mathis advised producers to first seek high-leverage change for greatest impact. He called crossbreeding a high-leverage management decision because, in addition to calves with hybrid vigor, it offers crossbred female fertility and longevity which can be used to increase revenue and to control costs.

Other high-leverage considerations may exist in seeking ways to calve heifers with less labor or in reducing dependence on harvested forages to save costs of labor, equipment and storage.

According to Mathis, cow-calf producers most likely to be efficient and profitable in 2036 will have adapted their production systems to optimize labor, purchased feed and depreciation in ways that minimize unit cost of production. He believes successful operations will employ technologies proven to provide a positive return on investment, consistently market calves and cull animals at their highest value, and manage price risk effectively.



Ty Lawrence

### Yield grades

During one of the Symposium's afternoon break-out sessions, West Texas A&M University animal scientist Ty Lawrence lamented the U.S. beef industry's reliance on an outdated system for determining beef yield grades.

"It's an antiquated system based on antiquated cattle," said Lawrence, explaining how development of United States Department of Agriculture yield grades began in the 1950s, based

on carcasses from just 162 head of small-framed cattle with an average hot carcass weight of 600 pounds. He contrasted that scenario with today's fed beef population comprised of medium- to large-framed cattle that produce larger carcasses.

"The purpose of yield grading is to predict the range of red meat yield, and the system currently predicts about 40% of the variation in red meat yield for beef-type cattle," said Lawrence. "But in Holsteins, yield grade predicts 0% of the variation. Yield grade is built on the measure of fat thickness, and there is not much variation of that in Holsteins.

"We continue to use a yield estimation system developed from a small population of cattle that no longer exist to predict red meat yield of cuts that are increasingly leaner. We apply that estimate to

carcasses that weigh beyond the inference of which it was designed, and we have ignored the opportunity to develop new yield estimates afforded by camera grading," said Lawrence. "Leadership within the beef community must decide if the status quo is acceptable, or if improvement is warranted."



Keith Belk

### Microbiome effects

Addressed, perhaps for the first time at a BIF conference, were the far-reaching effects of the microbiome — the community of microorganisms living in and on every animal, and every human, too.

Colorado State University meat scientist Keith Belk said studies of the human microbiome suggest that the microorganisms associated with each host individual actually influence gene expression.

Accordingly, the thousands of microorganisms associated with a beef animal may influence the expression of various traits, including beef tenderness and flavor.

Advising all in the audience to stop thinking of a beef animal as a single organism, Belk said, "We have to instead think about all of the organisms in the environment and how they interrelate and affect each other's physiology, and then how they express that physiology in their environment."

Belk's own research, going forward, will delve into the symbiotic relationships between host animals and their microbiomes and how the microbiome can influence gene expression. He believes there may be opportunity to select for phenotypic responses, based on the genetics of the animal and the genetics of organisms comprising its microbiome.

BIF business matters including the ascension to the organization's presidency by Marty Ropp, president of the Illinois-based seedstock marketing group Allied Genetic Resources. Ropp succeeds South Dakota Red Angus breeder Craig Bieber. Named vice president of BIF was Donnell Brown of R.A. Brown Ranch, Throckmorton, Texas.

The 2016 BIF Annual Meeting and Research Symposium was hosted by Kansas State University. The 2017 event will be held in Athens, Ga., May 31-June 3, hosted by the University of Georgia. For more information, go to [beefimprovement.org](http://beefimprovement.org) or contact Jane Parish, executive director, at 662-369-4426. **HW**

## Shaw Cattle Co. named BIF Seedstock Producer of the Year

The Beef Improvement Federation (BIF) presented Shaw Cattle Co., Caldwell, Idaho, the BIF Seedstock Producer of the Year Award June 16 during the group's annual meeting and symposium in Manhattan, Kan. This national award is presented annually to a producer to recognize his or her dedication to improving the beef industry at the seedstock level.

Shaw Cattle Co. is a generational beef operation that manages Hereford, Angus and Red Angus herds in a diversified system of irrigated rotational grazing, maximizing forage resources and beef cattle genetics. Today, Shaw Cattle Co. maintains more than 1,500 registered cows encompassing the three breeds. The Shaw family members work together to improve the cow herd through the diligent selection of breed-leading genetics with a keen eye toward performance, science and technology.

The origin of Shaw Cattle Co. began with a Hereford heifer. Tom Shaw worked weekends and summers throughout high school for a neighbor. After high school and upon his return from the U.S. Navy, the heifer was given to Tom as payment for his summers and as a thank-you for serving his country. The registered Hereford heifer became the foundation of Shaw Hereford Ranch in 1946.

By 1959 Tom had married Mary, started a family and purchased a home near Notus, Idaho. The family moved from the original Shaw homestead to the current headquarters and continued to build a cow herd and to raise a family.

Tom and Mary's youngest son, Greg, officially joined the operation after graduation in 1968 and married Cleo two years later. In 1988 the Shaw cow herd was divided into three herds. Greg and Cleo remained on the original homeplace at Caldwell to raise their three children —



Shaw Cattle Co., Caldwell, Idaho, was named the 2016 Beef Improvement Federation Seedstock Producer of the Year during an awards ceremony June 16 in Manhattan, Kansas. Pictured are (l to r) Wes Ishmael, *BEEF* magazine, award sponsor, with recipients Tucker, Angie, Cleo, Greg, Janel and Sam Shaw along with Craig Bieber, Leola, S.D., 2015-16 BIF president, and Marty Ropp, Normal, Ill., 2016-17 BIF president.

Tucker, Sam and Jaime — and subsequently formed Shaw Cattle Co.

Today, the third and fourth generations are continuing the tradition of raising reputable performance cattle. In 1990 Shaw Cattle Co. diversified the Hereford cow herd and added Red Angus genetics. In 1996 black Angus cattle were added to the herd.

Greg and Cleo's son, Sam, returned to the ranch in 1999, after graduating from the University of Idaho. Sam and his

wife, Janel, are raising their three daughters on the ranch. After graduating from the University of Idaho and working in the private sector, Tucker returned with his wife, Angie, in 2003. They are raising their five children on the ranch. Greg and Cleo's daughter, Jaime, her husband, Kelley, and their two daughters live in Eugene, Oregon, and enjoy helping out on the ranch when they can.

The American Hereford Association nominated Shaw Cattle Co. for this award. **HW**