

# Sustainable Expansion

Conference addresses sustainability's role in cow herd expansion.

by Kasey Brown, associate editor; Raney Lovorn, editorial intern; & Troy Smith, field editor

John Paterson sees tremendous opportunity for U.S. beef producers. The National Cattlemen's Beef Association (NCBA) executive director of education and former Montana State University professor set the stage for the opening general session of the 2015 Beef Improvement Federation Annual Convention, which focused on rebuilding the nation's cow herd with fixed resources.

Paterson recounted the reasons why, during recent years, U.S. cow numbers declined from 40 million head to around 28 million. He called drought a major factor, but also listed high feed costs, high operating costs, increasing age of producers and a shift in land usage from forage to row-crop production. Additionally, record cull-cow prices contributed to the decline in the inventory of brood cows.



PHOTOS BY TROY SMITH

▶ Responding to the question of how much rebuilding may occur, John Paterson said the cow tally is likely to return to a predrought level of 28 million head by 2017.

However, herd expansion is now occurring more rapidly than expected. Paterson said 72% of that growth is occurring in the Southern Plains via increased heifer retention. Citing reasons for producer optimism, Paterson said drought conditions have improved in most of the United States, feed and forage supplies have improved and input costs have become less volatile. Supply and demand fundamentals also encourage herd rebuilding.

Responding to the question of how much rebuilding may occur, Paterson said the cow tally is likely to return to a predrought level of 28 million head by 2017. The number could reach 30 million head by 2020. He said he expects expansion to occur primarily among

mid-size and large operations with 200 cows or more.

Paterson said the future looks bright for U.S. beef producers because of the still strong demand for high-quality U.S. beef, both domestically and internationally. He said steadily improving standards of living in many developing nations, and particularly in China, bode well for increased exports of beef.

"When people make more money, the more beef they want to eat," stated Paterson. "And consumers are willing to pay a premium for what they want."

— by Troy Smith

## Sustainability presents a 'wicked question' to beef producers

The challenge presented by an increasing world population and increasing worldwide demand for beef raises the question of the beef industry's ability to meet the demand sustainably. Sara Place, associate professor of animal science at Oklahoma State University, offered input on the "wicked problem" of ag sustainability.

A wicked question has no clear solution and represents a series of complex interrelated problems, Place explained. Sustainability is a balance between economic, environmental and social issues depending on available resources.

"All of these people are stakeholders within the beef value chain, and so that is why this is such a challenge," Place said. "People come at this from definitionally different angles."

The beef industry faces a few challenges going forward, Place explained. The average age of beef producers and barriers to young producers entering the beef industry, public perceptions of intensive management systems and public misinformation all affect the beef industry's ability to be sustainable.

"Climate variability and those challenges that we always deal with in agriculture obviously always present a challenge for this idea of always improving our sustainability," Place said. "The other major challenge, which was alluded to earlier in the session, is the average age of the producer in the United States."

Perception of the industry is a problem producers need to notice. Place said 100% of the U.S. population consumes food; only 2% produce food. Producers cannot simply



▶ The beef industry faces a few challenges going forward, Sara Place explained. The average age of beef producers and barriers to young producers entering the beef industry, public perceptions of intensive management systems and public misinformation all affect the beef industry's ability to be sustainable.

ignore the concerns of the majority.

Cow-calf production strategies have a better perception to the general public, which is a great advantage for the beef industry, Place explained. Misinformation about production practices as a whole is a problem for producers.

The public has different values than producers, which leads to a lack of trust, Place noted.

"It is really much more complicated than an 'educate the public' issue," she said. "It has to be two-way communication, and that means listening on both sides — which is challenging — and respectful dialogue."

A need has been identified to revitalize the infrastructure of animal science-based research, Place said. Sustainability is not just an education issue; it is a communications issue.

"Sustainability is about continuous improvement," Place said. "All systems can be sustainable; it is just about getting better in all of those areas, whatever fits your operation."

— by Raney Lovorn

## What does sustainability data say about the beef industry?

"Any time we make upgrades in agriculture, we enhance the sustainability of the industry," emphasized Kim Stackhouse-Lawson, NCBA director of sustainability.

Sustainability is not an issue that will go away, and it is an issue to which the Beef Checkoff Program contributes resources to

address. While sustainability includes economic and social impacts in addition to environmental effect, she urged that, “Zero impact is not possible. It is important to remember that there are tradeoffs, and food production will result in an impact. The goal is improvement over time.”

Stackhouse-Lawson shared that the beef industry has improved environmental impact by 5% and social impact by 7% in the last six years. These improvements have resulted from innovations within the food system through crop yields, machinery and irrigation technology, manure management, precision farming, animal performance, biogas capture, closed-loop water cooling systems, waste-water recycling and “right-size” packaging.

She admitted that a few results of the research surprised her in that consumers aren’t commenting on greenhouse gasses as much as animal welfare and traceability in the varied definitions of sustainability.

Sustainability research includes energy use, emissions, toxicity potential, occupational illnesses and accidents, resource use, land use, and consumptive water use. Stackhouse-Lawson noted that one-third of energy use is owned by the consumer through big houses,



► **Kim Stackhouse-Lawson shared that the beef industry has improved environmental impact by 5% and social impact by 7% in the last six years.**

inefficient refrigeration and food waste. Food waste is one of the biggest contributing factors to greenhouse gasses, she noted. The United Nations estimates that one-third of the world’s food goes to waste.

The other two-thirds of energy use is directly linked to the agriculture industry, but continuous improvement is being made. Since 2005, Stackhouse-Lawson listed these improvements:

- Energy use has been reduced by 2%;
- Emissions to soil have been reduced by 7%;

- Greenhouse gas emissions have been reduced by 2%;
- Emissions to water have been reduced by 10%;
- Water use has been reduced by 3%; and
- Occupational illness and accidents have been reduced by 32%.

She concluded that the beef industry sustainability research project has shown that the beef industry has negative consumer perceptions, but the industry does have a great story of continuous improvement.

More information on the sustainability research project can be found at

[www.beefresearch.org/](http://www.beefresearch.org/)

[beefsustainabilityresearch.aspx](http://beefsustainabilityresearch.aspx).

— by Kasey Brown



**Editor’s Note:** Troy Smith is a freelance writer and cattleman from Sargent, Neb. The 2015 BIF Annual Convention was hosted by Mississippi State University and the Mississippi Extension Service June 9-12 at the Beau Rivage Casino and Hotel in Biloxi. The Angus Journal and LiveAuctions.tv provide comprehensive online coverage of the event at [www.BIFconference.com](http://www.BIFconference.com). Visit the Newsroom for summaries, proceedings, PowerPoints and audio of the sessions; the Awards page for announcements of award winners; and the Photos page for photo galleries of the tour.