

# The Call for Traceability

**Beef producers, in countries that demonstrate credible animal and meat traceability systems, are finding a global market advantage from consumers who desire to know more about their food.**



Recall Clara Peller, the snarky old woman in the 1984 fast-food commercial. Her outrage after being served a minuscule hamburger patty buried in an enormous bun ended in the three-word shout: “WHERE’S THE BEEF?” Peller’s character represented widespread consumer culture of the 1980s.

If Peller were alive today, we suspect her shout would rather be something like: “WHERE’S IT FROM?” – representing consumer culture of the 2010s. And, the cultural question extends beyond simply demanding the origin of their food. Consumers want answers to a long list of specific questions regarding the history of their food. Their questions can only be answered, though, if a record exists of the complicated path a food product takes from the farm to the supermarket. And that history can only be achieved through traceability.

A landmark 2004 University of Massachusetts report on traceability in beef supply chains underscores the direction of post-Peller consumerism: *“The economic and social implications of mandatory and voluntary food traceability systems are just beginning to be played out. Overall, it is clear that traceability will become an increasingly integral feature of markets for food products.”*<sup>1</sup>

In short, traceability allows producers to communicate information to consumers and, in doing so, connect a higher value to the product. Servicing demands of consumers isn't just a domestic matter, however. Producers in countries that demonstrate credible animal and meat traceability systems are increasingly finding global market advantage. Some countries are well ahead of others in development and adoption of various animal and meat traceability systems.

## **Traceability essential to global trade**

A study released by the **U.S. Meat Export Federation** (USMEF) points out that the United States and India are the two major beef exporters that do not have mandatory traceability systems. Argentina, Brazil, Australia, New Zealand, Canada, and Uruguay all have animal identification/traceability programs in place.

Australia, for example, is a country highly dependent on red meat exports. Therefore, the country has been progressive in the development of animal traceability systems. In fact, national livestock identification (ID) has been evolving since the late 1960s when Australia introduced a campaign to eradicate bovine brucellosis and tuberculosis.

The most recent update to Australia's animal ID efforts came with implementation of the National Livestock Identification System (NLIS). The NLIS is a permanent whole-of-life individual animal ID system allowing an animal to be traced from its property of birth to its harvest destination.

While animal health management and food safety have been the primary drivers behind national livestock ID systems, it's becoming increasingly clear that national livestock ID systems and traceability/verification systems can travel parallel paths. And, as the mindset of the cattle industry evolves from commodity production to food production, the traceability/verification path is becoming the popular route for many producers.

The USMEF report emphasizes that competing beef exporting nations are using their national traceability systems as a platform from which to launch enhanced producer-level marketing and product differentiation efforts.

“Countries with well-developed mandatory animal identification and traceability programs enjoy comparative advantages in red meat exports relative to countries without such systems,” the researchers explain in the USMEF report.

The most widely recognized international animal health, food safety, and trade organizations have endorsed animal ID programs as essential components of food animal production and meat product trade, according to the report. “As more countries adopt animal and meat tracking

systems, those early adopters of livestock and meat traceability systems have the opportunity to gain significant market advantages through increased market access.”

The report cautions that Japan and Korea, among the highest value markets for U.S. red meat exports, have adopted mandatory livestock traceability programs – which could eventually lead to similar requirements being placed on importing countries.

**Leann Saunders, Castle Rock, Colo., president of IMI Global**, is the chair of the USMEF working group on traceability.

“When you consider the value of exports to the U.S. cattle market equating to \$236.88 per head of fed cattle harvested – there’s no denying the importance of exports for U.S. producers,” says Saunders. “Voluntary USDA process and verification programs work effectively for exporting beef to Japan and the European Union which have verification requirements specific to animal identification and traceability.”

She adds that traceability is a form of insurance that would insulate American producers in the event that importing countries change their import requirements or in the event of an animal disease outbreak. Supply chain coordination and enhanced producer management opportunities are secondary motivators.

### **A well-demonstrated duo: ID and traceability**

The duality of ID and traceability is well-demonstrated in Michigan. In the 1990s when bovine tuberculosis was plaguing the state’s cattle industry, researchers used radio frequency identification (RFID) technology to track cattle and keep tabs on the disease. Michigan was the first state to mandate use of RFID ear tags to track the movement of cattle.

Today, **Michigan State University (MSU) Extension Beef Specialist Dan Buskirk** is leading a project aimed at developing beef supply chain verification using the mandatory RFID system. Partnering with MSU Residential and Hospitality Services, the project facilitates source verification of MSU research center-raised and processed beef at cafeterias and restaurants on the MSU campus.

The next phase of the plan is to develop a system in which the RFID code from each animal harvested can be transferred to a barcode on the menu or case-ready package of beef. Consumers could then scan the code using a kiosk-based barcode reader or smart phone and instantly learn the history of that cut or package of meat.

Verified Beef, LLC, a Montana-based and owned corporation established in 2008, offers clients nationwide USDA process verification programs (PVP) associated with age and source. Verified Beef’s scope has been expanded to include Non-Hormone Treated Cattle (NHTC), “Never Ever3” (NE3), and “Grassfed Beef.”

“Verified Beef provides clients web-based procedures, records systems, and audit processes,” says **Ty McDonald, Bozeman, Mont., Verified Beef, LLC’s program manager**. “The

platform allows collection and transfer of process-verified information to support our customers through a documented and auditable system.”

### **Consumers desire, will pay for traceability**



**And for ranchers who ask “Where’s the Money?” Greg Henderson, editor of *Drovers CattleNetwork*, reported last August that age- and source-verified cattle can earn premiums in the marketplace. He adds that consumers are willing to pay more for beef from age- and source-verified animals, pointing to two recent studies that examined cattle sale results and consumer preferences.**

A Kansas State University study of Superior Livestock Auction sales found a premium of \$1.50 to \$2.00 per hundredweight (cwt.) for age- and source-verified cattle. Those premiums have continued to hold – reaching a high in 2008 – as participation in age and source verification has grown to nearly 50% of all calves sold by Superior in 2010. The study suggests small details in management and marketing can influence the premiums calves receive at sale time, including age and source verification.

Source-verified beef can also earn premiums at retail, according to research conducted by the University of Nebraska and Nebraska Department of Agriculture. The research included online surveys and in-restaurant taste tests of consumers in Connecticut and Arizona. The research found about two-thirds of participants in the in-restaurant taste testing ordered steak with either the state or farm-of-origin description. Compared to a non-source-verified steak, those consumers were willing to pay \$4.74 more for the steak with a state-of-origin description, and \$8.75 more for a steak with a farm-of-origin description.

Furthermore, IMI Global is helping cattle ranchers take the next steps in answering Clara Peller's 2010-era question with their *Where Food Comes From*® program that includes a "VerifiedGreen" component.

"There is a growing movement among consumers to know where their food comes from and whether the producers are practicing good environmental stewardship," says **David Stoner, manager of Wyoming's Arapaho Ranch and a participant in VerifiedGreen.**

"Arapaho Ranch is owned, managed, and worked by individuals who have a deep connection to the land, and are as proud of the leadership role we play in promoting environmentally sustainable practices as we are of the high-quality beef we provide to consumers across the United States."

*1 University of Massachusetts Amherst Department of Resource Economics Working Paper No. 2004-6; www.umass.edu/resec/workingpapers. The Economics of Implementing Traceability in Beef Supply Chains: Trends in Major Producing and Trading Countries, Diogo M. Souza-Monteiro and Julie A. Caswell.*

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