

# The value of traceability in the beef industry markets



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The beef industry is a complex market revolving around packers and producers exchanging cattle and money based on averages and current market value. With an average U.S. herd size of forty head, most cattle are produced from small family operations (Figure 1). Since most of the cattle being supplied to the beef market originate from these small herds, it is difficult for packers and distributors to obtain information about every animal being processed through their packing and distribution systems. Therefore, as cattle transition through the beef markets much of the animal's history is never relayed from one stage of the supply chain to the next. This lack of information sharing costs the industry time and money, reducing the industry's economic efficiency. This limits the quality, consistency, and specialization some feel is needed in the beef industry.

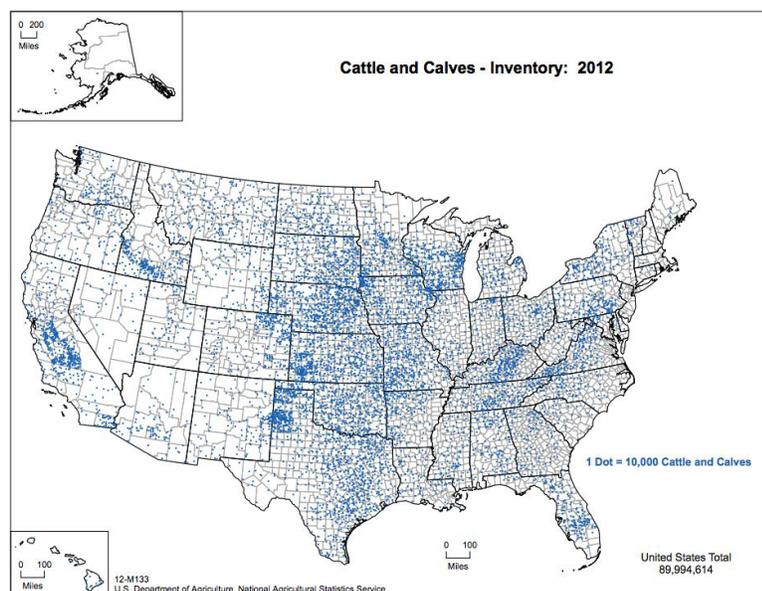


Figure 1. Cattle and calves inventory in the united states.  
[www.businessinsider.com](http://www.businessinsider.com)

Beef cattle are treated as a commodity in the marketing system, similar to that of crops or raw materials. This method of marketing beef cattle has been an efficient method in the past, but as food safety concerns and the need for specialization grows, managing beef cattle in this manner is becoming obsolete. When compared to beef cattle, crop and raw material commodities are much more consistent from location to location. There can be tremendous differences in meat quality in a given herd and more differences when evaluating beef cattle on a regional basis. Therefore, managing cattle using a commodity based approach presents challenges in consistency, not seen with other commodities.

To manage cattle in a commodity based system, cattle owners must work on averages. This reduces the value of specialization, which reduces the value of beef cattle altogether. The beef consumer market uses varying types of meat to achieve their own individual needs. As such, the beef industry is missing out on many value-added opportunities that would come with specialized meat producers. Much of this inability to produce specialized meat products comes from a lack of information sharing between producers, packers, distributors, and consumers. Industry wide implementation of a whole chain traceability system is a practical means of overcoming this lack of information sharing. The system gives producers the ability to market their meat to packers and consumers based on the individual or herd's genetics. This pushes managing the cattle in the beef market from a commodity system to a specialized and individual type system. With specialized production, the beef industry can cater to consumer trends and can adapt faster to the changing markets.

Production time is the greatest challenge in the beef cattle market. Since most cattle are not harvested until two years of age, the management decisions that producers make are based on past trends or speculation on future markets. This creates a unique challenge for beef cattle producers because they are making management decisions today based on what they think the markets will bear a year or more down the road. Even then, the producer that has sold cattle that produce higher quality meat may never know that their management practices produced a more valuable consumer product because consumer and packer information did not make it back to the cow calf producer. If consumer and processor information could be shared with the cow calf or feedlot producers, they could have a much better means of evaluating their production practices. Further, the quicker this information is shared the more refined the management practices can become over time.

Increased information sharing through a traceability system reduces the time needed for producers to receive feedback about their production methods. This helps them become more adaptable and responsive to changing market trends. Reducing individual beef producer costs and improving production efficiency will ultimately spread throughout the industry. Information sharing between all groups in the beef cattle supply chain is key to improving production efficiency. A whole chain traceability system that is widely used in the beef cattle industry is the primary tool needed to facilitate this information sharing. A whole chain traceability system could help improve profits throughout the supply chain, making U.S. beef markets more competitive.

For more information about the NWCTI system, contact Dr. Michael Buser using the information below. YouTube videos related to the NWCTI system can be viewed at <https://goo.gl/MwPhoS>.

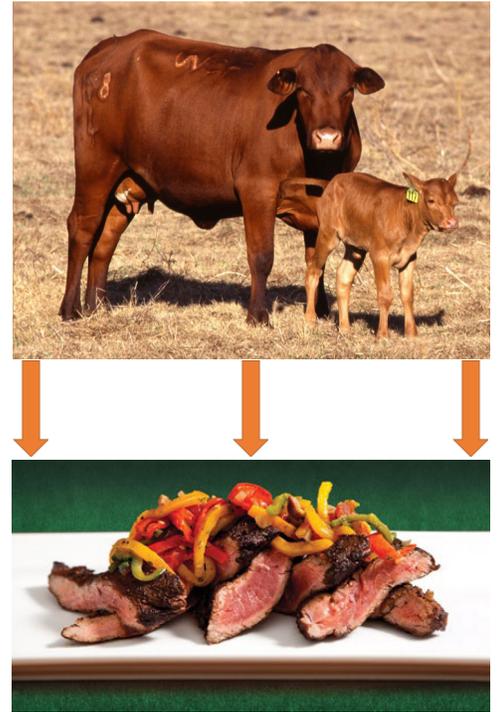


Figure 2. It may take two years before beef cattle reach consumer plates.



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