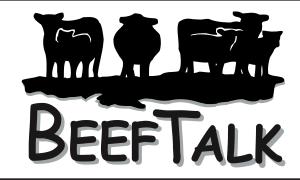# Ten Observations on Animal Identification

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As the continual effort of implementing or at least trying to understand the USDA efforts at establishing a national animal identification system keeps moving, an occasional look back is always nice. Many people have been involved in these efforts and certainly a hand of gratitude needs to be extended to those involved.

Since 1963, some North Dakota cattle have been in various projects that involved individual animal identification. Data collection and analysis for management decisions were the reasons for an animal ID, which is a visual tag, tattoo or other unique marking. Since the mid-1980s, a North Dakota computer program has been used to manage the data for diligent producers who wanted to base management decisions on data.

In recent years, there has been a desire for individual animal traceback. The North Dakota team has conducted research involving three key points, which are electronic animal identification, data management and traceback.

The industry discussions continue. Right now everyone is back at the work pit and I would like to offer 10 observations.

The first and overriding thought is cattle can be tracked if they are age and/or source verified. In a recent North Dakota trial, 37.5 percent were traced through slaughter, 41.7 percent were not traceable and 20.8 percent stayed on the ranch. These results may not be reflective of the entire industry, but they point out what the North Dakota team found. The process was one of establishing some basic industry information.

Electronic animal identification needs to simultaneously include low- and high-frequency technology. Several tag designs are being evaluated in anticipation of incorporating low- and high-frequency technology in a single application.

Low-frequency tags and readers work in accordance with industry standards, but may require at least three sequential reads for a 100 percent read during rapid single-alley movement.

High-frequency tags (916 megahertz) expand the reading range 6 to 18 feet, with up to 98.65 percent reads for a one-time 3-foot-wide, single-alley movement. High-frequency tags with a read range of 10 feet have greater than 90 percent accuracy for a one-time, rapid 11-foot-wide alley movement.

An important focal point in the process is the need to incorporate a Process Verified Program (PVP) or a Quality Systems Assessment (QSA) process through the USDA's Agriculture Marketing Service. The CalfAID™ program, as developed in North Dakota, is a USDA-PVP. CalfAID™ will continue to provide source and age verification, through data management, electronic animal identification and traceback, to the fullest extent possible.

Conforming and nonconforming calves must be accounted for through effective data management, which includes efficient electronic identification tag (EID) inventory control, EID distribution verification, visual tag data (VID) forms, EID data and VID feedback and cross-tag verification.

A calving record book, with third-party verification of VID and EID numbers and authentication of all recorded data at the producer level, will be required.

Calf traceback needs to incorporate localized data bases involving premise identification, focused data fields and data accessibility networked in accordance to standards set by the USDA's Animal and Plant Health Inspection Service and Veterinary Services (USDA-APHIS-VS).

Local North Dakota efforts are continuing and encouraging potential participation in the development of a localized database involving premises identification, focused data fields and data accessibility.

Cattle must maintain original electronic ear tags recorded in the USDA-APHIS-VS network of approved databases. Traceability through branding works (greater than 99 percent), provided cattle are not comingled and resorted. Once comingled and resorted, particularly when cattle are transported out of state, the cattle not traceable (0 percent) by any current method is primarily due to cut tags. Traceability is 79 percent in backgrounders and 13 percent in feeders.

Cooperation is necessary in the industry. We have gained some insight, yet the solution is not in hand.

May you find all your ear tags.

Your comments are always welcome at *www.BeefTalk.com*. For more information, contact the North Dakota Beef Cattle Improvement Association, 1133 State Avenue, Dickinson, ND 58601 or go to *www.CHAPS2000.com* on the Internet. In correspondence about this column, refer to BT0305.

Players Required to Achieve Age-Verified, Source-Verified and Traceable Cattle

Dickinson Research Extension Center

North Dakota Board of Animal Health

North Dakota Stockmen's Association

North Dakota State University

Dickinson State University

NDSU Center for Nanoscale Science and Engineering

NDSU Department of Electrical and Computer Engineering

Alien Technologies

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North Dakota Beef Cattle Improvement Association