



Cattle Producer's Handbook

Quality Assurance Section

285

Individual Animal Identification: Quality Assurance, Verification, and Value-added Marketing

*James J. England, DVM, Ph.D., University of Idaho
Caine Veterinary Teaching Center, Caldwell*

Cattle producers were among the first food producers to use “Label of Origin.” The ranch brand was, and is, a mark of ownership, pride, and product identification. New methods of animal identification are now available that are ranch, owner, and animal specific. These systems can identify a calf to a cow and to a product—from birth to table!

The coupling of electronic identification, automated data collection, and computerization permits “real time” data collection, manipulation, and retrieval. Individual ID systems tied to record systems provide a mechanism for compilation of **all** animal activity and processes permitting the producer to tabulate and select those traits that improve the quality of the beef product be that cow, bull, calf, or meat.

Identification systems include radiotelemetric ear tags, ear tags with bar graphs, and implantable electronic microchips. Readers mounted on alleyways, feedbunks, chutes, and handheld “wands” can read ear tag systems. Bar graph and radiotelemetric ear tags already are being used by an increasing number of ranchers and feedlot operators.

While bangle tags of either type are less costly than implantable microchips, they are subject to loss. Electronic microchips now have anti-migration barbs, but consumers are concerned that chips could remain in the meat product. Microchips currently are not universal and require compatible readers, however, as demand for uniformity grows, readers will become “nonspecific.”

Chips may be subject to electronic interference when two are placed close together—consequently, there

may be more than one ID or a nonsensical number for the animal. Therefore, it is important to “pre-scan” all animals before implantation.

Chips need to be placed in an anatomic location that is free from potential external trauma that may break the chip. Ear base has been used in cattle, but chute bars can damage the chips if the chip is placed on the back of the ear; however, chip placements on the upper front of the ear base are much less susceptible to chute damage. The nuchal ligament in the neck is safe from damage, and easy to scan but more difficult to assure that the chip is placed in the ligament. Other possible sites are the tailhead areas, in the tailfold, behind the poll, or under the lower jaw.

On-ranch programs are currently being instituted within the cattle industry using individual “electronic” identification methodology to produce a value-added product as well as for daily tracking of production costs.

Good records and individual animal identification provide feedback to the producer and assures the consumer of a product value. Producers with good historical information on product quality and consistency will be better positioned to develop alliances with consumers to market a “value verified” product.

Selected web addresses and information on available systems are included in the CD Web sites:

<http://www.destronfearing.com/>
<http://www.allflex.com/>
<http://www.templetag.com/>
<http://www.electronicidinc.com/>
<http://www.ytex.com/>



©2016

Issued in furtherance of cooperative extension work in agriculture and home economics, Acts of May 8 and June 30, 1914, by the Cooperative Extension Systems at the University of Arizona, University of California, Colorado State University, University of Hawaii, University of Idaho, Montana State University, University of Nevada/Reno, New Mexico State University, Oregon State University, Utah State University, Washington State University and University of Wyoming, and the U.S. Department of Agriculture cooperating. The Cooperative Extension System provides equal opportunity in education and employment on the basis of race, color, religion, national origin, gender, age, disability, or status as a Vietnam-era veteran, as required by state and federal laws. Fourth edition; December 2016 Reprint