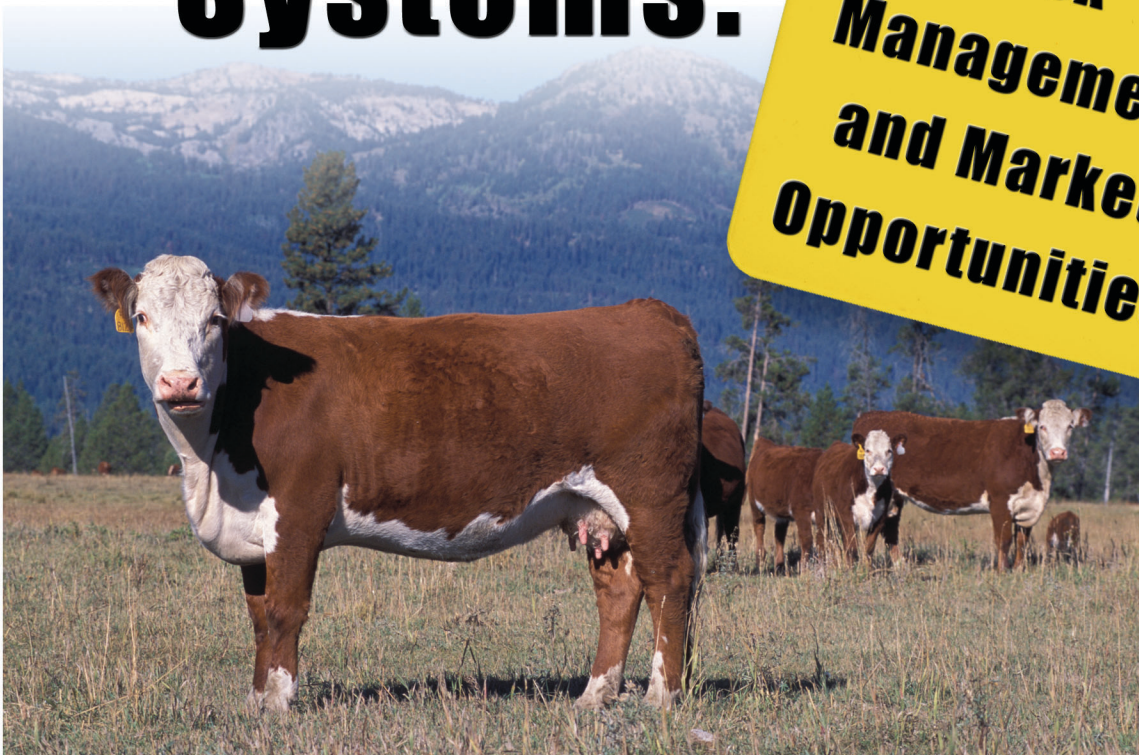


U.S. Livestock Identification Systems:

**Risk
Management
and Market
Opportunities**



Western Extension Marketing Committee

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Western Extension Marketing Committee Contributing Authors

DeeVon Bailey, (Co-Project Director and Managing Editor), Utah State University

Wendy J. Umberger, (Co-Project Director and Managing Editor), Colorado State University

Kynda R. Curtis, University of Nevada-Reno

C. Wilson Gray, University of Idaho

Russell Tronstad, University of Arizona

Ruby Ward, Utah State University

Other Contributing Authors and Reviewers

Michael Coe, Global Animal Management Inc.

Darrell R. Mark, University of Nebraska-Lincoln

James G. Robb, Livestock Marketing Information Center

Michael Roberts, National Agricultural Law Center and the University of Arkansas Law School

Erica L. Rosa, Livestock Marketing Information Center

Doug O'Brien, National Agricultural Law Center and the University of Arkansas Law School

Jack C. Whittier, Colorado State University

Technical Editor

Hollie Doyle, Utah State University

Layout and Design

Tana Stith, University of Wyoming

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For additional information please contact one of the project directors:

Wendy J. Umberger, Ph. D.

Assistant Professor and Agribusiness Extension Specialist

Department of Agricultural and Resource Economics and Cooperative Extension Service

Colorado State University
Fort Collins, CO

wendy.umberger@colostate.edu

DeeVon Bailey, Ph. D.
Professor

Department of Economics and Cooperative Extension Service

Utah State University
Logan, Utah

dbailey@econ.usu.edu

U.S. Livestock Identification Systems: Risk Management and Market Opportunities

Project Overview

In January 2003, U.S. Agriculture Secretary Ann M. Veneman announced the need to implement a National Animal Identification System (NAIS) (either voluntary or mandatory) after Bovine Spongiform Encephalopathy (BSE or Mad-Cow Disease) was found in a dairy cow in the United States. Additionally, on April 27, 2004, Secretary Veneman announced the framework for implementation of the NAIS, which has the goal of enabling government officials from the United States Department of Agriculture, Animal and Plant Health Inspection Service (USDA/APHIS) to identify any agricultural premise exposed to a foreign animal disease so that the disease can be more quickly controlled and eradicated. At that time, Secretary Veneman also announced that \$18.8 million would be transferred from the USDA Commodity Credit Corporation to initially fund the NAIS during fiscal year (FY) 2004.

Producers realize that an individual animal identification (ID) program such as the NAIS will provide the means to identify the movement of livestock through all stages of the production channel beginning at the farm level. However, in the past the U.S. beef industry has generally resisted a mandatory animal ID system. A cause of some producer resistance is likely related to the expectations of increased legal, financial, price, and production risks they may face with traceability as well as uncertainty related to the costs of a mandatory animal ID system versus the potential for downstream benefits of individual animal ID.

Cattle producers, now virtually anonymous in the marketing chain, may lose that anonymity under an individual animal ID system. Thus, there is concern that the legal risk may shift towards producers if market chain participants are able to identify the specific source of a particular safety or quality breakdown as originating at the farm level. In addition, animal ID could increase market risk by providing a means to limit



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market access based on specific qualities (e.g., genetics, location, feeding regimes, etc.). Furthermore, if producers shoulder the financial risk of investing in the infrastructure of animal ID, they may wonder what the costs and potential benefits may be from their investment.

Although animal ID can shift additional risk to producers, it also has the potential to provide producer and consumer-related benefits through value-added certification programs such as genetic tenderness, organic meat, humane animal treatment, social and environmental responsibility, and other attributes.

While an NAIS is inevitable, there are still numerous questions and concerns from individuals involved in all sectors of the livestock industry, particularly cattle producers, about what animal ID will mean for them. Questions still remain regarding implementation logistics, costs, risks, and potential market opportunities that animal ID systems may present.

In order to address many of these questions, during the summer of 2004, the following set of 11 fact sheets was compiled by a team of extension agricultural economists from the Western Extension Marketing Committee (WEMC), in collaboration with other University and livestock industry experts who have national expertise in animal ID, traceability, and marketing systems. The goal of these fact sheets is to provide a concise yet thorough set of educational materials to help various sectors of the livestock industry and extension educators “connect the dots” between the logistics needed to comply with a National

Animal Identification System (NAIS), the potential costs of a NAIS, and the possible value-added benefits that can be accomplished through using individual animal ID systems. This project was funded through direct dollar contributions from the Western Center for Risk Management Education and the Livestock Marketing Information Center, with indirect contributions from the Cooperative Extension Services of participating states.

Members of the WEMC focus primarily on issues related to western livestock production, particularly cattle production; therefore, these fact sheets are focused primarily on animal ID as it pertains to cattle. However, many of the issues are still relevant for other species of livestock and for other areas of the United States.

The following is a list of the 11 fact sheets and the key issues addressed in each:

1. The National Animal Identification System: Basics, Blueprint, Timelines, and Processes

This fact sheet provides a description of the proposed NAIS and addresses the following questions: what is the NAIS, what is the importance of being able to trace animals, are only U.S. animals affected, who is supporting the animal ID system, how will the system be implemented, what is the timetable for implementation and what are the potential costs, and where can one obtain more and updated information on this rapidly evolving subject?

2. Benefits and Costs Associated with an Animal Identification System for Cattle in the United States

Some of the potential reasons for implementing an animal ID system in the United States are discussed in this fact sheet along with some of the associated benefits and costs.

3. Opportunities for Value-Added Marketing and Production Efficiencies

The focus of this fact sheet is on potential market access issues and price premiums related to traceability systems. An overview of consumer demand for traceability is provided. The fact sheet also examines the companies currently benefiting from implementation of traceability systems.

4. The National Animal Identification System and Country-of-Origin Labeling: How are they Related?

To understand how the country-of-origin labeling (COOL) and the NAIS are related, this fact sheet provides an overview of the COOL program, followed by a discussion of the controversy related to COOL and a review of the estimated costs versus benefits of COOL. This is followed by a synopsis of the differing and complementary aspects of COOL and the NAIS.

5. Animal Identification and Confidentiality of Information

An overview is provided on the legal issues related to confidentiality of information versus the Freedom of Information Act (FOIA) as they relate to the NAIS.

6. Animal Identification and Liability Exposure and Risk Management

General liability, strict liability, and negligence as they relate to the NAIS are all discussed in this fact sheet. Additionally, this fact sheet contains a discussion of practical litigation concerns and ways to limit the risk of liability possibly associated with the NAIS.

7. Some Issues Related to Beef Traceability: Transforming Cattle to Beef in the United States

This fact sheet contains a discussion of some of the often overlooked issues regarding the ability to trace and maintain information and individual animal identity throughout the technological steps used in transforming live cattle into consumer beef items in the United States.

8. Potential Benefits to Producers of Production Information Gained through Individual Animal Identification

Potential benefits to cattle producers from traceability can be categorized in three ways: 1) food safety implications, 2) bioterrorism, and 3) increased production information that can be facilitated by the NAIS. Each of these potential benefits is discussed in detail.

9. Effects of Animal Identification on Cattle Market Structure

The extent to which the NAIS and additional record-keeping activities will affect structural changes in the cattle industry will depend on how the NAIS is implemented. It will likely vary by region. This



fact sheet explores some of the possibilities for structural changes in the cow-calf, stocker, and feeding sectors of the cattle industry.

10. Challenges of Animal Identification in the West

The diverse geographic terrain and fragmented structure of livestock production in the United States is such that the challenges associated with implementing an animal ID system differ by region and production-management methods. This fact sheet provides an overview of these challenges that are somewhat unique to the West.

11. Working with Animal Identification Technology Providers

A wide array of confusing terms and technology are associated with animal ID, and there are a growing number of companies providing products and services to assist producers as animal ID systems are introduced. This fact sheet is intended to provide an introduction to some of the more common terms and technology tools and hardware. Also included are some questions to ask technology providers regarding their products and services.

How to Obtain the Fact Sheets

Each of the individual fact sheets can be downloaded free of charge from the Livestock Marketing Information Center webpage at <http://lmic.info/memberspublic/animalID/AnimalID.htm> or from the Western Extension Marketing Committee website at <http://ag.arizona.edu/arec/wemc/wemc.html>. Bound hard copies of the fact sheets can be obtained by contacting one of the coordinators of the projects, Dr. Wendy Umberger (Colorado State University) or Dr. DeeVon Bailey (Utah State University) at the addresses below. Please direct any comments or questions to individual authors (their e-mail addresses are on each article) or the project coordinators.

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