

Dairy Cattle Identification Practices in the United States, 2007

In 2007, the U.S. Department of Agriculture's National Animal Health Monitoring System (NAHMS) conducted the Dairy 2007 study. The study collected data on dairy health and management practices from 17 of the Nation's major dairy States.¹ These States represented 79.5 percent of U.S. dairy operations and 82.5 percent of U.S. dairy cows. One of the goals of the Dairy 2007 study was to collect information on dairy cattle identification (ID) practices and to evaluate the use of standardized premises and animal ID methods consistent with the National Animal Identification System (NAIS). NAIS is a State-Federal-Industry partnership designed to help producers and animal-health officials respond quickly and effectively to animal-disease events in the United States.

During the Dairy 2007 study, dairy producers were asked about the methods they used to identify individual cows (each cow has its own unique ID) as well as the methods used to identify cows that belong to their herds (all cows have the same ID). Producers were provided a list of possible methods² for uniquely identifying their herds or individual cattle and given the option to report forms of ID not listed. More than one ID method could have been used on the same cow. For example, if an electronic ear tag was used, both the ear tag and electronic ID were reported. Similarly, if a collar and branding were used, both methods were reported.

Individual ID

Almost all cows (97.4 percent) had some form of individual ID. Ear tags were the primary method of individual animal ID used on 94.0 percent of cows, followed by branding and collars (13.2 and 10.3 percent of cows, respectively). Electronic ID was used for 9.0 percent of cows and on only 4.1 percent of operations. The majority of operations (93.0 percent) uniquely identified at least some of their cows. Most operations

(86.5 percent) used ear tags for individual cow ID, followed distantly by photographs or sketches (13.3 percent) and collars (12.7 percent). Even though branding was used to identify over 13 percent of cows, only 4.4 percent of operations used branding to ID individual cows (table 1).

Table 1. Percentage of Operations and Percentage of Cows, by Type of Individual Animal ID Used on at Least Some Cows

ID Type	Percent Operations	Percent Cows
Ear tags (all kinds)	86.5	94.0
Collars	12.7	10.3
Photograph or sketch	13.3	4.4
Branding (all methods)	4.4	13.2
Tattoo (other than tattoo for brucellosis)	7.7	8.5
Leg bands	3.0	2.9
Electronic (pedometers, bar code, RFD, etc.)	4.1	9.0
Other	7.7	4.7
Any ID	93.0	97.4

On operations that used individual animal ID, evaluating milk production was the primary reason for using animal ID on 38.1 percent of operations, and evaluating genetic improvements was the primary reason on 30.4 percent of operations. Evaluating animal health was the primary reason for using individual animal ID on 8.8 percent of operations, and a small percentage of producers (1.6 percent) reported using animal ID to allow for disease or residue traceback. However, over one-fifth of operations (21.1 percent) reported "other" primary reasons, and many of these operations reported that the listed choices (evaluating milk production, evaluating animal health, disease or residue tracking, and evaluating genetic improvements) were all primary reasons.

¹States/Regions

West: California, Idaho, New Mexico, Texas, and Washington

East: Indiana, Iowa, Kentucky, Michigan, Minnesota, Missouri, New York, Ohio, Pennsylvania, Vermont, Virginia and Wisconsin

²Ear tags, collars, photographs or sketches, branding, tattoo, leg bands, electronic ID (pedometers, bar code, RFD).

Herd ID

Compared to individual cow ID, a much lower percentage of cows (54.0 percent) had herd ID. Also, only about one-third of operations (36.4 percent) used herd ID on at least some cows. As with individual ID, ear tags were the predominant ID used; however, almost one-fifth of cows (18.7) were branded as a form of herd ID (table 2).

Table 2. Percentage of Operations and Percentage of Cows, by Type of Herd Identification Used on at Least Some Cows

ID Type	Percent Operations	Percent Cows
Ear tags (all kinds)	34.5	41.0
Collars	2.8	2.9
Branding (all methods)	3.1	18.7
Tattoo (other than tattoo for brucellosis)	2.5	4.6
Electronic (pedometers, bar code, RFD, etc.)	1.8	3.9
Other	2.0	1.7
Any identification	36.4	54.0

Participation in NAIS

Although nationally NAIS is a voluntary program, three States (IN, MI, WI) required participation at the time the study questionnaire was administered (January 1-31, 2007). Dairy 2007 study results show that 46.7 percent of dairy operations had been assigned a unique premises ID by their State Department of Agriculture as part of the NAIS program. A slightly higher percentage of small and medium operations had unique premises ID compared to large operations.³ Also, a higher percentage of operations in the East region (49.1 percent) had a unique premises ID compared with operations in the West region (16.5 percent).

Once an operation has been assigned a unique premises ID by its State Department of Agriculture, it can obtain officially-recognized individual animal ID, as outlined by the U.S. Animal Identification Number (AIN) guidelines. The percentages of dairy operations that had implemented an individual ID system using AIN guidelines ranged from 7.0 percent of small operations to 12.5 percent of large operations (table 3).

³Herd size is based on January 1, 2007, cow inventory. Small herds are those with fewer than 100 cows, medium herds are those with 100 to 499 cows, and large herds are those with 500 or more cows.

Table 3. Percentage of Operations that had Implemented an Individual Animal ID System or Technology that Utilizes AIN Guidelines, by Herd Size

Percent Operations			
Herd Size (Number of Cows)			
Small (Fewer than 100)	Medium (100-499)	Large (500 or More)	All Operations
Percent	Percent	Percent	Percent
7.0	9.6	12.5	7.8

Of the 46.7 percent of operations assigned a unique premises ID, 16.8 percent had implemented an individual ID system using AIN guidelines. A higher percentage of large operations with a unique premises ID (38.2 percent) were using an individual ID system compared with medium and small operations (19.8 and 14.8 percent, respectively) [table 4].

Table 4. For Operations that had a Unique Premises ID Assigned, Percentage of Operations that had Implemented an Individual Animal ID System that Utilizes AIN Guidelines, by Herd size

Percent Operations			
Herd Size (Number of Cows)			
Small (Fewer than 100)	Medium (100-499)	Large (500 or More)	All Operations
Percent	Percent	Percent	Percent
14.8	19.8	38.2	16.8

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