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Beef Cow-Calf Producer Participation in the National Animal Identification System

by
William D. McBride*
and
Kenneth Mathews

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*The authors are with the U.S. Department of Agriculture, Economic Research Service. The views expressed herein are those of the authors and do not necessarily reflect the views or policies of the U.S. Department of Agriculture. Direct any correspondence to:
wmcbride@ers.usda.gov , (202) 694-5577.

Introduction

Disease outbreaks from around the world, particularly BSE, or “mad cow disease”, motivated USDA to initiate a program for identifying animals so that disease outbreaks in the U.S. could be quickly traced back to the source.

- This program evolved over time into the National Animal Identification System (NAIS).
- The NAIS was a voluntary program intended to help protect U.S. livestock and poultry from disease spread, maintain consumer confidence in the food supply, and retain access to domestic and foreign markets.

The foundation of the NAIS and first step for producer participation was premises registration.

- To register a premises, producers must have contacted the appropriate State or Tribal authority and provided contact information for the premises and minimal information about the livestock operation.
- Providing premises information means that producers would be notified quickly when a disease event might impact their area or animal species (USDA, APHIS, 2007).

The NAIS and Beef Cow-Calf Production

Despite relatively wide acceptance by hog and poultry producers, implementation of the NAIS was met with significant resistance among U.S. beef cow-calf producers.

- Beef cow-calf producers were concerned about their liability in the event of a disease outbreak and their cost of implementing the program (Breiner et. al.).
- Due in part to resistance among many of the nearly 765,000 U.S. beef cow-calf producers, the NAIS was replaced in February 2010 with a framework that calls for less federal oversight and leaves States to choose their own degree of within-state animal identification and livestock traceability.

This presentation examines:

- the extent to which commercial beef cow-calf producers were familiar with and registered with the NAIS, and
- farm and operator characteristics of beef cow-calf producers according to their familiarity and registration with the NAIS.

Data and Methods

During March of 2009, USDA conducted a national survey of U.S. beef cow-calf producers as part of the annual Agricultural Resource Management Survey (ARMS).

- The survey targeted “commercial” beef cow-calf operations in 22 States [fig. 1], defined as those with at least 20 beef cows on the operation at any time during 2008.
- Limiting the target population to those with 20 or more beef cows omitted about 53 percent of farms with beef cows, but included about 90 percent of the beef cow inventory (USDA, NASS).
- Beef cow-calf producers were asked if they were familiar with the NAIS and if so, were they registered in the NAIS. Producers were classified into: 1) those not familiar with the

NAIS, 2) those familiar, but not registered in the NAIS, and 3) those registered in the NAIS.

Major Findings

- About 24 percent of beef cow-calf producers with more than 20 cows in 2008 were not familiar with the NAIS. Another 52 percent were familiar with the NAIS, but had not registered their premises. The remaining 24 percent of beef cow-calf producers had premises registered with the NAIS [fig.2]. This is greater than 16 percent reported from the National Animal Health Monitoring Survey (USDA, APHIS, 2008) due to the 20 cow minimum in the ARMS population.
- Size of cow-calf operation was associated with both familiarity and registration with the NAIS. Nearly a third of cow-calf operations with 20 to 49 beef cows were not familiar with the NAIS and only 16 percent of these small operations had premises registered. Among operations with 1,000 or more beef cows only 9 percent were not familiar with the NAIS and nearly half were registered [fig. 3].
- Cow-calf producers not familiar with the NAIS were about 5 years older, on average, than other producers and nearly 50 percent were more than 65 years of age. Producers registered with the NAIS were more educated than other producers as a third had graduated from college, compared with 17 percent not familiar with the NAIS.
- Farm incomes of cow-calf producers registered in the NAIS were much higher than those of other producers. Net cash farm income and net farm income were more than 3 times higher than for those not familiar with the NAIS [fig. 4].
- Information technologies were more often used by beef cow-calf producers registered in the NAIS. More than 60 percent of these producers kept individual cow records, 30 percent kept on-farm computer records for beef cattle, and about half used the internet to obtain beef cattle information, all much higher than among other cow-calf producers [fig. 5].
- More than 80 percent of beef cow-calf producers used methods for identifying cattle, including more than 90 percent of those registered in the NAIS and nearly 70 percent of those not familiar with the NAIS [fig. 6]. Visual ear tagging and branding were the most common methods used to identify beef cattle.

Conclusions

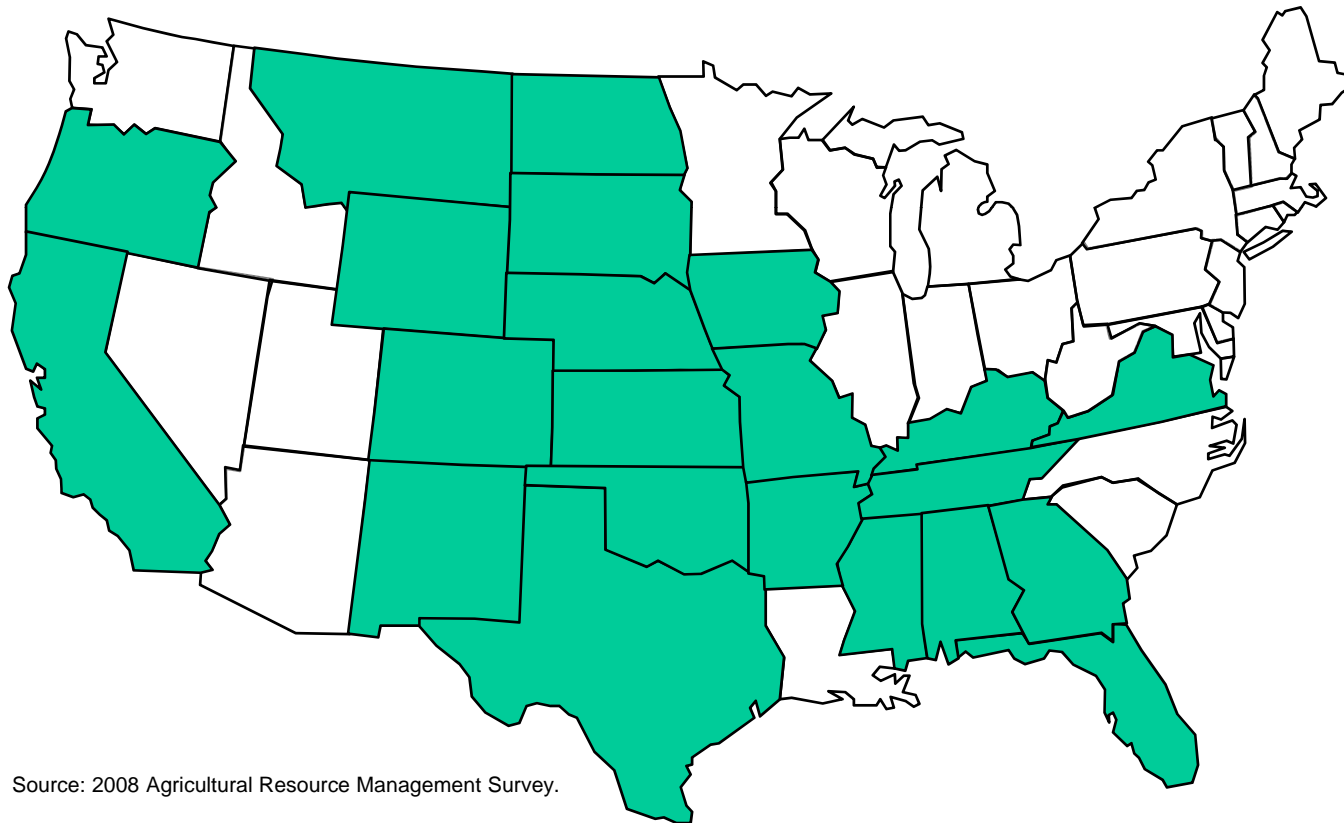
- Despite that the NAIS and its predecessors were initially drafted as early as 2002, many commercial beef cow-calf producers were not familiar with the program and only about a quarter had their premises registered by 2008. This suggests that federal or State efforts to enhance traceability through animal identification need to do a better job of informing producers about program benefits, as well as addressing producer concerns.
- The large number of small beef cow-calf operations, their limited registration with the NAIS, and their limited farm financial resources, suggests that participation costs could be an impediment to participation in animal identification systems by many producers. Methods for reducing these costs may need to involve subsidizing participation for small operations, or finding a way to utilize those animal identification systems currently in place on most beef cow-calf operations.

- The use of information technologies was associated with producer participation in the NAIS. Increasing producer involvement in production record keeping programs and expanding internet access in rural areas may also help to improve participation in animal identification programs.

References

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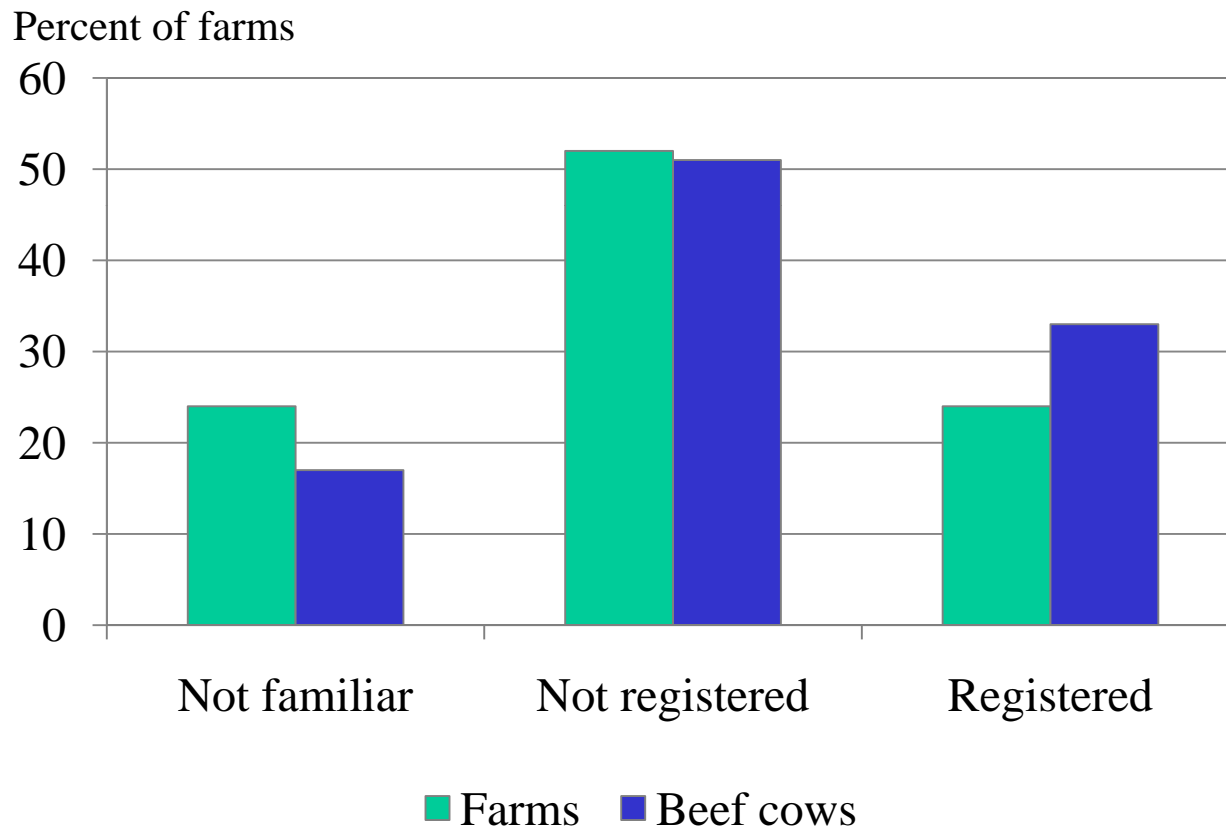
States surveyed in the 2008 ARMS of beef cow-calf producers



Source: 2008 Agricultural Resource Management Survey.

fig. 1

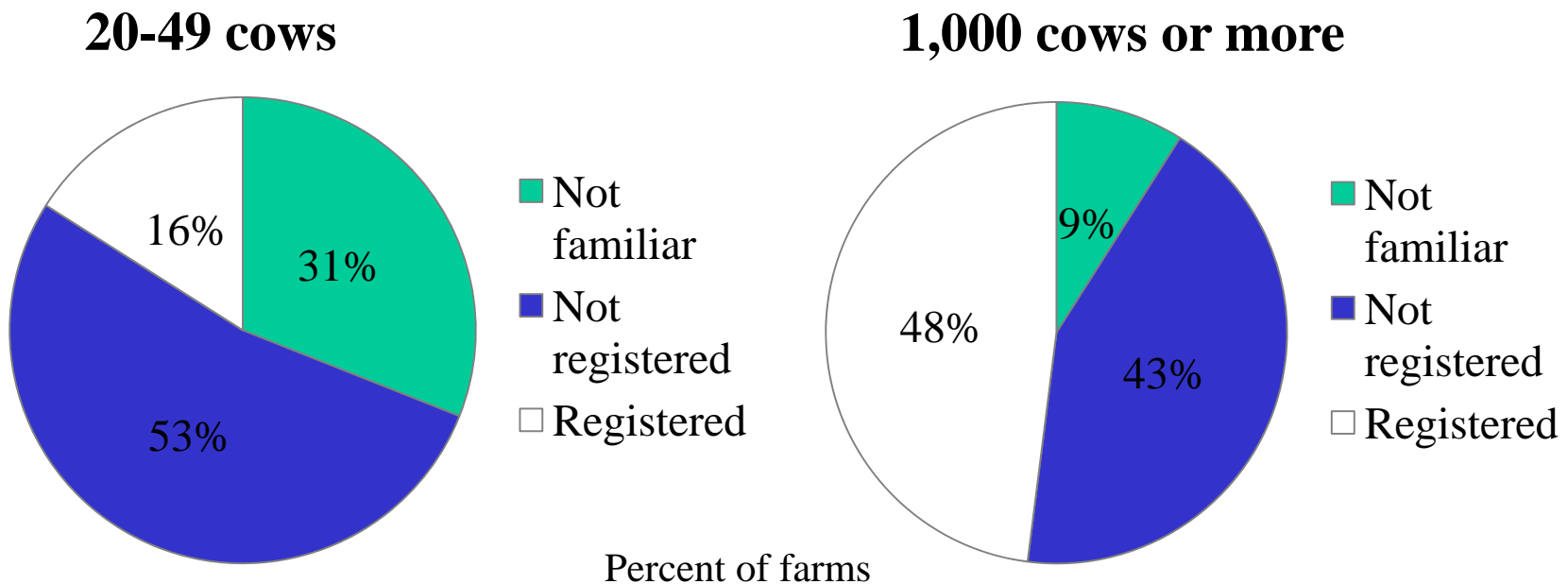
Only 24 percent of ARMS beef cow-calf producers, with a third of the beef cows, had registered their premises with the NAIS by 2008



Source: 2008 Agricultural Resource Management Survey.

fig. 2

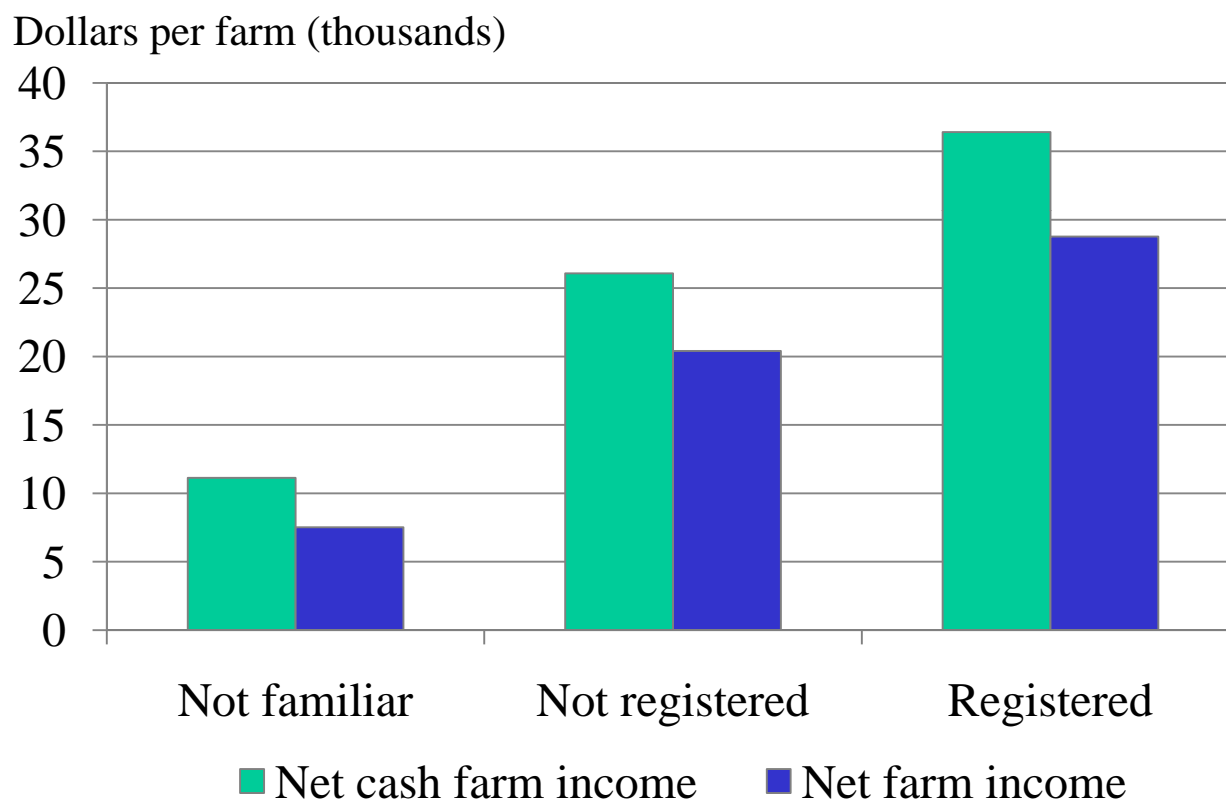
Only 16 percent of ARMS beef cow-calf producers with 20-49 beef cows were registered with the NAIS, compared with nearly half of those with 1,000 cows or more



Source: 2008 Agricultural Resource Management Survey.

fig. 3

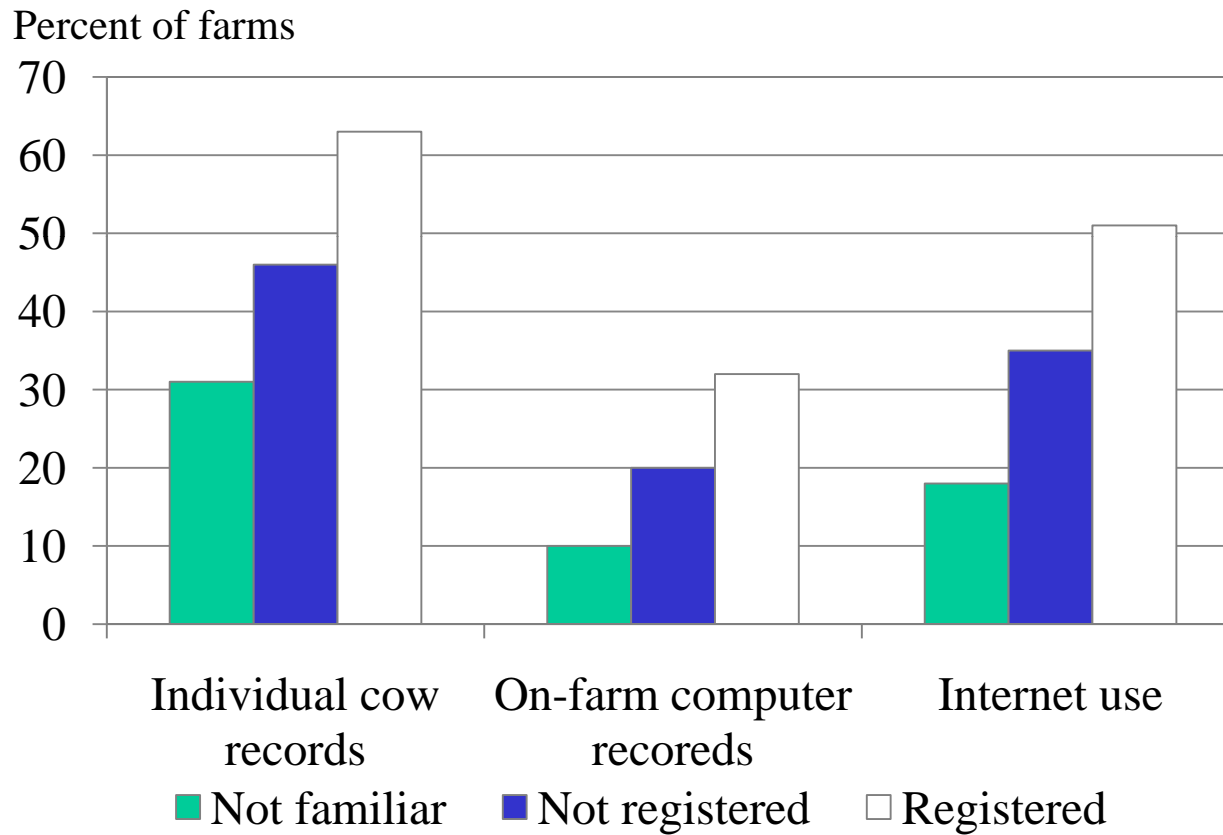
Net cash and net farm income for beef cow-calf producers registered in the NAIS were much higher than for other producers



Source: 2008 Agricultural Resource Management Survey.

fig. 4

Those registered in the NAIS more often used information management technologies

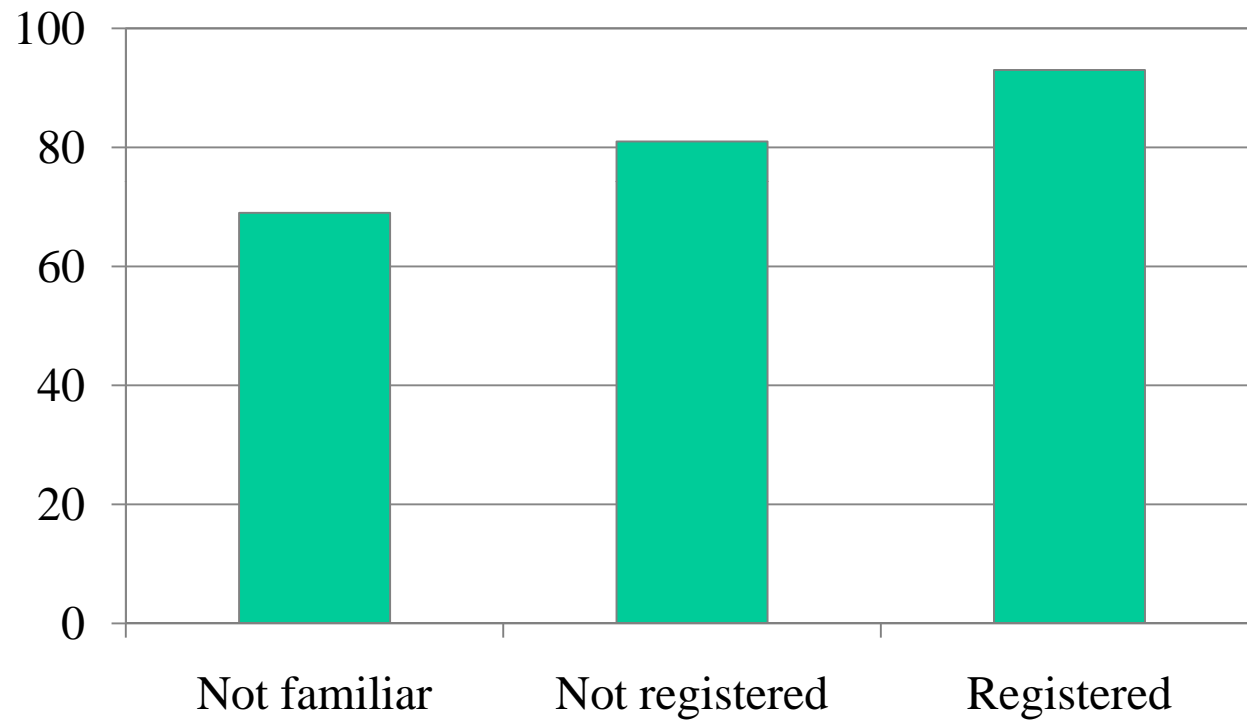


Source: 2008 Agricultural Resource Management Survey.

fig. 5

Most beef cow-calf producers used some type of cattle identification regardless of NAIS participation

Percent of farms



Source: 2008 Agricultural Resource Management Survey.

fig. 6