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Teaching Livestock Producers to Use Handheld Computers

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Teaching Livestock Producers to Use Handheld Computers

Abstract

Mandatory animal ID is a well-discussed topic among livestock producers. A national ID program will probably require animal records to be maintained in electronic format. A 2-day intensive training was held to help cattle producers become proficient in using a handheld computer for animal record keeping. On an end-of-meeting evaluation, 99% of the participants felt a handheld computer would make record keeping tasks easier. A follow-up survey was mailed 1 year after the program generated a 70% response rate. After one year, only 57% of the participants felt that the handheld computer made their record-keeping task easier.

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Background

The National Animal Identification System (NAIS) has been a hot topic of discussion among livestock producers. Initial questions from producers focused on how a national identification (ID) program would affect their operation and what additional cost they would incur. In Ohio, beef producers have been asking these questions since 2001, when public discussions about Country of Origin Labeling (COOL) began.

From those many discussions about COOL, it was clear that any type of national animal ID program would require livestock information to be reported in electronic format. Although the NAIS is "technology neutral," it has the goal of 48-hour trace-back (USDA, 2005). This implies that livestock producers will have to move toward an electronic record-keeping system. Regardless of the technology used for animal ID, the single most important piece of equipment producers will need to participate in NAIS is a computer.

Originally, laptop computers were considered a tool to collect livestock information when Extension worked with producers in the field. While more producers now own computers than in previous years, they are not necessarily portable models (NASS, 2005). Also, many producers do not have electricity located near their livestock handling facilities and may not feel comfortable having an expensive laptop in an outdoor environment.

A handheld computer like a personal data assistant (PDA) is a feasible alternative. Regardless of the technology used for animal ID, the animal's number could be transmitted to a handheld computer as easily as to a laptop computer. Other data pertinent to the operation could also be collected in the field directly on the handheld computer. This would keep all of the producer's records in electronic format and alleviate data entry errors while typing in records collected on paper.

Methodology

To help producers adopt this technology for use in their operation, OSU Extension developed a program called "Handheld Data Management for Beef Cattle." This was a 2-day intensive training to increase the proficiency of cattle producers in using a handheld computer to manage the data from their herd. The goal was to improve cattle producers' record-keeping ability and eventually assist with animal-tracking tasks.

The 2-day program included a Palm Pilot™, lunches, and refreshments. Space was limited to 50 participants. The program started by familiarizing participants with how to interface with the handheld computer, i.e., how to turn it on, run programs, synchronize it to a computer, and enter information into programs. Participants were then taught a variety of ways a handheld computer could be a useful tool in their operations. In addition to the handheld data management training, there were also sessions on the current proposals for the national identification program and a presentation on a current vertically coordinated, Ohio based program for raising and marketing cattle.

There were 51 participants in the training, including 34 beef producers, nine employees of beef operations, and eight individuals from supporting businesses. The number of beef cows represented by this group was 6,323 cows, 491 bulls, and 1,595 stocker cattle. End-of-program evaluations indicated that 99% of the participants would be willing to use a handheld computer for record keeping/data management on their farm.

Results

In an effort to evaluate this program, a follow-up, survey was mailed to participants 1 year after the training. The response to this survey was 70%. The results are shown in Figures 1-4, respectively. One year after the "Handheld Data Management for Beef Cattle" program, 83% of the respondents still found the training valuable or very valuable. The handheld computer was found to be useful or very useful by 63% of the participants and the same percentage found the handheld computer easy or very easy to use. Sixty-eight percent of the participants indicated they use the handheld computer either daily or weekly.

Figure 1.

Follow-Up Evaluation Responses to the Question, "How Valuable to Your Operation Were the Skills You Learned at the Program?"

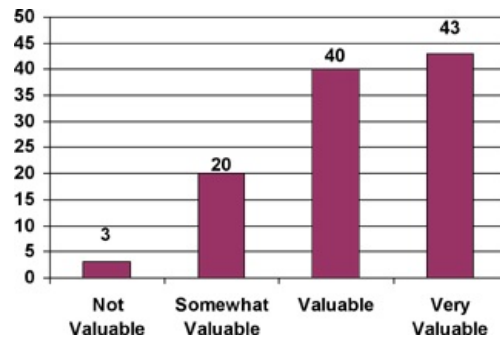


Figure 2.

Follow-Up Evaluation Responses to the Question, "How Useful Have You Found Your Handheld Computer?"

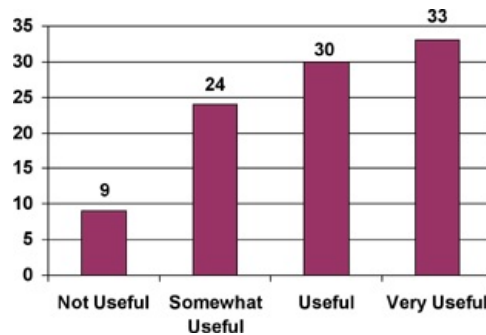


Figure 3.

Follow-Up Evaluation Responses to the Question, "How Easy Has the Handheld Computer Been to Use?"

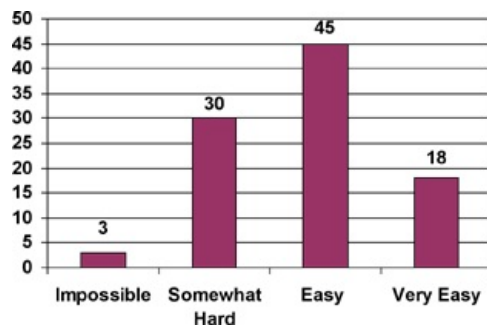
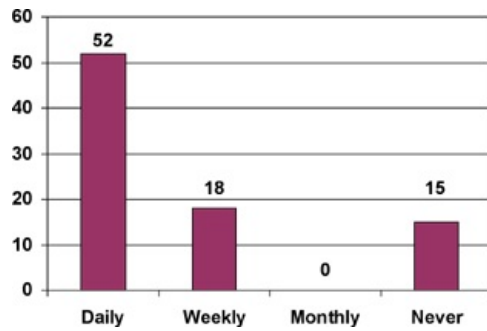


Figure 4.

Follow-Up Evaluation Responses to the Question, "How Often Do You Use Your Handheld Computer?"



The wording of one question was similar on both the end-of-training evaluation and the follow-up survey mailed 1 year later. Table 1 compares the responses to that question from both evaluations. Immediately following training 99% of the participants thought the handheld computer would make their record keeping/data management task easier. One year after the training, only 57% of participants indicated that the handheld computer had made their record keeping/data management task easier.

Table 1.

Survey Responses to the Effect a Handheld Computer Would Have/Had on Participants' Record-Keeping/Data-Management Task

With a Handheld Computer My Record-Keeping/Data Management Task Are...	% Responding	
	End of-Program Evaluation	1-Year Follow-Up Evaluation
Easier	99	57
Harder	0	0
Stay the Same	1	43

The only consistent suggestion from respondents regarding future trainings was that more time should be spent on actual record keeping programs.

Conclusions

As the United States moves toward a national animal ID program, there are plenty of opportunities for Extension to meet the educational needs of our clientele. One role could be helping producers adapt existing technology to their operation. Handheld computers can be a useful tool to assist livestock producers with their record-keeping task. At future trainings, significant time should be devoted to actual recordkeeping programs.

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