Two approaches to providing information about beef cattle preconditioning to randomly selected farmers were compared in a study involving 12 small and part-time farmers in Madison County, North Carolina. Half the farmers received the information from an extension agent via face-to-face consultations, telephone conversations, and an educational meeting. The remaining six farmers received the information through a poster, audiocassette, and fact sheets that were all developed by the extension agent. The farmers receiving the information via face-to-face instruction produced an average of 33.8 calves on their farm in 1993, whereas the farmers receiving the information without face-to-face contact averaged 22 calves per farm. Pretests and posttests assessing the farmers' knowledge gains established that the farmers receiving face-to-face instruction experienced knowledge gains of .976 and the other group experienced knowledge gains of .213. It was emphasized, however, that the latter group had a higher beginning knowledge level. Of the six individual delivery methods studied, fact sheets and face-to-face contact were the most favored, whereas posters and meetings were the least favored. The audiocassette and telephone methods were seen as only marginally effective means of delivering extension education programs. (MN)
Small and Part-Time Farmer Innovative Program Delivery Project
Madison County, North Carolina
1994

John G. Richardson, Project Leader
Maurice McAlister, Extension Agent

Subject: Program Delivery For Beef Cattle Preconditioning Programs

Two approaches were taken in providing information to randomly selected farmers. One group of six received information via face-to-face means through agent to farmer consultation, by telephone, and by means of an educational meeting. A non face-to-face group of six received information via a poster that was developed by the Extension agent, an audiocassette that contained information presented by the agent, and fact sheets that were developed by the agent.

Face-to-Face Methods

The face-to-face group produced an average of 33.8 calves on their farm in 1993. Their ages were in the 40 to 65 category, and most receive less than 50% of their total income from their farming operations. The sources which they receive beef cattle information from most frequently, with numbers listing in parenthesis, include magazines(5), cattlemens associations(4), farm supply dealers(4), and friends and neighbors(4). Other sources mentioned less often included Cooperative Extension(3), livestock markets(3), salespeople(3), feed dealers(3), and specialty publications(3).

In an analysis of the three delivery methods used for this group, the farmers reported the following:

Meeting: 2 very effective, 1 somewhat, and 3 not effective
Face-to-face with agent: 5 very effective, 1 somewhat
Telephone: 2 very, 3 somewhat, 1 not effective

1 received the information at the appropriate time; 1 some of the time; and 3 not at all.

5 said it was sometimes important to receive information from Extension before requesting, and 1 said seldom important to receive unrequested information.

2 like to receive packets of information all at once, and 3 like packets of information spread over an extended period of time.

3 would like to receive information on other subjects using the three delivery methods,

2 said maybe and 1 not at all.
3 said they would pay for such information while 2 were unwilling to pay for the type of information received.

1 was willing to pay $10 and 2 were willing to pay $20.

Knowledge Gain

Knowledge gain was measured by using a pre test at the beginning of the three month span of the program, and post test at the conclusion of the program. The knowledge gain was .976 with every category increasing. The increased knowledge gain ranged from .16 to 2.0 on a modified four point scale (only three of 14 questions were other than four points)

Non Face-To-Face Methods

The non face-to-face group of six produced an average of 22 calves on their farms in 1993. Their ages were mostly in the 40 to 65 range with only one each in the less than forty and over 65 categories. Most indicated that farming contributed less than one-half their total income. Their most frequent source of information is friends and relatives(6). Other relatively frequent sources include farm supply dealers and Cooperative Extension(4), and salespeople and livestock markets(3). Feed dealers(2), veterinarians, and special publications(1) are the other sources listed. Magazines were not listed as an information source by this group.

In assessing the effectiveness of the three non face-to-face methods, the six producers rated the methods as follows:

Posters: 1 very effective; 4 somewhat; 1 not effective.
Fact Sheets: 5 very effective, 1 somewhat.
Audiocassettes: 2 very effective; 2 somewhat; 2 not effective.

3 received the information at the appropriate time, and 3 some of the time.

2 think it is important to receive information from Extension prior to requesting, 4 think it is important sometimes.

1 likes to receive information all at once while 4 like it spread out over time.

3 would like information on other subjects, and 3 possibly using these three delivery methods.

3 would be willing to pay for information, and 2 said they were not willing to pay.

2 said they would be willing to pay $10 and 1 indicated a willingness to pay $20 for similar types of information.
Knowledge Gain

Knowledge gain was .213, from an original level of 3.187, rising to 3.40. Knowledge gain was shown in 10 of the 14 categories. Knowledge gain ranged from .16 to 1.0. Knowledge loss was indicated on three of the 14 categories with a range of .17 to .50. Knowledge level of this group was considerably higher than the face-to-face group initially. Beginning knowledge was 2.215 for the face-to-face group while the non face-to-face group began at 3.187. Following the educational program, the face-to-face group had a knowledge level of 3.19 compared to 3.40 for the non face-to-face farmers.

Primary Sources of Beef Cattle Information

10 Friends and Neighbors
8 Farm Supply Dealers
7 Cooperative Extension
6 Cattlemens Associations
6 Livestock Markets
6 Salespeople
5 Magazines
5 Feed Dealers
4 Specialty Publications
1 Veterinarians

Summary

Total knowledge gain was .594. With each group combined for each category and averaged, all categories showed a gain in knowledge, from a low of .17 to a high of 1.5.

One-half of the farmers indicated a willingness to pay from $10 to $20 for similar information using the program delivery methods in this study. Four said they would not be willing to pay.

One-half said they would like information on other subjects using these delivery methods, while five indicated maybe. Only two of the twelve participants had farm incomes greater than 50% of their total incomes. Non-farm income accounted for greater than 50% among other participants.

While six methods were used altogether, fact sheets and face-to-face contact by the agent were the two methods clearly favored. Posters and meetings were clearly not favored by the part-time and small farmers. The audiocassette and telephone were seen as only marginally effective means of program delivery for Extension education programs for this audience.
Clearly, Extension is one of many sources of information this group of farmers use, so it is critical that appropriate methods be used that can most effectively meet the needs of these farmers.