

# Extension Information Delivery Methods: Detecting Trends Among Users

by John G. Richardson

*The primary purpose of this study was to (a) determine what communications channels are used by agricultural producers who obtain information from the North Carolina Agricultural Extension Service; (b) identify the five most frequently used channels for receiving Extension information at the present time; and (c) determine what channels farmers expect to use most frequently in the future.*

*A mailed survey instrument was used. Of the 1178 instruments mailed, 702 were returned, for a 60-percent return rate.*

*The findings included:*

*1. More than 80% of the respondents listed meetings, newsletters, and agent visits as Extension communication methods that are important to them;*

*2. Newsletters, meetings, farm visits, telephone calls, and on-farm tests and demonstrations were identified as being the five most frequently used methods of receiving Extension information;*

*3. Those methods that are currently most frequently used are projected to be popular in the future, but with some shifting in preferences such as increased use of computers and video tapes;*

*4. North Carolina farmers who use Extension information expect to use nearly all types of print media as well as most other methods less frequently in the future for obtaining needed information.*

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County Extension agents have always used a variety of methods for delivering information to their clientele. From the on-farm demonstration to the videotape, this variation in delivery methods has allowed agents to attempt to provide information to their audiences in the most effective and efficient manner possible.

Today, as the structure of agriculture changes rapidly, and as Extension's resources are being stretched further and further, Extension agents and communicators need to be aware of the effectiveness of their various information delivery methods and aware of the new delivery technologies. They need to be able to tailor communication methods to most effectively supply information to farmers and other clientele. Furthermore, as newer communications media such as computer programs or videotapes are introduced, agents need to know how well clientele accept these newer sources, how often they use them, and whether Extension needs to make an effort to enhance acceptance of newer information delivery techniques.

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**Dr. John G. Richardson is Extension specialist for Educational Programs at the North Carolina State University, Raleigh, North Carolina.**

## Purpose of the Study

This study was conducted to (a) determine what communication channels are used by agricultural producers who obtain information from the North Carolina Agricultural Extension Service; (b) identify the five most frequently used channels for receiving Extension information at the present time; (c) determine what channels farmers expect to use most frequently in the future.

## Research Methodology

County Extension directors in 12 randomly selected counties were asked to identify 100 farmers who were known users of Extension information and represented a cross section of farming enterprises in their counties. The only proviso was that the farmers should be among those estimated to receive at least \$10,000 in gross farm income. Using the names supplied by county directors, we mailed questionnaires to 1,178 farmers. From this mailing, 702 viable instruments were returned for a 60-percent return rate.

The income restriction led to a sample weighted toward full-time farmers (70% of respondents). Although farmers were asked to identify a single major enterprise, many indicated more than one enterprise, reflecting the diversity of North Carolina agriculture. Farmers of all ages were represented in the sample. Of those who returned the questionnaire, 40.9% had completed high school, 23.3% indicated at least some college, and 25.4% were college graduates. With 48.7% of the respondents indicating college experience, the sample used in this study is well above the 20.8% state average for post-high school education.

Farmers surveyed were asked three questions about 29 possible Extension communications channels. In question 1, they were asked to check all of the methods that they use most at the present time to obtain Extension information. In question 2, respondents were asked to identify the five media channels currently used most often. In Question 3 they were asked to predict the five channels they expected to use most frequently five years in the future.

## Findings

*Question 1: Check all of the [Extension communication] methods that are important to you.*

Respondents generally expressed a strong preference for traditional Extension information delivery methods. More than 80% of the respondents listed meetings, newsletters, and agent visits as methods of information dissemination that they used. More than 50% added newspapers, field days, tours, demonstrations, bulletins, and telephone calls as other frequently used methods of obtaining Extension information. (See Table 1.)

Communications preferences also were analyzed separately for part-time and full-time farmers. Full-time farmers indicated a higher frequency than part-time farmers in use of most print media (fact sheets, newspapers, magazines, and specialized publications). They also were more frequent users of telephone calls, office visits, and radio and television as vehicles for obtaining information. Somewhat higher percentages of part-time than of full-time farmers checked field days and tours as sources of information. However, there were no significant differences between full-time and part-time farmers in their responses to this question.

Question 2: Check the five [Extension communication] methods that you use most frequently.

When asked to list the five methods most frequently used, the highest percentages of producers listed (a) newsletters, (b) meetings, (c) farm visits (agent to farmers), (d) telephone calls, and (e) on-farm tests and demonstrations.

**Table 1. Percentages of Respondents Selecting Various Communications Media. (Note: Number of respondents varied among questions and answers from full-time and part-time farmers have been combined.)**

<b>Medium</b>	<b>Present use N=702)</b>	<b>Current use 5 most frequent (N=658)</b>	<b>Future use 5 most frequent (N=630)</b>
Meetings	81.3	67.3	63.5
Workshops	36.6	10.0	12.1
On-farm tests	67.9	36.6	35.9
Field days	65.8	31.0	26.2
Demonstrations	62.7	24.1	25.5
Tours	56.	21.3	18.8
Newsletters	86.1	71.2	63.5
Bulletins	53.1	23.7	15.4
Fact sheets	35.2	10.0	9.0
Newspapers	52.3	21.7	17.1
Magazine articles	46.7	17.9	13.3
Special pub.	40.9	11.2	12.7
Farm visits	81.9	59.6	55.7
Telephone calls	60.1	41.2	35.5
Office conf.	28.8	15.5	15.2
Television	33.6	12.1	14.9
Radio	31.2	12.0	10.8
Computers	10.7	2.4	22.2
Videotape	5.0	0.3	8.9
Fairs	25.44	4.2	2.6
Exhibits	21.8	1.9	0.8

In terms of frequency of use, part-time farmers checked field days and tours somewhat more often than did full-time farmers. Full-time farmers checked farm visits from agents more than part-time farmers did. Again, these differences were not statistically significant.

### **Most-Used Information Methods**

Question 3: Check the five [Extension communication] methods you feel you will use most frequently five years from now.

Communications methods expected to be used most frequently were little changed from current choices for frequently used media. For 23 of the 29 media choices, the percentage of producers projecting future use showed

less than a 5% increase or decrease. Meetings, newsletters, and farm visits were ranked at the top with more than 50% of respondents indicating continued expectations that these would be the most frequently used channels.

When expectations of future use are compared with frequency of current use, some trends are evident. Six media were expected to be less important in the future: meetings (-4%), newsletters (-8%), field days (-6%), telephone calls (-7%), and bulletins (-8%). Only two media were expected to become more important: computers (20%) and videotapes (+9%).

All print categories except specialized publications show a decline in expectation of use in the future. Both full- and part-time farmers anticipate making less frequent use of bulletins and newsletters. Both also anticipate making greater use of computers and videotape and slightly more use of the toll-free "teletip" information line. Both full- and part-time farmers also anticipated a decrease in farm visits by agents and in telephone calls to agents.

Part-time farmers expected to make considerably less use of field days (-10%) and tours (-7%); both groups indicated an anticipated decrease of 5 to 7% in meetings as a source of information.

Although bulletins were ranked among the top 10 currently used media by all 11 of the different enterprise groups identified, only four enterprise groups rank bulletins among the media they anticipate using frequently in the future. Magazine articles also declined in anticipated importance. Six enterprise groups ranked this method among the top 10 most frequently used current methods, while only three groups anticipated that magazines would be a frequently used delivery mechanism in five years.

So much communication effort goes into state and county fair exhibits and posters, that communicators may be surprised by the small numbers of respondents indicating that they frequently use these sources of information. Although 25% checked fairs as a source of information, only 4% listed fairs among their most frequently used media, and 2.7% anticipating using fairs as sources of information in the future.

## Discussion

The most frequently used communications channels—meetings, newsletters, agent visits and telephone calls, field days and demonstrations—share the characteristics of immediacy and timeliness. Except for newsletters, all offer farmers the opportunity either to ask their own questions or to see something for themselves. Between 78 and 94% of the producers from all 11 enterprise groups indicated that they used newsletters as a source of Extension information. This percentage is far ahead of any other print media (bulletins 53.1; magazine articles 46.7; newspapers 52.3; or fact sheets 35.2). Farmers may well consider the information in newsletters to be more timely or more precisely tailored to their information needs. In North Carolina, specialized newsletters are directed toward many enterprise groups: *Swine News*, *Breakthrough* (poultry), and *Forage Notes* (beef and dairy) are widely distributed by specialists. Many county agricultural agents publish their own newsletters on various crops (e.g., apples, tobacco) and livestock enterprises.

The differences in use of media between full- and part-time farmers are important while Extension endeavors to match its communications efforts with those channels most likely to be used by target audiences. The higher use that full-time farmers make of fact sheets, newspapers, magazines, radio, and television may indicate that the full-time farmer is seeking information from multiple sources. The preference of part-time farmers for meetings and

field days may indicate a reliance on fewer sources of information and/or a shorter time to devote to seeking information.

Although increases were anticipated in use of computers and videotapes, these increases did not equal the decreases anticipated in use of all other communications media, suggesting that farmers have as much trouble as anyone else anticipating their likely future behavior. As Extension agents turn to videotapes and computers to stretch their communications capabilities, they can be encouraged that both full- and part-time farmers anticipated making greater use of these media. Videotapes have the potential to combine many of the functions that bulletins, farm visits, field days, and demonstrations now fulfill. Respondents to this survey indicated a significant increase (chi square  $P < .05$ ) in expected use of videotapes.

Both full- and part-time farmers anticipate a decrease in their use of one-to-one agent contacts (e.g., farm visits and telephone calls) as well as in the frequency of use of other first-hand opportunities, such as, meetings and field days.

The very low percentages of respondents who listed fairs and exhibits among frequently used media indicates the questionable usefulness of these media for communicating with this clientele. Nearly 70% of this sample consisted of full-time farmers whose livelihood depends on prompt access to timely information.

## Conclusions

Among agricultural producers, the farmers who participated in this survey are probably the most active users of Extension information. Their responses clearly indicate a preference for individualized information both now and in the future.

These preferences should be kept in mind as Extension markets more computer programs in the future. Computers have the paradoxical characteristics of being an impersonal medium (usable without much personal agent contact), but they also permit farmers to obtain customized or individualized information.

The findings from this survey indicate that traditional Extension information dissemination methods continue to be popular. However, the decline in popularity of bulletins and magazine articles in comparison to the increasing popularity of computers, videotapes, and special publications appears to indicate that timely and special sources of information will gain in popularity among Extension clientele.

These findings suggest that Extension should introduce new media alongside traditional media to give both agents and clientele an acclimation time during which each will learn the advantages of the newer methods. Periodic monitoring of media use will be helpful for communicators advising Extension Services on maximizing return on communications dollars.

Certainly, there is something of the chicken-and-egg problem in predicting use of future media. The choices and preferences for information delivery mechanisms reported by these agricultural producers reflect fairly closely the media now in use by the Extension Service in North Carolina to provide information. As specialists expand video programming, for example, clientele use can be anticipated to increase. Further studies with different clientele groups—community leaders, home horticulturalists, homemakers, or youth—may well show other patterns of communications preferences.