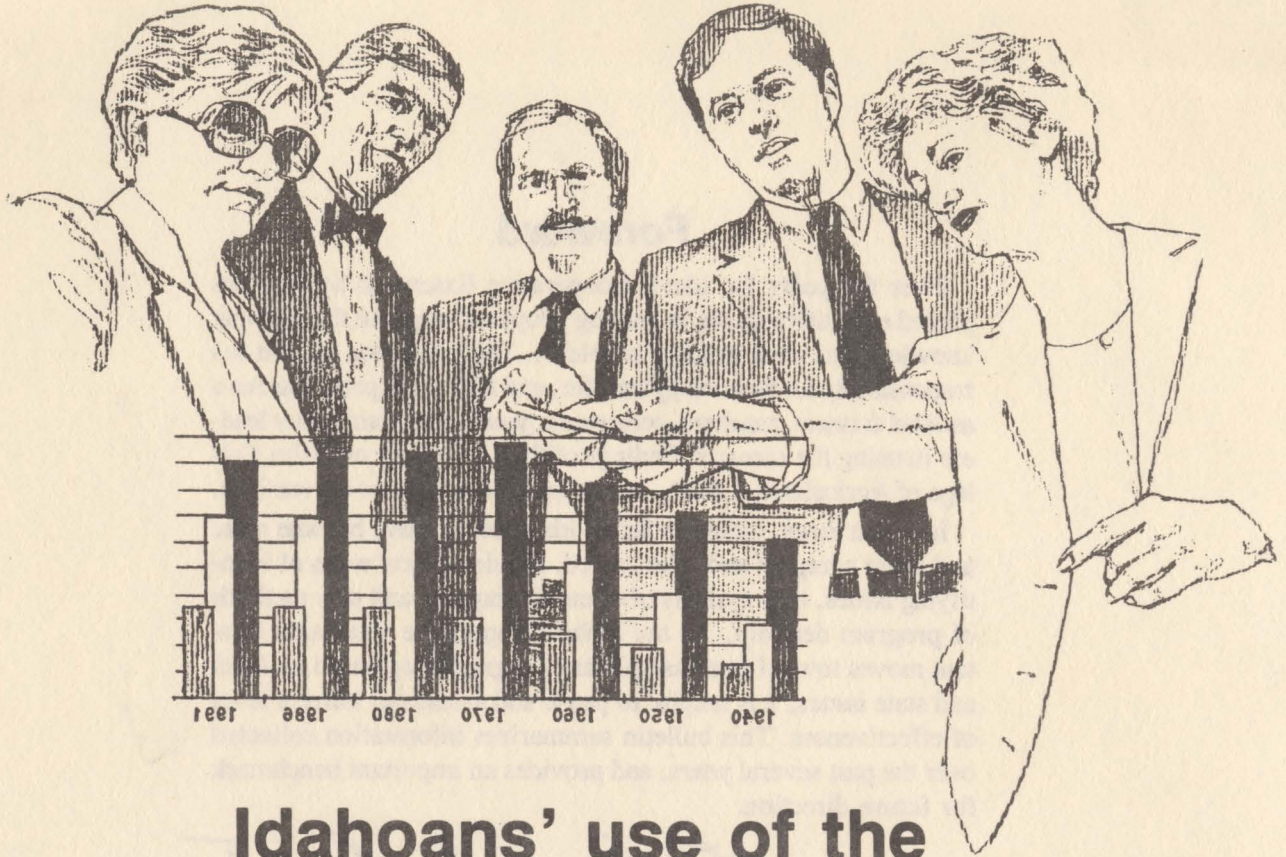


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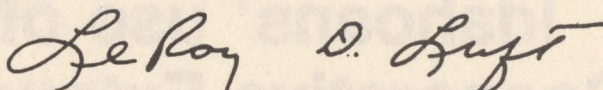
Idahoans' use of the Idaho Cooperative Extension System: Behavior, perceptions, and preferences

B. J. Schnabel, J. E. Carlson, and C. M. Lyle

Foreword

Over the years the Idaho Cooperative Extension System has played a significant role in helping people throughout the state put knowledge to work to solve problems. The Extension system has responsibility for technology transfer, and Extension programs have assisted farmers, ranchers, consumers, youth, and community leaders in using the research findings of the University of Idaho College of Agriculture, USDA, and other state land-grant universities.

In recent times, problems facing Idaho people have become more and more complex and interrelated, requiring new ways of identifying issues, new systems of scientific inquiry, and new methods of program delivery. As the Idaho Cooperative Extension System moves toward interdisciplinary programming based on local and state issues, it is helpful to pause and assess our current level of effectiveness. This bulletin summarizes information collected over the past several years, and provides an important benchmark for future direction.



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Introduction

"What a man hears, he may doubt; what he sees, he may possibly doubt; but what he does, he cannot doubt."

Seaman A. Knapp

Knapp's words define the basic concept upon which the Cooperative Extension System was founded 76 years ago. Knapp was involved in the first "demonstration farms" designed to bring home to farmers information to improve their agricultural production. Later, home demonstration agents (home economists) brought the principles of homemaking to farm wives. Three years after Knapp's death, the Smith-Lever Act of 1914 stated the mission of the Extension System: "To aid in diffusing among the people of the United States useful and practical information on subjects related to agriculture and home economics and to encourage the application of same."

In the years since its founding, the Extension System has sought to tailor programs to recipients. Since 1914 the rural population has shifted from primarily farm occupations and residences to ones that are predominantly nonfarm. Programming efforts today therefore increasingly focus on issues of broader public concern. Major Extension program areas are interdisciplinary, combining the efforts of agriculturalists, home economists, and a variety of specialists in other disciplines. As communities change, Extension develops new programs to meet recipients' needs. The current national Extension System mission is to help people improve their lives through an educational process that uses scientific knowledge focused on issues and needs. It is a dynamic, ever-changing organization pledged to meeting the country's needs for research, knowledge, and educational programs.

Who are the current users of the Cooperative Extension System in Idaho? How is Extension perceived by users of its services and programs? What are the most effective methods of program delivery? Surveys of

Idaho residents, agriculture-related organizations, University of Idaho College of Agriculture faculty, agricultural producers, and other Extension users provide important information for adapting Extension programs to the needs of current and future program recipients.

Overview of the surveys

This publication draws from information collected in several surveys conducted during the 1980s (Table 1). Although the focuses of the surveys varied, they duplicated many questions. Direct comparisons have been made where data allowed.

Nationwide random sample and four Idaho counties, 1982

A random digit sampling frame was used to select a nationwide sample to assess public use of Extension programs and services (A, Table 1) (Warner and Christenson 1984). A total of 1,048 useable questionnaires was returned for a response rate of 70 percent.

Questions similar to those in the nationwide survey were included in the survey of households in four Idaho counties (B, Table 1) conducted in 1982 (Rowe 1985). The Idaho sample was systematically selected from current telephone listings. Respondents were screened to obtain an oversampling of recent migrants, the target group for the study. From the sample of 343 households, 291 completed questionnaires were returned for a response rate of 84.8 percent.

Faculty of the University of Idaho College of Agriculture, 1984

Members of the University of Idaho College of Agriculture faculty were surveyed in 1984 to assess their opinions regarding existing problems of the college and its future (C, Table 1) (Carlson 1985 and 1986). Two hundred forty questionnaires were mailed, and 230 useable questionnaires were returned for a 93 percent response rate.

Table 1. Overview of the surveys.

| Population | Method | Year | Response rate (%) | Sample size |
|--|--------------------|------|-------------------|-------------|
| A Nationwide random sample | Mail | 1982 | 70 | 1,500 |
| B Four Idaho counties random sample | Mail | 1982 | 85 | 343 |
| C University of Idaho College of Agriculture faculty | Mail | 1984 | 93 | 240 |
| D Idaho directors of agriculture-related organizations | Mail | 1984 | 80 | 494 |
| E Idaho statewide random sample | Mail | 1984 | 55 | 1,223 |
| F Idaho home economics clientele | Mail | 1986 | 73 | 1,250 |
| G Idaho agricultural producers | Mail | 1986 | 31 | 1,500 |
| H Idaho potato growers | Mail | 1987 | 58 | 735 |
| I Nez Perce County farmers | Mail | 1987 | 55 | 386 |
| J Idaho statewide random sample | Telephone | 1989 | 68 | 1,067 |
| K Camas Prairie farmers (Lewis and Idaho counties) | Personal interview | 1989 | 69 | 117 |

Sources:

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- I Obel Gor, C. 1988. *Sources of information on new and/or innovative farming practices*. Master's thesis, University of Idaho, Moscow.
- J Carlson, J. E. 1989. *A survey of public issues affecting Idaho residents*. Unpublished data.
- K Carlson, J. E. 1989. *A survey of farm problems and practices in Lewis and Idaho counties*. Unpublished data.

Directors of agriculture-related organizations in Idaho, 1984

A survey of board members of businesses and agencies represented on the Agricultural Consulting Council (an advisory council to the College of Agriculture, University of Idaho) was conducted in 1984 to determine attitudes related to agricultural policy (D, Table 1) (Carlson 1985 and 1986). The survey also sought information helpful to the college's 10-year planning process. A questionnaire was mailed to 494 people in agriculture-related organizations (ARO), and 390 useable questionnaires were returned for an 80 percent response rate.

Idaho statewide random sample, 1984

In 1984 a questionnaire containing the same set of questions as the one sent to directors of agriculture-related organizations was mailed to a randomly selected statewide sample of Idaho residents (E, Table 1) (Carlson 1985 and 1986). The questionnaire was sent to 1,223 residents, and 675 useable questionnaires were returned for a response rate of 55 percent. The lower response rate was likely a result of the length and complexity of the questionnaire.

Idaho home economics clientele, 1986

A survey of Extension home economics program users (F, Table 1) was conducted in 1986 to provide information for program planning and evaluation (Rowe

1987). The sample was drawn from home economics newsletter mailing lists provided by county Extension offices. Of 1,250 questionnaires mailed, 854 useable questionnaires were returned. Deleting nondeliverable questionnaires from the sample resulted in a 73 percent overall response rate.

Idaho agricultural producers, 1986

A survey of Idaho agricultural producers was conducted in 1986 to provide information for program planning and evaluation (G, Table 1) (Rowe and Guenther 1988). The sample was systematically selected from the Idaho Agriculture Statistical Service's (IASS) listing of Idaho farms and ranches. Of the 1,500 questionnaires mailed to current agricultural producers, 444 useable questionnaires were returned. After deleting from the sample nondeliverable questionnaires and people no longer farming, the response rate was 31 percent. Although respondents' characteristics closely reflected those of Idaho producers as documented in the 1982 *Census of Agriculture*, differences were noted. Due to these differences and to the low response rate, the findings must be viewed with some caution.

Idaho potato growers, 1987

In 1987 a survey of Idaho potato producers (H, Table 1) was conducted to determine the relative importance of various information sources in farm management decision making (Carlson and Guenther 1989). Ques-

tionnaires were mailed to a randomly selected sample of 735 potato producers, and 427 useable questionnaires were returned for a response rate of 58 percent.

Nez Perce County farmers, 1987

A survey of Nez Perce County farmers (I, Table 1) was conducted in 1987 to determine how farmers access sources of information regarding new or innovative farming practices (Obel Gor 1988). Of 386 questionnaires mailed, 176 useable questionnaires were returned. Deleting nondeliverable questionnaires and persons no longer farming from the sample brought the overall response rate to 55 percent. Although questions contained in the survey instrument did not duplicate questions in the other surveys, some indirect comparisons could be made.

Idaho statewide random sample, 1989

In 1989 a telephone survey of a random sample of Idaho residents asked questions about public issues affecting Idaho residents (J, Table 1). Among the questions were several related to Idaho's Cooperative Extension System. Of the 1,569 residents contacted, 1,067 responded for a response rate of 68 percent.

Camas Prairie farmers, 1989

Camas Prairie farmers were interviewed in 1989 to examine farm problems and practices (K, Table 1). Farmers were systematically selected from USDA Agricultural Stabilization and Conservation Service lists for Lewis and Idaho counties. Of 117 farmers contacted, 80 of them completed in-person interviews for a response rate of 69 percent.

Awareness of Extension

Awareness of the Cooperative Extension System is quite high nationally. Eighty-seven percent of Americans were aware of Extension programs in 1982 (Warner and Christenson 1984). Awareness levels are high within Idaho as well; however, differences exist between directors of agriculture-related organizations (ARO) and the general public. Two surveys conducted in 1984 examined awareness of Extension in Idaho (Table 2). Both

ARO directors and the general public were more likely to have heard or read about 4-H youth programs than to have been aware of Extension radio and TV programs. Although the majority of residents were aware of Extension programs and services in 1984, ARO directors were more likely than the general public to be aware of them. The general public was less likely to have read or heard about Extension publications or newspaper items written by Extension staff and were less aware of Extension home economists or county agents.

Use of Extension

Agriculture orientation

The issue of who uses Cooperative Extension services was examined in two surveys conducted in Idaho, one closely comparable to a national study. Differences in the use of Extension programs reflected differences in the samples targeted for the Idaho surveys. The directors of agriculture-related organizations and agencies (ARO) were more agriculturally oriented than Idaho residents sampled in 1985 (Table 3). The directors were more likely to have grown up on farms, to reside on farms, and to farm as their major occupation. ARO directors' use of Extension programs was also greater than that of residents in general in Idaho or nationally.

Idaho respondents were more agriculturally oriented than respondents to the nationwide random sample of households primarily because Idaho has a predomi-

Table 2. Awareness of selected Idaho Cooperative Extension System programs and services.

| Extension program or service | Directors of agriculture-related organizations (D, Table 1) 1984 | Idaho statewide survey (E, Table 1) 1984 |
|--|--|--|
| | (%) | (%) |
| 4-H youth program | 99 | 97 |
| Extension radio or TV programs | 77 | 65 |
| Extension publications | 85 | 73 |
| Newspaper items by Extension personnel | 92 | 72 |
| Extension county agents | 98 | 84 |
| Extension home economists | 92 | 75 |

Table 3. Selected background characteristics of respondents to four surveys and respondents' contact with Extension.

| | Directors of agriculture-related organizations (D, Table 1) 1984 | Idaho statewide survey (E, Table 1) 1984 | Four counties in Idaho (B, Table 1) 1982 | Nationwide survey (A, Table 1) 1982 |
|--|--|--|--|-------------------------------------|
| | (%) | (%) | (%) | (%) |
| Used services, received assistance, or had contact with Extension system | 87 | 45 | 45 | 27 |
| Grew up on a farm | 59 | 34 | — | — |
| Primary residence is farm | 45 | 16 | 14 | 6 |
| Primary residence is town/city | — | — | 34 | 78 |
| Occupation is farming | 54 | 11 | 10 | 7 |

nantly nonmetropolitan population (80 percent) whereas the U.S. is predominantly metropolitan (75 percent). Idaho residents were more likely to reside on farms and were more likely to farm as their major occupation. They were less likely to reside in towns or cities. Idaho respondents were also more likely to have used Extension services than respondents to the nationwide survey.

Demographics

Nationally, people who used Extension services were predominantly married, employed, homeowners with high school or college educations, and middle to upper income levels (Warner and Christenson 1984). The nationwide survey also found more home economics program users were female than male. The 1982 profile of Idaho Extension users in four Idaho counties paralleled that of users nationally (Rowe 1985). Idaho Extension users in the four counties were predominantly female except for users of agriculture/farm management programs. However, Idaho respondents from the four counties represented lower educational levels than Extension users nationally and were more likely to be unemployed or retired.

Program areas

The program area with greatest use nationally was agriculture, followed by home economics, 4-H youth, and community development (Table 4). Direct comparisons between the national data and statewide data are not possible due to differences in question wording. Idaho respondents from four northern counties made higher use of agriculture programs, especially home gardening/landscaping, than of other program areas. The 4-H youth program received much higher use in the four Idaho counties than nationally. Home economics use may also be higher in the Idaho counties than nationally. The use of food preparation/nutrition/preservation programs alone accounted for 43 percent of

Table 4. National use of Extension program areas and statewide use of specific subject areas.

| Extension program | Nationwide survey (A, Table 1) 1982 | Four counties in Idaho (B, Table 1) 1982 |
|---|-------------------------------------|--|
| | (% of those who used Extension) | |
| Agriculture | 62 | |
| Agriculture/farm management | — | 41 |
| Woodlot/forest management | — | 30 |
| Home gardening/landscaping | — | 49 |
| Home economics | 43 | |
| Housing/home heating/energy | — | 13 |
| Food preparation/nutrition/preservation | — | 43 |
| Sewing/clothing | — | 23 |
| Home management | — | 7 |
| 4-H youth | 28 | 44 |
| Community development | 21 | — |

Table 5. Idaho residents' use of the Cooperative Extension System in 1988.

| Frequency of use | Idaho statewide survey (J, Table 1) 1989 (%) |
|------------------|--|
| Not at all | 73 |
| Once | 8 |
| 2 or 3 times | 10 |
| 4 or 5 times | 4 |
| 5+ times | 5 |

respondents. Community development programs were not available in Idaho at the time of the surveys.

Frequency of use

In 1989, respondents to the statewide telephone survey were asked to indicate how many times they used the Cooperative Extension System within the previous 12 months (Table 5). The majority of respondents indicated they had not used Extension services within the past 12 months. Only 27 percent of the households surveyed in 1989 indicated they had used the Extension System one or more times within the previous 12 months. This level of use corresponds to that in the nationwide survey of 1982 (27 percent "used services"), but is considerably lower than that in the four-county survey of 1982 and statewide survey of 1984 (45 percent "had contact" with or "received assistance" from the Extension system).

Type of contact

Respondents to the 1986 surveys of Idaho agricultural producers and Idaho Extension home economics clientele were asked to indicate which types of contact they had had with Extension in the past 12 months (Table 6). Both groups indicated more contact through print media than through programs, meetings, or committees. A greater use of written materials was also noted in the 1982 nationwide and four Idaho counties surveys (Table 7). Approximately 40 percent of respondents nationally and in the four Idaho counties attended meetings or workshops. The nationwide sample was much more likely than the four Idaho counties sample to indicate use of radio or television programs.

Preferred methods of program delivery

Which methods of information delivery do recipients most prefer or find most useful? Camas Prairie farmers (1989) and Idaho potato growers (1987) indicated a high preference for articles in farm or ranch magazines and newsletters (Table 8). The methods they preferred least were recorded telephone messages, radio programs, and computer networks. Directors of agriculture-related organizations (ARO) and respondents to the 1984 statewide survey found recorded telephone messages less useful than other methods of informa-

tion delivery. Large percentages of ARO directors reported short courses or workshops, newsletters, public meetings, tours, demonstrations, and individual consultation as very or somewhat useful. Large percentages of the statewide sample reported newspaper, feature stories, articles, and learn-at-home materials as very or somewhat useful. Overall, respondents preferred writ-

ten materials more than TV, radio, videotapes, or computer networks.

Perceptions of service

Helpfulness, value, and quality

How do people who use the Extension system perceive the quality or usefulness of the services offered? Table 9 shows results of 1984 surveys of Idaho directors of agriculture-related organizations (ARO) and of

Table 6. Type of contact with Extension system in past 12 months.

| Type of contact | Home economics clientele (F, Table 1) 1986 | Idaho agricultural producers (G, Table 1) 1986 |
|---|--|--|
| | (% of those who use Extension) | |
| Read Extension newsletter | 93 | 72 |
| Read Extension bulletin | 85 | 71 |
| Read Extension news article | 80 | 65 |
| Called county office | 70 | 54 |
| Attended Extension meeting with presentation | 50 | 45 |
| Heard Extension radio program | 26 | 44 |
| Watched Extension TV program | 17 | 25 |
| Served on Extension council or committee | 14 | 7 |

Table 7. Extent of contact with Extension programs.

| Contact with Extension | Nationwide (A, Table 1) 1982 | Four counties in Idaho (B, Table 1) 1982 |
|----------------------------|------------------------------------|---|
| | (% of those who use Extension) | |
| Household use of Extension | 27 | 45 |
| Written materials | | |
| Bulletins, newsletters | 99 | — |
| Newsletters, newspapers | — | 53 |
| Radio/TV | 94 | 37 |
| Meetings/workshops | 39 | 40 |

Table 8. Preference for or usefulness of information delivery methods.

| | Camas Prairie farmers (K, Table 1) 1989 | Idaho potato growers (H, Table 1) 1987 | Directors of agriculture- related organizations (D, Table 1) 1984 | Idaho statewide survey (E, Table 1) 1984 |
|--|---|--|--|---|
| | (% indicating high preference) | | (% very/somewhat useful) | |
| Articles in farm/ranch magazines | 73 | 56 | 85 | 72 |
| Newsletters | 68 | 68 | 89 | 76 |
| Learn-at-home materials | 54 | 49 | 81 | 82 |
| Newspaper, feature stories, articles | 53 | 36 | 75 | 84 |
| Individual consultation | 38 | 46 | 87 | 67 |
| Public meetings, tours, demonstrations | 35 | 25 | 87 | 70 |
| TV — public and commercial | 24 | 16 | 57 | 66 |
| Videotapes | 23 | 32 | 59 | 51 |
| In-depth shortcourses/workshops | 21 | 32 | 89 | 73 |
| Radio | 20 | 14 | 53 | 59 |
| Computer networks | 16 | 16 | 56 | 40 |
| Recorded telephone messages | 5 | 15 | 27 | 32 |

Table 9. Ratings of information received from the Idaho Cooperative Extension System.

| | Directors of agriculture-related organizations (D, Table 1) 1984 | Idaho statewide survey (E, Table 1) 1984 | Idaho statewide survey (J, Table 1) 1989 | Idaho agricultural producers (G, Table 1) 1986 |
|----------------------------|---|--|--|---|
| | (%) | | | |
| Value of information | | | | |
| Great value | 46 | 37 | 45 | — |
| Some value | 52 | 57 | 51 | — |
| Little value | 3 | 4 | 3 | — |
| No value | 0 | 2 | 2 | — |
| Helpfulness of information | | | | |
| Very helpful | 46 | 45 | — | — |
| Somewhat helpful | 48 | 50 | — | — |
| Not too helpful | 5 | 4 | — | — |
| Not at all helpful | 1 | 1 | — | — |
| Quality of information | | | | |
| Very good | — | — | — | 28 |
| Good | — | — | — | 45 |
| Fair | — | — | — | 22 |
| Poor | — | — | — | 5 |

Idahoans statewide that asked respondents to rate the services as "very helpful," "somewhat helpful," "not too helpful," or "not at all helpful." The majority of both groups rated information received from the Idaho Cooperative Extension System as "somewhat" or "very" helpful.

Respondents to the surveys in 1984 and the statewide survey in 1989 rated the value of information received from Extension. The majority rated the information as having "some" or "great" value. The majority of agricultural producers in Idaho surveyed in 1986 rated the quality of information received from Extension as "good" or "very good."

Satisfaction with information

Another way to assess the usefulness or value of information received is to ask program recipients how satisfied they are with the information (Table 10). In 1982, the majority of respondents to the nationwide and four Idaho counties surveys indicated satisfaction with the information received. The percentages of respondents who expressed satisfaction with agriculture and home economics programs were higher in Idaho than nationwide. However, a higher percentage of respondents nationally was satisfied with 4-H youth programs. Fewer Idaho respondents were satisfied with home management programs than with other programs.

Idaho agricultural producers were asked specifically which types of information they found satisfactory or considered adequate. More Camas Prairie farmers (1989) indicated they were "somewhat" or "very satisfied" with information on insect and weed control and fertilization than indicated they were satisfied with other information (Table 11). More than 85 percent of Idaho potato growers (1987) indicated information on weed and insect control, irrigation, harvesting, and storage and handling was "somewhat" or "very adequate." Less than two-thirds of both groups indicated satisfaction with marketing and farm management information.

Table 10. Satisfaction with Cooperative Extension System programs.

| Extension programs | Nationwide survey (A, Table 1) 1982 | Four counties in Idaho (B, Table 1) 1982 |
|---|--|--|
| | (% indicating satisfaction with program) | |
| Agriculture | 93 | |
| Agriculture/farm management | | 99 |
| Woodlot/forest management | | 90 |
| Home gardening/landscaping | | 100 |
| Home economics | 94 | |
| Housing/home heating/energy | | 97 |
| Food preparation/nutrition/preservation | | 99 |
| Home management | | 65 |
| 4-H youth | 95 | 81 |
| Community development | 84 | — |

Table 11. Agriculture producers' satisfaction with Extension information in selected areas.

| Area | Camas Prairie farmers (K, Table 1) 1989 | Idaho potato growers (H, Table 1) 1987 |
|------------------------|---|--|
| | (% "somewhat" or "very" satisfied) | |
| Harvesting | 83 | 94 |
| Storage and handling | — | 94 |
| Weed control | 88 | 91 |
| Irrigation | — | 88 |
| Insect control | 90 | 87 |
| Fertilizer application | 88 | 84 |
| Disease control | 82 | 82 |
| Planting procedures | — | 73 |
| Tillage practices | 80 | 73 |
| Quality control | — | 69 |
| Farm management | 66 | 51 |
| Marketing | 57 | 41 |
| Financial management | 69 | — |

Extension versus other sources of information

How does the Idaho Cooperative Extension System compare with other sources of information? Camas Prairie farmers (1989) and Idaho potato growers (1987) were asked to indicate whether various information sources were good guides (Table 12). Large percentages of both groups indicated Extension specialists and the Idaho Agricultural Experiment Station are "probably" or "definitely" good guides. Other farmers were also likely to be considered good guides. The Extension system was more likely to be rated a good guide than most other sources, especially radio or television programs, financial representatives and private company salesmen.

How does use of an information source relate to perceptions of its quality? Camas Prairie farmers (1989)

Table 12. Reliability of information sources.

| Information source | Camas Prairie farmers (K, Table 1) 1989 | Idaho potato growers (H, Table 1) 1987 |
|---------------------------------------|--|--|
| | (% indicating "probably" or "definitely" a good guide) | |
| Extension specialist | 96 | 92 |
| Idaho Agricultural Experiment Station | 91 | 92 |
| County agent | 91 | 83 |
| Other farmers | 90 | 96 |
| Friends or neighbors | 80 | 80 |
| Independent consultant | 78 | 84 |
| Contractor fieldmen | 76 | 81 |
| Farm magazines | 73 | 66 |
| Private company salesmen | 51 | 26 |
| Financial representative | 45 | 37 |
| Radio or TV | 37 | 32 |

and Idaho potato growers (1987) were asked to indicate frequency of use of various information sources (Table 13). Respondents were most likely to make "occasional" or "frequent" use of bulletins, leaflets, newsletters, magazines or newspapers, and neighbors and friends. The majority of respondents had indicated these sources were "probably" or "definitely" good guides (Table 12).

There were some interesting differences between Camas Prairie farmers and Idaho potato growers regarding use of information sources (Table 13). The Camas Prairie farmers were more likely than the potato growers to have contacted county agents and were less likely to have used independent consultants. Both groups more frequently used information from private company salesmen than from either county agents or independent consultants even though fewer respondents considered salesmen to be good guides (Tables 12 and 13).

The 1987 survey of Nez Perce County farmers asked respondents which information sources they use during the "awareness period" of a new farming practice (Table 14). A majority indicated use of an agricultural magazine and/or newspaper; neighbor, friend, or family member; and Cooperative Extension faculty (agent). Respondents were least likely to use a banker, social or political organization, or a consultant.

Overall, the three surveys (Camas Prairie 1989; Nez Perce County 1987; and Idaho potato growers 1987) indicated farmers were more likely to use printed sources and neighbors or friends than other sources of information. Farmers did, however, frequently consult county agents and private company salesmen or dealers (Tables 13 and 14).

Where do homemakers first turn to locate information regarding household management? The 1986 survey of

Extension home economics clientele asked respondents to indicate their first source for information related to home economics (Table 15). Respondents relied most on product labels for information regarding food preparation, laundry methods, and fabric care and stain removal. Retail stores were likely first information sources for selection of wardrobes, home furnishings, and household appliances. More than 40 percent of respondents first referred to books, magazines, or the library for information regarding special dietary concerns, diet and nutrition, and home or family recordkeeping. Respondents were also likely to turn to books or magazines for information concerning canning or preserving food and household energy savings.

Approximately one-third of the respondents first turned to Extension for information regarding canning or preserving food and home garden or pest management. Respondents relied on Extension or the product label for information regarding clothing construction and fitting but turned to friends or books for information about mending, repairing, or altering clothing. Professional agencies were the first source of information on family estate planning or wills and consumer credit concerns. Overall, Extension clientele turned first to written materials (i.e., product labels, books, magazines, and Extension System publications) for their information needs (Table 15).

The public's perceptions of the College of Agriculture

Overall role

How are the UI College of Agriculture and the Idaho Extension System perceived by the general public? The 1989 statewide telephone survey asked Idaho residents to give their opinions of the overall role of the College

Table 13. Agricultural producers' use of information sources.

| Information source | Camas Prairie farmers (K, Table 1) 1989 | Idaho potato growers (H, Table 1) 1987 |
|--|---|--|
| | (% indicating "occasional" or "frequent" use) | |
| Bulletins, leaflets, newsletters | 93 | 88 |
| Magazines or newspapers | 92 | 91 |
| Neighbors and friends | 92 | 84 |
| Private company salesmen | 85 | 84 |
| Seminars/conferences/ workshops | 71 | 69 |
| County agents | 70 | 39 |
| Agricultural experiment station researchers | 53 | 51 |
| Radio and TV | 50 | 42 |
| Extension specialists | 46 | 53 |
| Independent consultants | 34 | 60 |
| Bankers and lenders | 29 | 22 |
| Fieldmen | 26 | 48 |

Table 14. Information sources used by Nez Perce County farmers during the awareness period of a new farming practice, 1987.

| Information source | Nez Perce County farmers (I, Table 1) 1987 (%) |
|---|--|
| Agricultural magazine and/or newspaper | 65 |
| Neighbor, friend, or family member | 59 |
| Cooperative Extension faculty (agent) | 57 |
| Commercial/private dealer and/or distributor | 50 |
| Government-sponsored agency | 47 |
| College of Agriculture research or Extension publication | 47 |
| Personal ingenuity | 44 |
| Commodity association | 37 |
| County and/or state fair activity | 11 |
| Consultant | 10 |
| Social or political organizations | 5 |
| Banker | 2 |

Table 15. Extension home economics clientele's first source for information related to home economics, 1986.

| Topic | Product label | Retail store | Books/magazines library | Extension system publication | Friend or neighbor | Other agency | Other |
|---|---------------|--------------|-------------------------|------------------------------|--------------------|--------------|-------|
| | (%) | (%) | (%) | (%) | (%) | (%) | (%) |
| Food preparation | 42 | — | 31 | 11 | 8 | — | 8 |
| Canning/preserving | 12 | — | 39 | 32 | 8 | 1 | 9 |
| Special dietary concerns | 13 | 0 | 42 | 14 | 3 | 24 | 4 |
| Diet and nutrition | 11 | 0 | 48 | 17 | 3 | 16 | 5 |
| Garden or pest management | 13 | 9 | 25 | 34 | 7 | 5 | 7 |
| Home/family record-keeping | 4 | 3 | 44 | 8 | 6 | 33 | 3 |
| Family estate planning/wills | 1 | 0 | 17 | 2 | 2 | 60 | 1 |
| Consumer credit concerns | 3 | 10 | 33 | 10 | 3 | 41 | 1 |
| Clothing construction | 22 | 11 | 17 | 22 | 19 | 5 | 5 |
| Wardrobe selection | 14 | 44 | 18 | 8 | 10 | 3 | 3 |
| Laundry methods | 66 | 3 | 10 | 10 | 6 | 1 | 3 |
| Fabric care/stain removal | 52 | 2 | 14 | 19 | 7 | 2 | 5 |
| Mending/repairing/altering | 12 | 3 | 29 | 17 | 29 | 7 | 3 |
| Home furnishing/equipment | 15 | 44 | 22 | 6 | 3 | 6 | 4 |
| Household appliance selection/maintenance | 18 | 45 | 17 | 6 | 3 | 7 | 5 |
| Household energy conservation | 8 | 14 | 30 | 15 | 2 | 27 | 4 |

of Agriculture in the state. Approximately half (49 percent) chose not to give an opinion or answered, "I don't know" or "I have no idea." Of the 539 respondents who expressed an opinion, 31 gave vague responses such as "to provide whatever is needed in its ability." The 508 remaining responses were categorized into three major program areas: research, teaching, and Extension.

Teaching was mentioned by 42 percent. Typical comments were "to prepare young people to be successful farmers" or "provide training for those pursuing a career in agriculture." Research in agriculture was indicated by 32 percent with comments such as "developing new strains of crops or hybrid crops, research on chemicals," "explore alternative ways of farming, not using chemicals," and "research to increase farm productivity." Extension system program areas were mentioned by 26 percent. Comments included "serve in an advisory capacity, then use Extension for consulting purposes" or "make sure farmers are kept up with trends and resources."

Respondents were also asked to rate the College of Agriculture's current efforts in fulfilling its overall role. The majority were unable or unwilling to do so (Table 16). Twenty-nine percent rated the college's efforts as "good" or "excellent."

How do the perceptions of the general public compare with those of directors of agriculture-related organizations? In 1984, Idaho residents and ARO directors were asked to prioritize four college activities (Table 17). Highest priority was most often given to research. Interestingly, a higher percentage of Idaho residents than ARO directors rated research as the "highest priority" activity of the college. The majority of both

Table 16. Ratings of the College of Agriculture's current efforts in fulfilling its role.

| Rating | Idaho statewide survey (J, Table 1) 1989 (%) |
|------------|--|
| Excellent | 8 |
| Good | 21 |
| Fair | 6 |
| Poor | 1 |
| Don't know | 64 |

Table 17. Priority ranking for College of Agriculture activities.

| Activities | Directors of agriculture-related organizations (D, Table 1) 1984 (%) | Idaho statewide survey (E, Table 1) 1984 (%) |
|--|--|--|
| (% indicating activity should be "highest priority") | | |
| Research | 43 | 48 |
| Undergraduate teaching | 37 | 30 |
| Off-campus Extension | 18 | 18 |
| Graduate teaching | 2 | 4 |

Table 18. Respondents' perceptions of the importance of agricultural research.

| | Directors of agriculture-related organizations (D, Table 1) 1984 (%) | Idaho statewide survey (E, Table 1) 1984 (%) |
|----------------------|--|--|
| Very important | 70 | 60 |
| Somewhat important | 26 | 34 |
| Not too important | 4 | 5 |
| Not at all important | 0 | 1 |

the 1984 statewide survey respondents and ARO directors indicated agricultural research is "very important" (Table 18).

Respondents to the 1989 statewide survey were asked to rate the importance of various functions the Univer-

Table 19. Importance of functions the University of Idaho College of Agriculture might serve in the state.

| Function | Idaho statewide survey (J, Table 1), 1989 | |
|--|---|----------------------|
| | (% indicating "very important") | (Mean ¹) |
| Conducting research which will increase food quality and food safety | 82 | 2.835 |
| Conducting research which will increase farm productivity | 79 | 2.760 |
| Providing educational and consulting services to farmers and ranchers | 62 | 2.554 |
| Training students for careers other than farming or ranching | 51 | 2.453 |
| Training students for careers in farming or ranching | 50 | 2.414 |
| Providing educational programs which contribute to the improvement of rural life and communities | 49 | 2.395 |

¹3 = very important, 2 = somewhat important, 1 = not important.

sity of Idaho College of Agriculture might serve in the state (Table 19). The largest percentages indicated research to "increase food quality and food safety" and to "increase farm productivity" as very important.

The majority of ARO directors and of respondents to the statewide sample (1984) agreed that agricultural research "helps producers and consumers the same" (Table 20). About a quarter of both samples indicated agricultural research "helps producers more than consumers."

Table 20. Respondents' perceptions of who benefits from agricultural research in Idaho.

| | Directors of agriculture-related organizations (D, Table 1) 1984 | Idaho statewide survey (E, Table 1) 1984 |
|--|--|--|
| | (% agree) | |
| Helps producers more than consumers | 22 | 26 |
| Helps producers and consumers the same | 68 | 67 |
| Helps consumers more than producers | 10 | 7 |

Summary

This study investigated issues relevant to the University of Idaho College of Agriculture and the Idaho Cooperative Extension System. An important issue is public awareness of programs and services. Survey respondents were more likely to be aware of 4-H youth programs than to have heard Extension radio or TV programs. The Idaho directors of agriculture-related organizations were much more likely than the general public to be aware of and to have used the programs and services of the Cooperative Extension System in Idaho.

Idaho survey respondents were more agriculturally oriented and more likely to have used Extension programs than respondents to the nationwide survey. Idaho program users were predominantly rural residents with farm backgrounds. Program areas with the highest use in Idaho were related to agriculture; gardening and land-

scaping; food preparation, preservation, and nutrition; and 4-H youth.

Program recipients generally rated Extension services and programs as "somewhat" or "very" useful or helpful. The majority of survey respondents were satisfied with the programs, especially with home gardening/landscaping, agriculture/farm management, and food preparation/nutrition. Farmers were generally satisfied with Extension information on insect or weed control, fertilizer application, harvesting, and storage and handling. Respondents were less likely to be satisfied with home or farm management information and with marketing information.

Respondents generally placed greater importance on research than on teaching or Extension activities in the College of Agriculture. The research areas they judged most important were research to increase food quality and food safety and to increase farm productivity. The majority of respondents agreed research helps producers and consumers about the same.

Written materials were the most preferred and the most likely to be used methods of Extension program delivery. Farmers preferred articles in farm or ranch magazines and newsletters. The general public also preferred newspaper feature stories and articles as well as learn-at-home materials. Agriculture-related organization directors found short courses or workshops, newsletters, public tours or demonstrations, and written materials useful. The first sources Extension home economics clientele consulted for information related to household management were written materials including product labels, books, magazines, and Extension publications. Both Extension home economics clientele and agricultural producers were likely to have had contact with Extension through newsletters, bulletins, and news articles.

Agricultural producers in the Camas Prairie and Idaho potato growers were asked in 1987 and 1989 to indicate whether various information sources were "good guides." Extension specialists and the Idaho Agricultural Experiment Station were considered reliable information sources by more than 90 percent of producers

surveyed. Producers also rated "other farmers" as good guides. Private company salesmen and radio or TV were least likely to be considered good guides.

Recommendations

Extension should continue to place a high emphasis on dissemination of materials via the written word. Written materials rank high as a desirable source of information among all groups of clientele. There has been pressure for Extension to focus more on high technology dissemination such as videos, computer networks, and TV. This should be done with caution and with the realization that these methods limit the clientele to those having access to the appropriate technology.

The importance of farmers influencing farmers is evident. Extension should look for ways to facilitate this informal network to enhance the adoption of new technology. Recent research continues to show the importance of farmer networks in the adoption process (Beck 1991).

Extension should publish in the most commonly read publications of the various clientele groups. Even though personal contact with Extension is low, broad exposure can be gained from publication in these materials.

Finally, Extension should enhance contacts with those who, by virtue of their occupations, have high contacts with clientele. For example, fieldmen for processing companies may contact their growers regularly during the season. Providing them with current information will provide a channel to the grower.

The analysis presented here suggests that as these recommendations are implemented the Extension system in Idaho will be more effective in providing useful information to its clientele, the people of Idaho. As the concerns of Idaho residents change, the Extension system has demonstrated its flexibility in implementing programs to meet new needs and interests. By concentrating on current issues and incorporating systematic methods, Extension may further enhance program delivery. Cooperation with other agencies and institutions deal-

ing with the same issues also improves the educational capabilities of the Extension system.

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