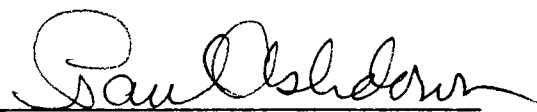


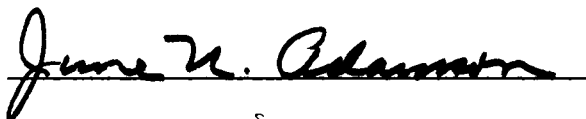
To the Graduate Council:

I am submitting herewith a thesis written by Ramona F. Sanders entitled "Evaluating An Extension News Service: A Census of Tennessee County Agents." I have examined the final copy of this thesis for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Master of Science, with a major in Communications.



Paul Ashdown, Major Professor

We have read this thesis
and recommend its acceptance:



Accepted for the Council:



The Graduate School

EVALUATING AN EXTENSION NEWS SERVICE:
A CENSUS OF TENNESSEE COUNTY AGENTS

A Thesis
Presented for the
Master of Science
Degree
The University of Tennessee, Knoxville

Ramona F. Sanders

December 1984

To my parents for giving me the freedom
to go the extra mile, and to Regina for
always believing and always caring

ACKNOWLEDGMENTS

The author wishes to thank the many mentors who guided this project to completion. Thanks goes to Dr. Paul Ashdown for serving as the chairman of the thesis committee and to Professor June Adamson and Dr. Joyce Russell for serving on the committee. They provided unfailing encouragement and advice while giving careful but speedy consideration to the study. It was a joy to work with each of them.

The author is also indebted to Dan Evans for his guidance, friendship, and encouragement in every phase of this study, to Ned Browning for his ready advice, to Brian Sanders for his steady friendship, to Wanda Richart for her compassionate understanding and example, and to Cindy Brown for her listening ear.

Finally, the author wishes to thank all of the county agents who returned the questionnaire as well as all the administrators, specialists, and other employees with the Agricultural Extension Service who provided personal and financial support for the project. A special thanks, however, goes to Mr. George C. Mays, Mr. Charles Walker, Mr. Conrad Reinhardt, and Dr. Robert Dotson for their words of wisdom, their patience, and their genuine concern. May they use these results to create a better flow of communication and cooperation across all Extension boundaries.

ABSTRACT

The purpose of this study was to gather information from county agents regarding their use and perceptions of the Agricultural and Home Economics News Packet, the primary news vehicle of the state communications section of the Tennessee Agricultural Extension Service.

A questionnaire was mailed on June 1, 1984, to all 342 Tennessee county agents. Although most evaluations of this type concentrate primarily on newspaper editors and readers, county agents were chosen as subjects for this evaluation because of their direct interaction with the county clientele and the local newspapers.

In addition to its evaluation of the news packet's strengths and weaknesses, the questionnaire was used to determine how agents viewed their audience priorities and perceived their abilities and successfulness in serving these audiences through newspapers. It was also used to generate ideas to improve the current communication services.

Ninety-six percent of the county agents returned the questionnaire.

The results suggested that, although it was designed only for editors' use, the news packet serves county agents in a variety of ways and possibly to a greater extent than it serves newspaper editors. Overall, agents were pleased with the informative value and timeliness of the news packet, but they wanted more home economics and 4-H information, less repetition of articles, and longer lead times for release dates.

Agents did not consider the newspaper outlet to be extremely important compared to other available channels, and they reported little direct use of the packet by local editors. Also, they did not consider themselves to be highly skilled at newspaper reporting and they devoted little time to it.

The results suggested that agents would prefer that subject matter specialists or communications specialists provide the news material for the local columns and stories, and indeed, they used the news packet already for that purpose.

It was recommended that the state communications section develop a separate publication for the county agents that would serve their needs as expressed in this study without duplicating material sent to local editors. It was also recommended that further research be conducted among editors and readers to determine use and generate recommendations and possible improvements for future news services.

TABLE OF CONTENTS

CHAPTER	PAGE
I. INTRODUCTION	1
II. STATEMENT OF THE PROBLEM	4
III. REVIEW OF LITERATURE	10
Background Information	10
The Role of Communication in Extension	14
Evaluation of Extension Communication	16
IV. METHODOLOGY	23
Data Collection and Instrument	23
Response Rate	25
Limitations of the Study	26
V. RESULTS	27
Personal Data	27
Use of the Agricultural and Home Economics News Packet	30
Local Editors' Use of the News Packet	33
News Packet's Primary Audience as Perceived by Agents	34
Perceived Success of the News Packet in Serving Its	
Primary Audience	36
Quality of the News Packet in Regard to Eight	
Categories	37
Importance of Regular News Stories for Promoting	
Extension Programs	38
Number of Hours Devoted to News Story Preparation . .	38
Effectiveness of Various Channels in Reaching Local	
Clientele	42
Agents' Perceptions as to Their Own Writing Skills . .	45
Perceived Effectiveness of Various Types of Newspaper	
Stories	48
Importance of Various Services Provided by the State	
Communication Section	48
News Packet: Strengths, Weaknesses and Suggested	
Improvements	52
Desired Frequency of Publication	55
Desired Number of Articles Per Packet	55
General Discussion of Findings	56
A Discussion of Communications Specialists' Predictions	58
VI. RECOMMENDATIONS	63
LIST OF REFERENCES	68

CHAPTER	PAGE
APPENDIXES	72
Appendix I	73
Appendix II.	81
Appendix III	86
Appendix IV	100
VITA	105

LIST OF TABLES

TABLE	PAGE
1. Newspaper Usage Survey Regarding the Agricultural and Home Economics News Packet for January-March 1984	5
2. Job Categories	28
3. Years of Experience with Extension	29
4. Education	29
5. Population of Work Area	31
6. Agents' Use for the Agricultural and Home Economics News Packet	31
7. Editors' Use of the News Packet as Reported by County Agents	34
8. Primary Audience as Perceived by Agents	35
9. Perceived Success of the News Packet in Serving its Primary Audience as Viewed by County Agents	37
10. Mean Rating for News Packet in Regard to Eight Categories on a Scale between 1 and 7	39
11. Importance of Regular News Stories for Promoting Extension Programs as Perceived by County Agents	39
12. Agents' Estimate of the Amount of Time Devoted to News Story Preparation	40
13. Agents' Evaluation of the Amount of Time They Devote to News Story Preparation	41
14. Agents' Perceptions as to the Most Effective Channel for Reaching the People in Their Local Area	43
15. Agents' Perceptions as to the Second Most Effective Channel for Reaching the People in Their Local Area	43
16. Agents' Perceptions as to the Least Effective Channel for Reaching the People in Their Local Area	44
17. Most Important Source of Personal Advice	45

TABLE	PAGE
18. Second Most Important Source for Personal Advice	46
19. Least Important Source for Personal Advice	46
20. Perceptions of County Agents as to Their Own Writing Skills	47
21. Most Effective Newspaper Story as Perceived by Agents . .	49
22. Second Most Effective Newspaper Story as Perceived by Agents	49
23. Third Most Effective Newspaper Story as Perceived by Agents	50
24. Least Effective Newspaper Story as Perceived by Agents . .	50
25. Value Agents Place on Training Sessions	52

CHAPTER I

INTRODUCTION

When the Cooperative Extension Service was first established by the Smith-Lever Act of 1914, its mission was:

. . . to aid in diffusing among the people of the United States useful and practical information on subjects relating to agriculture and home economics and to encourage the application of the same (Kelsey & Hearne, 1963).

From its very first application, this charge was supported by public funds and was to a great extent carried out through newspapers, pamphlets, and other printed matter. For The University of Tennessee Agricultural Extension Service (a state institution that employs 492 professional staff and spends an annual budget of approximately \$17 million) the mission is the same.

Today, The University of Tennessee Agricultural Extension Service employs a staff of communications specialists who disseminate information to the general public through television, radio, specialized publications, and print media. For each medium, specialists coordinate communications efforts and serve as media experts for all Extension staff. Throughout the years, these communications specialists have developed a variety of media outlets and specialized programs to communicate the Extension Service message to the varied clientele.

Although a great deal of time and effort is devoted to development of these varied communications, little research has been

done to audit their effectiveness in reaching the desired audience and in accomplishing the purpose for which they are designed.

Nevertheless, assessment is essential for the future.

In 1977, the United States Congress issued a mandate calling for a full-scale evaluation of the economic consequences of the national Extension programs. Two years later that call for evaluation extended to each individual state Extension Service as the Extension Committee on Organization and Policy appointed a task force to review the current state evaluation methods. This task force was also asked to recommend a revised reporting system (Report of the National Task Force on Extension Accountability and System, 1981).

As a result of these national and state mandates, all phases of Extension programs were called to accountability. This study responds to that call in the area of Extension communications services. It specifically focuses on Extension's print media information services, which maintain in-house informational services and provide news releases and other informational services to newspapers and magazines statewide.

The primary objective of the study is to gather information from the county agents regarding their use and perceptions of the Agricultural and Home Economics News Packet, the communications section's main print news vehicle. The secondary objectives are:

1. to determine how agents view their audience priorities and perceive their abilities and successfulness in serving these audiences through print media channels;

2. to generate ideas to improve the current communications services related to print media;
3. to serve as an initial evaluation upon which future research could be built; and
4. to serve as a model by which other communications professionals can develop studies to evaluate the effectiveness of print news materials as a communications tool.

CHAPTER II

STATEMENT OF THE PROBLEM

The University of Tennessee Agricultural Extension Service produces a variety of printed materials designed to provide information to Extension clientele. Some information is released through newsletters, and much is released through large, specialized publications. In the area of print news, some information is released through individual news releases, but the primary print news vehicle is the Agricultural and Home Economics News Packet. Appendix IV includes a copy of the news packet.

The news packet is released each week to 157 daily, semi-weekly, and weekly newspapers across the state. The articles in the packet (approximately 10-15 each week) are written by subject-matter specialists and are then edited by the communications staff. The packet was first designed and used in 1963. Its forerunners, Farm News From UT and Homemaking News from UT, were first developed in the early 1900's.

Although the packet has become an institution within the communications section of the Agricultural Extension Service, an analysis (conducted by the Extension communications staff) of newspaper clippings from across the state revealed little use of the articles. During the first quarter of 1984, 128 articles were released to the 157 newspapers, and an aggregate total of 266 articles were published. In other words (as Table 1 indicates), each article only averaged

Table 1. Newspaper Usage Survey Regarding the Agricultural and Home Economics News Packet for January-March 1984

News Packet Release Date	No. of Releases in Packet	Total Printing Attributed to Specialists	Average Use Per Release	Total Printing Attributed to County Ext. Agents	Average Use Per Release	Total Average Use with Specialist Attribution and Agent's Columns
Jan. 2, 1984	4	5	1.25	10	2.5	3.75
Jan. 8, 1984	7	31	4.42	12	1.7	6.1
Jan. 15, 1984	9	11	1.2	18	2.0	3.2
Jan. 22, 1984	11	18	1.6	18	1.6	3.2
Jan. 29, 1984	6	26	4.3	26	4.3	8.6
JAN. TOTALS	37	91	2.45	84	2.3	4.72
Feb. 5, 1984	6	34	5.6	38	6.3	12.0
Feb. 12, 1984	8	37	4.6	14	1.75	6.4
Feb. 19, 1984	13	25	1.92	16	1.2	3.2
Feb. 26, 1984	13	14	1.1	28	2.1	3.2
FEB. TOTALS	40	110	2.75	96	2.4	5.15
Mar. 5, 1984	10	10	1	12	1.2	2.2
Mar. 12, 1984	17	17	1	18	1.05	2.05
Mar. 19, 1984	16	19	1.18	29	1.81	1.81
Mar. 25, 1984	8	25	3.1	6	.75	3.8
MAR. TOTALS	51	65	1.3	65	1.3	2.6
FIRST QUARTER 1984	128	266	2.0	245	1.9	3.9

two uses among over 150 possible outlets. Appendix II includes the complete results from this clipping analysis.

Articles from the news packet, however, are also published through a second-hand outlet--an outlet for which the packet was not designed but by which many articles receive publication. Each week county agents receive a file copy of the news packet, and the clipping analysis revealed that many agents submit these articles from the news packet as a part of their regular newspaper columns. In other words, the agents attribute the articles to themselves and release them in this form to the local newspapers. Although this practice is not encouraged by state Extension administrators, it is recognized and not discouraged.

During the first quarter of 1984, 245 printed articles (derived originally from the Agricultural and Home Economics News Packet) were attributed to the county agents for an average use per article of 1.9. Although these results are not overwhelming, they do indicate that agents use the packet and derive publication from the articles. In fact, agents are able to exactly equal the number published directly by newspaper editors.

To the specialists in the state communications section, the results of this clipping evaluation were viewed with ambivalence. George Mays, the communications specialist in charge of the print media activities during the period, concluded, "Usage has been declining for the past 10-12 years and has been at a very low level for 1983 and 1984." A decade ago, an Extension-related news article from the packet averaged as much as 25 uses, Mays estimated. Yet

Mays also pointed out the more positive results of the study. In a memorandum to Extension personnel, he wrote:

Fourteen daily newspapers and 71 weekly newspapers printed at least one news article from our packet during the three month period. That indicates that at least 54 percent of the state's newspaper editors are still "shopping" in our news packet but are often not finding the items (news releases) that they want to print for their readers. We want to improve these figures! (G. C. Mays, personal communication, April 30, 1984).

Mays' contention, as well as the contention of the entire communications section, is that Extension communication services, such as the Agricultural and Home Economics News Packet, must be evaluated and improved if the goals and objectives of the Extension organization are to be achieved. Mays' attitude is also indicative of a major trend toward evaluation within Tennessee's entire Agricultural Extension network, and it also reflects the trend within Tennessee's national counterpart, the Cooperative Extension Service.

In 1977 the United States Congress issued a mandate that called for:

an evaluation of the economic and social consequences of the programs of the Extension Service and the cooperative extension services, including those programs relating to agricultural production and distribution, home economics, nutrition education . . . community development, and 4-H youth programs (Food and Agricultural Act of 1977).

Today, University of Tennessee administrators and communications specialists must face difficult questions as to future directions and programs, and they must do it with an ever-present call for

accountability. To demonstrate the value of its programs, the Extension print media specialists must reach the intended audience and must serve the local information needs of the agents involved in county programs. Research must be used to validate their effectiveness. Research must also be used to unveil problems and pinpoint specific areas where improvements can be made. Finally, Extension research must serve as a model by which other communications professionals can also develop studies that evaluate the effectiveness of print news materials as a communications instrument.

In view of the state and national trends toward accountability, this study is designed to serve these research needs. Also, in view of the results from the clipping analysis, this study specifically focuses on the Agricultural and Home Economics News Packet as designed and distributed by The University of Tennessee Agricultural Extension Service.

As a communications audit, this study is designed to analyze the effectiveness of the news packet as perceived by county extension agents. More specifically, this study analyzes:

1. how agents view their audience priorities;
2. how agents assess their news writing abilities;
3. how they use their current news services;
4. how agents perceive the effectiveness and quality of service in regard to current news activities;
5. how they assess their level of satisfaction with the current news release program in general;

6. how they view certain message-channel variables related to print media activities; and
7. what role they feel the state communications section should perform in its news services.

CHAPTER III

REVIEW OF LITERATURE

Background Information

"Extension" is a term that refers to the extending of a function beyond the home location (Mosher, 1978). In 1983 the term "extension education" was first used at Cambridge University in England to refer to the extension of regular educational programs away from the regular campus. The idea of agricultural extension first surfaced in the United States around the turn of the century when rural Americans started becoming involved in farm and home demonstration clubs (Mosher, 1978). Later, as these clubs gained strength, the U.S. Congress in 1914 passed the Smith-Lever Act that authorized the establishment of the Cooperative Extension Service, a nationally administered program for rural education. Figure 1 depicts this relationship between the research university, the Extension Service, and the client.

The act endowed the development and maintenance of agricultural and home economics educational extension programs at all state land-grant colleges. The stated mission was ". . . to aid in diffusing among the people of the United States useful and practical information on subjects relating to agriculture and home economics and to encourage the application of the same" (Kelsey & Hearne, 1968). Its mission was direct; its audience was clear; and as Edmund Brunner (1949) explained, the Smith-Lever Act also provided for the most vital, local link with that audience. It "provided for the development

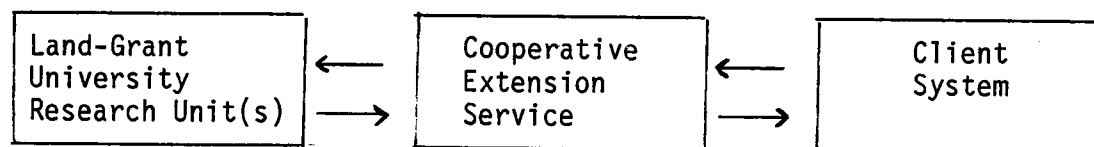


Figure 1. Theoretical Model

Note: Bridging the gap between knowledge producer and user (AWA, 1978).

of Extension through an itinerant agricultural adviser in each county, called in most states a county agent." The key communications link, therefore, was the county agent, and as Brunner (1949) said, the agent's mission was to provide an "out-of-school, roadside education" to the homemaker and the farmer.

The Smith-Lever Act also established the 4-H Club program for the nation's rural youth (Reck, 1957). Thus, as Brunner explained (1949), Extension education developed a total rural family approach by which the Cooperative Extension Service could "give leadership and direction along all lines of rural activity, technical, social, and economic . . ."

The county agents were the educational links to the rural family; therefore, because the Hatch Act of 1887 created agricultural experiment stations at each of the land-grant colleges (Kelsey & Hearne, 1968), the agents were called upon to disseminate research information about farm practices. As the research and knowledge in the field of agriculture became increasingly broad, however, the task soon became overwhelming. Another link in the communications

chain was needed. Thus, Extension subject-matter specialists were chosen in order to assist the generalist--the county agent--in the specific, related areas (such as plant and soil science, animal science, agricultural economics, etc.). Brunner (1949) explained:

Thus specialists are the professional liaison between the county agents, the agricultural colleges, the experiment station and the United States Department of Agriculture. . . . They are the dispensers of subject-matter information in their own fields, simplifying and clarifying this information so as to enable the people to understand and apply it to everyday affairs.

County agents were to be Extension contacts at the grass roots level. They were to provide one-to-one service, communicate on a one-to-one level. Specialists, on the other hand, were to work at the state level for the most part, usually at the land-grant university. They were to provide only specialized personal assistance, limited to their specialized area of expertise. Although the county agents and the subject specialists served in different roles (one as a generalist and one as a specialist), Turner (1981) explained that they worked together and became the vital "linking agents" by which the mission of the Extension Service was accomplished. Figure 2 illustrates this role. As linking agents between the scientists and the rural farmer/homemaker/youth, their professional success and the success of the Extension program in general could be measured by their ability to present "useful and practical information," but not only to present it but to do so in such a manner, with such a degree of skill, that the recommended techniques would be applied.

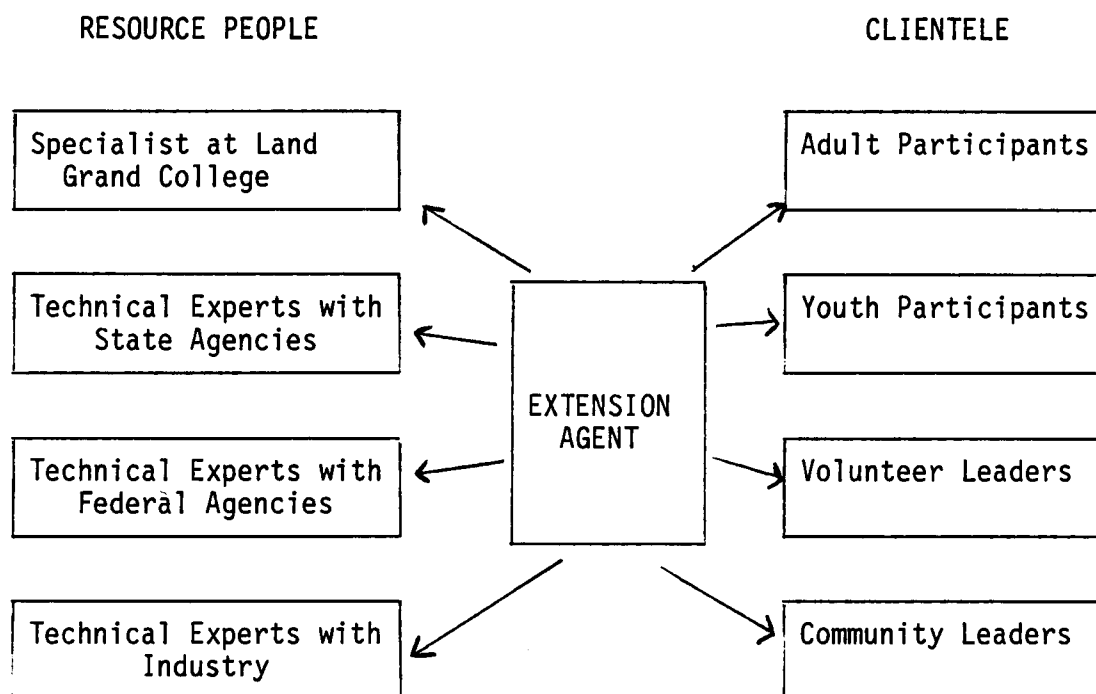


Figure 2. Cooperation Flow for Extension Program

Source: D. J. Decker. (1979, May/June). Your extension image is important. Journal of Extension, 18, 5.

As Turner (1981) explained, effective communication was the key to success.

The Role of Communication in Extension

In his book, Agricultural Extension, a Reference Manual, Addison Maunder (1972) said the "ability to communicate determines to a very large degree the success or failure of an Extension worker." In order to teach, Extension educators must first possess the skills necessary to transfer technical information into a form that the local farmer or homemaker or youth can understand. Leagan (1961) called communication, "The process by which two or more people exchange ideas, facts, feelings, or impressions in ways that each gains a common understanding of the meaning, intent, and use of messages." The key elements are a communicator, a message, a channel, and a receiver or an audience, but as Leagan (1961) concluded, "Channels are no good without careful direction or use in the right way at the right time, to do the right job for the right purpose with the right audience, all in relation to the right message."

Today, the Cooperative Extension Service is the nation's largest publicly supported, informal adult education organization in the United States. Over the course of its 70-year history, however, the role of agriculture in relation to society has changed. Agricultural communicator William Tedrick (1972) explained that modern society, with its urbanization and industrialization, has greatly diminished the farm block and has greatly changed its composition. Where once rural people looked to agriculture for

employment, in recent times they have had greater opportunities in industrial and service employment. Even for those who chose to maintain a farm, the farm became a secondary consideration in comparison to their full-time livelihood.

As society changed, the image of the individual farmers also began to change. Rural sociologists Conner and Singh (1981) wrote that prior to World War II farmers were usually viewed as self-sufficient, independent, God-fearing defenders of the republic, a product of what sociologists call agricultural fundamentalism. Now, they said, "Farm people, due to technological developments in agriculture and economic growth in general, have entered the mainstream of American economic, social, and political life. They are no longer readily distinguishable from non-farm people." The farm community has also changed. Conner and Singh (1981) pointed out that the number of farms has steadily decreased since World War II, but the average farm size has increased. Productivity has increased. Agriculture has become big business, and farm management decisions are more and more becoming controlled by the non-farm sector. Also, Conner and Singh (1981) explained that U.S. farms have become increasingly specialized among the variety of farm commodities.

The role of the county agent in relation to the farm community has also changed. Leagan (1961) said that at one time agents were a vital link by which "millions of rural people [were able] to lift themselves through their own efforts from a state of poor living to one of economic and social well-being." But today rural

communities have different needs. As Befecadu (1982) explained, today Extension workers' major concern is in finding effective ways to communicate relevant information to meet the everyday needs of the modern farmer. The ability to identify the clientele, to identify the needs, and then to provide an effective educational product is imperative. Christenson and Warner (1982) wrote:

The future of the Cooperative Extension Service depends on its ability to demonstrate its impact on its environment, to document its effectiveness and to maintain a climate of political legitimacy. [But] the scope of the agency is so broad and the subject matter so diverse that it is difficult to establish clear parameters for identifying its clientele and assessing its effectiveness.

Assessment may indeed be difficult, but Extension has no choice. In 1977 the United States Congress issued a mandate that called for an evaluation of the economic and social consequences of the Cooperative Extension programs. For the first time in its history, accountability became the focus for the entire publicly-supported service, and as Bennett (1982) said, it "sent shock waves through the system. . . . They still reverberate."

Evaluation of Extension Communication

The bulk of the evaluative research that is directed toward the Cooperative Extension Service attempts to answer the following general questions:

Who is Extension serving?

Is the general public aware of the mission and work of the Extension Service?

What types of material/information is Extension diffusing among the public?

Is Extension successful in its diffusion of educational information?

A review of the literature shows that Extension educators, rural sociologists, and agricultural communicators seem to be the primary investigators. These researchers have described Extension's objectives, audiences, resource allocations, processes, and results. Studies have been national in scope, as well as specific to particular states or local areas. The most extensive studies are being done by the National Task Force on Extension Accountability and Evaluation System (established by Congress in 1981). Evaluations by the National Task Force are done wholly along a program area-by-program-area basis, Bennett (1982) explained. Later, reports of program results are sent to Congress along with Extension's annual budget justification statement. Thus, it is logical that communications effectiveness in each program area also should be evaluated, because it is through communication that Extension workers affect and serve the public.

H. C. Sanders (1972), in his book Instruction in the Cooperative Extension Service, had the same idea. He wrote that the quality of Extension performance is based to a great extent on the quality of communications vehicles. He said:

It is possible that a circular letter poorly written and slovenly prepared is worse than no letter at all. It is probable that a meeting poorly conducted when it is not timely is detrimental to all Extension work for quite sometime.

In 1962 John Fenley also stressed the importance of well-prepared Extension communications. He wrote:

The ability to communicate and to be understood by others is one of the greatest single assets that we Extension workers can have. Coupled with the ability is the realization that we can always improve ourselves, our methods, our techniques.

For the Extension educator, as well as the professional communicator, research should be the key for determining past effectiveness and for adopting new, aggressive programs. Lindenmann (1980) explained that the "days of relying exclusively on hunches for communications planning are over." Donald Wright (1979) said that modern communications professionals must evaluate internal needs and attitudes; evaluate external needs and attitudes; then plan programs that will eliminate the disparities and will deal effectively with the stated deficiencies.

There are nine functions that communications audits serve, according to Kopec (1982). Included are evaluations of existing communications programs, existing vehicles and their use, attitudes toward existing communications, and needs and expectations. Research should be descriptive, and it should also be predictive, but as Jones (1975) said, "There's nothing very impressive about this approach. . . . Its great value is that it lessens the likelihood of flying by the seat of your pants."

Indeed, rural sociologists and agricultural communicators have conducted many studies in order to evaluate the current role

and effectiveness of Extension communications with a corrective function in mind. For example, many researchers have evaluated the diffusion success of Extension-prepared news/information releases. Millwood (1975) did a content analysis of Extension-prepared news releases appearing in 14 Georgia weeklies. Wallace (1963) evaluated the effectiveness of West Virginia University agricultural news releases. Although one focused totally on an analysis of news clippings and one analyzed both clippings and editor attitudes, both studies provided data to describe current successes and failures, thereby providing data upon which future programs could be built.

Similar studies have involved radio information. For example, Walker (1974) evaluated agricultural market news programming on Wisconsin broadcast media. He sought an external evaluation; therefore, he used a mail questionnaire and telephone contacts to obtain data from all of Wisconsin's radio and television stations.

Studies such as these are also common across all types of information sources. For example, Ahr (1978) studied the "Effectiveness and Reception of the News Release Program of the Illinois State Chamber of Commerce," and Hilberg (1973) evaluated the Dallas Police Department's public information system. Again, these studies were descriptive, but they also provided the necessary data for prediction.

The studies mentioned thus far focused on external audiences, but Wright (1979) explained that "most public relations audits begin inside the organization and research what the organization thinks

about its strengths and weaknesses, key publics, problems, etc."

For example, within the United States Army, there are officers who administer communications programs at the unit level (much like a county agent would within the Extension Service). Highlander (1972) used a questionnaire to determine the importance that unit level officers assigned to the public relations programs in achieving organizational goals and objectives. Gosdin (1971) did a similar study. He assessed the attitudes of first lieutenants through major officers in regard to the information officers and information programs of the United States Air Force.

Also, in non-profit public relations, studies have focused on evaluation of internal attitudes and opinions. Sidmore (1971) sought the opinions of volunteer leaders and staff personnel to evaluate the information programs of the Florida Division of the American Cancer Society. Stern (1978) focused her study on the community and staff attitudes toward a proprietary hospital. She polled 100 percent of the staff and used a purposive sample to question members of the community.

The Cooperative Extension Service has also undergone these types of internal attitude evaluations. Isahak (1978) chose to look internally for information as he evaluated reception, readership, understanding of content, and utility in regard to an Extension-prepared information pamphlet. Isahak's study elicited the opinions and perceptions of Extension agents toward the publication through a mail questionnaire. Recommendations were derived from the data.

Bigger (1972) measured the effectiveness of the University of Wisconsin Extension public relations program among members of Wisconsin's County Agriculture and Extension Education members. The committees were selected for study because they indirectly controlled Extension activities through appropriation of county funds. His study measured the attitudes of the committee members as well as general knowledge of university activities. Although these committee members played a key role in University Extension programs, he concluded that the committee members had only minimal understanding of university function and objectives.

Similar studies on other internal audiences have exposed similar weaknesses. Couch, Miller, and Murray (1964) evaluated the Michigan Cooperative Extension Service and concluded that the various internal publics perceived the formal organization and their role within the larger organization in different ways.

In her study of the communications behavior of Extension subject specialists and county agents, Turner (1981) spoke of the agents and specialists as "linking agents"--the vital communications link--between the scientists and the public, as well as between administrators and the public. She determined, however, that this link is hindered because there exists a discrepancy between the perceptions of the administrators, the specialists, and the agents as to what information should be communicated, as well as how the information should be communicated. Her review of the literature noted several studies documenting this type of problem within various state Extension

offices. She concluded that communication is likely to break down between linking agents and administrators, as well as between linking agents and the public, because of the failure to define objectives clearly and to survey perceptions in order to pinpoint dysfunctional areas or areas where needs remain uncovered.

Although researchers such as Turner (1981) have uncovered the possible problem areas, problems such as these within state Extension organizations cannot be corrected and maintained in working order unless continuous evaluative programs--both internal and external--are maintained. Goldhaber and Krivonos (1977) compared the communications audit to an accountant's audit or a physician's check up, both of which "are necessary to retain the 'health' needed for survival." But just as the business audit or the physician's physical examination is regular and periodic, so too should Extension communications evaluations become a continuous tracking, analyzing, correcting process. It is only in this way that effective programs can be maintained while better programs are being developed, thereby assuring the future of Extension. As Fenley (Leagans, 1961) said, "The challenge is ours. Can we improve ourselves professionally in communications?"

CHAPTER IV

METHODOLOGY

In Tennessee there are approximately 343 county agents who primarily work in one of four job roles: adult home economics agent, 4-H home economics agent, adult agricultural agent, and 4-H agricultural agent. Career ladder descriptions are assistant county agent, associate county agent, and county agent. Whatever the job description or career level, however, the agents become representatives of The University of Tennessee, the Cooperative Extension Service, and the United States Department of Agriculture as they interact directly with the public.

In the Extension hierarchy, the county agents are most directly responsible for one-to-one contact and service to the Extension Service's primary public--farmers and homemakers in rural communities. The Extension Service's print media communications specialists, on the other hand, are responsible for providing news materials to aid, enhance, and gain exposure for the work of the county agents. Consequently, the county agents across the state become the logical source in order to evaluate the effectiveness of the state news service in regard to local needs.

Data Collection and Instrument

In order to assess the characteristics, attitudes, and needs of the county agents, the self-administered mail questionnaire, as

shown in Appendix I, was sent to all 343 county agents in Tennessee who (as of May 15, 1984) were employed in adult home economics, adult agriculture, 4-H home economics, and 4-H agricultural positions. The list of agents was derived from the current Directory of The University of Tennessee Institute of Agriculture. The questionnaire included biographical data, attitude scales, rank order, and open-ended items. It was mailed on June 1, 1984.

As a pretest, the questionnaire was sent to the five district supervisors and the ten associate district supervisors who oversee the activities of the agents within the five Extension districts.

Agents were asked to evaluate the Agricultural and Home Economics News Packet, a packet of news releases distributed once a week to daily and weekly newspapers. It also included questions concerning the importance that agents attach to the state communications services in general. Audience priorities and message-channel preferences were also gauged, and the agents were asked to recommend future services. Five questions were open-ended to permit in-depth probing of opinions.

Although the researcher developed the instructions and questions involved with the instrument, the questionnaire was sent by mail to the individual agents with a cover letter enclosed from the professor and leader of the communications section. The cover letter included an endorsement from the deans and district supervisors of the Extension service, and it asked for cooperation so that the agents' views could be used to plan the future activities of the

state communications section in regard to print media activities. All responses were kept anonymous, but the questionnaires were coded so that follow-up requests could be sent to delinquent subjects.

The questionnaires were first mailed on June 1, 1984. A post-card reminder was sent on July 12, 1984, and a second questionnaire was sent in August to agents who had not returned the questionnaire.

Tabulation of the results was limited to frequency and percentage analysis with cross-tabulation of selected answers to ascertain differences between groups.

Also, this was an exploratory study. Because of the lack of any previous data concerning agents' perceptions, no hypotheses were formed prior to the study. Later in the study, however, the researcher asked two communications specialists from the state Extension communications section to predict agents' responses. These predictions were compared with the actual results at the conclusion of the study.

Response Rate

Questionnaires were mailed to 343 county agents. During the three months collection period, 332 questionnaires were returned. This constituted a 96.8 percent rate of return. This near perfect return rate can be attributed to the fact that the county agents are regularly required to evaluate various aspects of the Extension services; therefore, they are adept at completing and returning questionnaires.

Limitations of the Study

This study was restricted by the following limitations:

1. No previous study had evaluated the Agricultural and Home Economics News Packet in regard to success in fulfilling its purpose; therefore, the study was limited to an exploratory range.
2. Cost/utility factors were not explored in this study.
3. Tests were not employed to determine the significance of statistical differences between groups.
4. The questionnaire used as an instrument for collecting data could have restricted the findings of the study in at least two areas. First, answers to various questions seemed to indicate that county agents perceived themselves to be a primary audience; therefore, the question which asked agents to indicate the primary audience for the news packet should have provided "county agents" as a possible choice. Secondly, the question that asked agents to rank various interpersonal communication sources should have included the Soil Conservation Service, Federal Land Bank, Production Credit Association, and the Agricultural Stabilization and Conservation Service.
5. Before the study was conducted, hypotheses could have been formed based on the communications specialists' predictions.

CHAPTER V

RESULTS

Because of the varied nature of the information, it was necessary to classify the data into a logical and readable form; therefore, the information has been categorized, and tables are used when possible to illustrate the responses received from the county Extension agents. The results correspond to the answers as derived from the questionnaire shown in Appendix II. Appendix III lists responses to the open-ended questions regarding strengths, weaknesses, and suggested improvements.

Also, it should be noted that the answers to each question found in the questionnaire were cross-tabulated with major demographic characteristics of the agents. When the cross-tabulations showed obvious differences, these differences were discussed in this report. The results do not identify groups that showed no statistical differences.

Personal Data

As Table 2 indicates, the questionnaire revealed that the greatest number (32.5 percent) of Tennessee's county agents work in the area of adult/agriculture, as compared to the other five job categories. Sixty-four agents (19.3 percent) were adult/home economics agents, 62 were youth/home economics agents, 36 had dual job responsibilities in home economics for both youths and adults, and

Table 2. Job Categories

Job Description	Number of Agents	Percent
Home Economics/Adult	64	19.3
Home Economics/Youth	53	16.0
Agriculture/Adult	108	32.5
Agriculture/Youth	62	18.7
Home Economics/Both	36	10.8
Agriculture/Both	9	2.7

9 agents had dual responsibilities in agriculture for both adults and youths. One hundred eighty-three agents (55.1 percent) were male, and 147 (44.3 percent) were female.

In regard to age, 62.7 percent were between the ages of 26 and 45. In terms of the number of years that they had been employed by the Agricultural Extension Service (Table 3), almost half of the respondents had less than 10 years of experience, and 13 percent had more than 20 years of experience.

As Table 4 indicates, more than half of the agents had participated in some type of graduate work with 42.2 percent of the agents having completed a master's degree. Only 31 percent of the agents, however, had ever completed a course in journalism, and of those agents who had completed a course, only 38 agents had completed more than one course (3 quarter hours).

The greatest percentage of agents (35.5 percent) work in a county with a population range between 20,000 and 49,999 people

Table 3. Years of Experience with Extension

Years	Number of Agents	Percent
0-5	78	23.5
6-10	80	24.1
11-15	64	19.3
16-20	36	10.8
21-25	31	9.3
26 or more	43	13.0

Table 4. Education

Level	Number of Agents	Percent
Bachelor's degree	126	38.0
University graduate courses	62	18.7
Master's degree	140	42.2
Other	4	1.2

(Table 5). Twenty-two percent of the agents reside in a county with a population between 10,000 and 19,999 residents. Only 26 agents reside in a county with a population more than 90,000 people, and only 22 agents reside in a county with fewer than 10,000 residents. It should be noted that it is in those counties with the sparsest population that one agent becomes responsible for work in both youth and adult work for home economics or agriculture.

Use of the Agricultural and Home Economics News Packet

The Agricultural and Home Economics News Packet's primary function has traditionally been to provide newspaper editors across the state with regular news and information. In other words, the news packet was originally designed for editors' use. A copy of the packet was sent to agents merely as reference material. To determine how agents actually used the packet, agents were asked to:

(1) indicate whether they received the packet, and (2) indicate the one or many uses they had for the packet.

Responses to the questionnaire confirmed that 98.5 percent of the county extension agents in Tennessee regularly received the news packet. The questionnaire also revealed (as Table 6 indicates) that only 34 agents did not use the packet for any reason. The questionnaire also confirmed that the majority of agents used the packet as reference material. In fact, only 77 agents (23.2 percent) did not report using the news packet for that purpose.

More than half of the respondents used the news packet to develop radio scripts, and 40.4 percent of the agents used it to

Table 5. Population of Work Area

County Population	Number of Agents	Percent
Under 10,000	47	14.2
10,000 to 19,999	74	22.3
20,000 to 49,999	118	35.5
50,000 to 90,000	45	13.6
Over 90,000	26	7.8
Answer missing	22	6.6

Table 6. Agents' Use for the Agricultural and Home Economics News Packet

Use	Number of Agents	Percent
Reference material	255	76.8
Send to newspaper as part of regular column	51	15.4
Use as basis for developing original newspaper article	134	40.4
Don't use it, but file it	24	7.2
Don't use it, so discard it	10	3.0
Develop radio scripts	171	51.5
Use in Other Ways	54	16.3

develop newspaper articles. Also, 15.4 percent of the agents said they sent articles from the packet directly to local editors as part of their regular newspaper column. Finally, 54 agents (16.3 percent) indicated they used the packet in some other way, and most of those 54 agents indicated that this "other" use involved newsletters.

Cross-tabulation of job descriptions in relation to use revealed that (of the agents who used the packet in other ways, i.e., newsletters) 40.7 percent were adult/home economics agents while a lower 27.8 percent were adult/agriculture agents and only 13 percent were involved primarily in youth work. This suggests that home economics agents working in adult areas have the greatest need for resource materials that can be used to develop local publications.

Also, 62.5 percent of the total number of adult/home economics agents used the packet to develop radio scripts, and 53.7 percent of the total number of adult/agriculture agents used it for this purpose. Among those agents involved in youth work, 54.7 percent of all youth/home economics agents used the packet for radio scripts while 33.9 percent of the total number of youth/agriculture agents used the packet in that way. Again, these data suggest that agents in all categories look to the news packet to help them develop radio scripts. Adult/home economics agents, however, seem to utilize the packet most frequently when developing radio scripts.

In general, the data would suggest that, although the packet was not designed for direct use by county agents, it is nevertheless used a great deal by a great number of agents for a variety of

purposes. Local radio scripts, newsletters, regular newspaper columns, and other newspaper articles are each served by the news packet. These uses were found to be most significant among the adult/home economics agents as compared to the adult/agriculture or youth agents. These findings are contrary to the expectations of the communications specialists who produce this packet. They predicted that the material would be used almost exclusively as reference material or in newspaper columns.

Local Editors' Use of the News Packet

Reference to data in Table 7 discloses that almost half of the agents reporting indicated that most of the time no articles from the packet are used by the local editors. Thirty percent of the respondents indicated that in an average week one to two articles were used by the local editors, and approximately 6 percent of the agents indicated that three to five articles were used. Fifty-four agents (16.3 percent) reported that they did not know.

A further breakdown of those agents who reported that no articles were used failed to indicate a significant correlation between this response and the population of the county where the agent worked. In other words, the percentage of those respondents indicating no usage was fairly evenly distributed across the five population categories with only a slightly larger percentage emerging from the 10,000 to 19,999 and 20,000 to 49,999 categories.

In general, these data seem to confirm the results from the clipping analysis conducted by the Extension communication specialists.

Table 7. Editors' Use of the News Packet as Reported by County Agents

Articles Printed Per Week (in an Average Week)	Number of Agents	Percent
Most of the time none	150	45.2
1-2	100	30.1
3-5	21	6.3
More than 5	1	0.3
I don't know	54	16.3
No answer	6	1.8

The clipping analysis indicated that in the first quarter of 1984 only half of the newspapers that received the packet printed even one article. These data do, however, confirm that the packet is used in some counties on a regular basis.

News Packet's Primary Audience as Perceived by Agents

As Table 8 indicates, 71.7 percent of the county agents indicated the primary function of the news packet was "to provide agricultural and home economics information to the general public." By comparison, 14.8 percent indicated the rural farmer, homemaker, and youth, and less than 1 percent indicated the suburban family as the primary audience. No agent indicated that the packet's function was to provide technical information for large scale commercial farmers.

Table 8. Primary Audience as Perceived by Agents

Audience	Number of Agents	Percent
General public	238	71.7
Rural public	49	14.8
Suburban family	2	0.6
Large-scale commercial farmers	0	0.0
Other	12	3.6
No answer	31	9.3

Cross-tabulations revealed that whereas 80.3 percent of all male agents considered the general public to be the primary audience, only 64.5 percent of the female agents indicated the general public as the most important audience. On the other hand, 20 percent of the female agents considered the rural farmer, homemaker, and youth to be the primary audience compared to only 8.2 percent for the males.

Also, agents with less than five years of experience indicated the rural audience as most important more frequently than agents with a longer Extension tenure. Finally, agents who worked in counties with a population under 10,000 indicated the rural audience more frequently than agents who worked in more densely populated counties.

Although agents indicated that the primary function of the news packet was to provide information to the general public, this answer may not accurately reflect agents' perceptions. Agents were given five possible answers from which to choose. One of those

possible answers was a miscellaneous, "other" category. Only 3.6 percent of the agents chose this category but most of those who did choose it explained that the agents themselves were the primary audience of the news packet. This suggests, especially in view of other answers to other questions, that a separate choice should have been "to provide agricultural and home economics information to the county agent."

Perceived Success of the News Packet in Serving Its Primary Audience

As already discussed, agents were asked to indicate the primary audience of the news packet. Based on their answers, agents were then asked to indicate how successful the news packet was in accomplishing this function. As Table 9 indicates, the response revealed that over 60 percent of the agents considered the packet to be at least "somewhat successful" in providing information to this audience. Twelve percent found it to be "very successful," and 12.7 percent indicated that it was "for the most part unsuccessful." Only three agents found it to be "unsuccessful," and 28 agents indicated that they did not know.

Further analysis revealed no difference between home economics and agricultural agents in the perceived degree of success. Also, no significant difference appeared in relation to the number of years experience with Extension. Agents who worked in counties whose population exceeded 90,000 people, however, were more likely to consider the packet as unsuccessful than were agents in less densely populated counties. Also, agents who worked in counties with a population

Table 9. Perceived Success of the News Packet in Serving its Primary Audience as Viewed by County Agents

Degree of Success	Number of Agents	Percent
Very successful	40	12.0
Somewhat successful	208	62.7
For the most part unsuccessful	42	12.7
Unsuccessful	3	0.9
I don't know	28	8.4
No answer	11	3.3

between 10,000 and 19,999 people rated the packet slightly more favorably than the other agents.

Quality of the News Packet in Regard to Eight Categories

The county extension agents were asked to rate the Agricultural and Home Economics News Packet in regard to eight factors: timeliness, originality of writing style, content accuracy, entertainment value, information value, format/design, overall readability, and overall quality of the packet. In each category, the agents were asked to indicate a number between 1 and 7 with 1 being "very poor," 4 being "average," and 7 being "excellent."

The news packet received the highest rating for content accuracy. Almost half of the agents (42.5 percent) gave it a rating of 6 in this category, 21 percent gave it a rating of 7, and 16 percent

gave it a rating of 5. Six agents rated it below average in this category, and 26 agents did not respond at all.

The news packet received the lowest rating for its entertainment value as 108 agents (32.5 percent) gave it a 4 in this category while 148 agents (44.6 percent) rated it as below average or poor in this area.

In the other categories, the ratings were for the most part between 4 and 6 on the scale (in other words, average to above average). Only in the category of "originality of writing style" did the ratings drop between 3 and 5. Table 10 indicates the mean rating in each category.

In general, the home economics agents tended to rate the news packet lower across each category when compared to the agents who worked in the agricultural area.

Importance of Regular News Stories for Promoting Extension Programs

As Table 11 indicates, 56 percent of the county agents consider news stories to be "extremely important" for promoting the overall image of Extension programs. Thirty-eight percent indicated that news stories were "somewhat important," and only two agents indicated that news stories were "somewhat useless" or "useless." Twelve agents reported that they "did not know."

Number of Hours Devoted to News Story Preparation

Another measure of importance assigned to news reporting might be the amount of time the agent devotes to the task. Table 12 shows that as a group the average time devoted is only zero to three hours

Table 10. Mean Rating for News Packet in Regard to Eight Categories on a Scale between 1 and 7

Category	Mean Rating
Timeliness	5
Originality of writing style	4
Content accuracy	6
Entertainment value	3.5
Information value	6
Format/design	4
Overall readability	5
Overall quality of packet	5.5

Table 11. Importance of Regular News Stories for Promoting Extension Programs as Perceived by County Agents

Importance	Number of Agents	Percent
Extremely important	186	56.0
Somewhat important	127	38.3
Somewhat useless	1	0.3
For the most part useless	1	0.3
I don't know	1	3.6
No answer	5	1.5

per week. Almost half reported zero to one hour of involvement, and 47.3 reported two to three hours of time spent per week. Ten agents reported four to six hours.

Table 12. Agents' Estimate of the Amount of Time Devoted to News Story Preparation

Hours Devoted	Number of Agents	Percent
0-1	162	48.8
2-3	157	47.3
4-6	10	3.0
More than 6	1	0.3
No answer	2	0.6

When these responses were cross-referenced with job descriptions, the data revealed that agriculture agents (both in youth and adult areas) tended to spend more hours preparing newspaper articles than did home economics agents (both in youth and adult areas). The responses also suggested that males tended to devote more time to news writing than did female agents.

Agents who had taken a course in journalism also tended to a slight degree to devote more hours to newspaper writing. Finally, those agents who considered themselves to be "about average" or "very good" writers tended to devote more time to newspaper writing than did the agents who considered themselves to be "poor" writers.

Although this suggests that agents spend a small percentage of their week in news story preparation, there appears to be a widely held opinion on the part of the agents that they should spend more time in this activity. Table 13 indicates that half of the agents responding rated the time they devote to newspaper reporting as "too little." On the other hand, 35 percent of the agents rated the time spent as "about right." Five percent indicated that they did not do any newspaper reporting, and 2 percent indicated that the time they spent was "too much."

Table 13. Agents' Evaluation of the Amount of Time They Devote to News Story Preparation

Amount of Time Devoted	Number of Agents	Percent
I don't do any	18	5.4
Too much	7	2.1
About right	117	35.2
Too little	169	50.9
I don't know	15	4.5
No answer	6	1.8

Cross tabulations revealed that youth agents (both in home economics and agriculture) most often viewed the time they spent as "too little" as compared to the agents working in the adult areas. Also, those agents who viewed their writing skills as "poor" tended

more often than the other agents to view the time they spend as "too little."

Agents were also asked to indicate why this particular amount of time was indeed the case. Twenty-five percent of the agents did not respond to this question, but of those who did respond, the overwhelming consensus was that time constraints and other responsibilities did not allow for more time in news writing.

Effectiveness of Various Channels in Reaching Local Clientele

As a great number of county agents suggested, the local agent is a generalist who in the course of a work day must handle a wide variety of responsibilities. This, of course, limits the time that can be devoted to news story preparation. Other factors, however, may also discourage media use by the agent. One factor may be the agent's perception of the actual effectiveness of the newspaper medium, particularly in comparison with other available channels.

For this reason, the county agents were asked to rank six different channels in the order of effectiveness in reaching the people in the local area. Over half of the agents indicated (Table 14) that personal contacts were most effective. Thirty-three percent of the respondents (Table 15) indicated meetings as the second most effective channel. More agents (35 percent) chose radio as the least effective medium than any other channel (Table 16).

Newspapers (as well as Extension publications and newsletters) received a mixed evaluation. Thirteen percent of the agents ranked these as most important, 12 percent ranked them second in importance,

Table 14. Agents' Perceptions as to the Most Effective Channel for Reaching the People in Their Local Area

Channel	Number of Agents	Percent
Extension publications	12	3.6
Newspaper articles	46	13.9
Meetings	33	9.9
Newsletters	38	11.4
Radio	14	4.2
Personal contacts	180	54.2
No answer	9	2.7

Table 15. Agents' Perceptions as to the Second Most Effective Channel for Reaching the People in Their Local Area

Channel	Number of Agents	Percent
Extension publications	41	12.3
Newspaper articles	41	12.3
Meetings	110	33.1
Newsletters	50	15.1
Radio	32	9.6
Personal contacts	41	12.3
No answer	12	3.6
Other	5	1.5

Table 16. Agents' Perceptions as to the Least Effective Channel for Reaching the People in Their Local Area

Channel	Number of Agents	Percent
Extension publications	63	19.0
Newspaper articles	29	8.7
Meetings	32	9.6
Newsletters	35	10.5
Radio	117	35.2
Personal contacts	22	6.6
No answer	2	9.6
Other	32	0.6

16.6 percent ranked them third, 22.3 percent ranked them fourth, 19.9 percent ranked them fifth, and 8.7 percent ranked them as the least effective medium. Overall, this may indicate a rather low, or at best ambivalent, attitude toward the effectiveness of newspapers in comparison to the other available channels.

The data suggest that county agents consider mass media in general to be less effective than one-to-one communications. To analyze more specifically the effectiveness of personal advice and information, county agents were asked to rank the relative effectiveness of various businesses or groups who offered advice to farmers and homemakers. As Table 17 reveals, most county agents ranked themselves as the most important information sources in their areas as compared

Table 17. Most Important Source of Personal Advice

Source	Number of Agents	Percent
Commercial farm, garden, and home product dealers	18	5.4
Farm Bureau	0	0.0
Tennessee Farmers Cooperative	24	7.2
Extension agents	207	62.3
Friends and relatives	69	20.8
Other	1	3.9
No answer	13	0.3

to the other choices, although 20 percent ranked friends and relatives as the most important source of information.

Table 18 indicates that the Tennessee Farmers Cooperative was ranked by the greatest percentage of agents as the second most important local source of information. Although the agents were mostly split in their choices of the third and fourth most important sources, Table 19 indicates that almost one out of every two agents considered the Farm Bureau to be the least important source. Interestingly, three respondents ranked Extension agents as the least effective source.

Agents' Perceptions as to Their Own Writing Skills

Their writing abilities, as perceived by the agents themselves, may also be a factor that influences the amount of time devoted to

Table 18. Second Most Important Source for Personal Advice

Source	Number of Agents	Percent
Commercial farm, garden, and home product dealers	67	20.2
Farm Bureau	14	4.2
Tennessee Farmers Cooperative	107	32.2
Extension agents	70	21.1
Friends and relatives	51	15.4
Other	3	0.9
No answer	20	6.0

Table 19. Least Important Source for Personal Advice

Source	Number of Agents	Percent
Commercial farm, garden, and home product dealers	42	12.7
Farm Bureau	163	49.1
Tennessee Farmers Cooperative	27	8.1
Extension agents	3	.9
Friends and relatives	40	12.0
Other	2	0.6
No answer	55	16.6

news writing. Furthermore, this factor may influence the perceived effectiveness of the newspaper medium in general.

For this reason, county agents were asked to rate their own newspaper writing skills as "excellent for the most part," "very good," "about average," or "poor." As Table 20 indicates, the greatest percentage of agents, almost 70 percent, rated their skills as "about average," with only 20 agents rating their skills as "poor" and only 17 percent rating their skills as "very good." Nine agents rated their skills as "excellent."

Table 20. Perceptions of County Agents as to Their Own Writing Skills

Level of Skill	Number of Agents	Percent
Excellent for the most part	9	2.7
Very good	56	16.9
About average	232	69.9
Poor	20	6.0
Didn't know	10	3.0
No answer	5	1.5

Home economics agents (both 4-H and adult) tended to rate themselves as "very good" more often than agricultural agents. Also, agents with master's degrees tended to rate themselves as better skilled than did agents who only had bachelor's degrees. There was

no significant difference in the answers between those who had taken a journalism course and those who had not.

Perceived Effectiveness of Various Types of Newspaper Stories

In addition to asking agents to rank different channels in regard to their effectiveness, agents were also asked to focus on the newspaper medium and rank specific types of stories. When this study was conducted, the Agricultural and Home Economics News Packet provided straight informational stories and stories announcing events and activities almost exclusively. In the questionnaire, agents were asked to rank these two types of stories, as well as feature stories and stories with accompanying photographs, in the order of their effectiveness in presenting Extension information to their local audiences.

The data showed that most agents considered stories with accompanying photographs as most effective. Stories promoting events and activities and feature stories almost tied for second, and straight informational stories were considered (for the largest percentage of agents) as least effective. Tables 21 through 24 indicate the relative percentages for the four types of stories.

Importance of Various Services Provided by the State Communication Section

The state communications section serves county agents in a variety of ways, several of which relate to print media activities. Agents were asked to rank several of these activities in the order

Table 21. Most Effective Newspaper Story as Perceived by Agents

Type of Story	Number of Agents	Percent
Feature story	57	17.2
Straight informational story	39	11.7
Story with accompanying photograph	188	56.6
Story promoting event or activity	37	11.1
Other	2	2.7
No answer	9	0.6

Table 22. Second Most Effective Newspaper Story as Perceived by Agents

Type of Story	Number of Agents	Percent
Feature story	96	28.9
Straight informational story	44	13.3
Story with accompanying photograph	71	21.4
Story promoting event or activity	106	31.9
Other	2	0.6
No answer	13	3.9

Table 23. Third Most Effective Newspaper Story as Perceived by Agents

Type of Story	Number of Agents	Percent
Feature story	104	31.3
Straight informational story	77	23.2
Story with accompanying photograph	41	12.3
Story promoting event or activity	92	27.7
No answer	18	5.4

Table 24. Least Effective Newspaper Story as Perceived by Agents

Type of Story	Number of Agents	Percent
Feature story	57	17.2
Straight informational story	152	45.8
Story with accompanying photograph	16	4.8
Story promoting event or activity	80	24.1
Other	2	0.6
No answer	25	7.5

of their importance. Presumably, this information would reflect the expectations of county agents in regard to future services.

The data revealed that more than 65 percent of the agents considered it most important to supply agents directly with news material. Although the rankings were greatly split among the other roles and activities, maintaining in-house information activities tended to be ranked as least important. Also, promoting events and releasing news articles to newspapers statewide seemed to be ranked as more important than providing training for the county staff.

Again, the data seem to suggest that agents, for whatever the reason, would rather not spend their time in news writing but would prefer that professional communicators handle the news writing chores. On the other hand, when agents were asked specifically to indicate the value they attributed to training sessions related to writing skills, more than half of the agents indicated that they would consider a training session in writing to be somewhat valuable. As Table 25 indicates, 18 percent of the agents indicated that a training session would be extremely valuable, and only 16 percent indicated such a session would probably have minimal value. Three percent of the respondents said it would be a waste of time.

Cross-tabulations revealed that agents who considered themselves as the most skilled also considered training sessions as having the least value. Likewise, those agents who considered themselves least skilled valued training sessions the most.

Agents were also asked if they would in fact attend a non-required training session if one were held in their area. Seventy-two

Table 25. Value Agents Place on Training Sessions

Degree of Value	Number of Agents	Percent
Extremely valuable	60	18.1
Somewhat valuable	176	53.0
Didn't know	29	8.7
Would probably have minimal value	53	16.0
Would be a waste of time	11	3.3
No answer	3	0.9

percent of the respondents indicated that they would attend such a session. Twenty-three percent indicated that they would not. Whether they had taken a journalism course before or not did not seem to affect this response significantly. Those who rated themselves as skilled writers, however, tended to indicate more than non-skilled writers that they would not attend a training session.

News Packet: Strengths, Weaknesses and Suggested Improvements

The most interesting results derived from the questionnaire emerged from the open-ended questions. Particularly interesting and enlightening were the answers to the three questions regarding strengths, weaknesses, and suggested improvements. Appendix III, although not a complete list, reflects the great variety of responses.

For analytical purposes, the answers to the open-ended questions were classified into general categories (including a miscellaneous

category for unique responses). First, in regard to strengths associated with the packet, agents most frequently mentioned the information value and the timeliness of the articles. The comments suggested that agents keep up-to-date on research topics, current problems, and timely topics through the weekly articles provided in the news packet. Specifically, some agents mentioned that since the packet is readily available and frequently published, it saves them time when they have to research answers to problems. Some agents also appreciated the variety of subject matter covered as well as the condensed presentation of these subjects. Other agents reflected that many times the news packet provided the ideas and resource materials for their newspaper columns and radio shows. These suggested benefits or strengths seem to confirm the finding already mentioned as to agents' use for the packet and their perceptions as to its value and quality.

The other side of the story--regarding weaknesses--was equally revealing. The most frequently mentioned weakness suggested a lack of home economics subject matter. In fact, one out of every four agents surveyed mentioned this deficiency. Many agents also criticized the absence of 4-H information.

Other frequently recurring answers included the following:

1. Articles are reprinted year after year with little or no updating or other revisions.
2. Many times the material is outdated by the time agents receive the news packet (event information, for example).

3. The writing style does not vary.
4. Many articles are not appropriate to local audiences.
5. The variety of subject matter is limited.
6. The information covered is at times far behind other periodicals.

Perhaps most informative and indicative of the agents' opinions was the open-ended question which asked for recommendations on ways to improve the packet. Again, the most frequently mentioned suggestion was that more home economics material should be included in the packet.

More surprisingly, however, was the frequent suggestion that the news packet be sent directly to the county agents rather than to the editors. Specifically, several agents explained that they wanted to be able to choose which articles the editors received. Others said they wanted to be able to localize the articles before they were sent to editors. A few explained that sometimes they wanted to use the information in their own columns but could not do so for fear the local editor had chosen to use that information.

Another related suggestion, also frequently mentioned, was that the articles should not include references to or quotes from subject matter specialists. Some of these agents said that they wanted to increase local agent credibility by making themselves the source of the information. Others seemed to suggest that in the past it had been an unnecessary bother to have had to retype and adjust a whole article because of the specialists' quotes that were included.

Other suggested improvements that were frequently mentioned included the following:

1. More 4-H news should be included.
2. The news packet should be divided into sections according to subject matter.
3. A table of contents should be added.
4. A yearly or quarterly index should be compiled.
5. Articles should be revised if they must be reprinted from a previous year.
7. The information should be published well in advance of the time when it would be needed by the local farmer, homemaker, agent, etc.
8. At least one article in each subject matter area within home economics or agriculture should be published each week.

Desired Frequency of Publication

The data revealed overwhelmingly that the county agents prefer the news packet to be released once a week. Only 13.3 percent indicated a bi-weekly preference, and only 5.1 percent indicated a monthly preference. This preference for weekly publication was strong across each job description with only a slightly lower preference among the youth/home economics agents, a quarter of whom preferred bi-weekly publication.

Desired Number of Articles Per Packet

Sixty percent of the respondents indicated that the current number of articles was adequate in order to meet the local needs in their subject matter area. A third of the agents, however, indicated

that they preferred a greater number of articles per packet. Only 3 percent suggested a fewer number of articles was optimum.

Adult/agriculture and youth/agriculture agents indicated the strongest satisfaction with the current number of articles per packet. In those two job areas, almost three out of every four agents indicated that the current number was adequate. By comparison, only about half of the adult/home economics and youth/home economics agents were satisfied. The other half indicated a preference for a greater number of articles.

General Discussion of Findings

In general, the data suggested that the Agricultural and Home Economics News Packet serves county agents in a variety of ways and possibly to a greater extent than it serves newspaper editors. The packet's greatest strengths seemed to be its constant, frequent publication, its informative value, and its varied content. Its greatest weaknesses, according to the agents, were its lack of home economics information and its tendency to repeat articles from year to year. Also, articles in the packet were sometimes released with too little lead time for agents' use.

The agents' evaluation also revealed that agents did not consider the newspaper outlet to be extremely important compared to other available channels. Agents also did not consider themselves to be highly skilled at newspaper reporting, and they did not devote a lot of time to it. Apparently, agents would prefer that subject

matter specialists or communications specialists provide the news material for their local stories.

Generally, agents thought the packet should serve the general public rather than the more specialized rural or suburban family or the large scale commercial farmer. Also, agents, for the most part, considered the packet somewhat successful in serving the general public.

The data also suggested that there is a serious discrepancy between the purpose of the Agricultural and Home Economics News Packet as it was originally designed and its purpose as perceived by county agents. Initially, the packet was designed to provide the general public with general information about which the county agent had more information and more specific resource materials. Agents, however, seemed to perceive that the news packet should serve their own informational and resource needs. The data suggested that the possible reasons for this discrepancy are many.

Traditionally, county agents are expected to use the available mass media channels in their area; however, as the data revealed, most agents have had no training in communications skills. On the other hand, the data also suggested that, even with more training, other factors (such as time constraints, lack of newspaper space, higher priorities, etc.) would discourage greater attention to mass media channels. In other words, training could possibly improve the quality of the agents' efforts at news writing, but it would not necessarily affect the amount of time devoted to it.

On the other hand, the Agricultural and Home Economics News Packet was viewed by agents as an answer to their ever-present mass media responsibilities. The data suggested that agents need easy access to frequently released information that is appropriate and easily developed for newspaper, newsletter, and radio releases. The Agricultural and Home Economics News Packet fits that description even though it was not originally designed to meet that need.

The agents' suggested praise, criticisms, and improvements for the packet confirmed this idea. For example, some agents wanted specialists' names and quotes to be deleted so that the agents' names could be easily inserted; some praised the readily available information afforded to agents; some criticized the fact that editors were allowed to receive the news packet directly; and others criticized the fact that they received the packet too late for some of its articles to be timely.

A Discussion of Communications Specialists' Predictions

The purpose of this study was to determine county agents' perceptions of the news activities of the Agricultural Extension Service. Merely as an addendum to this study, two communications specialists in the state communications section were asked to predict the results so that, at the conclusion of the study, a comparison could be made.

Professor George Mays, a 20-year member of the state communications staff, was assigned to print media activities when this study was first conceived. Also, it was his evaluation of the news

clippings from the Agricultural and Home Economics News Packet that first suggested a problem to the researcher. When Professor Mays' predictions were compared to the actual agents' perceptions, the following predictions were confirmed:

1. The news packet is primarily used as reference material.
2. The primary function of the news packet is "to provide agricultural and home economics information to the general public."
3. The news packet rates highest on content accuracy and timeliness and rates lowest on entertainment value.
4. The packet's strength is that "most releases give details for specific Extension recommendations."
5. The packet's weakness is that there is a "lack of audience interest and a lack of localization and personalization."
6. Regular news stories are "extremely important" for promoting the overall image of Extension programs.
7. The amount of time agents devote to news story preparation is "about right."
8. Agents rate their own newspaper writing skills as "about average."
9. Stories with accompanying photographs are the most effective type of news story for presenting Extension information, and straight informational stories are least effective.
10. Agents would attend a voluntary training session.

On the other hand, Mays was incorrect with these predictions:

1. Local editors use 3-5 articles from the packet per week.
2. Agents perceive the news packet to be for "the most part unsuccessful" in serving its primary audience.
3. The news packet rates below average in information value, and the originality of information is average.
4. The packet should be released once every two weeks.
5. The packet should include a smaller number of articles.
6. A major improvement for the packet would be to include "more people-related stories" and "more releases that relate to current statewide news interests."
7. Personal contacts and meetings are considered somewhat ineffective in reaching local clientele as compared to other information channels.
8. Newspaper articles and radio are considered the most effective information channels.
9. The most important activity of the state communication section is "to provide training for county staff in news writing," and the least important activity is "to supply agents with news material."
10. A training session would be "extremely valuable" to agents.

Mays' most significant misperceptions involved the rated effectiveness of various media channels and the least and most important roles of the state communications section in regard to print media services. In these areas, Mays' predictions were exactly opposite of the agents' actual perceptions. Mays indicated that

personal contacts and meetings would be least significant compared to newspaper articles and radio when in fact the exact opposite was true. Also, Mays predicted that training would be the most important state communications role and supplying news materials to agents would be perceived as least important. Again, the exact opposite was true.

When the results of this study were being analyzed (Fall 1984), Charles Walker was the newly-employed communications specialist in charge of news services. He was also asked to predict the agents' perceptions.

A comparison of his prediction with the actual results of the study revealed that Walker was correct in all of his predictions except for the following incorrect predictions:

1. The primary function of the news packet is to "provide agricultural and home economics information to the rural farmer, homemaker and youth."
2. Radio and newspaper articles are the most effective channels available to agents.
3. Personal contacts are insignificant compared to other available channels.
4. Friends and relatives are the most important sources of personal information for the farmer and homemaker, and commercial farm, garden and home product dealers are the least important sources.

Walker's misperceptions centered mainly on the relative importance of Extension's audiences and the relative importance of

Extension's available mass media and personal channels. Walker was basically on target, however, in his predictions of agents' use for the news packet and agents' estimation of their own abilities and success in using mass media channels.

CHAPTER VI

RECOMMENDATIONS

Although this study is designed to serve as a model for evaluating news services in general, its specific focus is on the news services of the Agricultural Extension Service. More specifically, its primary objective has been to determine county agents' perceptions regarding their use and evaluation of the Agricultural and Home Economics News Packet. As such, this study is practical in nature, and its ultimate usefulness is that it can be used to revise present services and plan future services in view of agents' complaints, suggestions, and needs.

On the other hand, this study is but a first step in analyzing the effectiveness of the Extension news services in general as well as the news packet specifically. More comprehensive studies should be planned, and evaluation should become a continuing process. Below are some recommendations based on the information gathered from the agents and also some recommendations for additional research.

1. The data from this study show that, although the agents are required to do news writing, most agents find themselves with few skills and less time to meet that challenge. As such, these results build a substantial argument that more help and guidance are needed for the agents faced with a weekly mass media challenge. Although the news packet, as it is now designed, is indeed useful to the agents, it does not specifically address agents'

needs for information and ideas appropriate to their local area. For this reason, a separate publication should be designed specifically for the county agent. It should provide timely information from subject matter specialists in both home economics and agriculture, but more important, it should become a teaching tool by which the agents could improve their writing skills, knowledge of the media, and ability to interact with local media representatives.

More specifically, this publication for county agents should:

- a. suggest ways to promote the news material among editors;
- b. give appropriate release dates for each article;
- c. explain possible ways that the material could be localized,
and
- d. suggest the possible news outlets for the material.

The agent-oriented news packet could also provide radio scripts as well as lists of new Extension publications, new audio-visual materials, or other available, timely reference materials. It could provide examples of promotional news releases for local events, and it could offer a "Tip of the Week" on news writing. It could also be used to publish examples of well-written local stories or agents' columns. Finally, it could remind agents of coming events or activities, and it could suggest lead times and possible media promotions that are needed.

In addition to its obvious informational and educational value, such a publication would also promote media use by county agents, and it would promote good employee relations between the state and local staffs. It would also provide material when time is limited,

and it would promote quality work because it would promote the perception that help is available and improvement is within their own abilities. Because of its multi-media scope, it would also be useful and cost-efficient for each of the communications specialists in all media areas. Because it would be sent directly to agents, it could also become an instrument for on-going communication evaluation.

2. With regard to its currently targeted audience--the newspaper reader by way of the local editor, the Agricultural and Home Economics News Packet should undergo more extensive evaluation in regard to its readability, format, appropriateness, information value, and usefulness among all of its various users. Separate research projects, therefore, are needed.

The agents have suggested and the clipping analysis confirmed that, although it receives some use, it probably could be better designed to appeal to Tennessee's newspaper readers. Hence, readership surveys are needed.

Also, since editors are the gatekeepers who serve the readers, an evaluation by newspaper editors who receive the packet is also needed. This type of evaluation could be done through a mailed questionnaire or through focus groups.

Based on this initial evaluation of agents' perceptions and use, however, the following improvements could be made:

- a. Include a greater number of home economics articles each week.
- b. Revise or rewrite articles that need to be dealt with annually.

- c. Divide the articles into sections according to subject matter.
- d. Include more articles based on current research.
- e. Deal with a greater variety of timely farm and homemaker topics.
- f. Include more 4-H information, particularly more project information.
- g. Vary the style of presentation. For example, include stories with a question and answer format or a topic of the week or an occasional feature story.
- h. Publish the information well in advance of the time that it would be needed by the local homemaker, farmer, 4-H'er, etc. (for example, event promotions, seasonal crop methods, seasonal homeowner problems, etc.).

3. The format of the Agricultural and Home Economics News Packet should also be changed. As one agent pointed out, the packet is currently typeset with 10-pica column widths, yet the standard column width for Tennessee newspapers is 13 picas. If the articles are to continue to be typeset, they should conform to this standard column size. A separate study, however, is needed to confirm or deny the need for typesetting. A standard, typewritten news release might have the same or better publication rate among newspaper editors, and it would be less expensive.

4. Extension print media specialists should also regularly poll Extension agents to determine specific informational needs.

This could possibly involve an annual survey or other appropriate instrument for gathering information from a local area or district geographical area.

5. Other research should include:
 - a. a cost/utility study through which the actual line-item costs of the news packet are judged in relation to the actual usefulness of the packet, and
 - b. an extensive statistical analysis of the data obtained from this study in order to analyze statistical differences between the different groups and specific needs for the different groups.

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APPENDIXES

APPENDIX I

Agricultural Extension Service
University of Tennessee Institute of Agriculture

P. O. Box 1071
Knoxville, Tennessee 37901-1071

M E M O R A N D U M

DATE: April 30, 1984

TO:

FROM: George C. Mays *GCMays*
Professor - Communications

RE: Newspaper Usage Survey

We have completed an intensive survey of the use of news articles submitted to Tennessee's 157 newspapers in the weekly "Agricultural and Home Economics News" packet during the first three months of 1984.

Clippings provided by the Tennessee Press Association were used to determine the number of newspapers printing each news article as submitted in the packet or with minor editorial changes made by the local newspaper editor. These figures reflect printings in the 157 newspapers with attribution to the specialist submitting the news article. They are reported in columns 3 and 4 on the attached summary sheet.

We also measured usage by County Extension Agents of information contained in the news articles you submitted. These figures, reported in columns 5 and 6 on the summary sheet, indicate the use of all or part of the release in a news story, feature story, or personal columns printed in a Tennessee Newspaper and attributed to a County Extension Agent during the week the news article was marked for release and for a two week period following the release time.

Usage figures are provided for each news release you submitted. (Information for the entire section is provided for section leaders.) You may want to compare your usage figures with the average for the release date and the three month period.

The summary figures show that Tennessee newspapers are making very little use of the news articles submitted in the weekly "Agricultural and Home Economics News" packet. Usage has been declining for the past 10-12 years and has been at a very low level for 1983 and 1984.

That's the bad news! Now let's look at the more positive survey results.

Fourteen daily newspapers and 71 weekly newspapers printed at least one news article from our packet during the three month period. That indicates that at least 54 percent of the state's newspapers editors are still "shopping" in our news packet but are often not finding the items (news releases) that they want to print for their readers. We want to improve these figures!

The Agricultural Extension Service offers its programs to all eligible persons regardless of race, color, national origin, sex, or handicap and is an Equal Opportunity Employer.

THE UNIVERSITY OF TENNESSEE. THE U.S. DEPARTMENT OF AGRICULTURE AND COUNTY GOVERNMENTS COOPERATING

Newspaper Usage Survey
Page 2

I feel confident that subject matter specialists and communications specialists working together as a team can provide Tennessee newspaper editors with information that they will use to strengthen Extension's educational programs and make more people aware of the impact of the Agricultural Extension Service. We want to help you package the information to make it more attractive to newspapers editors and their readers.

First, we need to concentrate on quality rather than quantity. Note in the examples of news releases used most frequently that the maximum length was 7 column inches and the item used most was only 3 column inches in length.

Each of these news stories was built around one single statistic or one research finding. Each contained useful information that should interest a wide variety of readers. The content was well organized with generally short sentences, short paragraphs and easily understood terms. The writing style was direct, crisp and lively. There were adequate facts to substantiate the recommendations. Attribution clearly identified the specialist and the Agricultural Extension Services as the authority.

We, in the Communications Section, want to help you do a better job of marketing the information that you write. This will involve using other outlets for some of the information now being submitted as news releases. For many of you, it will require giving a little more time and attention to the content and writing style of news releases submitted for use in newspapers.

We feel that the benefits will be well worth the extra effort and hope that you will join us in a campaign to increase newspaper usage of Extension Service information.

GCM/jet

SUMMARY SHEET NEWSPAPER USAGE SURVEY January - March 1984 "Agricultural and Home Economics News"						
(Column 1) NEWS PACKET RELEASE DATE	(Column 2) NO. OF RELEASES IN PACKET	(Column 3) TOTAL PRINTING ATTRIBUTED TO SPECIALISTS	(Column 4) AVERAGE USE PER RELEASE	(Column 5) TOTAL PRINTING ATTRIBUTED TO COUNTY EXT. AGENTS	(Column 6) AVERAGE USE PER RELEASE	(Column 7) TOTAL AVERAGE USE WITH SPECIALIST ATTRIBUTION AND AGENT'S COLUMNS

Jan. 2, 1984	4	5	1.25	10	2.5	3.75
Jan. 8, 1984	7	31	4.42	12	1.7	6.1
Jan. 15, 1984	9	11	1.2	18	2.0	3.2
Jan. 22, 1984	11	18	1.6	18	1.6	3.2
Jan. 29, 1984	6	26	4.3	26	4.3	8.6
JAN. TOTALS	37	91	2.45	84	2.3	4.72

Feb. 5, 1984	6	34	5.6	38	6.3	12.0
Feb. 12, 1984	8	37	4.6	14	1.75	6.4
Feb. 19, 1984	13	25	1.92	16	1.2	3.2
Feb. 26, 1984	13	14	1.1	28	2.1	3.2
FEB. TOTALS	40	110	2.75	96	2.4	5.15

Mar. 5, 1984	10	10	1	12	1.2	2.2
Mar. 12, 1984	17	17	1	18	1.05	2.05
Mar. 19, 1984	16	19	1.18	29	1.81	1.81
Mar. 25, 1984	8	25	3.1	6	.75	3.8
MAR. TOTALS	51	65	1.3	65	1.3	2.6

FIRST QUARTER 1984	128	266	2.0	245	1.9	3.9
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NEWS RELEASES USED MOST
BY NEWSPAPERS
JANUARY - MARCH 1984

$\frac{15}{2}$
**CHECKING TIRE
PRESSURE**

Checking tire pressure before the temperature drops below freezing can save motorists the trouble of changing a flat tire.

According to Tim Prather, Agricultural Extension Service engineer, when a person attempts to check tire inflation during sub-freezing conditions, frozen moisture inside the tire may hold the valve open and allow the air to escape.

Persons who must check tires during extremely cold weather and who encounter this problem should be able to cure a frozen valve core by pouring warm water over the valve system.

...

$\frac{14}{4}$
**1984 FARM OUTLOOK
IS HOPEFUL**

Economic recovery in the livestock industry is one of the most positive factors apparent now as the Tennessee farmer looks toward economic improvements in 1984, according to University of Tennessee agricultural economists.

In 1983, feed costs for livestock producers increased as weather scares pushed crop prices higher. Cash prices have declined following harvest, but still remain well above early 1983 levels.

Prices for Choice slaughter cattle turned up sharply to exceed \$70 per hundredweight in mid January. They are predicted to hold at least in the mid \$60s through June.

"Feeder cattle prices should hold steady through April, then weaken some into summer," explained Emmitt Rawls, livestock marketing economist.

Looking to 1984 crop production, Charles Farmer, Agricultural Extension Service economist, predicted crop plantings substantially larger than 1984. He cited changes in government programs as the major factor influencing these increases.

Crop prices during the first half of 1984 will likely be higher than 1983. After mid year, prices will reflect prospects for the 1984 crop, Farmer said.

Although the agricultural industry in general looks toward some improvement in 1984, many individual producers will face a difficult financial situation.

...

$\frac{13}{4}$
**FERTILIZE FESCUE
PASTURES NOW FOR
EARLY GROWTH**

Many Tennessee farmers need early pasture growth, and it is essential to fertilize pastures now to produce this early growth, according to Joe D. Burns, University of Tennessee Extension forage specialist.

Cold winter weather prevents fescue from growing normally. Fertilizing the fescue now will produce earlier growth — more than any other permanent, cool-season pasture plants.

Pastures with well-drained soils and south and west facing slopes produce earlier growth. There is also less chance for nitrogen loss on well-drained soils as compared to waterlogged soils with poor drainage.

Use soil test recommendations for applying lime and fertilizer. If a soil test report isn't available, apply 30 pounds of nitrogen to fescue pasture.

For phosphate, potash and lime, take a soil test and apply the nutrients as soon as possible. Carefully follow the soil test recommendations. Nitrogen alone won't produce the most economical forage yield when phosphate, potash and lime levels in the soil are low.

...

$\frac{12}{1}$
**ROTATE OTHER
FARM CROPS
WITH ALFALFA**

For the best yields and the longer lasting stands, rotate alfalfa with other crops, especially corn and small grains.

Now that Tennessee's alfalfa acreage is increasing, some farmers are reseeded alfalfa in the same fields after old stands have died, reports University of Tennessee Forage Specialist Joe Burns.

Some recent research from Virginia shows that stands seeded after alfalfa lasted about one-half as long as stands seeded on land that hadn't grown alfalfa recently.

"Although the reasons aren't fully understood yet, diseases are probably one of the main causes of stand loss," the Agricultural Extension Service specialist said.

By rotating to corn following alfalfa, the build up of nitrogen in the soil can be used by the corn, which leads to higher corn yields.

Also, higher alfalfa yields are made following corn compared to reseeded in an old alfalfa field.

New research in Tennessee is being conducted to try to determine why the stands die early and what to do to prevent stand loss.

...

NEWS RELEASES USED MOST
BY EXTENSION AGENTS
JANUARY - MARCH 1984

FARMERS NEED GOOD RECORDS

6/10

For tax purposes, for credit purposes, for decision-making purposes in general, record-keeping is essential to the farmer.

"A farm manager needs financial records such as income and expense, depreciation and inventories," advised Alvin Wade, Agricultural Extension Service economist.

"Non-financial records such as livestock and crop production, livestock health, breeding and feeding records are also necessary for good decision-making," he added.

Specifically, records are required for both state and federal income tax purposes.

Farmers who are seeking credit can use records to (1) determine if their businesses can justify the cost of the credit, including the periodical repayments, and (2) substantiate their claims.

Records also furnish the information for:

- Farm business analysis — where the past performance of a farm business is evaluated.
- Linear programming — where the results of alternative decisions affecting the whole business are analyzed.
- Partial budgeting — where the effects of a single change can be estimated.

...

WATCH FOR LICE ON CATTLE

2/10

Lice begin increasing in the fall and reach peak population during the winter and early spring; therefore, cattlemen may be seeing a problem, reported Gene Burgess, University of Tennessee entomologist.

Producers that used a septic insecticide before November for grub control have probably kept lice under control to this point. "However, lice numbers are likely to be building on cattle," Burgess warned.

Producers not treating for cattle grubs in the fall will likely find heavy populations of lice at this time.

Cattlemen should not wait to treat for lice until they see cattle rubbing patches of hair off on fence posts or other objects, but should periodically check for this pest.

Lice are found on the neck, brisket, inner surface of the thighs and on the head around the nose, eyes and ears.

Several insecticides are available for lice control. Methods of application consist of backrubs, pour-ons, spot-ons and sprays.

In order to avoid stress from spraying, one of the other methods of application should be chosen. Also, if grubs were not controlled in the fall, a nonseptic insecticide should be used.

"Since lice are one of the most important external parasites of cattle, control measures should be utilized," emphasized the Agricultural Extension Service specialist.

...

FUNGUS FOUND IN FESCUE

1/9

Problems with fescue-fed cattle, horses and sheep may be linked to a fungus that University of Tennessee researchers have recently discovered growing in fescue plants.

The fungus (*Acremonium coenophialum*) lives inside the plant or seed but may also infect hay and other seeds, reported Joe Burns, plant scientist with the Agricultural Extension Service.

"You can't see it, and it doesn't seem to hurt the plant or seed," Burns said. "The best way to find out if the fescue on your farm has the fungus is to take samples of the fescue and have it tested."

One of the best ways to improve the quality of fescue pastures is to renovate by putting clovers back in fescue pastures.

The addition of clover helps the quality regardless of whether the fescue is infected. If the fungus is present, however, it helps to dilute the effects.

Research and farmer experience have shown that killing about one-half of the fescue in a field and planting clover has increased forage quality.

Find out about sampling methods and costs, and get the latest renovation information at your county Extension office.

...

VEGETABLES FOR BETTER LIVING

6/8

The crops may become short and the prices may go up, but for good health, vegetables are a dietary must.

The U.S. Dietary Goals state that 55-60 percent of total food intake should consist of carbohydrates. "Since vegetables consist mostly of water and starch," said Mary Ann Haubenreich, University of Tennessee nutritionist, "vegetables give us a three-for-one deal."

Vegetables can supply carbohydrates as well as the recommended allowances of vitamins A and C and potassium.

To know what vegetables provide which nutrients, Haubenreich explained that color is a good sign.

Dark green leafy and deep yellow or orange vegetables are higher in vitamin A than other vegetables. The dark green leafy vegetables are also high in iron content, as are legumes.

Legumes, such as dried beans, peas and soybeans, have fair amounts of protein and B vitamins as well.

Vegetables, as well as citrus fruits, are also high in vitamin C. Good sources are broccoli, green leafy vegetables, cabbage and green pepper. Potatoes are a fair source of this vitamin.

The Extension specialist warned, however, that "proper food storage, preparation and cooking methods are vital for conservation of vitamin C. Raw vegetables lose their vitamins through processing."

To conserve vitamin C, purchase fresh vegetables as close to serving day as possible, store at proper temperature, serve raw and unpared when possible, or cook in a small amount of water until tender crisp.

Use a lid in cooling all vegetables except strong flavored ones.

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Production Schedule and Guidelines For Submitting News
Articles For Agricultural and Home Economics News Packet

PURPOSE OF WEEKLY NEWS PACKETS

1. The "Agricultural and Home Economics News" (weekly news packet) is prepared for Tennessee's 157 newspapers. Its major purpose is to provide these newspapers with timely information related to Extension's educational programs that will interest the newspaper readers.
2. Copies of the weekly news packet are distributed to all Extension employees (county personnel, specialists, administrators) to inform them of information that has been released to the news media by subject matter specialists. Some agents localize and personalize the information in the packet for their news stories or personal newspaper columns and radio programs.
3. Copies of the weekly news packet are also distributed to magazines, tabloids and other publications to provide news leads to these editors for potential future stories that they might request from subject matter specialists.
4. News articles submitted for the packet should be written for newspaper readers. In order to gain acceptance by newspaper editors, they must be written in "newspaper style" and contain information that the editor feels will be of interest to a relatively large number of readers. Declining percentages of readers actively involved in farming has influenced many editors to resist printing detailed production information, especially if it is written in the step by step procedure used for publications and fact sheets. However, most editors are eager to print farm production news releases that emphasize the impact that using the recommended practices will have on the area's economy, the environment, or providing better quality food and fiber for consumers.
5. The "Agriculture-Home Economics Briefs" is a vehicle for providing technical information to county personnel and supplying them with information for use with smaller client groups. Many sections provide newsletters and other direct mail items for these audiences.
6. Farm magazines and tabloids are often interested in more detailed production information. In many cases their editors contact communication specialists or news article authors to arrange phone interviews or request additional information relating to news packet releases. The weekly news packet is not designed to fill these request. Some specialists submit news and feature stories directly to these specialized publications. Others channel them through our office for editing.

RELEASE DATES AND PRODUCTION SCHEDULE

1. Each packet is designed for use by the newspaper during a one week period. Prepared packets are mailed on Wednesdays so that newspapers will have them for use in the first edition of the designated week. Many articles are used on Sunday or Monday morning.

-2-

2. Personnel in the Extension Communications Section edit news copy on Thursday and Friday ten days before the release date (Sunday). Typesetting is done on Friday afternoon and Monday morning. Proofreading and paste-up are usually completed by Tuesday noon.
3. You should arrange to submit news articles to the Communications Section ten days before the designated release date. In special instances, if we are notified on Thursday of plans to prepare a news article from information secured over the week-end we can hold space and accept the article hand carried to our office before 10:00 a.m. on Monday (six days before the release date).

MEASURING PRINTED LENGTH

1. Our survey indicated that length is a critical factor in newspaper acceptance.
2. A form for submitting news articles has been prepared. It is similar to the manuscript paper used for submitting publications but clearly indicates the intended use in order to avoid improper handling in our office.
3. The form is marked to indicate column inches. One page of double spaced copy with the designated margins will provide a one column release as they are printed in the weekly packet. If you prefer a longer news release, use manuscript paper for the second page.
4. Blocks are provided for the maximum characters used by standard newspapers for a one-column and two-column headline. If you prefer, we will write the headline.

APPENDIX II



Agricultural Extension Service
University of Tennessee Institute of Agriculture

P. O. Box 1071
Knoxville, Tennessee 37901-1071

June 1, 1984

TO: County Extension Agents
FROM: ^{CAR}Conrad Reinhardt, Professor & Leader
Extension Communications Section
RE: Print Media Evaluation

The State Communications Section is in the process of evaluating its current services in the print media area, and we need your help.

For many years the Communications Section has prepared news releases, held training sessions, published in-house information pieces, provided newspaper editors with Agricultural and Home Economics News, etc. Through this study, we would like you to evaluate the strengths and weaknesses of these services that we provide, particularly the Agricultural and Home Economics News Packet.

As County Agents, you are Extension's most vital--grass roots--educational link with the clients. We value your opinions. We want to serve you better. We want to help you to better serve and educate the public. Therefore, to survey your opinions, we have prepared the enclosed questionnaire. Consider the questions and mark down your answers. Please be honest and candid, and be sure to answer every question. Your responses will remain confidential.

Dr. Troy Hinton and the District and Associate District Supervisors have reviewed and supported this study, and they are convinced that your evaluation can help improve Extension communications. Ramona Sanders, a graduate student in journalism and a part-time employee in the Communications Section, is working on the study for her Master's thesis. When her analysis is completed in the fall, you will receive a summary of the findings.

Your completed questionnaire should be returned to George Mays, Extension Communications Section, P. O. Box 1071, Knoxville, TN 37901-1071, no later than June 22.

Again, you are playing a vital role in improving the overall effectiveness of Extension educational programs. Thank you for your help.

CAR:sti

The Agricultural Extension Service offers its programs to all eligible persons regardless of race, color, national origin, sex, or handicap and is an Equal Opportunity Employer

THE UNIVERSITY OF TENNESSEE, THE U.S. DEPARTMENT OF AGRICULTURE, AND COUNTY GOVERNMENTS COOPERATING

Questionnaire on Extension Communications

The state communications section of the Tennessee Agricultural Extension Service is in the process of evaluating its current news service. Ramona Sanders, a graduate student in communications, is conducting the evaluation, but to do so, she needs your assistance in completing the following questionnaire.

Please understand the purposes of this study are descriptive. Your answers will remain anonymous, and your views and opinions will in no way reflect on you personally. You are a powerful link in the Extension communications chain. The goal of this study is to provide information that will improve the news service you now receive.

So, please be candid and honest.

Also, please be sure you answer every item on the questionnaire. It should take no more than 20 minutes to complete. Each questionnaire is numbered in order to determine if the questionnaires have been returned by the agents and to facilitate follow-up mailings. Again, your responses will remain confidential.

Thank you for your help.

EVALUATION OF EXTENSION COMMUNICATIONS Questionnaire Page 1

Part I: Personal Data — Please respond to the following items by placing a check by the answer that applies to you.

1. Job Description: (indicate major area)
 - a. Home Economics — Adult ☐
 - b. Home Economics — 4-H ☐
 - c. Agriculture — Adult ☐
 - d. Agriculture — 4-H ☐
2. Age:
 - a. 18-25 ☐
 - b. 26-35 ☐
 - c. 36-45 ☐
 - d. 46-55 ☐
 - e. 56 or older ☐
3. Years worked with Extension Service:
 - a. 0-5 ☐
 - b. 6-10 ☐
 - c. 11-15 ☐
 - d. 16-20 ☐
 - e. 21-25 ☐
 - f. 26 or more ☐

Extension Communication Questionnaire Page 2

4. Sex: Male ☐ Female ☐
5. Educational Level:
 - a. Bachelor's degree ☐
 - b. University Graduate Work ☐
 - c. Master's degree ☐
 - d. Other (please explain) _____
6. Population of county where you work:
 - a. Under 10,000 ☐
 - b. 10,000 to 19,999 ☐
 - c. 20,000 to 49,999 ☐
 - d. 50,000 to 90,000 ☐
 - e. Over 90,000 ☐
7. Have you ever received credit for a university course in journalism? Yes ☐ No ☐
 - a. If so, how many credit hours? (Indicate semester or quarter) _____
 - b. If so, what type:
 - ☐ 1. news reporting
 - ☐ 2. feature writing
 - ☐ 3. editing
 - ☐ 4. magazine editing
 - ☐ 5. history/theory
 - ☐ 6. public relations
 - ☐ 7. other: (explain) _____

Part II. Evaluation of Agricultural and Home Economics News Packet

1. Do you receive a copy of the UT Agricultural and Home Economics News Packet regularly? Yes ☐ No ☐
2. Which of the following most accurately describes your primary use for the news packet? (Check more than one if they apply.)
 - ☐ a. I use it as a reference material.
 - ☐ b. I send it to local newspapers as part of my regular column.
 - ☐ c. I use it as a basis for developing my own original newspaper article.
 - ☐ d. I usually don't use it at all, but I file it.
 - ☐ e. I usually don't use it at all, so I discard it.
 - ☐ f. I develop radio scripts from the information.
 - ☐ g. I use it in other ways. (Explain.) _____

Extension Communication Questionnaire Page 3

3. The Agricultural and Home Economics News Packet is sent directly to newspapers from the state office. Approximately how many articles per week (in an average week) do local editors use from the packet? (Do not count articles that you submitted.)
☐ a. Most of the time none ☐ b. 1-2 ☐ c. 3-5 ☐ d. More than 5 ☐ e. I don't know
4. What do you see as the Agricultural and Home Economics News Packet's primary function? (Check one.)
☐ a. Provide agricultural and home economics information to the general public.
☐ b. Provide agricultural and home economics information to the rural farmer, homemaker and youth.
☐ c. Provide agricultural and home economics information for the suburban family.
☐ d. Provide technical information for large scale commercial farmers.
☐ e. Other: (Explain) _____

5. Based on your answer to question no. 4, how successful is the news packet in accomplishing this function?
☐ a. Very successful ☐ b. Somewhat successful
☐ c. For the most part unsuccessful ☐ d. Unsuccessful ☐ e. I don't know

Please explain why you feel this way.

6. Using the scale below, please rate the Agricultural and Home Economics News Packet in regard to the following factors.

1	2	3	4	5	6	7
Very Poor			Average			Excellent

- | | |
|-------|---------------------------------|
| _____ | a. Timeliness |
| _____ | b. Originality of writing style |
| _____ | c. Content accuracy |
| _____ | d. Entertainment value |
| _____ | e. Information value |
| _____ | f. Format/Design |
| _____ | g. Overall readability |
| _____ | h. Overall quality of packet |

(3)

Extension Communications Questionnaire Page 4

7. The Agricultural and Home Economics News Packet is currently released once a week. To meet your local needs, which of the following would be best in terms of frequency of publication?
☐ a. It would be better to release the packet once every two weeks.
☐ b. It would be better to release the packet once a month.
☐ c. The packet should continue to be released once a week.
8. To meet local needs in your subject matter area, which of the following would be best in terms of the number of articles included in the packet?
☐ a. The packet should include a greater number of articles.
☐ b. The packet should include a smaller number of articles.
☐ c. The current number of articles is adequate.
9. What strengths do you associate with the Agricultural and Home Economics News Packet?

10. What weaknesses do you associate with the Agricultural and Home Economics News Packet?

11. What are some ways that the News Packet could be improved in order to meet your local needs? (Example: more information on a particular topic.)

Part III: General Media Questions

1. To what extent is having regular news stories in your local newspaper(s) essential for promoting the overall image of Extension programs?
☐ a. Extremely important ☐ b. Somewhat important
☐ c. Somewhat useless ☐ d. For the most part useless
☐ e. I don't know

(4)

Extension Communication Questionnaire Page 5

2. Listed below are information channels available to Extension agents. Rank them in the order of their effectiveness in reaching the people in your area. (1st, 2nd, 3rd, etc., with 1st being most effective)

☐ a. Extension publications
☐ b. Newspaper articles
☐ c. Meetings
☐ d. Newsletters
☐ e. Radio
☐ f. Personal contacts
☐ g. Other: (explain) _____

3. The following groups or businesses offer one-on-one, personal advice and information to farmers and homemakers. Rank them in the order of their importance as information sources in your area. (1st, 2nd, 3rd, etc., with 1st being most important.)

☐ a. Commercial farm, garden and home product dealers
☐ b. Farm Bureau
☐ c. Tennessee Farmers Cooperative
☐ d. Extension Agents
☐ e. Friends and Relatives
☐ f. Other: (explain) _____

4. In what you consider an average week, how many hours do you devote to preparing newspaper articles?

☐ a. 0-1 ☐ b. 2-3 ☐ c. 4-6
☐ d. more than 6

5. How would you rate the amount of time you devote to newspaper reporting?

☐ a. I don't do any ☐ b. Too much ☐ c. About right
☐ d. Too little ☐ e. I don't know

Why do you think this is true? (For example: "I think I should spend that time doing other types of work" or "I don't have time to do more, but I would like to.")

Extension Communication Questionnaire Page 6

6. In general, how would you rate your own newspaper writing skills?

☐ a. Excellent for the most part ☐ b. Very good
☐ c. About average ☐ d. Poor ☐ e. I don't know

7. Rank the following types of newspaper stories in order of their effectiveness in presenting Extension information to your local audiences. (1st, 2nd, 3rd, etc., with 1st being most effective)

☐ a. Feature stories
☐ b. Straight informational stories
☐ c. Stories with accompanying photographs
☐ d. Stories promoting events and activities
☐ e. Other: (explain) _____

8. Below is a list of roles and activities (print related only) of the state communications section. Rank them in order of importance. (1st, 2nd, 3rd, etc., with 1st being most important)

☐ a. Provide training for county staff in news writing.
☐ b. Maintain in-house information services (ex. Third Thursday)
☐ c. Supply agents with news material (ex. Agricultural and Home Ec. Briefs)
☐ d. Release news articles to newspapers statewide (ex. Ag/Home Ec News Packet)
☐ e. Promote events (ex. Advance promotion and follow-up stories about 4-H Congress)

9. How valuable do you feel an agents' training session would be to improve your writing and newspaper reporting skills?

☐ a. Extremely valuable to me
☐ b. Somewhat valuable to me
☐ c. I don't know
☐ d. Would probably have minimal value to me
☐ e. Would be a waste of my time

10. If a non-required, voluntary training session were held in your area, would you probably attend: ☐ Yes ☐ No
- Why or why not? _____
- _____
- _____
- _____

APPENDIX III

Agents' Responses to Open-Ended Questions

I. What strengths do you associate with the Agricultural and Home Economics News Packet?

- a. "Strength to Ag program."
- b. "Most are short and snappy--gets attention and is easily held."
- c. Factual, timely information."
- d. "Keeps agents abreast of on-going things and news as well as newspapers."
- e. "Reminder to agents of timely practices and provides information agents haven't received in training meetings."
- f. "Good reference material for my own news story most of the time."
- g. "Concise information on current events and research."
- h. "Reminds county staff of various information as to the timeliness if one looks over last year's editions."
- i. "Timely information."
- j. "Current information, covers wide range of areas."
- k. "Source of information for newspapers and radio."
- l. "Timely information saves agents' time in researching information."
- m. "We can quote what a specialist has said or recommended on a subject."
- n. "Editors use readily."
- o. "Up dates information already in our office."
- p. "It is a reminder to agents as to time for certain articles."
- q. "Reminds people of current production practices and problems in Agriculture and Home Economics."
- r. "Gives agents more help."
- s. "It is regular."

Strengths (continued)

- t. "Helps county staff with up-to-date information for newsletters, columns and radio releases."
- u. "Weekly time schedule."
- v. "Best timely, technical information available to agents."
- w. "Educational value to local clientele."
- x. "Concise information that is useful in news articles, radio programs and personally educational."
- y. "Good garden information."
- z. "It helps keep up on important articles by the specialists in the whole state and for all the news media."
- aa. "Concise, university-based research; to the point."
- bb. "Current articles for radio and news scripts."
- cc. "Keeps me up to date on current problems that I don't have time to research."
- dd. "The material is very reliable."
- ee. "Complete information."
- ff. "Provides a contact with local news media; timely."
- gg. "Telling the Extension story of what is new and changing."
- hh. "Very helpful in development of local news."
- ii. "Excellent information."
- jj. "UT exposure, reliable and usually up-to-date information."
- kk. "Could be valuable in getting information to extension office and readers in a timely manner."
- ll. "It provides information for both urban and rural. The local newspapers are not as high on it as we are because of the low percentage of ag readers."
- mm. "Information direct from the specialists."
- nn. "I.R. to mass media."
- oo. "Usually a good mixture of Ag/Home Ec."
- pp. "Very good for radio programs."
- qq. "It is good for ideas on weekly news articles."

Strengths (continued)

- rr. "Provides a condensed form of agriculture news. Keeps me informed."
- ss. "It is a filler when we don't have time to do a news article."
- tt. "It is a steady source of current recommended practices."
- uu. "They are current and based on sound research."
- vv. "Enables me to discuss areas which I sometimes do not feel comfortable with."
- ww. "Information is concise and to the point."

- II. What weaknesses do you associate with the Agricultural and Home Economics News Packet?
- a. "There isn't enough Home Economics information."
 - b. "It appears that some articles have been reprinted from old news packets."
 - c. "Not able to include everything needed."
 - d. "Some of the material is out of date before we receive it."
 - e. "Maybe too general, our editors don't use it much."
 - f. "Not enough on family lives (children)."
 - g. "Some articles too late to be timely, old material used over and over again."
 - h. "Not enough home economics material."
 - i. "Little 4-H material."
 - j. "Needs to include more detailed articles."
 - k. "Too much information about awards, who did what, who went where, etc."
 - l. "Not all home economics specialists have weekly releases."
 - m. "Some articles appear year after year."
 - n. "Doesn't cover enough areas."
 - o. "The writing style does not vary much."
 - p. "Too long, needs articles to the point, no excess to fill a page."
 - q. "They all read the same !...Mr. so & so____, ____specialist."
 - r. "Not enough 4-H information in them."
 - s. "Not always pertinent to needs at that time."
 - t. "Sometimes: 1. length, 2. too much depth of subject matter."
 - u. "Not enough Home Ec articles."
 - v. "Some too long, others too short."
 - w. "Lacks originality, needs to be eye-catching, very drab, very dry."

Weaknesses (continued)

- x. "Articles too long and wordy, many times too general."
- y. "All areas of Home Ec. are not covered often enough. Most are too lengthy. Should not be sent to editors if agent is using information in personal column."
- z. "Not enough variety."
- aa. "Not enough information on current happening for the farmer."
- bb. "It's too strong in the agriculture area."
- cc. "Many articles I cannot use with my audience area and articles are too brief."
- dd. "It should be directed more towards the agents' use instead of the editor. I do not use articles for fear of duplication with editors."
- ee. "Little narrow and short."
- ff. "Some articles are repeats from year to year. However, some items do not lend to change."
- gg. "Very few articles to use in Home Ec. Divorce, abuse, etc. not too good for paper and radio."
- hh. "Many specialists use the same articles year after year."
- ii. "Doesn't cover 4-H-related articles except 4-H winners."
- jj. "Some news occasionally is late or problems and activities have already occurred."
- kk. "Recently, there have been too many articles on horses."
- ll. "Too many articles are the same as they were in previous years. (Reprints) What about new articles all the time."
- mm. "Lacks creativity."
- nn. "Home Economics sections (if there are any) are weak, lack definite facts and usually give little information."
- oo. "In the larger newspapers, the value seems to be under estimated."
- pp. "I wish the newspapers would use it."
- qq. "Editor uses them as filler material."
- rr. "Some of the specialist copy their information from sources I already have."

Weaknesses (continued)

- ss. "Sent to editors."
- tt. "Newspapers do not use unless it is rewritten and given local emphasis."
- uu. "Written at professional level rather than public level."
- vv. "Has to be rewritten because of using or quoting specialists."
- ww. "Not enough new research findings, other ideas on the horizon."
- xx. "It is not localized enough to suit our purposes."
- yy. "On June 1st, the local paper wants information timely for early June. On June 1st, I need information for the July article I am writing."
- zz. "Not particularly useful in 4-H work."
- aaa. "News editors who decide whether or not to use articles may not know what information is needed by readers."
- bbb. "None except our newspapers will not release the articles."
- ccc. "It is fine for the newspaper to use, but since they receive the information directly from U.T. I never use the material in my column."
- ddd. "Readability. Style uninteresting. Never know what the paper will use. Sometimes it repeats information I have also put in. When that happens, they usually leave mine out of paper."
- eee. "Timeliness. Some departments almost never report. Your sending them to our local news media results in less of our own articles being used."
- fff. "More homeowners, vegetables, fruit, ornamental horticulture articles."
- ggg. "Too brief on most articles."
- hhh. "Slanted too much to larger commercial farmers."
- iii. "Schedule time about 7-14 days too late to work in local papers."
- jjj. "Not snappy. It covers topics I've already read about in magazines, Commercial Appeal, etc."
- kkk. "Timely topics; however, since our paper hardly ever publishes the articles, I would like for them to be longer so I could use them for radio."

Weaknesses (continued)

- lll. "Subject matter is sometimes out of date or far behind other periodicals."
- mmm. "Not enough 4-H news articles except state events."
- nnn. "Articles based on research but not enough variety."
- ooo. "Not localized."
- ppp. "Subject matter not always appropriate to our particular county."
- qqq. "Some articles lack depth. They float across subject matter without saying anything worthwhile or important."
- rrr. "Home Economics is usually way behind Ag! Time wise, etc. EFNEF is usually left out of Home Ec information."
- sss. "Could possibly bring out more of the 'how tos' with various subjects."
- ttt. "Column width is not correct for most Tennessee newspapers. Should be 2 1/16 or 13 picas wide---presently not wide enough."
- uuu. "News gets to office on the average about one week too late."
- vvv. "The format."
- www. "Sometimes boring."
- xxx. "Some articles too long. Faper does not use those long articles."
- yyy. "By the time subject matter specialists write articles and submit them to you, it is too late for some corrections to Ag problems."
- zzz. "Some articles seem better suited for farm magazines than for local newspapers."
- aaaa. "Lack of pictures."
- bbbb. "Too much horse, family relations, and soil compaction fillers."

III. What are some ways that the News Packet could be improved in order to meet your local needs?

- a. "More intensive articles on subject material, especially Home Economics."
- b. "More 4-H News."
- c. "Factual information without specialist quotes."
- d. "More articles for the suburban homeowners, on trees, shrubs, insects, and diseases."
- e. "More family information."
- f. "Localize materials by different section of state if possible."
- g. "Include 4-H material, on project work. How to complete projects. Enough on activities and events."
- h. "Add articles for areas, such as East Tenn. about east Tennessee things."
- i. "Subject matter articles should be reworked every year."
- j. "Add a little entertainment and spunk to the first paragraph to catch the reader's interest if possible."
- k. "More dairy and crop information."
- l. "Lag time between a widespread ag problem and a column on it could be reduced."
- m. "Keep topics short, but not too general."
- n. "Send only to agents."
- o. "More Home Economics articles covering a wide range of subjects."
- p. "More information in ag area since I work in that area."
- q. "Have a topic of the week like an agri-trip or a Home Ec Trip."
- r. "More specific production or useful type information related to production. Articles about sales not very useful in my opinion."
- s. "Add policy issues/updates on farm bill, etc."
- t. "More Home Ec topics. Is it asking too much to have

Improvements (continued)

Just one article in all areas in Home Economics each week? Why is the Ag and Home Ec News Packet mostly Ag? Yes, I have Home Ec information in my file, and yes, I can use it to write articles (and I do so very often), but if the Ag and Home Ec News Packet is just that--- we need more Home Ec news articles!!!"

- u. "I prefer all information come to Extension office and not be mailed directly to newspapers."
- v. "Do not send to local newspapers, let that be our job."
- w. "More information about current research experiments on varieties of crops, herbicides, and insecticides."
- x. "More information on particular topic instead of an outline of each."
- y. "Have it based on monthly, timely tips in all areas, not just those which have the verbose specialists."
- z. "More 4-H citizenship, leadership and senior program ideas on topics and information."
- aa. "More information from Animal Science, Beef, Dairy and Plant and Soil Sciences."
- bb. "More Home Ec articles. Change format to double-spaced, non-column format to allow agent to localize material. Release packet to agent one week before it is sent to editor so that agent has first priority to localize and use. This is very important."
- cc. "Needs more details, especially for agents' use--too general."
- dd. "More detailed and up-to-date information on food nutrition, dangerous fads, etc."
- ee. "More articles on production agriculture, fewer announcements on state 4-H winners and state livestock shows."
- ff. "Leave off specialist names in the articles so agents can substitute their names and titles in the article. This is no major problem, however. Packet is pretty good overall."
- gg. "From an agent's viewpoint, a packet of articles in each subject area with suggested use dates would be more helpful."
- hh. "Maybe have articles from agents in the counties with successful programs."
- ii. "Send to extension office and let us determine what editor uses."

Improvements (continued)

- jj. "More livestock information, particularly beef cattle."
- kk. "It should be sent to the extension office and not to the paper."
- ll. "Information should be in an outline form so agent could rewrite it in their own articles."
- mm. "It would be good to have these compiled by subject matter areas each year for reference."
- nn. "More information in the clothing section, i.e., coming colors, fabrics and styles."
- oo. "Poll extension leaders and home agents periodically to help stay current and on the right track."
- pp. "Group articles by work area (AG, Home Ec, 4-H)."
- qq. "When possible, get information out well in advance of time needed by farmers, etc."
- rr. "Too many articles are repeats from previous years. More recent research results needed."
- ss. "Send to agents, not newspapers. Include information well before needed---takes a few days before agent receives it, a few days before articles are provided to newspaper---then a few days before published."
- tt. "More topics written so they can be used directly by agents."
- uu. "More fact sheets, so agents could develop own story or script."
- vv. "Keep it coming and include pictures. Or send pictures to the agent."
- ww. "Include information for homeowners, gardeners, lawn care, repair and maintenance of equipment and appliances, and consumer buying."
- xx. "Need more information from housing and interior design specialists."
- yy. "Use a theme related to our yearly theme--or a theme a month."
- zz. "More articles on dark tobacco. Because we are in one of the 7 or 8 counties that have dark tobacco. Maybe a supplement for these counties like West Tennessee cotton."

Improvements (continued)

- aaa. "Could use more research information."
- bbb. "More advance material on checking insect pests."
- ccc. "More articles on tobacco production."
- ddd. "Have one report for each section each week (beef, swine, dairy, plant and soil science, etc.)."
- eee. "Perhaps topics on consumerism. In the clothing area, clothing construction topics could be written more often."
- fff. "Be the 'firstest with the mostest'. Use upbeat lead sentences."
- ggg. "Don't send to editors if county extension office asks you not to."
- hhh. "Have more West Tennessee affairs, meetings and news-worthy comments."
- iii. "Send a more detailed version to agents."
- jjj. "More up-to-date topics--even on topics you maybe 'suddenly' hear about---such as a homemaker hearing that you can 'can' foods in a microwave."
- kkk. "When describing a problem, give specific controls. Don't be so general."
- lll. "Don't send to newspapers, so we'll know they're not going to use them too. Let each office send them what is appropriate."
- mmm. "More 4-H information and ideas and more Home Ec subject matter should be included."
- nnn. "Add articles on energy-efficient housing and on weatherization tips for home."
- ooo. "More farm safety articles."
- ppp. "More information on consumerism."
- qqq. "More information on family economics, housing, and interior design."
- rrr. "Perhaps try to make articles more entertaining to appeal to natural curiosity."
- sss. "Less horse information."
- ttt. "Economics is a major issue that could be covered more."

Improvements (continued)

- uuu. "Improve writing style. If topics, articles, etc., are going to be short, at least make the writing flow smoothly for easy reading."
- vvv. "More information on home economics, put in a question and answer format for some articles."
- www. "Needs pictures to be used by local paper to encourage use of articles."
- xxx. "Home economics and Ag topics separated on different pages."
- yyy. "More articles on 4-H winners in different areas. Foster, dairy posters, photo search, etc."
- zzz. "More information on new products on the market (foods, etc.)."
- aaaa. "Paper is not using Home Ec articles. Send only to Home Economics agent and let us send to papers."
- bbbb. "More feature type and timely articles (in home ec. area)."
- cccc. "Need information for urban problems in agriculture."
- dddd. "More livestock articles."
- eeee. "For my use, short length is better for radio use."
- ffff. "Don't site specialist's name. Why not allow local agent credit? It would improve local credibility!"
- gggg. "Need more information for urban homeowners, lawns, gardens, ornamentals."
- hhhh. "Change writing styles to be more entertaining."
- iiii. "I would like to see subject-matter specialists develop a series of news articles. Most news articles are repeats of past years."
- jjjj. "An indexing of topics by quarters would be nice."
- kkkk. "Be earlier with pre-publicity of 4-H events."
- llll. "It seems a waste to send one to every agent. Just send one (two) and let the leader post it."
- mmmm. "Quit repeating the same topics."
- nnnn. "Need table of contents. Format and design makes locating certain topics difficult. When using for reference (after it has been filed)."

Improvements (continued)

- oooo. "Include 'attention-getting' drawings for newspapers and /or newsletter."
- pppp. "More general information to incorporate into radio scripts."
- qqqq. "More filler items."
- rrrr. "Needs to include reference publication list that are available."

APPENDIX IV



Agricultural Extension Service
University of Tennessee Institute of Agriculture

P. O. Box 1071
Knoxville, Tennessee 37901-1071

AGRICULTURAL & HOME ECONOMICS NEWS

FOR RELEASE
SEPTEMBER 23, 1984

Dear Editor:

The University of Tennessee Agricultural Extension Service provides these news releases for your use during the designated week. I hope they will interest readers in your distribution area.

For additional information on any of these releases or other topics relating to agriculture, community resource development, home economics and 4-H youth activities, contact the Agricultural Extension Service office in your county or call me at 615/974-7141.

Sincerely,

Charles T. Walker

Charles T. Walker
Assistant Professor — Communications

cc: County Extension Agents
Specialists
Administrative Staff

This week's packet includes:
**TRANSPORTATION SAVINGS PROMISED BY USE OF NEW TENN.
TOM WATERWAY**
WHEAT VARIETIES ANNOUNCED
FALL GARDEN CLEANUP HELPS CONTROL PROBLEMS
FARMERS URGED TO APPLY QUALITY LIME
TEACH KIDS TO RESPECT THREE-WHEELERS
DRILL WHEAT IN STANDS OF ALFALFA
TOP BOARDS AUCTIONED AT STRONG PRICES
ARTIFICIAL INSEMINATION CALLED A PLUS
ALL TRACTORS AREN'T ALIKE
GOOD NUTRITION IS ESSENTIAL FOR TEENAGERS

Transportation Savings Promised By Use Of New Tenn-Tom Waterway

Tennessee barge shippers can look for a transportation savings of nearly \$24 million a year after the opening of the Tennessee-Tombigbee Waterway.

This is what two groups of agricultural leaders were told by a delegation from Alabama State Docks recently at meetings in Knoxville and Nashville.

Additional meetings around the state are planned in October.

The Agricultural Extension Service at the University of Tennessee arranged for the meetings to make state farmers aware of the waterway and its possibilities for Tennessee, says Lloyd Downen, dean of the Agricultural Extension Service.

The Tennessee-Tombigbee Waterway, which links the Tennessee River with the Tombigbee River in Alabama, will open to barge traffic Feb. 1. The 234-mile waterway extends from the Pickwick Lock and Dam through northeast Mississippi to the Tombigbee River near Demopolis, Ala. River traffic then follows the Tombigbee to the deep-water Port of Mobile.

The waterway provides Tennessee with a shortcut to the Gulf of Mexico. Using the waterway trims 882 miles off a river trip to the Gulf from Knoxville and Chattanooga. The river trip from Nashville is 235 miles shorter using the

waterway.

Without the waterway, barge traffic bound for the Gulf must go to the Ohio River near Paducah, Ky., then double back down the Mississippi River.

Gerry Robinson, general sales manager at Alabama State Docks, says a barge usually progresses about 100 miles a day, meaning the shortcut could save several days from many points in Tennessee.

Robinson says, "The transportation savings are what makes this the most eagerly awaited transportation system ever." He says shippers will save \$3.89 a ton or 10-15 cents a bushel shipping agricultural products by way of the waterway. "This could mean a \$46,000 savings on one 12,000-ton, eight-barge tow," he says.

Sonny Hankins, marketing specialist with Alabama State Docks, notes the waterway is a "slack-water canal," meaning it has no appreciable current because of the 10 locks along it. So, river traffic going upstream on the waterway will not struggle against the flow of a river, he explains.

Grain and coal are the major products expected to be shipped down the waterway during its first full year of operation in 1986. Other products expected to be shipped along the waterway are forest products, metals and petroleum.

The Agricultural Extension Service offers its programs to all eligible persons regardless of race, color, national origin, sex or handicap and is an Equal Opportunity Employer.

Cooperative Extension Work in Agriculture and Home Economics, The University of Tennessee Institute of Agriculture, U.S. Department of Agriculture, and county governments cooperating in furtherance of Acts of May 8 and June 30, 1914. Agricultural Extension Service, M. Lloyd Downen, Dean.

For Release September 23

Wheat Varieties Announced

Nine soft red winter wheat varieties are being recommended for planting in Tennessee, reports Paulus P. Shelby, Extension plant and soil scientist.

The recommended varieties are Auburn, Caldwell, Coker 747, Coker 916, Fillmore, Hart, Pioneer brand 2550, Pioneer brand S76 and Tyler.

Auburn, Pioneer brand 2550 and Tyler were added to the recommended list because of high yields and other characteristics, Shelby says. "Auburn is late, similar to Fillmore and has good resistance to lodging," the plant and soil scientist explains. "Tyler is susceptible to leaf rust and will need fungicide protection under severe leaf rust conditions."

Each of the recommended varieties has been evaluated at eight locations across the state for such factors as yields, maturity and plant height, lodging and disease resistance, Shelby explains. These varieties have performed well and are adapted to Tennessee conditions.

Most of the recommended varieties will be available through local seed sources, he says. The new varieties may be in short supply in some locations this year.

Fall Garden Cleanup Helps Control Problems

Fall sanitation, or disposing of plant debris in the garden, is the first step in controlling insects, diseases and weeds in next summer's garden, says David W. Sams, Extension gardening specialist.

"Many insects and disease organisms overwinter in plant debris," he explains. "Removing this debris now can delay buildup and spread of insects and diseases next summer. It can also increase yield and quality of your garden and reduce your chemical control requirements."

Sams suggests several fall sanitation practices.

- Remove all dead and dying vegetable plants from gardens and fields as soon as possible. Do not allow fleshy roots such as turnips, sweet potatoes and carrots to remain in gardens over winter.

- Mow weeds around gardens, in fence rows and under fruit trees before seeds mature. Rake the debris or turn it under.

- Remove mummified and rotting fruit from trees and from under trees.

- Dispose of plant residues properly. Disease or insect-infested plant material should be burned or hauled away. Never compost or turn under diseased plants or weeds with mature seed. If the composting process is incomplete, weed seeds or disease organisms may survive.

- Till or disk soil in the fall. Plant residue will decay more rapidly when mixed into the soil. This will reduce potential insect and disease problems and increase the organic matter content of the soil. The reduced preparation necessary before early spring planting will be an additional benefit.

Farmers Urged To Apply Quality Lime

Before applying lime to fields this fall, John Jared, Extension soil fertilization specialist, urges farmers to have their soils tested as soon after harvest as possible.

He says the test will indicate if lime is needed and how much.

If lime is needed, Jared cautions farmers to use lime that meets or exceeds state regulations in order to obtain the maximum benefits.

"Lime is the one soil conditioner on today's market that has a proven record," Jared says. "Although various claims have been made about numerous other soil treatments, lime has been producing positive results for hundreds of years."

He lists ways lime enhances crop production on acid soils.

- It prevents toxic levels of manganese and aluminum from building up.

- It improves the nitrogen-fixing capability of legumes.

- It increases the availability of secondary and micronutrients.

- It increases the efficiency of the plant to use nitrogen, phosphorus and potassium.

- And, it improves the effectiveness of certain pre-emergence herbicides.

For Release September 23

Teach Kids To Respect Three-Wheelers

Motorized three-wheeled and the newer four-wheeled vehicles need to be treated with respect, cautions Tim Prather, Extension agricultural engineer.

"In many cases, parents and grandparents buy a three-wheeler for the children, but neglect to teach them how to operate it safely," Prather says.

These popular vehicles can be workhorses on a farm, he admits, but can be dangerous machines in the hands of inexperienced riders.

Most have a straight rear axle rather than a differential, he says. So one rear wheel must spin in order to make a turn. This makes it difficult for beginning riders until they learn the proper technique.

"In addition, they will turn over just like anything else. The person who thinks they won't is likely to find out soon the hard way," Prather warns.

Make sure every operator reads and understands the owner's manual. If children cannot read it, they are not old enough or mature enough to be allowed to operate the machine, Prather says.

Be sure children are physically large enough to reach all controls with ease. If in doubt, wait a while to let them grow a little more, he urges.

Require riders to wear a helmet, long pants, a shirt, gloves and sturdy shoes.

Closely supervise children's riding to see that their performance is satisfactory. Discourage daredevil acts such as excessive speed, two-wheeled turns and climbing and jumping steep banks. "These are best left to the stunt riders," he states.

Restrict riding to safe areas and prohibit highway operation altogether, the safety specialist says. Don't tow any load which is heavier than the machine, and always maintain a safe speed, he urges.

Drill Wheat In Stands Of Alfalfa

"What can be done to increase the yield of old, thin stands of alfalfa this fall?"

This is a question being asked by many farmers in Tennessee, says Joe D. Burns, Extension plant and soil scientist. He advises, "For higher yields from the first cutting of alfalfa next spring, drill wheat in the old, thin stands this fall."

Many farmers across Tennessee have old, thin stands of alfalfa which they hope to keep another year, Burns says, but they need extra feed for next spring.

"By seeding wheat in the alfalfa this fall," Burns says, "they will get several benefits." They will have increased yields of the first cutting next spring, it will help "clean up" some winter weed problems and will use some of the nitrogen the alfalfa has placed in the soil.

"In many cases, the alfalfa will look so healthy in the spring, they will keep the stand for another year," Burns comments.

Seed about one-half bushel of wheat per acre with a grain drill or some type of no-till machine in early October when the soil is moist, he advises.

If it is desirable to keep the field in permanent cover, drill three to five pounds of orchardgrass per acre in the old alfalfa stands, Burns says. The orchardgrass can be maintained after the alfalfa stand disappears.

Rotate the field to corn or other grass crops for at least two years before trying to reseed to alfalfa, he advises.

Top Boars Auctioned At Strong Prices

Performance-tested boars from the two Tennessee central test stations recently auctioned at steady to strong prices, Richard H. Sims, Extension swine specialist, reported.

Forty-nine performance-proven boars from this year's spring to summer test periods sold at an average of \$427, he said. The sale boars represented about 40 percent of the original animals placed on test.

Thirty Duroc boars averaged \$382, 12 Yorkshires sold for an average figure of \$551, three Hampshires brought an average of \$457, three Spotts sold at a \$337 average and one Landrace auctioned at \$460, Sims reported.

A pen of Duroc boars from the Ernest Meadows herd in Anderson County "topped" the West Tennessee sale, he said. The pen had a daily weight gain average of 2.5 pounds per animal and a feed efficiency of 2.08.

Three Duroc boars from the Clayton Thomas herd in Lincoln County exhibited a feed efficiency figure of 2.21 pounds in the Spring Hill test, Sims said.

Headlining the mid-state sale was a pen of Yorkshire boars from the Lyle Barham herd in Lincoln County which had an average gain of 2.37 pounds. A pen of Yorkshires from the David Upton herd in Warren County recorded a daily gain of 2.46 pounds.

One boar from the Upton test pen was auctioned at an all-time Tennessee test station sale price of \$2,500, according to Sims. A second animal, with a daily weight gain of 2.7 pounds, was selected as this year's National Yorkshire Hog-College boar for display and sale at the National Barrow Show.

A Landrace boar with a daily weight gain of 2.51 pounds from the Tim York herd in Crockett County was selected by the west test station as this year's National Landrace Hog-College boar for the Austin, Minn., show and sale, the swine specialist said.

For Release September 23

Artificial Insemination Called A Plus

"The advantage of using artificial insemination (A.I.) in the dairy herd management program continues to be a big plus," T. Ray Spann, Extension dairy science specialist, says.

He made the statement after the release of the July genetic evaluation of bulls by the U.S. Department of Agriculture.

The predicted difference for milk (PDM) from cows sired by A.I. bulls and non-A.I. bulls is close of 1,100 pounds of milk more from the cows sired by A.I. bulls, Spann says.

"When all active A.I. bulls from six breeds were used," he says, "there was a plus PDM of 571 pounds. When all of the non-A.I. bulls were figured from the same breeds, there was a minus 511 PDM."

Eleven hundred pounds of milk at \$13 per hundredweight is \$143 for each cow in the herd, he explains. "Multiply this amount by the number of cows in the herd and the total dollar figure is quite large even for a small herd."

Another reason for using A.I. is safety, Spann says. "Bulls can be very dangerous. They can seem to be so gentle one minute. Then the next minute, they have someone down on the ground. We keep hearing the story every year about someone else being laid up because the bull turned mean."

If non-A.I. bulls are used, there are two precautions that should be kept in mind, the dairy specialist cautions. Make sure the bull is in a pen or stall that will allow a fence or wall between him and the caretaker, and use the bull on 30 percent or fewer of the herd, he says.

All Tractors Aren't Alike

If on paper, front-wheel-assist tractors outperform conventional two-wheel-drive tractors, why do some farmers complain about the superior tractors?

James B. Wills, Extension agricultural engineer, says, "Most likely the answer is most farmers treat their front-wheel-assist tractors (FWA) the same way they do their two-wheel-drive tractor (2WD)."

As soon as an FWA is acquired, as much weight as possible is added to the tractor, he predicts. "Tires are filled with liquid and cast iron weights are added to the wheels. The rear end of the tractor is carrying implements much of the time, and this creates an imbalance from normal weight distribution."

Two-wheel drive tractors are normally ballasted to give a dead ballast weight of 20-30 percent on the front axle and 70-80 percent on the rear axle," Wills says. "This ratio simply does not apply to FWA tractors."

"Front-end weight should be 40 percent of the total and rear-end weight should be 60 percent of the total. By shifting weight from the rear to the front of the tractor, the total amount of weight can be reduced and the need for duals may no longer exist," he says.

"One other secret to the successful use of FWAs is the proper use of the three-point hitch," Wills adds. This hitch has a geometry that changes the line of pull away from the rear axle to a point ahead of the front wheels. This principle keeps all four wheels firmly on the ground, he says.

Proper adjustment is the key to success with this hitch, he says. Implement weight can be centered too high with poor adjustment and the line of pull is shifted to the rear axle instead of all wheels.

The lower draft arms on the tractor should always be below a horizontal position by 15 degrees when an implement is in use, the agricultural engineer advises. Proper adjustment of the three-point linkage transfers weight and forces it to the front end of the tractor where it is needed for traction.

"One additional key to success with FWAs," he notes, "is to run the tractor at slightly higher ground speed and reduce the implement load slightly." As much or more ground can be covered each hour, and wear and tear on the tractor will be reduced in most cases, he says.

Tire sizes on the tractor can be reduced by one size when pulling lighter loads at faster speeds, he reminds.

Good Nutrition Is Essential For Teenagers

"Growing teens need a lot of nutrients," Mary Ann Haubenreich, Extension food, nutrition and health specialist, says.

To assure good nutrition, she suggests that teens drink four glasses of milk, eat four or more servings of fruits, vegetables, breads and cereals and two servings of meat or other protein food each day.

She notes, "The desire for independence, peer acceptance and socializing may conflict with the idea of eating more."

She replies that iron requirements increase with the onset of a girl's monthly cycle and boys need iron to produce lean body mass.

"In general, boys have better diets than girls because their food intake is higher," she explains.

She praises 4-H projects which teach teens to avoid pitfalls in their diets which could lead to nutritional problems such as obesity or anemia.

VITA

Ramona Frances Sanders was born October 23, 1961, to the parents of David and Dorothy Ann Sanders. She was reared in Dickson, Tennessee, and she graduated from Dickson County Senior High School. Because of her high school work at a county newspaper, the Dickson Free Press, she pursued and received a bachelor of arts degree in journalism from The University of Tennessee at Martin. While at UTM, she was editor of the campus newspaper, The Pacer, for two years.

She decided to attend graduate school and was offered a graduate assistantship at The University of Tennessee at Knoxville. While in Knoxville, she worked as a news editor in the communications section of the Tennessee Agricultural Extension Service. She also interned for three months as a technical editor for Resource Systems International, a technical training company in Nashville, Tennessee.

She plans to pursue a career in non-profit or corporate communications while directing her volunteer efforts toward public promotions of Extension's 4-H Club work.