AN EXAMINATION OF THE ADOPTION OF THE INTERNET IN AGRICULTURE MAGAZINES

By

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This document is dedicated to my husband Aaron and my parents for their continued support and encouragement during this process.
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The Internet has become a major factor in most media newsrooms over the last
decade. A large portion of print and broadcast operations have moved onto the Internet to
reach their audiences in new ways. Research has shown that rural and agricultural
audiences, however, prefer receiving their agricultural information in print form.

In an attempt to access how agricultural trade publications, whose readership is
comprised mostly of rural audiences, are utilizing the Web as a news collection and
dissemination tool, a census study of agricultural trade publication editors who are
members of the Livestock Publications Council (N=117) was conducted via a bimodal
online and print survey. Of the 117 members of the population, 44 responded
electronically and 19 responded by print survey, for an overall response of 53.8%.  

Of respondents, 35.7% reported their Website design skill level was poor,
indicating that they have not been trained in these skills and that they are typically not the
ones handling the publications’ Websites.
In terms of computer assisted reporting, respondents reported their publications used the Internet for a variety of newsgathering tools, including receiving information, graphics, and e-mail. Editors felt that the speed of gathering information and the ability for their staff to easily submit stories were great benefits of the Internet and computers in their newsrooms. The majority also reported wanting to receive information from Extension, government, public relations firms, and other agricultural sources in electronic formats.

Results showed that 71% of respondents reported having a Website associated with their publication. Websites were reported to contain links to other sites, graphics, current stories, archived stories, and advertising. The majority of respondents indicated that their main audience for their Website included the agricultural industry as a whole and producers. While the majority of respondents (57.9%) were unaware as to what software was used to develop their publication’s Website, of those who did the majority (15.8%) reported their Website was designed in Adobe GoLive.

Findings indicate that these publications are offering information online to their audiences. Editors in this study want to receive Extension, government, and public relations news in an electronic format as they continue to use the Internet more for newsgathering and dissemination.

Lastly, this study shows that it is important as educators that we prepare students to work as Webmasters, and they must be proficient in a wide variety of software programs as well as being versed as a journalist since many of these publications require news staff to work on these sites.
CHAPTER 1
INTRODUCTION TO THE STUDY

Introduction

In response to tight budgets facing universities and state cooperative extension services, many administrators are encouraging their staffers to discontinue print publications in favor of Web publications (Wood-Turley & Tucker, 2002). Although past studies indicate that the general population is turning more to the Internet for its news and information (Stempel, Hargrove, & Brent, 2000), research also shows that certain groups, such as agricultural audiences, may still want news in non-electronic formats (Wood-Turley & Tucker, 2002). For example, in a study of agricultural landowners, Howell, Habron, and Woods (2002) found that respondents overwhelming preferred “conventional” print sources as the channel of information when looking for agricultural news rather than online information delivery media.

Generally, the critical mass stage of adoption of interactive online technology, such as the Internet and the World Wide Web, is being reached at a much faster rate than for other forms of media, with a steeper increase in the number of users compared to conventional technological innovations (Garrison, 2001). In 1995, five million Americans reported having Internet access, while only four years later, 50 million were connected (Stempel, Hargrove, & Bernt, 2000). As of February 2003, Americans spent an average of 25.5 hours per month using the Internet (CyberAtlas, 2003). Age has been found to be a factor in adoption of these technologies (Gregg, 2002).
In addition to age, other demographics variables, such as geographical location, have been shown to be related to Internet adoption rates. Until recently, rural markets have remained relatively underserved by large commercial Internet service providers, due to traditionally limited telephone and cable access and isolated geographic location (Clement, Holbrook, & Staman, 1996). Rural lifestyles, traditionally viewed as more oriented to outdoors pursuits and occupations, have also been viewed as a social context in which the benefits of modern communications technologies may not always be as important (Hindman, 2000).

With the increased number of Americans looking for information in new places, traditional media sources have stepped up to keep their audiences by going online. A national survey of media use showed a huge gain in the general population’s use of the Internet for news sources from 1995 to 1999, while there was a decline in both local and network television news viewership and newspaper readership (Stempel, Hargrove, & Bernt, 2000). Garrison (2001) found that as of 1999, almost 90% of U.S. daily newspapers were actively using online technologies to research for articles, and most also boasted their own news Web sites to reach new markets. In the United Kingdom, Stanyer (2001) reported that all major national newspapers provided online versions of some type.

Although the move toward information gathering online may be true of general media, is this also the case for media directed toward the agricultural community? Wood-Turley and Tucker (2002) found in a readership analysis of Discover & Enlighten, a newsletter published by the University of Missouri’s College of Agriculture, Food and Natural Resources, that of the 335 readers surveyed, fewer that one-fourth indicated they
would prefer receiving the newsletter electronically. Suvedi, Campo, and Lapinski (1999) found that farmers ranked Data Transmission Network (DTN) and the Web as their least popular source to find news and information. An information preference study done with farmers in 2001 in North Carolina found that 57% used magazines for information on a weekly to monthly basis, while 52.3% never looked to Web-based information (Maddox, Mustian, & Jenkins, 2003).

**General Background**

Agricultural communications/journalism first appeared on the communication scene in the early- to mid-19th century when major advances in agriculture emerged (Boone, Meisenbach, & Tucker, 2000). Technology, like the printing press and postal service, and the development of land-grant institutions led to further growth in publications and numbers of subscribers (Boone, Meisenbach, & Tucker, 2000). When agricultural journals such as the *American Farmer* began publishing in the early 1800s, their editors had no formal training or practical farming experiences, causing many of their publications to be short-lived (Boone, Meisenbach, & Tucker, 2000). As publications grew in popularity and began associating themselves with colleges and agricultural associations, they became a main form of communication to reach farmers. By the 1970s the average farm received seven farm periodicals, and much prosperity was being seen in the agriculture industry allowing for magazines to thrive (Boone, Meisenbach, & Tucker, 2000).

Metropolitan media had also dropped coverage of agriculture many years before this, so that agriculture was covered less than ever in the news (Boone, Meisenbach, & Tucker, 2000). However, farm publications were, and still are, the main source of
agriculture information for farmers in today’s society (Boone, Meisenbach, & Tucker, 2000).

When considering how agricultural media are addressing these issues, it is important to look at the editors of the publications who make the decisions concerning how stories are composed and disseminated to agricultural audiences. Editors serve as the gatekeepers for their publication when it comes to how the Internet will be utilized. Research, so far, has neglected to look at the preferences of agricultural publication editors. For example, Williams and Woods (2002) found in a research synthesis of the Journal of Applied Communications from 1992-2001 that information technology and electronic media were the two top items studied by researchers. They also found that a large portion of the published research was designed to analyze the readership trends of agricultural trade publications. In a thorough review of the literature by the researcher, no research was found looking at the trends of Internet adoption among agricultural publications.

The lack of agricultural communication research in the Internet realm focusing on more than reader perceptions may be one consequence of the so-called “rural-urban digital divide.” The digital divide has been defined as the differences between those with access to new technologies and those without access (Hindman, 2000). While age, socio-economic status, and education are a part of the phenomena, location is also an important factor. The idea of a rural-urban divide, which can be explained as a gap in agricultural information among rural and urban areas, has been around for several years (Reddick, 2002)
These knowledge and technology gaps have been viewed as fusing together to create a larger computer and new technology gap between rural and urban populations. Hindman (2000) found that rural audiences were in more need of information since they face a “rural penalty” by being greater distances from markets. Rural audiences, however, are also disadvantaged as they are more isolated from high-speed, broadband networks than those in metropolitan areas (as defined by the U.S. Census). “High-speed Internet access providers realize greater return on investment in more densely populated communities than in rural areas,” (Hindman, 2000, p. 551). As a consequence, Hindman found that there was a growing gap between urban and rural residents’ ability to go online to view the news.

Rural audiences tend to be slower in adopting information technologies due to costs of computers and the cost to connect (Amponsah, 1995; Hoag, Ascough, & Fraiser, 1999). The rapid pace of change in Internet technology is also a deterrent as farmers do not want to invest in new systems that will soon be obsolete (Amponsah, 1995). Rural areas are different from urban areas in the sense that they are typically comprised of lower income families with lower educational levels than found in urban areas (Strover, 2001). Rural audiences tend to be different from urban audiences in that they are older and lower in income and educational experience (Strover, 2001; Hoag, et.al 1999; Amponsah, 1995). The financial stress in the agricultural world has also slowed the adoption of computers and information technology (Amponsah, 1995).

Farmers tend to rank magazines and newsletters as a very important channel of communication when looking for farm news, second only to personal contacts with family, friends, and neighbors (Maddox, 2001). Magazines tend to be looked at
differently from other media since they are printed and bound (Johnson and Prijatel, 1999). While people turn off their computers and forget about the Websites they saw, they tend to keep magazines and stockpile old issues for later reference (Johnson & Prijatel, 1999). Agricultural magazines have always been popular in America with rural audiences, and at one time were considered by the industry a distinct type or category, similar to today’s consumer, trade, and organizational magazines (Johnson & Prijatel, 1999).

While many farmers still rely on print over electronic media, some of the largest farm magazines, Successful Farming and Farm Journal, have moved to electronic versions of their publications in an attempt to offer greater news coverage of agriculture (Boone, Meisenbach, & Tucker, 2000). For example since 1995, Farm Journal has offered “Farm Journal Today” which provides links to companion publications, as well as other Web-based resources (Boone, Meisenbach, & Tucker, 2000).

**Problem Statement**

So what is the majority of agricultural trade publications doing in terms of Internet usage? Are all agricultural publications feeling the pressure of their hard news counterparts to enter the world of online news, or are they staying with their primarily farm-employed readers and sticking to print? Is the Internet being used to gather research for articles written in these publications? If the Internet is being used, how do these operations function with the added component of the online environment? Finding the answers to these questions is important, and has implications for both agricultural communicators and practitioners. Without being fully aware of how the agriculture publications of today are running their newsrooms, with respect to Internet news-gathering and dissemination, communications specialists at land grant institutions,
Extension services, and agricultural companies will be unable to effectively transmit press releases and research findings to these media outlets. Universities also need to be aware of how the industry is operating in this new production environment in order to prepare their students to effectively work in this medium.

By knowing how agricultural trade publication editors across the United States use the Internet, in terms of news gathering and dissemination via e-mail or the World Wide Web (Bisdorf, Irani, & Telg, 2003), communicators will be better able to transmit news information in a manner that is likely to be most effective. Results of this study can also be used by agricultural communications faculty to design instruction that will help prepare their students to excel in this new medium.

Objectives

The following objectives will guide this study:

- Describe the production characteristics and staff organization of agricultural trade publications belonging to the Livestock Publications Council (LPC) and the demographics of the agricultural trade publication editor respondents.
- Describe the perceptions of LPC member agricultural trade publication editors as to usage of the Internet in agricultural trade publication newsrooms.
- Determine the perceptions of LPC member agricultural trade publication editors as to the effectiveness and usefulness of the Internet, with respect to newsgathering and news dissemination operations.
- Describe the characteristics of online editions of agricultural trade publications published by LPC member respondents.

Definitions of Terms

For the purpose of this study, Internet is defined as communication via e-mail or the World Wide Web and all Web-based information (Bisdorf, Irani, & Telg, 2003). Agricultural magazines/trade publications include all agricultural publications that are
sent to a list of subscribers on at least a monthly basis and do not claim themselves to be newspapers. An online edition is defined as a Website that contains anything from subscription information to stories from a particular print publication. “Rural” will be defined as those counties with less than 50,000 urban residents (Hudson & Parker, 1990).

**Organization of the Remainder of the Chapters**

This thesis is set up in a format of five consecutive chapters. The first chapter establishes the background and need for the study; chapter two thoroughly examines past research theoretical frameworks in the field. Chapter three follows with an explanation of the study design and methodology used. An extensive report of the collected data is presented in chapter four, and chapter five concludes with a summary of the study and implications of the findings.
CHAPTER 2
REVIEW OF THE LITERATURE

A large body of literature on communication trends provides the basis for this study. This chapter will provide a brief history of the Internet, and then examine studies conducted on Internet use in terms of acceptance, as a newsgathering tool by media, and with respect to perceptions of credibility. The study will also discuss the rural-urban digital divide and agriculture media in the computer age. Lastly, the theoretical studies in the field that define how technology is accepted and diffused into the population, as well as how information gaps affect use of things such as technology, will be discussed.

Empirical Research

An Overview of the History of the Computer and Internet

In 1969 the United States Department of Defense’s Advanced Research Projects Agency (ARPA) created a computer network system called ARPANET allowing users to send and receive messages and data (Griffiths, 2002 A). Many people wanted to share their ideas for the communication between these computers that made up the new network. A system was devised to allow ideas to be put forward that required people to submit papers called “Request for Comments” (RFC) (White, 2002). The first RFC was written on April 1, 1969, the closest actual date to the start of the Internet (White, 2002).

In the late 1970s ARPANET was opened up to non-military users. Large universities were the early users of the new network to transmit research to each other;
however, this system was still far from today’s Internet and e-mail. In 1972 data transmissions to and from international locations became possible (White, 2002).

At this point, all computers were identified by their Internet protocol (IP) addresses, which consisted of numbers. In 1984, the idea of “domain names” was introduced, and the protocols for email and other services known today followed (White, 2002). This new system of domain name servers (DNS) set up a tiering system for Internet addresses within the U.S. such as: com (commercial), gov (governmental), edu (educational) and org (international organization or nonprofit) (Griffiths, 2002 A). Country codes were also set-up at this point, but the United States was not issued its own specific code (Griffiths, 2002 A).

Tim Berners-Lee, a scientist at the Centre Europeenne Recherché Nucleaire (CNRE), began envisioning a world in which access to data would be simple to accomplish in a consistent manner no matter what the terminal or program in use. Berners-Lee began working out a plan in 1989 for a linked information system that would be accessible to everyone (Navarro, 2001). In 1992 Berners-Lee and CNRE released the World Wide Web (Hall, 2001). This new invention gave users the protocols to access WWW pages and allowed access and browsing ability of hypertext-formatted text. It also opened the gateway for other methods of information transfer such as File Transfer Protocol (FTP).

In 1993, the launch of the Mosaic browser helped the Internet to explode in size as novice users began dialing-in via modems and Internet service providers (ISP) to the huge network (Navarro, 2001). Since then, the Internet has grown tremendously from 1994 when an estimated 38 million users were online (Griffiths, 2002 B) to September
2002 with approximately 605.6 million users (NUA, 2003). Hoffman, Novak, and Chatterjee, (2000) reported that the Web grew 1758% in 1994 alone and that it was doubling in size every two to three months.

This large growth has led to many new uses of technology. The Internet itself consists of the Web, e-mail, and many other commercial uses that date back to the invention of the first Web browser.

**News Media’s Use of and Perceptions Toward the Internet**

**Newsrooms online**

Following World War I through World War II, the media industry went through major changes as radio displaced newspapers as the first media audiences turned to for breaking information. By the 1950s radio was losing audiences to television, which allowed for even faster information in a richer form. The power of the televised news image helped the medium grow at an even greater pace during a series of world crises such as the Vietnam War (Hall, 2001). In 1999, the crisis in Kosovo showed a shift in media once again as audiences looked to the Internet for breaking news, knowing that they could receive timely and more in-depth information online than that offered by other forms of media (Hall, 2001).

Many mass communication researchers overlooked the Internet in early years, comparing computers to telephones, and dismissing any idea of the Internet as mass communication (Morris & Ogan, 1996). However, over the past decade, news media newsrooms have been gathering and disseminating news via online commercial and Internet-based resources (Garrison, 2001). As of September 1998 there were 4,925 newspapers online worldwide, according to Meyer (1998). Online newspapers have
grown at a remarkable rate with 745 in July 1996 and 2,059 only a year later (Meyer, 1998).

In a census of U.S. daily newspapers, Garrison (2001) found that newsrooms were not only using computers to gather information, but were also using online technology as part of their daily means of reaching their markets. Media outlets in the U.S. are not the only ones jumping onto the Internet; in 2000 there was a considerable amount of investment in the Internet by newspaper groups and broadcasters in the United Kingdom (Stanyer, 2001). “These organizations have been using their existing news outlets to promote their Websites while extending their new media brand names to the Internet,” reported Stanyer (2001, p. 353-354)

In a national survey done from 1995 to 1998 Stempel, Hargrove, and Bernt (2000) found a decline in the use of local and network television and newspapers while there was a huge gain for Internet use. More than one-third of the respondents claimed to be “regular users” of the Internet. The study showed that users of the Internet were more likely to read newspapers and listen to the radio than those who were non-Internet users. They also found that Internet use for newsgathering was heaviest for people under 35. A survey done by the Pew Research Center found that one-third (and almost half of those under 30) of respondents received news online at least once a week (Bogart, 2000).

In a study done on broadcast and print media in Florida, Bisdorf, Irani, and Telg (2003) found that 63.9% reporters in the newsroom had Internet access from their own desktop computer. Reporters used the Internet in 88.9 % of the regular daily work, and 72.2% indicated that they maintained an online Web presence for a variety of news dissemination features (Bisdorf et.al, 2003).
Runett (2000) found that 56% of newspaper reporters and editors went online two to three times a day. This study of 132 newspapers and 145 magazines reported that 21% of the newspapers’ Websites routinely reported stories before their print editions while 25% of magazine sites reported stories before the print version did. Those who did not report stories earlier on their sites than on their print editions cited fear of radio stations picking the story up and reporting it to more people (Runett, 2000).

Bechtel and Wu (2002) found that the disruptiveness of the day’s news is positively correlated with online news use. They found that when news was disruptive, greater Web traffic was observed. Audiences actively sought out online news sites when there were ongoing or breaking news stories that captured their attention (Bechtel & Wu, 2002).

Magazines, like other forms of other print media, are developing a presence on the Internet (Johnson & Prijatel, 1998). Magazines are using the Internet to check proofs, find art, sell subscriptions, do research, run ideas past readers, and search for staff members and freelancers (Johnson & Prijatel, 1998). By September 1995, 1,300 magazine services had distinct Web sites (Morris, 1996). As of 1998 the Magazine Publishers of America reported that 1,750 magazines had an online presence. These online versions serve as adjunct to their print versions by allowing potential subscribers sample magazines free-of-charge (Magazine Publishers of America, 1998). However, most magazines are still keeping stock in their print version over their online version since the bound nature of magazines adds mobility the Internet can not always offer (Johnson & Prijatel, 1998).

**Perceptions of the Internet as a tool**

Journalists are also moving toward the Internet to gather information for stories. The scope and depth of the information available online has become very appealing to
journalists, as well as the speed with which online information can be retrieved (Garrison, 2000). Reporters cannot only use online resources for background information, but also for interviews and verifying facts. Use of the Internet by reporters for newsgathering has increased to 95.1% (Garrison, 2000). Bisdorf, Irani, and Telg (2003) found that 97.3% of reporters use the Internet for background research on stories, and another 89.2% use it to receive news releases. In the academic realm, journalism students entering the profession are also more likely to use the Internet to do research than past reporters. Bressers and Bergen (2000) found, in a study of 400 Midwestern college students, that respondents reported spending approximately 1 hour and 32 minutes per day on the Internet or using e-mail. Students in this study reported using the Internet frequently to seek out information on news and media and 61% used it frequently to search out information. The study also reported that 47.8% use the Internet frequently for reference or research materials (Bressers & Bergen, 2000).

However, as this usage increases, concerns among practitioners in the journalism field are being heard. A longitudinal study of journalists conducted from 1994-1998, showed concern by respondents in the ability to verify facts of online sources, sites containing unreliable information, lack of source credibility, and badly sourced information (Garrison, 2000). The same study also found a need for newsroom training on online research skills. Saunders, Akers, Haygood, and Lawver (2003) found, in a content analysis of Web coverage of agricultural issues, a need for reporters to be aware of the accuracy of the stories they report online by making sure to attribute to sources.

While sources are readably available online, they can contain many errors or flaws. Information on the Internet is very fluid in nature, which can cause something that was
online one day to be gone or found to be incorrect the next. Information online has been described as a free-flow of information. Anyone can be an author on the Internet, causing credibility concerns (Flanagin & Metzger, 2000). While Internet information typically undergoes an editorial process prior to being posted, it is not nearly as stringent as other information sources, such as newspapers or research reports (Flanagin & Metzger, 2000). Newspapers, books, magazines, and television content all undergo factual verification, content analysis and editorial reviews, while Internet media is not put through that much scrutiny (Flanagin & Metzger, 2000). Information placed by special interest groups is one of the most common forms of content on the Internet and the majority of this information does not go through an editorial review (Flanagin & Metzger, 2000).

Using data from an annual national census of daily newspapers with circulations of 20,000 or greater, Garrison (2000) found that 80.5% of respondents sought out information online from what they considered to be reputable sources, while 77.8% felt that it was important to find valid, accurate information. Journalists (81.6%) reported that inaccurate information was the largest characteristic of a poor-quality Website and that useless or bad content was the next worst characteristic (70.3%) (Garrison 2000). Garrison also found that 54.1% of the respondents listed lack of verification as the most common problem in using the Web for newsgathering. Many journalists are unsure which sources on the Web are to be trusted and accurate, and this perception is also shared by student journalists who are just beginning to access the Internet and its resources (Garrison, 2000). In his study, Garrison argued that many journalists were concerned about the quality of the information, rather than the quality of the medium. Many of these
same obstacles cited by journalists can also be problems with human sources, personal observations, and documents (Garrison, 2000).

Concerns about Internet credibility are also being heard among readers. Many users are still new to the Internet and have difficulty evaluating Web information accurately (Flanagin & Metzger, 2000). For example, a survey of undergraduate students and non-college-age respondents showed that newspapers were rated higher in credibility than other media including the Internet (Flanagin & Metzger, 2000). Respondents in the study cited reference and news information on the Internet as more credible than commercial information. Surprisingly, Flanagin and Metzger (2000) found that in their sample the Internet was perceived as being as credible as magazines, radio, and television. In the study, however, more experienced users of the Internet did not find the Internet as credible as compared to other media. Flanagin and Metzger (2000) also found that many respondents rarely verified information gathered via the Internet.

The Internet may not always be the best medium to reach audiences; Bogart (2000) reported that an experiment done at The Ohio State University showed that when readers were given an article in both print and Web versions, they reported that the printed version was more understandable. “A strength of the Web is its ability to present individual readers with a selection of tailored contents. This is also a weakness, if it means that they are no longer exposed to what they haven’t expected and did not know they wanted.” (Bogart, 2000, p. 1).

Agriculture Audiences and the Computer Age

Rural-Urban digital divide

Research shows that rural and non-rural audiences differ as to how they use new technology. The differences among rural and urban audiences have been shown to have
an effect on users logging on to find news on the Internet. Hindman (2000) a growing gap between urban and rural residents going online to find news. In a study done looking at the “rural-urban digital divide,” Hindman found that rural audiences were in more need of the information since they face a “penalty” by being greater distances from markets. This distance causes time issues in this time-conscious society. Rural communities must compensate for this time/distance problem when competing with metropolitan areas (Hudson & Parker, 1990). Rural areas can only compete across distance and geography when they have a natural resource advantage. These rural audiences, however, are at a disadvantage, as they are isolated from high-speed, broadband networks than those in metropolitan areas (as defined by the U.S. census) can more easily access. “High-speed Internet access providers realize greater return on investment in more densely populated communities than in rural areas,” (Hindman, 2000, p. 551).

Digital subscriber line (DSL) services run from central offices, and they typically cannot extend far enough out from that to characterize them as truly rural (Strover, 2001). Of all households, 69% access the Internet using one of these national service providers which claim to have a “national” service scope, while 14% use a local phone company (National Telecommunication and Information Administration, 2000). While these national service providers boast many areas of coverage, the local dialing numbers are often only reachable by paying long distance or toll fees, causing more of a barrier for rural audiences (NTIA, 2000). Rural residents rely on Internet service providers (ISP) to dial into the Internet via the modem since they cannot access digital and broadband services. A study done in Texas showed that ISPs were concentrated in the more populated areas and those in surrounding areas were required to connect with a toll call
Many of the ISPs found in rural towns were of questionable financial health and service quality; the study cited as examples providers such as a local ham radio club and another ISP that operated out of a radio supply store (Strover, 2001). Similar situations in Louisiana and West Virginia were found in the same study. Strover (2001) reported that while representatives of several ISPs he studied felt there was a demand for their service and would like to expand, due to the cost structure they are unable to. Often, the commercial telecommunications providers on whom the ISPs depend will not invest in these rural areas due to the high costs needed to reach the relatively few consumers in the area. ISPs who want to serve these rural areas can not provide good service without becoming telephone companies themselves, which most are not able to do (Strover, 2001).

The National Telecommunication and Information Administration (NTIA) of the United States Department of Commerce reported in 1999 that:

- At almost every income level, those households in rural areas are less likely to own computers than households in urban or central city areas.
- At every income level, households in rural areas are significantly less likely—sometimes half as likely—to have home Internet access than those in urban or central city areas.
- Black households in rural areas are 1/3 less likely to own a computer than the average U.S. black household, and are 2/5 less likely to access the Internet than the average U.S. black household (p. 1).

The NTIA (2000) reported that at some income levels those in rural areas are 50% less likely to have Internet access than those earning the same amount of income in urban areas. In 2000 the NTIA reported that the gap between the digital “have” and “have-nots” was making dramatic gains toward disappearing but still had farther to go.
A survey of 800 agriculture producers in the Great Plains reported the following major factors keeping producers from owning computers: cost, difficulty to learn and use, and the feeling computers were unnecessary to their work (Hoag et al., 1999). Of those producers studied, 37% owned computers and rated their experience with them as 2.4 on a scale of 1 (beginner) to 4 (advanced). Hoag and associates (1999) found that the scale of the operation including size, farm tenure, off-farm employment, and ownership of livestock were important factors in the decision to adopt computers on the farm.

Ampnsah (1995) studied North Carolina commercial farmers, finding an adoption rate for computers of only 14.4%. The study found that those farmers with some college education were more likely to adopt a computer in their business. Park and Mishra (2003) found similar results in an analysis of data from the 2000 Agricultural Resources Management Survey, where they concluded that the number of Internet applications used on a farm is directly and significantly correlated with the education level of the farmer, farm size, farm diversification, location of farm, and presence of marketing contracts.

**Rural Publications’ Readership Preferences**

Computer technology may be in widespread use by the general population (Stempel, Hargrove, & Bernt, 2000; CyberAtlas, 2003; Garrison, 2001), but studies suggest it is not the preferred method of delivery for most traditional agricultural information (Wood-Turley & Tucker, 2002, Maddox et al., 2003). In a readership study of *Discover & Enlighten* at the University of Missouri, Wood-Turley and Tucker (2002) found that less than one-fourth of respondents indicated preference for electronic newsletters over print.

Of 707 agricultural producers surveyed in North Carolina, 83.8% reported magazine articles as their most important information channel, followed by family and
friends at 83%. Of respondents 52.3% cited the Internet as a communication channel that was never used. Respondents reported newsletters (60%) and magazine articles (46%) as their preferred information delivery channel (Maddox et. al, 2003).

A study of agricultural landowners in Michigan reported that all types of farmers preferred print information over information delivered via e-mail or the Web (Howell, Habron, & Woods, 2002). The researchers found that farmers with higher levels of education and larger gross incomes were more likely to prefer e-mail or the Web as a communication source. A statistically significant relationship was found between Web preference and education level and farm size. Only 8.7% of the full-time farmers and 8.6% of the part-time farmers preferred getting information on the Web (Howell et al., 2002).

A study conducted on beginning farmer education in Iowa showed that instructional technologies like the Internet were rated much lower in future usefulness for educators than the more traditional instructional techniques (Trede & Whitaker, 1998). A study of Virginia Cooperative Extension personnel showed that technicians still showed a 33.4 percent anxiety level with computers (Martin, Stewart, & Hillison, 2001). However, respondents also had adopted e-mail (89%) and the Internet (88.1%) (Martin et al., 2001). A study of Midwestern farmers who do have computers showed that on average they used the Internet 7.5 hours a week (Iddings & Apps, 1992). Of these respondents, 84.37% taught themselves to use a computer through experimentation with the machine. Siegrist, Labarge, and Prochaska (1998) reported one instance where an electronic newsletter helped crop farmers in Ohio become more informed about extension practices, allowing them to increase profits.
The National Association of Farm Broadcasters in 1999 released an annual report as to how farmers and ranchers utilize farm media. The NAFB reported that 53.4% of their respondents did not have a personal computer that they used for farm related business, and 78% did not access the Internet.

In an early study done of agricultural communication units in all 50 states, Fritz (1993) found that 54% of Extension news offices transmitted news computer-to-computer and 22% posted to university or Extension bulletin boards. A similar study done in 2002 of 299 Extension agents in Florida found that 91.97% of respondents communicate with clientele via e-mail (Gregg, 2002). A reported 100% claimed to use e-mail, and 22.74% said that they create or edit Web pages (Gregg, 2002).

**Theoretical Literature**

The theoretical framework for the study consisted of several theories that have been used to explain the nature of computer and technology adoption, as well as the differences in population adoptions toward new technologies and information. The following section will discuss the theories of diffusion, the technology acceptance model, and some related theories like knowledge gap and relative consistency.

**Adoption of Innovations**

Adoption of the Internet is said to have been the most rapid and widespread technology diffusion in history (Goodman, Burkhart, Press, Tan, & Woodard, 1998). The Internet converges several types of media into one accessible form, causing users to be drawn to it. Diffusion is said to be a function of someone’s willingness to try new products, or “innovations” (Atkin, Jeffres, & Neuendorf, 1998). By looking at the Internet as a technological innovation, diffusion theory can give light to how people are accepting new technologies.
Diffusion is defined by Rogers (1995) as the process by which an innovation is communicated through certain channels over time among members of a social system. The process of adoption of innovations, like new technologies, follows a five sequential stage model described by Rogers (1995). The steps are:

1. **knowledge** about, or exposure to the innovation’s existence;
2. **persuasion** or forming a favorable or unfavorable attitude toward the innovation;
3. the decision to adopt or reject the innovation;
4. **implementation** when an individual puts the innovation to use;
5. and **conformation** or reinforcement of the decision (p. 161).

Rogers (1995) describes five factors that play a role in the rate of innovation adoption: compatibility, complexity, relative advantage, trialibility, and observability. For example four of these factors can play a role in the Internet in the newsroom. The Internet in the newsroom has relative advantage over older reporting methods as it is a “one-stop shopping” allows users to find a variety of information, news, and sources without leaving their desk (Atkin, Jeffres, & Neuendorf, 1998). It is compatible to the process of supplying timely information for stories and to the public via news Websites. Complexity is not much of an issue for newsrooms since most are computer based today. Neither is trialibility, since the computers are already at a user’s disposal. It does cause a financial burden, as users must pay to access the Internet each month (Atkin, Jeffres, & Neuendorf, 1998). However, as costs for technology like computers and Internet connection continue to fall this could become less of a factor (Hoag et al., 1999).

Garrison (2001, p. 233) found that the frequency of use of online sources by media indicated that interactive technologies’ adoption begins gradually, becoming more frequent, following the classic S-shaped diffusion curve described by Rogers (1995).
Garrison wrote: “Growth in use takes place as users become more comfortable, learn new applications, and, ultimately trust the technology to enhance their work. Clearly with any technology there are risks in use and some adopters are reluctant to place themselves in venerable positions on deadline or at other times when completion of work is the highest priority” (2001, p. 233).

The Internet is interactive in nature with communication occurring via an electronic channel, rather than face-to-face (Rogers, 1995). This interactivity affects the rate of adoption through a distinctive quality known as “critical mass” (Rogers 1995). According to Rogers, critical mass occurs at the point when enough individuals adopt an innovation that the further rate of adoption becomes self-sustaining. Interactive innovations are of little use to those who have adopted if the individuals they want to converse with have failed to adopt the innovation (Rogers, 1995).

Atkin et. al (1998), found that being young and educated related positively to computer and Internet adoption. The substantial investment needed for the Internet has proven to keep the innovation from reaching the “household necessity” stage of diffusion (Atkin et. al, 1998).

Technology Acceptance Model

The technology acceptance model (TAM) is a theoretical framework that can be used to look at how agricultural trade publications are accepting the Internet into their newsrooms. TAM explains the psychological determinants of acceptance behavior and attitudes toward technology in the workplace (Roberts & Henderson, 1998). TAM is based on a proven framework, the theory of reasoned action (TORA) (Fishbein & Ajzen, 1975), which provides the rationale for many assumptions seen in TAM (Davis, 1993). Fishbein and Ajzen (1975) say that attitudes are a function of a belief about an object,
and those beliefs lead to the behavioral intention toward that object. If the intention is not changed by some other factor it will lead to behavior. This theory allows TAM (Figure 1) to draw a distinction between attitude toward the object and attitude toward the behavior (Davis, 1993).

Fig. 1 Technology Acceptance Model (Roberts, 1998)

TAM asserts that the perceived usefulness and ease of use will represent the beliefs and attitudes that lead to acceptance of new technology, as explained by Lederer, Maupin, Sena, and Zhuang (1999). They described perceived usefulness as the degree to which a person believes that the particular system will enhance their job performance by reducing their time to complete a task or providing information quickly. The perceived ease of use is the degree to which someone believes using a particular system would be effortless. Lederer, et.al, describe other constructs including attitude toward use and behavioral intention of use. TAM postulates that the impact of other external variables on behavioral intentions can be mediated as well (Yi & Venkatesh, 1999). In their study, Davis (1993) contends that the external stimuli that influence the user’s attitude toward a behavior is influenced by their beliefs about the consequences of performing the
behavior. Davis also states that since system design features are external stimuli, they should influence the user’s beliefs.

Davis (1993) found in a study of business professionals that usefulness exerts more than twice the influence on use than does attitude toward using, and usefulness exerts more than four times the influence on attitude as does ease of use. Davis views computer usage to be motivated extrinsically, by having concern over gain in performance and associated rewards, (Davis, 1993). Leader, Maupin, Sena, and Zhuang (1999) also described research findings that the ease of use of the Web is still in question, since many people find problems with Web pages that have slow downloading or viewing times, or being unable to find a page they know existed, or organizing the pages and information gathered.

Yi and Venkatesh (1999) described the concept of self-efficacy with respect to understanding users’ behavior in accepting technology. The research contended that an individual who has a strong sense of capability in dealing with computers is more likely to accept new technology, such as the Internet. This could affect how they adopt this technology as well. TAM research has been extensively done looking at how certain technology systems are being perceived and used. Davis (1993, p. 475) found in a study of 112 users regarding two-end user systems, that “TAM fully meditated the effects of system characteristics on usage behavior.” This study found that perceived usefulness was 50% more influential on attitude than ease of use in determining usage (Davis, 1993). A person’s intention toward using a given system is determined by the extrinsic and intrinsic rewards of using the system (Davis, 1993).
In a study comparing TAM with the theory of planned behavior (TPB), Mathieson (1991) found that TAM was easier to apply and had empirical advantage over TPB. Mathieson (1991) stated that:

Ease of use (EOU) explains a significant amount of the variance in usefulness (U). EOU and U contribute to intention (I). Given the usual size of correlation coefficients in behavioral research, the multiple correlation coefficients are quite large. TAM is successful in explaining intention. (p. 184)

Agarwal and Prasad (1997, p. 569) found “perceptions of compatibility, that is, the extent of behavior modification the use of innovation necessitates on the part of potential adopters, appears to be the most important predictor of current usage, while relative advantage is the dominant predictor of future use intentions.”

Although used extensively in communication research, this theory does present some problems to the designers of these technologies. Opponents argue that the key barrier to user acceptance is the lack of user friendliness instead of, as in Davis’s study, the usefulness of the system (Davis, 1993). Designers believe that adding user-friendly interfaces is the key to adoption. Davis (1993) refutes that, saying most users will be willing to put up with a difficult interface if it helps them do their job more effectively.

As people begin to perceive the usefulness and act with an intention to use computers and the Internet, they will begin to integrate it more into their work environment. If the editors of the agricultural trade publications being studied here have a perceived usefulness and ease of use, they will in turn begin using the system into their publication’s newsroom.

**Related Theories**

Several other theories are worth mentioning when looking at how agricultural audiences use the Internet as an information source and new medium and the problems
they face reaching this medium. Society continues to be further removed from traditional
agriculture and the rural way of life (Reddick, 2002). While major urban newspapers
have pulled back from serving the regional audience, making it harder for people in small
communities to get access to information needed to address issues in their communities
(Baran & Davis, 2003). This gap of knowledge is similar to what is being seen as more
ISPs are not providing access to these same small, rural communities (Strover, 2001).
This gap between the “media rich” and the “media poor” is described by the theory as a
rift in society between those who do more with media (Stone, Singletary, & Richmond,
1999).

The theory of the knowledge gap suggests that over time, these differences in the
better informed and the less informed segments grow, with the gap between them
increasing (Baran & Davis, 2003). The implication for agricultural audiences is that the
“rural penalty” that Hindman (2000) describes will thus continue to be a large problem in
rural communities. To reduce this knowledge gap, the media must give information in a
way that will be accessible to the less informed group, allowing group members to lessen
the gap.

Once the gap between groups is lessens, then the community will be able to choose
freely which media they prefer. The theory of relative consistency shows that the
proportion of money spent on mass media remains fairly consistent over time, relative to
the gross national product (GNP) (Stone et al., 1999). Since expenditures on media are
relatively constant, new media like the Internet must fight it out with existing media.

A substantial increase in the number of study respondents getting their news from
online sources, with a decline in those getting news from traditional sources like
newspapers, television and magazines was found by the Pew Research Center for the People and the Press (2000). Stempel et al. (2000) also found a decline in the use of local and network television and newspapers, while there was a huge gain in Internet use by respondents.

The theory of uses and gratifications can help researchers to understand this movement from traditional media to online media. “Uses and gratifications theory seeks to explain the psychological needs that help shape why people use the media and that motivate people to engage in media use behaviors to derive gratifications to fulfill those intrinsic needs, within the confines of a particular socio-cultural environment” (Stone et. al., 1999, p. 200). Recent studies show that the Internet is gratifying the need to escape, the need for entertainment, the need for interaction, and the need for learning and socialization (Stone et. al, 1999). The Internet has become a recent interest for those working with the uses and gratification research because of the interactivity, demassification, and asynchronicity it allows that other media does not (Baran & Davis, 2003).

**Summary**

As the Internet has evolved through the years it has precipitated an increasing of convergence of media. As the general public has come to perceive the technology as useful and easy to use, it is quickly being diffused throughout the general population.

Many news media operations have noticed this trend and have followed suit by going online to utilize the “one-stop shopping” aspects of this new media. Many media outlets are using the Internet as another channel in which to disseminate their information (Garrison, 2000). As this trend continues, use of older media technologies has begun to decline. In addition, concerns are being heard from both the media and the public
concerning the credibility and accuracy of the Internet as a news and research collection tool. The less rigorous editorial processes used on the Internet versus traditional media may leave gaps for error in the information presented (Flanagin et.al, 2000).

However, as more media move online, not all audiences are adopting the technology, due to location and economic restraints. Studies have shown that rural farmers do not typically get their information via the Internet for different reasons (Maddox et.al, 2003; Wood-Turley & Tucker, 2002; Howell et.al, 2002; Trede & Whitaker, 1998). The ISP and DSL providers are also playing a role in this, by creating a rural digital divide through not providing affordable access to these audiences. Agricultural publications are facing the need to stay on top of technology while also reaching their main audiences in their preferred channel. While rural audiences have been shown to be adopting the Internet at a lower rate than general audiences are, a need has arisen to find out how these publications are reaching their core audiences through traditional print and online media delivery.
CHAPTER 3
METHODOLOGY

Introduction

As discussed in chapters one and two, much research has looked at how both general mainstream news media operations and agricultural audiences are adopting and using the Internet. However, based on a lack of studies specifically focusing on agricultural trade publication media, there is a need to look at how agricultural news operations are utilizing the Internet for news gathering and dissemination purposes. This study was therefore designed to descriptively survey a population of agricultural media editors to assess their publications’ use of the Internet for news dissemination and collection purposes.

The following objectives to guide this study were established in Chapter one:

- Describe the production characteristics and staff organization of agricultural trade publications belonging to the Livestock Publications Council (LPC) and the demographics of the agricultural trade publication editor respondents.
- Describe the perceptions of LPC member agricultural trade publication editors as to the usage of the Internet in agricultural trade publication newsrooms.
- Determine the perceptions of LPC member agricultural trade publication editors as to the effectiveness and usefulness of the Internet, with respect to newsgathering and news dissemination operations.
- Describe the characteristics of online editions of agricultural trade publications published by LPC member respondents.

This study was quantitative in nature in that it used objective measurements and statistical analysis to understand and describe agricultural news media editors’ usage of
the Internet, (Ary, Jacobs, & Razavieh, 2002). Using applied research methodology, this study aimed to assess how the Internet is being used by agricultural trade publications.

**Research Design**

The research design for this census study was a descriptive survey of a population of agricultural trade publication editors who are members of LPC (N=117). The survey instrument was delivered via Web and mail form utilizing the bimodal survey technique (Lander, Wingenbach, & Raven, 2001).

The usage of Internet-based surveys has the potential to bring great efficiencies in design and administration to traditional surveying methods (Dillman, 2000). Web surveys can have a more refined appearance and can provide survey capabilities beyond those achieved in paper surveys, like the ability for responses to be sent electronically to the researcher (Dillman, 2000). However, Dillman suggests that researchers use mixed-model designs, including both Internet and print versions in order to reach those with lower computer usage rates (Dillman, 2000).

Respondents using the mixed model bimodal technique are given a period of time (in the case of this study, six weeks were given due to the holiday season) to complete a Web-based survey with the option to be sent a mailed survey upon request. In this present study, the final wave, consisting of a paper copy, was then mailed to those who had not completed the Web-based version. By sending the instrument both ways, one is able to reach those who do not have Web access, and those who do not like to use the Web, as well as those who prefer the Web (Lander et.al, 2001). Lander et. al, (2001, p. 10) concluded in their study of Internet-versus paper-based collection methods that “Web-based surveying methodology has the same reliability and criterion related validity as traditional paper based survey methodology.” Brashears, Bullock, and Akers (2003),
found that the bimodal model is an effective method to collect a high response rate in a relatively short amount of time at less cost. Using the bimodal model, Brashears, Bullock, and Akers (2003) surveyed a sample of members of the Cooperative Communicators Association (CCA), a professional organization of agricultural communicators, and found that using this survey administration model resulted in a 71% response rate. Researchers concluded the results were an accurate representation of the population. Members of the CCA consist of professional communication specialists employed by agricultural cooperatives, which has similarities to the population being utilized in the current study. Wingenbach, Lander, Newman, and Raven (2003) also studied a population belonging to an agricultural service organization, the American Association for Agricultural Education (AAAE), in which they received a 66.1% response rate using the bimodal method, and also concluded that researchers should be encouraged to use Web-based survey methods to collect data.

A decade ago, Web-based surveys were an effective means of sampling large populations; however, they were not representative due to the fact that Internet users were mostly male and middle- to upper-class (Brashears et.al, 2003). However, as Internet adoption increased to more broadly represent the general population, it became apparent that the Web could be seen as a viable method of surveying populations in a quick and cost effective manner (Brashears et.al, 2003). While this form of surveying has become very popular in market research, it is beginning to make its way into academia, proving to be a viable and reliable method to collect data (Wingenbach, Ladner, Newman, & Raven, 2003).
Brashears, Bullock, and Akers (2003) tested the bimodal technique, using a five wave contact process over a 25-day period. Their first contact was with a notice letter, followed by a Web survey E-mail, a thank you/reminder, a mailed survey packet, and a final e-mailed thank you/reminder. They concluded that by extending their deadline one week they would have increased their overall return rate by 4%.

Population

To conduct this study, a census population of agriculture magazine editors belonging to the Livestock Publications Council (N=117) was used. The Livestock Publication Council (LPC) is a non-profit professional organization whose goal is to provide information on how to improve overall effectiveness of its membership’s publications (LPC, 2003). LPC is a group which provides leadership on the current trends and issues in publishing (Boone, Meisenbach, & Tucker, 2000). Membership of this organization is comprised of members representing publications serving the livestock industry.

The population was defined as active members of the LPC, who were described as “publication members.” This population was selected due to its broad member base, which includes 117 different agricultural trade publications across the United States (LPC, 2003).

Instrumentation

A researcher-developed survey consisting of 56 items adapted from a previous study of statewide Texas media (Phillips, Janish, Fannin, & Mayes, 2002) and the TAM model (Roberts & Henderson, 1998) was constructed and reviewed by a panel of experts for face and construct validity (see Appendix A and B). Items consisted of 19 dichotomous choice and 21 multiple choice questions designed to assess usage factors
and demographics, combined with a set of two Likert-type ten-point scales, comprised of nine and ten items respectively, developed to assess perceptions of usefulness of specific aspects of Internet technology as perceived by respondents. Fourteen open-ended questions describing demographics and usage characteristics were also included. This instrument was pilot-tested in Florida (Bisdorf, Irani, & Telg, 2003) using three separate versions of the survey instrument that were developed for the three main media types (print, radio, and television), in order to collect channel-specific information. In the pilot study, the instrument was sent to a sample (N=300) of Florida newspapers, magazines, radio, and television outlets. The instrument was shown to be valid (alpha=0.66) in describing media Internet usage, and was adapted for the present study to focus specifically on agricultural trade publications.

Demographic questions were utilized to determine the circulation and production characteristics of respondents’ publications as well as the make-up of the publications’ full-time and freelance staff. A filter question was used to find out how long the newsroom had had Internet access. If Internet access was not available, respondents were filtered to questions in the instrument asking for the reasons access was not available in the newsroom (Table 1). If access was available in the newsroom, respondents moved to the next area, which was devised to determine the availability of the Internet to reporters working for an agricultural trade publication.

The next section was developed to analyze Internet access and availability. The instrument used dichotomous yes/no questions to determine if Internet access was available for only one computer in the newsroom, a cluster of reporters or all reporters,
and if the Internet was part of the daily work routine for librarians, staff researchers, reporters, artists, or editors. (See Table 1 for examples of questions.)

Table 1. Questions Describing Internet Access

<table>
<thead>
<tr>
<th>Question</th>
<th>Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Does your newsroom have Web access?</td>
<td>Yes</td>
</tr>
<tr>
<td>How long has your newsroom had Web access?</td>
<td>No</td>
</tr>
<tr>
<td>If your magazine doesn't have Web access, the main reason you don’t have it is:</td>
<td></td>
</tr>
<tr>
<td>- Cost</td>
<td>Strong</td>
</tr>
<tr>
<td>- Lack of support staff</td>
<td>Strong</td>
</tr>
<tr>
<td>- Lack of Interest</td>
<td>Strong</td>
</tr>
<tr>
<td>- Don’t see the benefits</td>
<td>Strong</td>
</tr>
<tr>
<td>- Reporters will spend too much time online</td>
<td>Strong</td>
</tr>
<tr>
<td>- No time for installation</td>
<td>Strong</td>
</tr>
<tr>
<td>- Information has to be routed</td>
<td>Strong</td>
</tr>
<tr>
<td>- Too much information to process</td>
<td>Strong</td>
</tr>
</tbody>
</table>

The next section of the instrument included 10 questions focusing on perceptions of the use of the Internet and the perceived usefulness for newsrooms of agricultural trade publications. Respondents were asked in an unstructured open-response type question to describe their publication’s policy or philosophy for staff members’ use of the Internet. Multiple choice questions followed to determine respondents’ perceptions of the way the newsroom uses the Internet in terms of research, e-mail, news releases, and other news gathering and dissemination activities. Respondents were asked how often information is searched for via the Internet each day and the percentage of stories generated with assistance from the Internet. A dichotomous choice question was then utilized to determine respondents’ preference as to receiving government releases, press releases, letters to the editor, news items from agricultural sources, and graphics from the Internet or traditional sources. A dichotomous yes/no question was used to find out how the magazine used the Internet in terms of background research, e-mail, receiving press
releases, database manipulation, accessing the magazine’s Web page, exchanging viewpoints between journalists, querying for interviews, allowing staff away on assignment to file stories, receiving information from news services, and receiving graphics and photos. A five-point Likert scale (strongly agree to strongly disagree) was used to determine the perceived benefits of computer assisted reporting in terms of tracking stories, interacting with other journalists, staying current with the industry, speeding up information gathering, conducting investigative projects, filing stories, storing previous stories, editing and saving costs. Respondents were then asked in an unstructured response question what formal training they had had in Website design or maintenance and their perceived skill level.

The next section of the instrument included seven items that asked respondents to indicate if their publication maintained an online Web presence and to describe its characteristics. Respondents were asked their site’s address, and how many hits a month their publication’s Web edition received, as well as if visitors were required to sign-up to access news on the site. A checklist question asked respondents to indicate if there was current stories, archived articles, links to other Web sites, graphics, discussion forums, chat rooms, e-mail feedback, display advertising, classified advertising, databases, photo gallery, flash animation, or statistics related to the industry they serve.

The final set of 20 questions discussed how the site supported by the publication was built and maintained. A set of “check the answer” questions asked how often the site is updated, who the perceived audience was, the main objective of the site, and how advertising was handled on the site. Respondents were asked if all editorial material
appeared on the site. If not all material was included, they were asked in an unstructured response question what criteria determined what is put online.

A set of questions followed asking who created the Website, if they employed specific staff to work on the site or if they outsourced the work to another company. Respondents were asked who maintains the site, and if the magazine provides Website training for staff. Lastly, they were asked what computer software was used to develop the Website, and what software was used and how often the site was updated.

**Data Collection**

The initial survey was sent out December 2, 2003, at the beginning of the month in order to avoid typical editorial deadlines. The instrument was first disseminated as a link to a Web form through e-mails sent to the population for the study (Appendix C). Cover letters sent with the survey asked that only editors of the publications complete the survey. The researcher utilized survey administration procedures as outlined in Dillman’s tailored design method (Dillman, 2000) to generate as many respondents as possible. After the initial mailing, a follow-up e-mail was sent seven days later (Appendix D), December 9, as well as 16 print copies of the survey were mailed to members of the population without a published E-mail address (Appendix E). A request for participation in the study was printed in the monthly LPC member newsletter on December 12, 2003 (Appendix F). Reminder e-mails (Appendix G) were sent on December 16 as well as reminder post cards (Appendix H) to those receiving print versions. Due to the holidays, a break in data collection occurred. A follow-up e-mail was sent to non-responders on January 5, 2004, for the final wave (Appendix I). A print copy of the survey was then sent via mail (Appendix J) in order to generate late responses from those not utilizing E-
mail, and those who had not responded to the original print surveys, sent on January 13, 2004 (Dillman, 2000).

**Variables**

Independent variables were defined as demographics of respondents and the publications they represented, including size, media type, geographic location and news focus. Dependent variables were defined as respondents’ perceptions of the current usage of the Internet in each operation represented in the study, in terms of news collection and dissemination practices, as well the respondents’ perceptions of the ease of use and usefulness of the Internet for news collection and dissemination purposes.

**Data Analysis**

Data analysis consisted of descriptive statistical analysis using SPSS® 10.0 statistical software package for the PC. Frequencies and descriptive statistics such as mean and standard deviation were calculated (Ary et al., 2002). To access the reliability of the instrument, Cronbach’s Alpha was calculated for the scale items. The standard alpha was $\alpha=0.74$. 
CHAPTER 4
RESULTS

This study investigated the current use of the Internet for newsgathering and dissemination purposes by agriculture publication editors who are members of the Livestock Publications Council (LPC). With the many changes in technology in the last century, mainstream news operations have utilized the Internet to disseminate their information to the general public. However, based on the literature, which shows that the rural digital divide still exists and that rural audiences still prefer information in print form, questions arise as to how media geared toward agricultural audiences are using the Internet. Are agricultural trade publication newsrooms using the Internet to collect information? Are they using it disseminate their stories? Are online editions of agricultural trade magazine publications different from their print versions? How have these publications integrated this new technology into their newsrooms? And, if they do have online versions, how are they created and who maintains them?

To answer these questions a survey instrument was adapted from a pilot study done of Florida media (Bisdorf, et.al, 2002). The researcher-developed instrument included 56 questions that recorded personal and publication demographics, patterns of Internet use in the newsroom, and descriptive characteristics of the publications’ online editions and/or online presence. In addition, the instrument assessed perceptions of the benefits of using the Internet in newsgathering and dissemination. Responses to these questions were then analyzed in order to give an accurate description of how agricultural trade publications are using the Internet.
This study presents its findings in sequence with the major objectives established in Chapter one. These objectives were:

- Describe the production characteristics and staff organization of agricultural trade publications belonging to the Livestock Publications Council (LPC) and the demographics of the agricultural trade publication editor respondents.

- Describe the perceptions of LPC member agricultural trade publication editors as to the usage of the Internet in agricultural trade publication newsrooms.

- Determine the perceptions of LPC member agricultural trade publication editors as to the effectiveness and usefulness of the Internet, with respect to newsgathering and news dissemination operations.

- Describe the characteristics of online editions of agricultural trade publications published by LPC member respondents.

### Comparing Response Groups

An overall response rate of 53.8% (N=63) of the population’s 117 members was achieved. To control for nonresponse error, early and late respondents were compared. To assist in this comparison, respondents were first split into quartiles, with the first quartile designated as the “early respondents” and the last quartile designated as “late respondents” (Gregg, 2003). Early respondents thus comprised 25% (N=15) and late respondents comprised 25% (N=15) of the total respondents in the study.

An analysis of early respondents versus late respondents was performed. Upon visual inspection, 46.7% (n= 7) of early respondents were male and 53.3% (N= 8) were female, while 60.0% (N= 9) of late respondents were male and 40.0% (N=6) were female. The analysis then explored descriptive frequencies for early and late respondents in response to age, level of education, and if their publication had a Website.

Upon visual inspection, there appeared to be no major differences in the level of education of respondents. There appeared to be a slight difference between early and late
respondents as to whether their publication has a Website or not and the late respondents appeared to be slightly older.

An analysis was then done to compare online respondents and paper respondents. Of the 63 respondents, 44 (69.8%) completed the electronic version of the survey online, and 19 (30.2%) completed the paper version. The percentages of male and female online and paper respondents appeared to be similar.

Online and print respondents were then examined for mean response for age, level of education, and if their publication has a Website. Upon visual inspection no major differences were apparent, although print respondents appeared to be slightly older.

**Objective 1**

**Describe the production characteristics and staff organization of agricultural trade publications belonging to the Livestock Publications Council (LPC) and the demographics of the agricultural trade publication editor respondents.**

**Description Statistics of Respondents**

To achieve objective one, an online census study of agricultural trade publication editor members of LPC (N=117) was conducted. Sixty-three, or 53.8% of the population of LPC members completed the study’s survey instrument via online or paper version. Of respondents, 69.8% filled the survey out online while 30.2% filled out the paper version. The respondents were evenly distributed by gender, with 50.8% (N=31) female and 49.2% (N=30) male respondents. Respondents’ ages were also fairly evenly distributed with the slight majority, 26.7% (N=16) ranging in age from 31-40. Only 6.7% (N=4) reported being older than 60. The majority, 47.6% (N=30), reported their job position as some form of editor for the publication, while 11.1% (N= 7) reported being the publisher or owner of the magazine. Only 3.2% (N= 2) reported they were an assistant or office manager. Most respondents (69.8% N=44) reported having a bachelor’s degree, while the
next highest group (11.1% N=7) held master’s degrees. Agricultural communications/journalism was the most reported major of study (29.3% N=17) followed by animal sciences (19% N=11) and journalism (15.9% N=10). Tables 2 and 3 present this information.

**Table 2. Number of Respondents by Gender and Age**

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>N</th>
<th>%N</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>30</td>
<td>49.2</td>
</tr>
<tr>
<td>Female</td>
<td>31</td>
<td>50.8</td>
</tr>
<tr>
<td>Total</td>
<td>61</td>
<td>100.0</td>
</tr>
<tr>
<td><strong>Age Group</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21-30</td>
<td>13</td>
<td>21.7</td>
</tr>
<tr>
<td>31-40</td>
<td>16</td>
<td>26.7</td>
</tr>
<tr>
<td>41-50</td>
<td>15</td>
<td>25.0</td>
</tr>
<tr>
<td>51-60</td>
<td>12</td>
<td>20.0</td>
</tr>
<tr>
<td>61-70</td>
<td>4</td>
<td>6.7</td>
</tr>
<tr>
<td>Total</td>
<td>60</td>
<td>100.0</td>
</tr>
</tbody>
</table>

**Table 3. Number of Respondents by Job and Education**

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>N</th>
<th>%N</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Job Title</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Editor</td>
<td>30</td>
<td>47.6</td>
</tr>
<tr>
<td>Owner/Publisher</td>
<td>7</td>
<td>11.1</td>
</tr>
<tr>
<td>Office manager/assistant</td>
<td>2</td>
<td>3.2</td>
</tr>
<tr>
<td>Communication director/coordinator</td>
<td>4</td>
<td>6.3</td>
</tr>
<tr>
<td>Contracted employee</td>
<td>1</td>
<td>0.2</td>
</tr>
<tr>
<td>Production manager/director</td>
<td>5</td>
<td>7.9</td>
</tr>
<tr>
<td>Network administrator</td>
<td>1</td>
<td>0.2</td>
</tr>
<tr>
<td>General manager</td>
<td>1</td>
<td>0.2</td>
</tr>
<tr>
<td>Other</td>
<td>2</td>
<td>3.2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>53</td>
<td>100.0</td>
</tr>
</tbody>
</table>
Table 3 Continued  Number of Respondents by Job and Education

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>N</th>
<th>%N</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Highest Level of Education</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High School</td>
<td>4</td>
<td>6.3</td>
</tr>
<tr>
<td>Some College</td>
<td>5</td>
<td>7.9</td>
</tr>
<tr>
<td>Bachelor’s degree</td>
<td>44</td>
<td>69.8</td>
</tr>
<tr>
<td>Master’s degree</td>
<td>7</td>
<td>11.1</td>
</tr>
<tr>
<td>Doctorate</td>
<td>3</td>
<td>4.8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>63</td>
<td>100.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Major area of Study for Highest Degree</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Journalism</td>
<td>10</td>
<td>17.2</td>
</tr>
<tr>
<td>Ag Communications/Journalism</td>
<td>17</td>
<td>29.3</td>
</tr>
<tr>
<td>Animal Science</td>
<td>11</td>
<td>19.0</td>
</tr>
<tr>
<td>Agricultural Education</td>
<td>1</td>
<td>1.7</td>
</tr>
<tr>
<td>Agricultural Business/Economics</td>
<td>4</td>
<td>6.9</td>
</tr>
<tr>
<td>General Agriculture</td>
<td>1</td>
<td>1.7</td>
</tr>
<tr>
<td>English</td>
<td>2</td>
<td>3.4</td>
</tr>
<tr>
<td>Marketing/Advertising</td>
<td>1</td>
<td>1.7</td>
</tr>
<tr>
<td>Public Relations</td>
<td>1</td>
<td>1.7</td>
</tr>
<tr>
<td>Business</td>
<td>3</td>
<td>5.2</td>
</tr>
<tr>
<td>Other</td>
<td>7</td>
<td>12.1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>58</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Respondents were asked to evaluate their own Website design skills. Responding to a one-item measure, with a scale ranging from one to five, with one being poor and five being excellent, 35.7% (N=20) reported a poor skills level, 17.9% (N=10) reported below average, 26.8% (N=15) reported average, 16.1% (N=9) reported above average, and 3.6% (N=2) reported an excellent skills level. The overall mean of self-reported skill level was 2.34 with a standard deviation of 1.23. (See Table 4.) Seven respondents chose not to answer this question.

Table 4  Reported Website Design Skill

<table>
<thead>
<tr>
<th>Skill level</th>
<th>N</th>
<th>%N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor</td>
<td>20</td>
<td>35.7</td>
</tr>
<tr>
<td>Below average</td>
<td>10</td>
<td>17.9</td>
</tr>
<tr>
<td>Average</td>
<td>15</td>
<td>26.8</td>
</tr>
<tr>
<td>Above average</td>
<td>9</td>
<td>16.1</td>
</tr>
<tr>
<td>Excellent</td>
<td>2</td>
<td>3.6</td>
</tr>
</tbody>
</table>
When asked if they had any formal Website training, only 20.6% (N= 13) reported any formal courses, while 79.4% (N=50) reported no formal training.

**Publication Characteristics**

Of the responding publications, 34.9% (N=22) publish more than one magazine, while 65.1% (N=41) publish only one. The majority of the publications were based out of Texas (23.8%), followed by Kansas (11.1%) and Missouri (7.9%) as shown in Table 5.

<table>
<thead>
<tr>
<th>State</th>
<th>N</th>
<th>%N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alabama</td>
<td>2</td>
<td>3.2</td>
</tr>
<tr>
<td>California</td>
<td>2</td>
<td>3.2</td>
</tr>
<tr>
<td>Colorado</td>
<td>3</td>
<td>4.8</td>
</tr>
<tr>
<td>Florida</td>
<td>1</td>
<td>1.6</td>
</tr>
<tr>
<td>Georgia</td>
<td>1</td>
<td>1.6</td>
</tr>
<tr>
<td>Idaho</td>
<td>1</td>
<td>1.6</td>
</tr>
<tr>
<td>Illinois</td>
<td>1</td>
<td>1.6</td>
</tr>
<tr>
<td>Iowa</td>
<td>3</td>
<td>4.8</td>
</tr>
<tr>
<td>Kansas</td>
<td>7</td>
<td>11.1</td>
</tr>
<tr>
<td>Kentucky</td>
<td>1</td>
<td>1.6</td>
</tr>
<tr>
<td>Mississippi</td>
<td>1</td>
<td>1.6</td>
</tr>
<tr>
<td>Missouri</td>
<td>5</td>
<td>7.9</td>
</tr>
<tr>
<td>Minnesota</td>
<td>1</td>
<td>1.6</td>
</tr>
<tr>
<td>Montana</td>
<td>3</td>
<td>4.8</td>
</tr>
<tr>
<td>Nebraska</td>
<td>2</td>
<td>3.2</td>
</tr>
<tr>
<td>New York</td>
<td>1</td>
<td>1.6</td>
</tr>
<tr>
<td>Ohio</td>
<td>3</td>
<td>4.8</td>
</tr>
<tr>
<td>Oklahoma</td>
<td>3</td>
<td>4.8</td>
</tr>
<tr>
<td>Oregon</td>
<td>1</td>
<td>1.6</td>
</tr>
<tr>
<td>South Dakota</td>
<td>1</td>
<td>1.6</td>
</tr>
<tr>
<td>Tennessee</td>
<td>3</td>
<td>4.8</td>
</tr>
<tr>
<td>Texas</td>
<td>15</td>
<td>23.8</td>
</tr>
<tr>
<td>Wisconsin</td>
<td>1</td>
<td>1.6</td>
</tr>
<tr>
<td>Total</td>
<td>63</td>
<td>100.0</td>
</tr>
</tbody>
</table>

The majority of the publications represented in the study (63.5%) are printed monthly, while 12.7% are printed weekly and 11.1% are printed bimonthly (Table 6).
Seventy-one percent (N=45) reported that the readership is based on a paid subscription to their magazine, and 27% (N=17) receive their publications as an unpaid subscription. One magazine reported that some of its readers receive their publication as a paid subscription and some receive it free as a benefit of being a member of an association.

### Table 6  Publications’ Print Frequency

<table>
<thead>
<tr>
<th>State</th>
<th>N</th>
<th>%N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weekly</td>
<td>8</td>
<td>12.7</td>
</tr>
<tr>
<td>Monthly</td>
<td>40</td>
<td>63.5</td>
</tr>
<tr>
<td>Bimonthly</td>
<td>7</td>
<td>11.1</td>
</tr>
<tr>
<td>Quarterly</td>
<td>6</td>
<td>9.5</td>
</tr>
<tr>
<td>Yearly</td>
<td>2</td>
<td>3.2</td>
</tr>
<tr>
<td>Total</td>
<td>63</td>
<td>100.0</td>
</tr>
</tbody>
</table>

The majority of the magazines where characterized by respondents as national, regional, or state publications (38.1%, 2%, and 27% respectively). Table 7 shows the publications’ approximate circulation; the majority (38.1% N=24) of the magazines had a readership of 5,001 to 10,000.

### Table 7  Publications’ Circulation

<table>
<thead>
<tr>
<th>Area</th>
<th>N</th>
<th>%N</th>
</tr>
</thead>
<tbody>
<tr>
<td>National</td>
<td>24</td>
<td>38.1</td>
</tr>
<tr>
<td>Regional</td>
<td>17</td>
<td>27.0</td>
</tr>
<tr>
<td>State</td>
<td>17</td>
<td>27.0</td>
</tr>
<tr>
<td>International</td>
<td>4</td>
<td>6.3</td>
</tr>
<tr>
<td>Smaller than State (city, county)</td>
<td>1</td>
<td>1.6</td>
</tr>
<tr>
<td>Total</td>
<td>63</td>
<td>100.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Circulation</th>
<th>N</th>
<th>%N</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,001-5,000</td>
<td>24</td>
<td>38.1</td>
</tr>
<tr>
<td>10,001-20,000</td>
<td>17</td>
<td>27.0</td>
</tr>
<tr>
<td>5,001-10,000</td>
<td>11</td>
<td>17.5</td>
</tr>
<tr>
<td>More than 50,000</td>
<td>7</td>
<td>11.1</td>
</tr>
<tr>
<td>20,001-50,000</td>
<td>3</td>
<td>3.8</td>
</tr>
<tr>
<td>Below 1,000</td>
<td>1</td>
<td>1.6</td>
</tr>
<tr>
<td>Total</td>
<td>63</td>
<td>100.0</td>
</tr>
</tbody>
</table>
The majority of the publications (66.7%) have been published for 20 or more years. Similarly, 11.1% have been published for 6-10 years, and 11.1% have been published from 11-15 years.

Many of the publications were reported by respondents to cover several species of livestock, but the majority (79.0%) was reported as covering some breed of cattle. Table 8 shows the percent of magazines covering each species.

Table 8  Publication’s Livestock Focus

<table>
<thead>
<tr>
<th>Species</th>
<th>N</th>
<th>% N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beef</td>
<td>49</td>
<td>77.8</td>
</tr>
<tr>
<td>Equine</td>
<td>16</td>
<td>25.8</td>
</tr>
<tr>
<td>Dairy Cattle</td>
<td>14</td>
<td>22.6</td>
</tr>
<tr>
<td>Sheep</td>
<td>12</td>
<td>19.4</td>
</tr>
<tr>
<td>Swine</td>
<td>10</td>
<td>16.1</td>
</tr>
<tr>
<td>Poultry</td>
<td>6</td>
<td>9.7</td>
</tr>
<tr>
<td>Other (goats)</td>
<td>1</td>
<td>1.6</td>
</tr>
</tbody>
</table>

Note: Respondents could select multiple species. Percentages, therefore, do not equal 100.

Objective 2

Describe the perceptions of LPC member agricultural trade publication editors as to the usage of the Internet in agricultural trade publication newsrooms.

Internet Availability

The majority (96.8%, N=61) of respondents reported having Internet availability in their office. Thirty-six percent (N=21) reported that they have had Internet access for five years, while 10.6% (N=6) reported having Internet access in their office for 10 or more years. 22.8% (N=13) reported having Internet access for less than five years.

The 3.2% (N=2) that reported not having Internet access in their office were asked to rank from 1-10 (low influence to strong influence) to what extent the listed items had an influence on Internet accessibility (see Table 9). “Too much information to process”
had the strongest influence $M=8.50, (N=2)$ followed by “Information has to be routed,” $M=6.00, (N=2)$.

Table 9  Influence of Not Having the Internet in the Office

<table>
<thead>
<tr>
<th>Influence</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost</td>
<td>2</td>
<td>5.00</td>
<td>2.83</td>
</tr>
<tr>
<td>Lack of support staff or training</td>
<td>2</td>
<td>5.00</td>
<td>2.83</td>
</tr>
<tr>
<td>Lack of Interest</td>
<td>2</td>
<td>3.50</td>
<td>0.71</td>
</tr>
<tr>
<td>Don’t see the benefits</td>
<td>2</td>
<td>2.50</td>
<td>0.71</td>
</tr>
<tr>
<td>Staff will spend too much time online</td>
<td>2</td>
<td>5.00</td>
<td>4.24</td>
</tr>
<tr>
<td>No time for installation</td>
<td>2</td>
<td>4.00</td>
<td>4.24</td>
</tr>
<tr>
<td>Information has to be routed</td>
<td>2</td>
<td>6.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Too much information to process</td>
<td>2</td>
<td>8.50</td>
<td>2.12</td>
</tr>
</tbody>
</table>

Note: On a scale of 1-10, with 1=low influence and 10= strong influence.

Of the respondents who answered the question $(N=50)$, 79.4% have Internet access available for all staff at their own computer. A small percentage $(11.1\%, N=7)$ of respondents stated that Internet was only available at one computer/location in their office. Another 11.1% $(N=7)$ reported that Internet access was available to only a few reporters.

**Internet Use**

Of survey respondents, 44.4% $(n=28)$ indicated that their newsroom had a policy or philosophy with respect to Internet use by their staff, while 54.8% $(n=34)$ said their newsroom did not. Subsequent open-ended responses indicated that polices ranged from “Internet use for business only” to “no personal Web surfing during business hours” to “inappropriate material is not allowed.”

Respondents reported 31.7% $(n=19)$ that less than 10% of their publication’s stories were generated with computer-assisted reporting; another 17.5% $(n=11)$ reported 76-100% of their stories were generated with computer-assisted reporting. (See Table 10.)
Table 10  Percentage of Stories Generated Monthly with Computer Assistance (N=60)

<table>
<thead>
<tr>
<th>Percent of Stories</th>
<th>N</th>
<th>%N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 10%</td>
<td>19</td>
<td>31.7</td>
</tr>
<tr>
<td>11-25%</td>
<td>10</td>
<td>16.7</td>
</tr>
<tr>
<td>26-50%</td>
<td>10</td>
<td>16.7</td>
</tr>
<tr>
<td>51-75%</td>
<td>10</td>
<td>16.7</td>
</tr>
<tr>
<td>76-100%</td>
<td>11</td>
<td>18.3</td>
</tr>
<tr>
<td>Total</td>
<td>60</td>
<td>100.1</td>
</tr>
</tbody>
</table>

Of respondents, 24.6% reported that an individual staff member searches information online two to five times a day (Table 11).

Table 11  Times a Day Online Information is Searched for By an Individual Staff Member

<table>
<thead>
<tr>
<th>Times a day</th>
<th>N</th>
<th>%N</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-1</td>
<td>2</td>
<td>3.3</td>
</tr>
<tr>
<td>2-5</td>
<td>15</td>
<td>24.6</td>
</tr>
<tr>
<td>6-10</td>
<td>11</td>
<td>18.0</td>
</tr>
<tr>
<td>11-20</td>
<td>11</td>
<td>18.0</td>
</tr>
<tr>
<td>21-40</td>
<td>1</td>
<td>1.6</td>
</tr>
<tr>
<td>41-50</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>51 or more</td>
<td>12</td>
<td>19.7</td>
</tr>
<tr>
<td>Too many to count</td>
<td>5</td>
<td>8.2</td>
</tr>
<tr>
<td>I do not know</td>
<td>4</td>
<td>6.6</td>
</tr>
<tr>
<td>Total</td>
<td>61</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Internet usage in the publication’s offices appeared to be fairly high, with the majority reporting usage for a series of news functions. A high percentage of responding publications reported using the Internet for e-mail (98.4%), to receive news releases (93.7%), and to receive graphics and photos (92.1%). Table 12 describes the percentage of respondents who use the Internet for research, Website access, e-mail, and to receive news releases, exchange viewpoints, query for interviews, receive stories from reporters on assignment, and several other uses.
<table>
<thead>
<tr>
<th>News Function</th>
<th>N</th>
<th>%N</th>
</tr>
</thead>
<tbody>
<tr>
<td>e-mail</td>
<td>62</td>
<td>98.4</td>
</tr>
<tr>
<td>To receive news releases</td>
<td>59</td>
<td>93.7</td>
</tr>
<tr>
<td>To receive graphics and photos</td>
<td>58</td>
<td>92.1</td>
</tr>
<tr>
<td>Research/background for stories</td>
<td>53</td>
<td>84.1</td>
</tr>
<tr>
<td>Information and news services</td>
<td>50</td>
<td>79.4</td>
</tr>
<tr>
<td>To access magazine’s Web page</td>
<td>45</td>
<td>71.4</td>
</tr>
<tr>
<td>Query for and interviews with sources</td>
<td>36</td>
<td>57.1</td>
</tr>
<tr>
<td>For stories filed by staff away on assignment</td>
<td>34</td>
<td>54.0</td>
</tr>
<tr>
<td>To exchange viewpoints with journalists</td>
<td>28</td>
<td>44.4</td>
</tr>
<tr>
<td>Database manipulation</td>
<td>23</td>
<td>36.5</td>
</tr>
<tr>
<td>To find links to add to Website</td>
<td>20</td>
<td>31.7</td>
</tr>
<tr>
<td>Other</td>
<td>1</td>
<td>1.6</td>
</tr>
</tbody>
</table>

**Objective 3**

Determine the perceptions of LPC member agricultural trade publication editors as to the effectiveness and usefulness of the Internet, with respect to newsgathering and news dissemination operations.

**Preferences for Receiving Information**

Survey respondents were given a list of several types of information they might typically receive on a given day at their publication, and were asked if they would prefer to receive this information electronically at their computer or via traditional methods (mail, fax, or hand delivery). In each case, a majority of respondents indicated that they wanted to receive the information electronically at their computers (See Table 13.)

<table>
<thead>
<tr>
<th>Information</th>
<th>Web N</th>
<th>%N</th>
<th>Traditional N</th>
<th>%N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Releases from Govt. /Extension offices</td>
<td>54</td>
<td>88.5</td>
<td>7</td>
<td>11.5</td>
</tr>
<tr>
<td>News items from other agriculture sources</td>
<td>54</td>
<td>88.5</td>
<td>7</td>
<td>11.5</td>
</tr>
<tr>
<td>Releases from public relations firms</td>
<td>48</td>
<td>78.7</td>
<td>13</td>
<td>20.6</td>
</tr>
<tr>
<td>Graphics and photos</td>
<td>46</td>
<td>75.4</td>
<td>15</td>
<td>24.6</td>
</tr>
<tr>
<td>Letters to the editor</td>
<td>44</td>
<td>73.3</td>
<td>16</td>
<td>26.7</td>
</tr>
</tbody>
</table>

**Benefits of Computer Assisted Reporting**

Using a Likert scale ranging from 1= “strongly disagree” to 5= “strongly agree,” respondents were asked to rate their perceptions of the benefits of computer-assisted
reporting. Respondents found most items to be of average to above average usefulness, with speeding up information gathering achieving the highest mean (M= 4.63, SD= .76). (Table 14.)

Table 14  Benefits of Using Computers to Help Generate Stories

<table>
<thead>
<tr>
<th>Function</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>To track story topics for fresh stories</td>
<td>62</td>
<td>3.73</td>
<td>1.15</td>
</tr>
<tr>
<td>To get story ideas by subscribing to a listserve</td>
<td>60</td>
<td>3.12</td>
<td>1.34</td>
</tr>
<tr>
<td>To interact with other industry members</td>
<td>60</td>
<td>3.92</td>
<td>1.17</td>
</tr>
<tr>
<td>To stay current with the agriculture industry</td>
<td>62</td>
<td>4.37</td>
<td>.93</td>
</tr>
<tr>
<td>To speed up gathering information</td>
<td>60</td>
<td>4.63</td>
<td>.76</td>
</tr>
<tr>
<td>To submit stories easily</td>
<td>61</td>
<td>4.49</td>
<td>.99</td>
</tr>
<tr>
<td>To edit easily</td>
<td>62</td>
<td>4.31</td>
<td>1.12</td>
</tr>
<tr>
<td>To save costs</td>
<td>62</td>
<td>4.44</td>
<td>.92</td>
</tr>
<tr>
<td>To keep archives of past stories</td>
<td>62</td>
<td>4.00</td>
<td>1.33</td>
</tr>
</tbody>
</table>

**Objective 4**

Describe the characteristics of online editions of agricultural trade publications published by LPC member respondents.

**Website Characteristics**

To achieve objective four, respondents were asked to describe various aspects of their online publications. The majority of respondents (71%, N=44) reported having a Website associated to their publication, while 29% (N=18) reported not having a Website. 31.7% (N=6) of respondents reported receiving an average of 1,500 to 10,000 page views on their site each month, while 21.1% (N=4) reported receiving less than 1,000 page views (Table 15).

Table 15  Monthly Average Page Views

<table>
<thead>
<tr>
<th>Page Views</th>
<th>N</th>
<th>%N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 1,000</td>
<td>4</td>
<td>21.1</td>
</tr>
<tr>
<td>1,500-10,000</td>
<td>6</td>
<td>31.7</td>
</tr>
<tr>
<td>10,001-20,000</td>
<td>3</td>
<td>15.9</td>
</tr>
<tr>
<td>20,001-30,000</td>
<td>3</td>
<td>15.9</td>
</tr>
<tr>
<td>30,001 or more</td>
<td>3</td>
<td>15.9</td>
</tr>
<tr>
<td>Total</td>
<td>19</td>
<td>100.0</td>
</tr>
</tbody>
</table>
Respondents reported that 25% (N=9) of the publications they represent first put their Website online in 1999. Table 16 shows the reported years publication sites went online.

Table 16  Year Publication Website was First Put Online

<table>
<thead>
<tr>
<th>Year</th>
<th>N</th>
<th>%N</th>
</tr>
</thead>
<tbody>
<tr>
<td>1991</td>
<td>1</td>
<td>2.8</td>
</tr>
<tr>
<td>1992</td>
<td>1</td>
<td>2.8</td>
</tr>
<tr>
<td>1993</td>
<td>1</td>
<td>2.8</td>
</tr>
<tr>
<td>1995</td>
<td>1</td>
<td>2.8</td>
</tr>
<tr>
<td>1996</td>
<td>2</td>
<td>5.6</td>
</tr>
<tr>
<td>1997</td>
<td>4</td>
<td>11.1</td>
</tr>
<tr>
<td>1998</td>
<td>4</td>
<td>11.1</td>
</tr>
<tr>
<td>1999</td>
<td>9</td>
<td>25.0</td>
</tr>
<tr>
<td>2000</td>
<td>7</td>
<td>19.4</td>
</tr>
<tr>
<td>2002</td>
<td>2</td>
<td>5.6</td>
</tr>
<tr>
<td>2003</td>
<td>4</td>
<td>6.3</td>
</tr>
<tr>
<td>Total</td>
<td>36</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Of respondents, 25.6% (N=11) reported that their Website services more than one publication. Respondents also reported that 97.7% (N=42) of the sites were accessible to anyone without a required fee or password. One publication reported that viewers were required to put in some form of password to view information on their Website.

Survey respondents were asked how often their publication’s site was updated, and the majority (42.5% N=17) reported their site was updated monthly (Table 17). “Other” responses included “not regularly.”

Table 17  How Often Publication Site Is Updated

<table>
<thead>
<tr>
<th>Frequency</th>
<th>N</th>
<th>%N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Daily</td>
<td>10</td>
<td>25.0</td>
</tr>
<tr>
<td>Weekly</td>
<td>8</td>
<td>20.0</td>
</tr>
<tr>
<td>Bi-Weekly</td>
<td>1</td>
<td>2.5</td>
</tr>
<tr>
<td>Monthly</td>
<td>17</td>
<td>42.5</td>
</tr>
<tr>
<td>Yearly</td>
<td>1</td>
<td>2.5</td>
</tr>
<tr>
<td>Other</td>
<td>3</td>
<td>7.5</td>
</tr>
<tr>
<td>Total</td>
<td>40</td>
<td>100.0</td>
</tr>
</tbody>
</table>
Of the responding publications with Websites, 47.6% (N=20) pay an organization outside of their company to host their Website, 40.5% (N=17) reported not paying an outside organization to host their site, and 11.9% (5) stated they were unaware of who hosted their site. When asked if they utilized server statistics, 71.4% (N=30) stated that they do, while 16.6 % (N=7) said no they do not, and 11.9% (N=5) were unsure.

The majority of respondents described their Website’s target audience as several different groups. Table 18 shows how respondents saw their target audience. In the case where the respondent selected more than one choice, the items were grouped to make a new variable. “Other” included items such as “breeders and showers,” “anyone involved in horse racing,” and “other segments of the sheep, lamb, and wool industry.”

<table>
<thead>
<tr>
<th>Audience</th>
<th>N</th>
<th>%N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Producers</td>
<td>27</td>
<td>64.3</td>
</tr>
<tr>
<td>Ag Industry as a whole</td>
<td>22</td>
<td>52.3</td>
</tr>
<tr>
<td>General Public</td>
<td>16</td>
<td>38.2</td>
</tr>
<tr>
<td>Paid subscribers to print publication</td>
<td>10</td>
<td>23.9</td>
</tr>
<tr>
<td>Other</td>
<td>5</td>
<td>12.0</td>
</tr>
</tbody>
</table>

Note: Respondents could select multiple audiences. Percentages, therefore, do not equal 100.

Respondents were also asked to describe the main objective of their publication’s Website. The majority (32.5%, N=13) see their Website as a promotional tool for their magazine, followed by 27.5% (N=11) who see it as an informational piece. (See Table 19.) In the case where the respondent selected more than one choice, the items were grouped to make a new variable. “Other” included items such as “news for breeders/producers/showers” and “provide one-stop source for industry members on various topics.”
Editors were reported by 43.6% (N=17) of respondents as the primary decision-maker of what is put on the publication’s Website, followed closely by staff members (38.5%, N=15). The publisher was reported by 12.8% (N=5) as the primary decision maker, and 5.1% (N=2) reported “other” (such as “information specialist”).

The majority of respondents (57.9%, N=22) were unsure as to what software was used to develop their publication’s Website, while 15.8% (N=6) reported their Website was designed in GoLive. The majority of respondents (47.4% N=18) also were unsure what software was used to update their publication’s Website. Again, GoLive was reported as the updating software for 13.2% (N=5). (See Table 20.) Written-in responses, indicated as “other,” included the program Cold Fusion and “done in http.”

### Table 20  Software Used to Create and Maintain Websites

<table>
<thead>
<tr>
<th>Created In</th>
<th>N</th>
<th>%N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unknown</td>
<td>22</td>
<td>57.9</td>
</tr>
<tr>
<td>GoLive</td>
<td>6</td>
<td>15.8</td>
</tr>
<tr>
<td>Dreamweaver</td>
<td>4</td>
<td>10.5</td>
</tr>
<tr>
<td>FrontPage</td>
<td>4</td>
<td>10.5</td>
</tr>
<tr>
<td>Other</td>
<td>2</td>
<td>5.3</td>
</tr>
<tr>
<td>Total</td>
<td>38</td>
<td>100.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Maintained In</th>
<th>N</th>
<th>%N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unknown</td>
<td>18</td>
<td>47.4</td>
</tr>
<tr>
<td>GoLive</td>
<td>5</td>
<td>13.2</td>
</tr>
<tr>
<td>Other</td>
<td>4</td>
<td>10.5</td>
</tr>
<tr>
<td>Dreamweaver</td>
<td>3</td>
<td>7.9</td>
</tr>
<tr>
<td>FrontPage</td>
<td>3</td>
<td>7.9</td>
</tr>
</tbody>
</table>
Table 20. Continued

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>%N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flash</td>
<td>3</td>
<td>7.9</td>
</tr>
<tr>
<td>Contribute</td>
<td>1</td>
<td>2.6</td>
</tr>
<tr>
<td>Netscape Composer</td>
<td>1</td>
<td>2.6</td>
</tr>
<tr>
<td>Total</td>
<td>38</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Note: Contribute and Flash are not considered Web-editing software.

Website Content

Of respondents, 81% (N=34) reported that not all of their editorial material appears on their Website. In an open-ended follow-up question, respondents stated criteria such as “feature articles and regular columns,” to “timeliness of the article,” and “whether they can acquire the rights from freelance material” as considerations that help them determine what is put online and what is not. Respondents were asked to list original content that is included on their Website, but not in their print publications. Responses ranged from “history” to “statistics and records” to “weekly e-mail newsletter.”

The majority (78.6% N=33) of respondents reported having graphics such as illustrations and animations on their publication’s site. They also reported that 78.6% (N=33) have links to other Websites (not advertisers) on the publication’s site. Only one respondent reported having a chat room feature on the site, while only 9.8% (N=4) used Flash animation. “Other” items written in included media kits, market information, directories, links to customer Websites, and special sections. (See Table 21.)

Table 21 Publication Website Features

<table>
<thead>
<tr>
<th>Feature</th>
<th>N</th>
<th>%N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Links to other Websites (not advertisers)</td>
<td>33</td>
<td>78.6</td>
</tr>
<tr>
<td>Graphics (photos or illustrations or animation)</td>
<td>33</td>
<td>78.6</td>
</tr>
<tr>
<td>Current stories</td>
<td>32</td>
<td>76.2</td>
</tr>
<tr>
<td>e-mail feedback function</td>
<td>27</td>
<td>64.3</td>
</tr>
<tr>
<td>Display advertising</td>
<td>25</td>
<td>59.5</td>
</tr>
<tr>
<td>Archived articles</td>
<td>22</td>
<td>52.4</td>
</tr>
<tr>
<td>Statistics related to your industry</td>
<td>17</td>
<td>40.5</td>
</tr>
<tr>
<td>Classified advertising</td>
<td>15</td>
<td>35.7</td>
</tr>
</tbody>
</table>
Respondents reported that 60.5% (N=23) do not require advertisers to pay extra to be represented on their publication’s site, while 39.5% (N=15) do require them to pay extra. Of respondents, 30.2% (13) reported not using advertising on their site.

Advertisements are displayed in several different ways, according to respondents. Banner advertisements were used by 46.5% (N=20) of the respondents, while other types of graphical ads were used by 37.2% (N=16). Written responses, indicated as “other,” included “PDF file links,” and “unsure of what is used.” (See Table 22.)

Table 22  Display Advertising on Publication’s Website

<table>
<thead>
<tr>
<th>Display Form</th>
<th>N</th>
<th>%N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Banner ads</td>
<td>20</td>
<td>46.5</td>
</tr>
<tr>
<td>Other graphical ads</td>
<td>16</td>
<td>37.2</td>
</tr>
<tr>
<td>Text links</td>
<td>15</td>
<td>34.9</td>
</tr>
<tr>
<td>Classified ads</td>
<td>11</td>
<td>25.6</td>
</tr>
<tr>
<td>Pop up windows</td>
<td>3</td>
<td>7.0</td>
</tr>
<tr>
<td>Other</td>
<td>2</td>
<td>3.2</td>
</tr>
</tbody>
</table>

**Website Staff**

Of the respondents, 73.8% (N=31) reported that they do not outsource their Website development and maintenance work, while 26.2% (N=11) did outsource the work. Thirty-four percent of respondents stated that they have staff dedicated to only working on Website development, while 60% do not have staff dedicated to only Website work. The majority (57.5%, N=23) reported that their Website staff does not design the advertising, while 42.5% (N=17) do, and 62.5% (N=25) do not write or edit editorial
materials. Respondents reported that 30% (N=12) do write and edit materials, while 7.5% (N=3) edit materials for online use.

Thirty-eight percent of respondents (N=26) indicated that their publication does provide or pay for Website training for their Web staff, while 62% do not. Sixty-four percent (N=23) of publications are created by a Webmaster/designer, while 25% of the sites are created by a graphic designer. Sixty-four percent (N=23) of the respondents indicated that a Web designer also maintains their Website. “Other” represents responses like “various people in-house.” (See Table 23 and 24.)

<table>
<thead>
<tr>
<th>Table 23</th>
<th>Staff Who Handles Website Creation</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>%N</td>
</tr>
<tr>
<td>Webmaster/designer</td>
<td>23</td>
</tr>
<tr>
<td>Graphic designer</td>
<td>9</td>
</tr>
<tr>
<td>Editor</td>
<td>2</td>
</tr>
<tr>
<td>Reporter</td>
<td>1</td>
</tr>
<tr>
<td>Other</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>36</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Table 24</th>
<th>Staff Who Handles Website Maintenance</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>%N</td>
</tr>
<tr>
<td>Web designer</td>
<td>23</td>
</tr>
<tr>
<td>Editor</td>
<td>4</td>
</tr>
<tr>
<td>Administrative assistant</td>
<td>4</td>
</tr>
<tr>
<td>Reporter</td>
<td>3</td>
</tr>
<tr>
<td>Other</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>36</td>
</tr>
</tbody>
</table>

Post Hoc Analysis

After analyzing the objectives, a series of means tables and cross tabulations were calculated to explain the relationship between age, education of respondents, and if the publication has a Website with reported web skills level, as well as between age and if they have a Website with how they prefer to receive information, such as government and Extension news releases, agricultural sources news, public relation news releases, letters
to the editor, and graphics. Analysis also looked at relationships between the circulation, type of livestock, Internet accessibility, and number of staff. Table 25 shows means for age group and mean Website design skill levels (1 = poor to 5 = excellent). The table shows that respondents between the ages of 51-60 had the highest mean for perceived level of Web site design skill, followed by respondents between the ages of 21-30, then respondents between ages 61-70, 41-50, and 31-40, respectively.

Table 25  Age Ranges and Mean Website Design Skill Level

<table>
<thead>
<tr>
<th>Age Group</th>
<th>N</th>
<th>Mean</th>
<th>S.D.</th>
</tr>
</thead>
<tbody>
<tr>
<td>21-30</td>
<td>13</td>
<td>2.69</td>
<td>0.85</td>
</tr>
<tr>
<td>31-40</td>
<td>15</td>
<td>1.87</td>
<td>1.19</td>
</tr>
<tr>
<td>41-50</td>
<td>12</td>
<td>2.42</td>
<td>1.08</td>
</tr>
<tr>
<td>51-60</td>
<td>10</td>
<td>2.70</td>
<td>1.57</td>
</tr>
<tr>
<td>61-70</td>
<td>4</td>
<td>2.50</td>
<td>1.73</td>
</tr>
</tbody>
</table>

Note: 1 = poor to 5 = excellent.

A means table was subsequently constructed to show level of education and mean Website design skills level, which is reported in Table 26. The table shows that respondents with some college education had the highest mean for Website design skills level, followed by respondents with a doctorate degree, a master’s degree, a high school diploma, and lastly those with a bachelor’s degree.

Table 26  Education and Mean Website Design Skill Level

<table>
<thead>
<tr>
<th>Education Level</th>
<th>N</th>
<th>M</th>
<th>S.D.</th>
</tr>
</thead>
<tbody>
<tr>
<td>High school diploma</td>
<td>4</td>
<td>2.50</td>
<td>1.29</td>
</tr>
<tr>
<td>Some College</td>
<td>3</td>
<td>3.33</td>
<td>0.58</td>
</tr>
<tr>
<td>Bachelor’s degree</td>
<td>39</td>
<td>2.18</td>
<td>1.19</td>
</tr>
<tr>
<td>Master’s degree</td>
<td>7</td>
<td>2.57</td>
<td>1.51</td>
</tr>
<tr>
<td>Doctorate degree</td>
<td>3</td>
<td>2.67</td>
<td>1.53</td>
</tr>
</tbody>
</table>

Note: 1 = poor to 5 = excellent.
Table 27 describes means for whether the publication has a Website or not and the mean Website design skill level. Means for respondents’ Website design skills levels appeared to be similar.

<table>
<thead>
<tr>
<th>Website Design Skills Level</th>
<th>N</th>
<th>M</th>
<th>S.D.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Website</td>
<td>38</td>
<td>2.32</td>
<td>1.30</td>
</tr>
<tr>
<td>No Website</td>
<td>18</td>
<td>2.39</td>
<td>1.09</td>
</tr>
</tbody>
</table>

**Note:** 1 = poor to 5 = excellent.

Two by two contingency tables were used to further explore relationships between nominal variables. Tables 28 through 32 represent the relationship between age of respondent and whether they prefer to receive information like government and Extension information, agricultural information, press releases, letters to the editor, and graphics in print or online form.

Table 28 shows that the large majority of respondents between the ages of 21-60 prefer to receive government and Extension information in an electronic form, while a majority of respondents ages 61-70 prefer the information delivered to them in a print format.

<table>
<thead>
<tr>
<th>Age Group</th>
<th>N</th>
<th>%N</th>
<th>N</th>
<th>%N</th>
<th>Total %N</th>
</tr>
</thead>
<tbody>
<tr>
<td>21-30</td>
<td>1</td>
<td>7.70</td>
<td>12</td>
<td>92.31</td>
<td>100.00</td>
</tr>
<tr>
<td>31-40</td>
<td>3</td>
<td>18.75</td>
<td>13</td>
<td>81.25</td>
<td>100.00</td>
</tr>
<tr>
<td>41-50</td>
<td>0</td>
<td>0.00</td>
<td>13</td>
<td>100.00</td>
<td>100.00</td>
</tr>
<tr>
<td>51-60</td>
<td>0</td>
<td>0.00</td>
<td>12</td>
<td>100.00</td>
<td>100.00</td>
</tr>
<tr>
<td>61-70</td>
<td>3</td>
<td>75.00</td>
<td>1</td>
<td>25.00</td>
<td>100.00</td>
</tr>
</tbody>
</table>

Table 29 shows that a large majority of respondents ages 21-30, 31-40, 41-50, and 51-60 prefer receiving press releases in an electronic format.
Table 29  Age Range and Preference in Receiving Press Releases (N=58)

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Print</th>
<th>Online</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%N</td>
<td>N</td>
</tr>
<tr>
<td>21-30</td>
<td>2</td>
<td>15.38</td>
<td>11</td>
</tr>
<tr>
<td>31-40</td>
<td>3</td>
<td>18.75</td>
<td>13</td>
</tr>
<tr>
<td>41-50</td>
<td>2</td>
<td>15.38</td>
<td>11</td>
</tr>
<tr>
<td>51-60</td>
<td>3</td>
<td>25.00</td>
<td>9</td>
</tr>
<tr>
<td>61-70</td>
<td>3</td>
<td>75.00</td>
<td>1</td>
</tr>
</tbody>
</table>

Table 30 shows that 100% of respondents ages 21-30 and 41-50 prefer to receive information in an electronic format only, and the majority of respondents ages 31-40 and 51-60 prefer an electronic format as well.

Table 30  Age Range and Preference in Receiving News From Agricultural Sources (N=58)

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Print</th>
<th>Online</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%N</td>
<td>N</td>
</tr>
<tr>
<td>21-30</td>
<td>0</td>
<td>0.00</td>
<td>13</td>
</tr>
<tr>
<td>31-40</td>
<td>3</td>
<td>18.75</td>
<td>13</td>
</tr>
<tr>
<td>41-50</td>
<td>0</td>
<td>0.00</td>
<td>13</td>
</tr>
<tr>
<td>51-60</td>
<td>1</td>
<td>8.33</td>
<td>11</td>
</tr>
<tr>
<td>61-70</td>
<td>3</td>
<td>75.00</td>
<td>1</td>
</tr>
</tbody>
</table>

Table 31 shows that a majority of respondents ages 21-30 and 31-40 prefer to receive letters to the editor in an electronic format, while 100% of respondents ages 61-70 want to receive them in only print form.

Table 31  Age Range and Preference in Receiving Letters to the Editor (N=57)

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Print</th>
<th>Online</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%N</td>
<td>N</td>
</tr>
<tr>
<td>21-30</td>
<td>2</td>
<td>15.38</td>
<td>11</td>
</tr>
<tr>
<td>31-40</td>
<td>3</td>
<td>18.75</td>
<td>13</td>
</tr>
<tr>
<td>41-50</td>
<td>3</td>
<td>25.00</td>
<td>9</td>
</tr>
<tr>
<td>51-60</td>
<td>3</td>
<td>25.00</td>
<td>9</td>
</tr>
<tr>
<td>61-70</td>
<td>4</td>
<td>100.00</td>
<td>0</td>
</tr>
</tbody>
</table>

Table 32 reports all respondents’ ages 21-30 prefer receiving graphics in an electronic format.
Table 32  Age Range and Preference in Receiving Graphics (N=58)

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Print</th>
<th>Graphics Online</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%N</td>
</tr>
<tr>
<td>21-30</td>
<td>0</td>
<td>0.00</td>
</tr>
<tr>
<td>31-40</td>
<td>6</td>
<td>37.50</td>
</tr>
<tr>
<td>41-50</td>
<td>3</td>
<td>23.08</td>
</tr>
<tr>
<td>51-60</td>
<td>3</td>
<td>25.00</td>
</tr>
<tr>
<td>61-70</td>
<td>3</td>
<td>25.00</td>
</tr>
</tbody>
</table>

Tables 33 through 37 represent the relationship between whether the respondent’s publication has a website and whether they prefer government and Extension information, agricultural information, press releases, letters to the editor, and graphics in print or online form.

In table 33 it is reported that whether the publication has a Website or not, the majority prefer to receive government and Extension information in an electronic form.

Table 33  Having a Website and Preference in Government/Extension Information (N=60)

<table>
<thead>
<tr>
<th>Government/Extension Information</th>
<th>Print</th>
<th>Online</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%N</td>
</tr>
<tr>
<td>Website</td>
<td>2</td>
<td>11.11</td>
</tr>
<tr>
<td>No Website</td>
<td>5</td>
<td>11.90</td>
</tr>
</tbody>
</table>

Table 34 shows that respondents whose publications do not have a Website and those that do both prefer to have press releases sent to them in an electronic format.

Table 34  Having a Website and Preference in Press Releases (N=60)

<table>
<thead>
<tr>
<th>Press Releases</th>
<th>Print</th>
<th>Online</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%N</td>
</tr>
<tr>
<td>Website</td>
<td>3</td>
<td>16.67</td>
</tr>
<tr>
<td>No Website</td>
<td>10</td>
<td>23.80</td>
</tr>
</tbody>
</table>

Table 35 shows that both respondents with and without Websites prefer receiving agricultural information in an electronic format.
Table 35: Having a Website and Preference in Agricultural Information (N=60)

<table>
<thead>
<tr>
<th></th>
<th>Print</th>
<th></th>
<th></th>
<th>Total</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%N</td>
<td>N</td>
<td>%N</td>
<td>%N</td>
</tr>
<tr>
<td>Website</td>
<td>2</td>
<td>11.11</td>
<td>16</td>
<td>88.89</td>
<td>100.00</td>
</tr>
<tr>
<td>No Website</td>
<td>5</td>
<td>11.90</td>
<td>37</td>
<td>88.10</td>
<td>100.00</td>
</tr>
</tbody>
</table>

Table 36 shows that both respondents whose publication does not have a Website and those that do prefer receiving letters to the editor in an online format.

Table 36: Having a Website and Preference in Letters to the Editor (N=59)

<table>
<thead>
<tr>
<th></th>
<th>Print</th>
<th></th>
<th></th>
<th>Total</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%N</td>
<td>N</td>
<td>%N</td>
<td>%N</td>
</tr>
<tr>
<td>Website</td>
<td>6</td>
<td>33.33</td>
<td>12</td>
<td>66.67</td>
<td>100.00</td>
</tr>
<tr>
<td>No Website</td>
<td>10</td>
<td>24.40</td>
<td>31</td>
<td>75.61</td>
<td>100.00</td>
</tr>
</tbody>
</table>

Table 37 shows that little difference can be seen between respondents with a Website and those without, as both prefer to receive graphics in an electronic online format.

Table 37: Having a Website and Preference in Graphics (N=60)

<table>
<thead>
<tr>
<th></th>
<th>Print</th>
<th></th>
<th></th>
<th>Total</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%N</td>
<td>N</td>
<td>%N</td>
<td>%N</td>
</tr>
<tr>
<td>Website</td>
<td>4</td>
<td>22.22</td>
<td>14</td>
<td>77.78</td>
<td>100.00</td>
</tr>
<tr>
<td>No Website</td>
<td>11</td>
<td>26.20</td>
<td>31</td>
<td>73.81</td>
<td>100.00</td>
</tr>
</tbody>
</table>

Side by side contingency tables analyzed the relationship between livestock the magazine covers and the publication’s circulation size. Table 38 shows the top two reported livestock covered (beef and equine) by the publications and their circulation size. Publications covering beef showed the majority have a circulation between 1,001 to 5,000 or 10,000 to 20,000. The publications covering equine showed a circulation of 10,001 to 20,000. Out of all livestock species beef publications had the largest number of publications at a circulation over 50,000.
Table 38  Circulation of Publications covering Beef and Equine

<table>
<thead>
<tr>
<th></th>
<th>Beef</th>
<th></th>
<th>Equine</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%N</td>
<td>N</td>
<td>%N</td>
</tr>
<tr>
<td>Below 1,000</td>
<td>1</td>
<td>2.04</td>
<td>0</td>
<td>.00</td>
</tr>
<tr>
<td>1,001-5,000</td>
<td>18</td>
<td>36.73</td>
<td>2</td>
<td>12.50</td>
</tr>
<tr>
<td>5,001-10,000</td>
<td>9</td>
<td>18.37</td>
<td>2</td>
<td>12.50</td>
</tr>
<tr>
<td>10,001-20,000</td>
<td>14</td>
<td>28.57</td>
<td>6</td>
<td>37.50</td>
</tr>
<tr>
<td>20,001-50,000</td>
<td>1</td>
<td>2.04</td>
<td>2</td>
<td>12.50</td>
</tr>
<tr>
<td>More than 50,000</td>
<td>6</td>
<td>12.24</td>
<td>4</td>
<td>25.00</td>
</tr>
</tbody>
</table>

Note: Respondents could select multiple species. Percentages, therefore, do not equal 100.

Table 39 examines the frequencies of reported full time staff and publication’s circulation. Upon visual inspection it appears that the majority of publications with less than nine staff members had a circulation between 1,001 and 20,000. The majority with more than 10 fulltime staff members reported having a circulation from 20,001 or more.

Table 39  Circulation of Publications Compared with Number of Full-Time Staff

<table>
<thead>
<tr>
<th>Staff</th>
<th>&lt;1,000</th>
<th>1,001-5,000</th>
<th>5,001-10,000</th>
<th>10,001-20,000</th>
<th>20,001-50,000</th>
<th>&lt;50,000</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-5</td>
<td>1</td>
<td>19</td>
<td>8</td>
<td>8</td>
<td>1</td>
<td>0</td>
<td>37</td>
</tr>
<tr>
<td>6-10</td>
<td>0</td>
<td>4</td>
<td>3</td>
<td>7</td>
<td>0</td>
<td>4</td>
<td>18</td>
</tr>
<tr>
<td>11-20</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>21+</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>1</td>
<td>23</td>
<td>11</td>
<td>17</td>
<td>3</td>
<td>7</td>
<td>62</td>
</tr>
</tbody>
</table>

Table 40 describes the relationship between the publication’s circulation size and whether the publication has a Website. The majority of publications who do not have a site have a circulation between 1,001 and 5,000.

Table 40  Number of Circulation of Publications Who Support Websites

<table>
<thead>
<tr>
<th></th>
<th>Website</th>
<th>No Website</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>Below 1,000</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>1,001-5,000</td>
<td>12</td>
<td>11</td>
</tr>
<tr>
<td>5,001-10,000</td>
<td>8</td>
<td>3</td>
</tr>
<tr>
<td>10,001-20,000</td>
<td>14</td>
<td>3</td>
</tr>
<tr>
<td>20,001-50,000</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>More than 50,000</td>
<td>6</td>
<td>1</td>
</tr>
</tbody>
</table>
Summary

The 63 respondents were described through frequencies in terms of their personal demographics as well as their publications’ demographics. Statistics were shown describing the publications’ Websites and Web presence.

Analysis was done comparing early and late respondents and online and print respondents. Follow-up cross tabulations were used to analyze differences in age, gender, and if the publications supported Websites. As well as comparisons between circulation sizes, species of livestock covered, and number of staff were computed.

The responding publications are moving online to reach perceived audiences of producers and the agricultural industry to provide information. They saw the need to move online early, and are currently supporting low-end Websites that do not contain complex elements. Editors who responded for the publications reported that they were below average in their Website design skills showing that they typically were not the ones working on these sites.
CHAPTER 5
SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary

This study sought to describe the usage of the Internet for news collection and dissemination by agricultural trade publication editor members of the Livestock Publications Council. Respondents were asked about their use of the Internet to collect information and their publication’s use of the Internet to disseminate news, as well as to describe their publication’s Website if they supported one. Data was returned by 53.8% of the population of agricultural trade publication editor members of LPC, and was statistically analyzed. This chapter offers summary, conclusions, and recommendations based upon the data.

Procedure

The population used for this study consisted of agricultural trade publication editors who were members of the Livestock Publications Council. This population consisted of 117 publications.

The survey instrument was adopted from a pilot study of Florida media and the Internet (Bisdorf, Irani, & Telg, 2003). The instrument, consisting of 56 items, collected information on respondent and publication demographics, publication use of the Internet for news collection, and description of the publications’ Websites. The instrument was made available to the population via an e-mail containing a cover letter and link to the Web-based survey. Respondents were given an identification code that allowed access to the instrument. Individuals who had invalid or no e-mail address were sent a paper copy
of the cover letter and instrument and notification that they could access it online as well. After two weeks, a break in the data collection occurred due to the Christmas and New Years holidays. Six weeks after the initial contact a final wave of a print version of the instrument was sent to all non-responders via the United Postal Service. A response rate of 53.8% (N=63) was achieved at the end of data collection.

**Key Findings and Implications**

Respondents were evenly distributed between males and females and in terms of age. There were slightly more respondents ranging in age from 31-40, and only a small percentage were older than 60. An implication of these findings is that there is a wide range of ages among agricultural trade publication editors of LPC, indicating that the majority are not just out of college or older adults who may not have had computer education in school. The population has been exposed to the Internet at some point and may have already begun utilizing it in their newsrooms.

The majority of respondents ranked their Website design skill level as poor. The post hoc analysis showed that age did not seem to affect respondents’ skills level; however, those who reported “some college” as their highest education level also had the highest mean skill level. This was surprising, since one would assume having a higher education level would indicate more exposure to the Web. Respondents with a bachelor’s degree or higher, however, were not far below the highest mean. This may show a demographic relationship between education and exposure to these Web skills. Those with only “some college” may be technically trained or employees who are still taking courses towards a degree. In these instances they may be receiving more state of the art technology training. There may be a need for Website training for these individuals with
low skill levels if they are involved in any aspect of their publication’s Website development or maintenance.

A similar finding asked respondents if they had formal Website training. Only 20.6% reported having training. This goes along with what was seen in reported skills level. It can be assumed that if the majority has poor skills levels then the majority would also report having no formal training in Web design. An implication of these findings is that editors may only have training as journalists and might not have received technical training in their higher education programs. These editors may also not be the person working on the Website, and hence would not need to be as fluent in these skills.

The majority of the publications in this study had a circulation of 5,001 to 10,000 readers. While this circulation is similar to what was seen in the pilot study of Florida media (Bisdorf, Irani, & Telg, 2003), it shows that agricultural trade publications reach a much smaller audience than general media magazines (Magazine Publishers Association, 2002). The average circulation for the top 100 magazines described by the Magazine Publishers Association in 2002 was well above 940,000. Agricultural trade publication audiences are much smaller in scope than the general magazine industry’s audiences are, due to their niche publication characteristics. More general audiences may have a broader scope of Web skills and capabilities, while this smaller agricultural trade publication audience may be composed differently.

Post hoc analysis showed that the majority of publications with more than 10 fulltime staff members reported having a circulation from 20,001 or more, showing that the publications with a larger circulation also tend to have a larger number of staff members. This is not surprising since these publications are covering a broader area of
producers who will have broader news needs thus causing the staff to be larger to meet these needs. This also shows that these publications may typically have smaller circulations, but they work as any other business, hiring as many staffers as are needed to correctly reach their clients.

There are several findings relating to Internet availability in the offices of agricultural trade publication editor respondents. The majority reported having Internet availability in their office, with 36% having it for five years. Only 10% have had the Internet in their office for more than 10 years. An implication of these findings is that while the Internet is accessible in the majority of agricultural trade publication newsrooms, it is still not fully available in all newsrooms and to all staff members. The majority of the editors of these publications see the value of having computers in the newsroom and, just as mainstream media has, they are adopting this technology to reach their audiences.

The 3.2% who reported not having Internet access in their newsrooms reported “too much information to process” and “information has to be routed” as the two strongest influences as to why they did not have access. Only a small number of agricultural trade publications in this study did not have the Internet in their newsrooms, this is similar to newsrooms of more general media in terms of a high overall adoption rate of the Internet (Garrison, 2001).

The majority of respondents reported that less than 10% of their publications’ stories were generated with computer-assisted reporting. However, a large majority reported using the Internet to wend and receive e-mail, to receive news releases, to receive graphics, to research stories, to receive information from news services, to access
the magazine’s Webpage, to query for interviews, to file stories by reporters away on assignment, and to exchange viewpoints with other journalists. An implication of this is that while respondents reported they are adopting the Internet in their newsrooms, they are using it for a variety of reasons, and they may not necessarily consider their usage to be “computer-assisted reporting.” In fact, respondents’ use of the Internet for newsgathering is similar to that reported in studies of general media, where respondents indicated that they use the Internet for background information, interviews, and source verification (Garrison, 2000; Bisdorf, Irani, & Telg, 2003).

Respondents strongly agreed that the ability to stay current with the agricultural industry, the speed of information gathering, the ability to submit and edit stories easily, and cost savings were all benefits of using computers to help generate stories. This suggests that while respondents may be using a mix of both traditional and Internet-based methods of newsgathering, they do see the benefits that new technology offers to their publications. Respondents’ perceptions of the benefits of new technology were very similar to those reported by Bisdorf, Irani, and Telg (2003).

In regard to the publications’ Websites, one of the findings dealt with the fact that almost three-fourths of the publication editors reported having a Website in conjunction with their publication. The majority of these sites went online between 1991 and 1999. The majority of publications who do not have a site have a circulation between 1,001 and 5,000. These findings show that many of the respondents and the companies they work for are recognizing the need for their publications to jump online in some form to reach audiences. With the cost to produce traditional print publications expensive, the industry may be recognizing the benefits and cost savings of moving online to supplement
information formerly delivered only in print. The smaller publications who reach smaller
audiences may still not see the cost benefits of moving online since they are not printing
as many publication pieces as the larger publications are.

The majority of sites reported receiving up to 10,000 page hits per month or more.
However, page hits are the number of each individual page visited and are not a good
representation of each actual visit to the site.

A majority of the respondents with Websites reported their target audience online
was agricultural producers and the agricultural industry, as a whole. However, many of
the farmers and ranchers who typically would be considered as the perceived audiences
for agricultural trade publication Websites prefer receiving agricultural information in
non-electronic forms (Wood-Turley & Tucker, 2002; Maddox et al., 2003). This implies
that the audience for an agricultural trade publication Website may actually differ from
that of its print edition. Interestingly, the majority of the respondents in the study reported
that the main objective for their site was to use it as a promotional or an informational
tool. Respondents’ publications may then be gearing their sites to reach new readers in
the agricultural industry and to provide more information for audiences above what is in
print. Based on research, it may be the case that the Website audiences may differ from
the print audiences and this will have implications on how these publications give
information in each format.

Editors for these publications may be aware of the need to be online however; they
may not have a strategic reason in place for these sites; however, from the findings of this
study, it could be implied that these publication sites are being used as electronic
storefronts for their traditional print editions, much as general media did with their Websites several years ago.

The majority of respondents were unsure as to what software was used to create and maintain their publication’s site. It may be the case that the editors of these publications may not be involved in Website creation and maintenance. Of those who knew the software, the majority reported Adobe GoLive as the software used for Website development and maintenance. This finding is surprising, as Macromedia Dreamweaver is the software most used by Website designers (M. McAdams, personal communication, March 15, 2004). It could be the case that many graphic designers at these publications may find this software program in their Adobe software suite and decide to use it over buying new software. GoLive is also very similar in software structure, menus, and tools to other software like PhotoShop or PageMaker that graphic designers may be familiar with (M. McAdams, personal communication, March 15, 2004). GoLive, however, is not typically used to teach agricultural communications students about Website development. Of the 20 programs offering agricultural communication degrees, the majority are using a combination of Web design software like Macromedia Dreamweaver, Microsoft Front Page, and Netscape Composer (T. Irani, personal communication, March 3, 2004). Therefore agricultural communication educators may need to reassess the types of software they are using to teach their students about Website design and production.

Another finding in the study dealt with the publication site content. The majority of sites contained features such as links to other sites, graphics, current stories, e-mail feedback functions, display advertising, archived articles, and statistics related to their industry. A small portion used discussion forums, databases, and Flash animation. These
sites are very simple in their makeup, allowing them to be user friendly to farmers who may not have the latest technology. Editors may perceive that rural audiences, whom research shows are slow to adopt computers due to cost factors (Hoag et al., 1999), may not own computers with the newest technology.

In terms of how these sites are handling advertising, several findings can be noted. A percentage (30%) of respondents reported not including any advertising on their publications’ sites. The majority of those who did include advertising on their site reported not requiring advertisers to pay extra to be represented. Banner advertisements were the most used type of advertisements on sites, followed by other graphical advertisements. While print magazines survive on advertising, these findings suggest that agricultural trade publications are using their Websites as a no cost added bonus to their advertisers. While these findings are somewhat unexpected, they may be related to the complexity of classified and display advertisement software and content management systems traditionally used to manage print advertisement content. Editors may not perceive these systems to be easily adapted to the Web (M. McAdams, personal communication, March 15, 2004). These troubles may not be seen as worth the gains of adding advertisements to their sites. There is a potential for these publications to add such advertising for livestock and equipment sales.

Another set of findings is that the majority of responding publications in this study do not outsource their Website development and maintenance work. They also do not have staff solely dedicated to work on their Website. Of the respondents in the study, only 38% have paid for Website training for their staff. Due to tight budgets in the
publishing industry as a whole, this may imply that, in future, newly hired staff may be expected to have a strong combination of both journalistic and technology skills.

The post hoc analysis shows that the majority of respondents ranging in age from 21-60 prefer to receive government/Extension information, press releases, agricultural information, and letters to the editor in an electronic format rather than a print format. However, those respondents ages 61 or older prefer all of this information in a print format to an electronic one. Preference for receiving graphics was the only item that all ages preferred receiving in an electronic format over print. Whether their publication had a Website or not did not affect how respondents preferred to receive this information. An implication of this is that older respondents still feel more comfortable in receiving information in traditional formats.

Limitations of the Study

A limitation of this study is that since this was a self-administered instrument there was no guarantee that the respondent was knowledgeable about the Internet usage of the publication. To combat this, a cover letter accompanied the instrument asking for the editor to fill out the survey or for the person receiving the instrument to forward it to the editor. As a result, only 3.2% (N=2) of respondents reported that their job position was lower than that of editor, owner, publisher, director, manager, or administrator. Furthermore, the study showed similar findings to that seen in the pilot study of Florida media (Bisdorf, Irani, & Telg, 2003).

The 53.8% response rate, which can be considered an acceptable response rate, is not substantial. Media is a hard audience to reach due to their busy deadlines and print schedules. The break due to the holiday season could also have affected this response rate.
The comparison of early and late respondents appeared to show some differences in age and gender. The use of an Internet survey may account for these apparent differences. Research has shown that Internet adoption does differ for different ages and other demographics (Reddick, 2002). However, the major variables and focus of this study were not based on demographics, and comparison of online and print respondents did not show apparent differences.

Finally, this study was based on a census survey of the population of agricultural trade publication editor members of LPC; therefore, the results can not be generalized to other populations, though they do offer insight into the workings of similar publications. A report in 2003 by the Magazine Publishers Association showed that there were 379 magazines considered to be in the agriculture and animal categories. This study’s population was made up of 117 of these publications, which counts for 31% of the total agricultural magazines reported.

**Conclusions**

Based on the empirical evidence it can be concluded that the agricultural trade publications that are members of the Livestock Publications Council are embracing the Internet to reach current and potential audiences with many interactive features.

But while editors at these publications are trying to reach agricultural audiences, they must take into account what those audiences are looking for in their media vehicle preferences. If agricultural audiences do indeed prefer print to online channels, editors must continue to run their print publications while embracing the new technology. But as the rural/urban divide continues to shrink, these publication editors must be prepared for more of their audience moving online. This convergence of media is inevitable, as more and more mainstream media are moving online. As a consequence of convergence,
general audiences and mainstream media will be looking for more agricultural
information online and editors of agricultural publications need to be prepared to meet
these needs. Editors of these publications should continue to move online but they will
probably need to continue to offer some print versions, or use their online presence as
supplemental material for some time to come.

Agricultural communication units and Extension outlets trying to give information
to this audience may need to continue to send information in an electronic format.
However they may need to take into account the file formats, including graphics and
video, they are utilizing when sending this information so it is easy for these publications
to add the information to their sites. If information is coming out as a PDF, for example,
it may be harder for publication editors with low web skills to put the text on their sites.
As transmitters of agricultural information, such as Extension, continue to move online to
offer their information, they will have to make this similar choice to leave audiences who
prefer print media behind or provide information in several formats.

It is also important to note that editors of these agricultural publications are using
current staff to develop Websites and not outsourcing the work. Newly hired staff may be
required to maintain sites and may be expected to know the specific software or to learn
the software before being hired. As educators we must prepare students to be well versed
in journalistic skills as well as Web production skills in order to succeed in this industry.

After a thorough review of the literature, no studies were found looking at the
preferences of editors of agricultural publications in terms of how they are using the
Internet to reach their audiences and to gather information. It is now evident that these
respondents’ publications may be moving online slower than the general media, but they
are moving online. Based on the results, as agricultural trade publication editors move forward with these publications there are many things they will need to continue to address in terms of who they are targeting and what they are offering their audiences and their Websites in comparison to their print publications. Educators can also take from this study the need to stay current with these publications in terms of how they are doing business, what software they are using, and what they are expecting from staff in order to prepare students for the industry.

**Recommendations**

Based on these findings agricultural communications programs need to introduce their students to several types of software programs to prepare them to work in the industry. Results also show how important in the future it may be for students to know how to build and maintain Websites in order to secure a career in this field.

Further research should be conducted to describe the specific software usage of the agricultural trade publications and why these specific software programs are chosen. Knowing if the publications are using Macromedia Dreamweaver, Adobe PhotoShop, Adobe PageMaker, Quark, or any other print or Web design software would allow for better resources for educators teaching production courses in higher education curriculum.

Agricultural communicators must continue to move toward more electronic dissemination of information by packaging information for agricultural trade publications in a manner that will be most useful. While many agricultural information sources are already sending information such as press releases electronically, they must also move toward sending information like photos, graphics, and video in an electronic form.
While the Internet offers many potential benefits for interactivity for agriculture media, it continues to present a challenge as well. Since many rural audiences still prefer traditional media, agricultural communicators must continue to try and bridge this gap and reach all aspects and preferences of their audiences. Further research might address this question of the rural/urban divide by focusing on comparing audiences of agricultural publications and general media publications to see if they are similar in their uses of these online publications.

Research should be done on audiences of agricultural trade publication Websites to assess their preferences on the types and usefulness of specific Web features. A content analysis could also be useful in comparing the actual Website features of the sites as to what was reported in this study and to the Websites of other trade publications. A comparison of these two analyses would allow for better guidelines and suggestions on how to best reach audiences with information of use.

Follow-up interviews with the population surveyed in this study should address why agricultural trade publications are using the Internet to reach their audiences and what do they know about these audiences and where do they get this information.

Further research might also address the question as to who is actually looking at these sites. By setting up polls on these sites the publication editors could determine exactly who accesses their site and then could adjust the content to fit their needs. Publication editors could also use this information to find out what features these current users would like to see added to their sites. If research shows that they are reaching different audiences than they think they are targeting, editors will then need to research what steps they need to take to reach their intended audiences.
A thorough analysis of how agricultural trade publication editors work with advertisers, why they do or do not put ads online, and their perceptions of their advertising capabilities would allow for better understanding for potential advertisers and agricultural marketing and communication students on how to best work with these publications. This research could also address the most efficient ways for advertisers to give information to these publications in order to make advertisement handling easy.

Further research might also analyze the exact make-up of the staff structure of these agricultural trade publications. By knowing how many staff there are, what exactly they do in terms of the publication, and the skills needed for their jobs, educators will be able to provide curricula designed for specific careers in this field.
APPENDIX A
WEB SURVEY
LPC Member Survey

Please take a few minutes to complete this survey. It is very important to the success of this survey that all questions be complete. Responding will only take approximately 10 minutes. Your responses to the study will stay confidential. Your cooperation in the survey is greatly appreciated.

Page 1 of 5
0% Complete

* Required Fields

Please enter your pin number * (Number required)

Name of Magazine

Title of person completing the survey

What is your highest level of education?
High school  Some college  Bachelor's degree  Master's degree  Doctorate

What was your major area of study in your highest level of education?

Your gender:
Male  Female

Your age:

Does your company publish more than one magazine?
Yes  No

If your company publishes more than one magazine, please list:

500 characters remaining.

Your magazine is printed:
Weekly Monthly Bimonthly Quarterly Yearly

Your magazine is:
Paid subscription Unpaid subscription

Your circulation area is predominantly:

- International
- National
- Regional (more than one state)
- State
- Smaller than your state (city, county, area)

Your publication's approximate circulation is:
Below 1,000
1,001-5,000
5,001-10,000
10,001-20,000
20,001-50,000
50,000 +

The state your publication is based in:

How many full-time photographers does your magazine employ?

How many full-time designers/page layout staff does your magazine employ?
LPC Member Survey

Page 2 of 5

20% Complete

* Required Fields

How many full-time news/editorial staff does your magazine employ?

How many full-time advertising/marketing staff does your magazine employ?

How many free-lance photographers does your magazine employ?

How many free-lance designers/page layout staff does your magazine employ?

How many free-lance news/editorial staff does your magazine employ?

How many free-lance advertising/marketing staff does your magazine employ?

What percent of your employees are Full-time?

What percent of your employees are Free-lance?

What type of livestock does your magazine cover?

- Beef cattle
- Dairy cattle
- Sheep
- Swine
- Poultry
- Equine
- Other

How long has your magazine been published?

less than 1 year


12/4/2003
1-5 years
6-10 years
11-15 years
16-20 years
20+ years

Does your publication have Internet availability in the office?

yes  no

If your publication has Internet in the office, how long has it been available?

If your publication DOES NOT have Internet availability in your office, to what extent does this have an influence on it: (1= Low influence, 10= Strong influence)

Cost
Lack of support staff or training
Lack of interest
Don't see the benefits
Staff will spend too much time Online
No time for installation
An assistant has to spend time sorting and delivering information from the Web to the proper staffer
Too much information to process
Other

In your office, Internet access is available for:

Only one computer/ location
All staff at their own computer
Only a few staff members

In your office, is there a policy or philosophy about personal Online use by your staff

yes  no

If you have an Online policy or philosophy, please provide a brief description of your policy

LPC Member Survey

In an average day in your publication office, Online information is searched for and/or received by an individual staff member:

0-1 time
2-5 times
6-10 times
11-20 times
21-40 times
41-50 times
51 or more times
I do not know

The percentage of stories your publication generates each month with at least partial Web assistance totals:

Less than 10 percent
11-25 percent
26-50 percent
51-75 percent
76-100 percent

If you had a choice of receiving certain types of information electronically into your computers or via traditional methods (mail, fax or hand delivery), which of the following would you prefer to be Web or traditional methods?

 Releases from government information/ Extension offices
    Web  Traditional

 Releases from public relations firms
    Web  Traditional

 News items from other agricultural sources
    Web  Traditional

 Letters to the editor
    Web  Traditional


12/4/2003
Graphics and photos

Web    Traditional

Our magazine uses the Internet for (choose all that apply)

☐ Online information research/background for stories
☐ To access our magazine's Web page
☐ E-mail
☐ To receive news releases
☐ To exchange viewpoints with other journalists
☐ Query for and interviews with expert sources
☐ For stories filed by staff away on assignment
☐ Information and news sources
☐ Database manipulation
☐ To find links to add to your Web site
☐ To receive graphics and photos
☐ Other

The benefits of using computers to help generate stories are:

To track story topics to make sure you have fresh stories
To get story ideas by subscribing to a listserv (Internet mailing list) in your field
To speed up the gathering of information
To interact with other industry members
To stay current with the agriculture industry
To submit stories easily
To edit easily
To save costs
To keep archives of past stories
Other

Have you had any formal Website training? (Such as internal, external or academic training in designing Websites)

yes       no

If you have had formal Website training, please list the courses:


500 characters remaining.

12/4/2003
In terms of Website design, you feel your skills are: (1= poor, 5= Excellent)

1 2 3 4 5

Does your magazine have a Website?

yes  no

What is your site's URL:

How many page views does the website receive a month?

Continue
LPC Member Survey

What year was your site first put Online?

Does your company's site contain only your publication or several publications?
- Only one publication
- Several publications

Is your Website available for anyone to view without a fee or password?
- yes
- no

Your publication's site contains: (please check all that apply)
- Current stories
- Archived articles
- Links to other Websites (not advertisers)
- Graphics (photos, illustrations, animation)
- Discussion forums
- Chat rooms
- E-mail feedback
- Display advertising
- Classified advertising
- Database
- Photo Gallery
- Flash animation
- Statistics related to your industry
- Other

How often is your site updated?
- Daily
- Weekly
- Bi-weekly
- Monthly
- Yearly
- Other

Who is your audience for your Website?


12/4/2003
LPC Member Survey

☐ Agriculture industry as a whole
☐ Producers
☐ Paid subscribers to your print publication
☐ General public
☐ Other

What is the main objective of your Website?
   Promotion for the magazine
   Advertising
   Informational
   Value added for our subscribers
   Other

How do you display advertising on your site? (check all that apply)
☐ Banner ads
☐ Other graphic ads
☐ Text links
☐ Pop up windows
☐ Classifieds
☐ We do not put advertising on our site
☐ Other

Do advertisers pay extra to be represented on your publication’s website?
   yes  no

Does all of your editorial material appear on your site?
   yes  no

If NOT all of your print material is on your Website, what criteria determines which material is put Online?

500 characters remaining.

Please list any type of original content on your site that does not appear in your print publication (Ex.: feature stories, biographies, photos)

500 characters remaining.


12/4/2003
Who is the primary decision maker for what is on your site?
- Editors
- Publisher
- Staff members
- Other

Who creates your Website?
- Webmaster
- Graphic designer
- Reporter
- Writer
- Other

Do you outsource your Website work?
- yes
- no

Do you have staff dedicated only to working on Website development?
- yes
- no
LPC Member Survey

* Required Fields

Does the Web staff design the advertising for the Website?
   yes  no

Does the Web staff write or edit editorial materials on the site?
   write  edit  both  neither

Who maintains the Website?
   Administrative assistant  Web designer  Reporter  Editor  Other

Does the magazine provide or pay for website training for the Web staff?
   yes  no

What program is your Website developed in?
   □ Dreamweaver
   □ FrontPage
   □ Netscape Composer
   □ GoLive
   □ Flash
   □ I am unsure what program is used
   □ Other

What program is your Website updated in?
   □ Dreamweaver
   □ Contribute
   □ FrontPage
   □ Netscape Composer
   □ GoLive
   □ Flash
   □ I am unsure which program is used.
   □ Other

Do you pay an outside organization to host your Website?
   yes  no  I do not know


12/4/2003
Do you utilize server statistics (ex: Web page hits)?

- yes  
- no   
- I do not know

What do you want to add about your Website or operation that this survey has not addressed?

500 characters remaining.

LPC Member Survey

100% Complete

* Required Fields

Thank you for taking time to complete this important questionnaire. Your answers are extremely valuable to the success of this study.


12/4/2003
INFORMED CONSENT

Protocol Title: An examination of the adoption of the Internet by agricultural magazines

Please read this consent document carefully before you decide to participate in this study.

My name is Emily Rhoades and I am a graduate student in the Department of Agricultural Education and Communication. Thank you for taking the time to participate in this study. Your participation is completely voluntary. There is no penalty for not participating. If you choose to participate, you will answer items on a confidential survey that will take about 10 minutes to complete. You can stop any time without penalty and you do not have to answer any question you do not wish to answer.

All answers are confidential to the extent provided by law. There are no known risks associated with this study and there is no compensation or other direct benefit to you for participation.

If you’d like to learn more about this study, please contact me at 213 Rolfs Hall, Gainesville campus, 352-392-0502 ext. 226. If you have questions about your rights as a research participant, please contact the UFIRB Office, Box 112250, University of Florida, Gainesville, FL, 32611-2250, 352-392-0433. IRB # 2003-U-900.

Agreement:

By returning this instrument, I agree that I have read the procedure described above. I voluntarily agree to participate in the procedure and I have received a copy of this description.
Please take a few minutes to complete and return this survey. It is very important for the success of this survey that all questions be completed. Responding will only take approximately ten minutes and will be crucial to the success of the study. Your responses to the study will stay confidential. Your cooperation in the survey is greatly appreciated.

Name of magazine

Name of person completing the survey

Your title

1. What is your highest level of education:
   - [ ] High school
   - [ ] Some college
   - [ ] Bachelor’s degree
   - [ ] Master’s degree
   - [ ] Doctorate

2. What was your major area of study in your highest level of education?

3. Your gender   [ ] Male   [ ] Female

4. Your age: __________

5. Does your company publish more than one magazine? ___ Yes ___ No

5a. If yes, please list _________________________________

---

Please check the answer which fits most appropriately with your magazine.

6. Your magazine is printed:
   - [ ] Weekly
   - [ ] Quarterly
   - [ ] Monthly
   - [ ] Yearly
   - [ ] Bimonthly

7. Your magazine is:
   - [ ] Paid subscription
   - [ ] Unpaid subscription

8. The circulation area is predominantly:
   - [ ] International
   - [ ] Regional (more than one state)
   - [ ] Smaller than your state (city, county, area)
   - [ ] National
   - [ ] State

9. Your publication’s approximate circulation is:
   - [ ] Below 1,000
   - [ ] 1,001-5,000
   - [ ] 5,001-10,000
   - [ ] 10,001-20,000
   - [ ] 20,001-50,000
   - [ ] More than 50,000
10. The state your publication is based in is: __________________

11. How many full-time photographers does your magazine employ? ______
   - How many full-time designers/page layout staff does your magazine employ? ______
   - How many full-time news/editorial staff does your magazine employ? ______
   - How many full-time Advertising/marketing staff does your magazine employ? ______

12. How many free-lance photographers does your magazine employ? ______
   - How many free-lance designers/page layout staff does your magazine employ? ______
   - How many free-lance news/editorial staff does your magazine employ? ______
   - How many free-lance Advertising/marketing staff does your magazine employ? ______

13. What percent of your employees are: Full-time staff ______ Free-lance ______

14. What kind of livestock does your magazine cover?
   - Beef cattle
   - Poultry
   - Dairy cattle
   - Sheep
   - Equine
   - Swine
   - Other (please list) ______

15. How long has your magazine been published?
   - less than 1 year
   - 1-5 years
   - 6-10 years
   - 11-15 years
   - 16-20 years
   - 20+ years

16. Does your publication have Internet availability in the office?
   - Yes
   - No (Go to Question 18)

17. How long has your publication had Internet availability in the office? ______

18. If your publication DOES NOT have Internet availability in your office, to what extent does this have an influence on it: On a scale of 1 to 5 with 1 = Low Influence and 10 = Strong influence, Please indicate your answer to the following statement:

   a. Cost
   - Low influence: 1 2 3 4 5 6 7 8 9 10
   b. Lack of support staff or training
   - Low influence: 1 2 3 4 5 6 7 8 9 10
   c. Lack of interest
   - Low influence: 1 2 3 4 5 6 7 8 9 10
   d. Don't see the benefits
   - Low influence: 1 2 3 4 5 6 7 8 9 10
   e. Staff will spend too much time Online
   - Low influence: 1 2 3 4 5 6 7 8 9 10
   f. No time for installation
   - Low influence: 1 2 3 4 5 6 7 8 9 10
   g. Information has to be routed (an assistant has to spend time sorting and delivering from the Web to the proper staffer)
   - Low influence: 1 2 3 4 5 6 7 8 9 10
<table>
<thead>
<tr>
<th>h. Too much information to process</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>i. Other (please list)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

19. In your office, Internet access is available for:
   a. Only one computer/location
   b. All staff at their own computer
   c. Only a few staff members

20. In your office, is there a policy or philosophy about personal online use by your staff?
   a. Yes
   b. No (go to question 22)

21. If yes, please provide a brief description of your policy.

22. In an average day in your publication office, online information is searched for and/or retrieved by an individual staff member: (circle one)
   a. Zero to one time
   b. Two to five times
   c. Six to 10 times
   d. 11 to 20 times
   e. 21 to 40 times
   f. 41 to 50 times
   g. 51 or more times
   h. I do not know
   i. Too many to count

23. The percentage of the stories your publication generates each month with at least partial Web assistance totals: (circle one)
   a. Less than 10 percent
   b. 11-25 percent
   c. 26-50 percent
   d. 51-75 percent
   e. 76-100 percent

24. If you had a choice of receiving certain types of information electronically into your computers or via traditional methods (mail, fax or hand delivery), which would you prefer? (Please check a box for either Web or traditional as preferred)

<table>
<thead>
<tr>
<th>Web</th>
<th>Traditional</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Releases from government information/Extension offices</td>
<td></td>
</tr>
<tr>
<td>b. Releases from public relations firms</td>
<td></td>
</tr>
<tr>
<td>c. News items from other agriculture sources</td>
<td></td>
</tr>
<tr>
<td>d. Letters to the editor</td>
<td></td>
</tr>
<tr>
<td>e. Graphics and photos</td>
<td></td>
</tr>
</tbody>
</table>

29. In terms of Website design you feel your skills are: (1 = poor, 5 = excellent)
   Excellent
   1 2 3 4 5
   □ □ □ □ □

30. Does your magazine have a website?
   a. Yes
   b. No (Thank you for your help, you are done with the survey!)

31. What is your site’s URL: __________________________

32. How many page views do you receive a month? ______________

33. What year was your site first put online? ______________

34. Does your company’s site contain only your publication or several publications?
   □, only one publication  □, several publications

35. Is your Web site available for anyone to read without a fee or password?
   a. Yes
   b. No

36. Your publication’s site contains: (Check all that apply)
   a. Current stories
   b. Archived articles
   c. Links to other Web sites (not advertisers)
   d. Graphics (photos, illustrations, animation)
   e. Discussion forums
   f. Chat rooms
   g. E-mail feedback
   h. Display Advertising
   i. Classified Advertising
   j. Database
   k. Photo gallery
   l. Flash animation
   m. Statistics related to your industry
   n. Other________________

37. How often is your site updated?
   a. Daily
   b. Weekly
   c. Bi-weekly
   d. Monthly
   e. Other (please list)___________
25. Our magazine uses the Internet for (check all that apply)
   a. Online information research/background for stories
   b. To access our magazine’s Web page
   c. E-mail
   d. To receive news releases
   e. To exchange viewpoints with other journalists
   f. Query for and interviews with expert sources
   g. For stories filed by staff away on assignment
   h. Information and news services
   i. Database manipulation
   j. To receive graphics and photos
   k. To find links to add to your Web site
   l. Other (please list)

On a scale of 1 to 5 with 1= strongly disagree and 5= strongly agree, Please indicate your answer to the following statement:

26. The benefits of using computers to help generate stories are:

<table>
<thead>
<tr>
<th>Benefit</th>
<th>Strongly Disagree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. To track story topics to make sure you have fresh stories</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>b. To get story ideas by subscribing to a listserv (Internet mailing list) in your field</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>c. To interact with other industry members</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>d. To stay current with the agriculture industry</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>e. To speed in gathering information</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>f. To submit stories easily</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>g. To edit easily</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>h. To save costs</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>i. To keep archives of past stories</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>j. Other</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
</tbody>
</table>

27. Have you had any formal Website training? (such as internal, external or academic training in designing websites)
   □ Yes
   □ No (Go to question 29)

28. If you have had formal Website training please list the courses:
38. Who is your audience for your website?
   a. Agriculture industry as a whole
   b. Producers
   c. Paid subscribers to your print publication
   d. General public
   e. Other (please list) ________________________________

39. What is the main objective of your website?
   a. Promotion for the magazine
   b. Advertising
   c. Informational
   d. Value added for our subscribers
   e. Other (please list) ________________________________

40. How do you display advertising on your site? (check all that apply)
   a. Banner ads
   b. Other graphic ads
   c. Text links
   d. Pop up windows
   e. Classifieds
   f. Other (please list) ________________________________
   g. We do not put advertising on our site.

41. Do advertisers pay extra to be represented on your publication’s website?
   a. Yes
   b. No

42. Does all of your editorial material appear on your website?
   a. Yes (If “Yes,” skip to question 43)
   b. No

42 (b). If not all of your print material is on your Web site, what criteria determines which material is put online?

43. Please list any type of original content on your site that does not appear in your print publication (Ex: feature stories, biographies, photos.).

44. Who is the primary decision maker for what is on your site?
   a. Editors
   b. Publisher
   c. Staff members
   d. Other (please list) __________________________

45. Who creates your website?
   a. Webmaster
   b. reporter
   c. graphic designer
   d. editor
   e. other (please list) __________

46. Do you outsource your website work?
   a. Yes (If “yes,” please skip to question 48)
   b. No

47. Do you have a staff dedicated only to working on Website development?
   a. Yes
   b. No

48. Does the Web staff design the advertising for the Website?
   a. Yes
   b. No

49. Does the Web staff write or edit editorial materials?
   a. Write
   b. Edit
   c. Both
   d. Neither

50. Who maintains the website?
   a. Administrative assistant
   b. Web designer
   c. Reporter
   d. Editor
   e. Other (please list) __________________________

51. Does the magazine provide or pay for website training for the Web staff?
   a. Yes
   b. No
52. What program is your website developed in?
   a. Dreamweaver
   b. FrontPage
   c. Netscape Composer
   d. GoLive
   e. Flash
   f. I am unsure which program is used.
   g. Other (please list) ____________________________

53. What program is your website updated in?
   a. Dreamweaver
   b. Contribute
   c. FrontPage
   d. Netscape Composer
   e. GoLive
   f. Flash
   g. I am unsure which program is used.
   h. Other (please list) ____________________________

54. Do you pay an organization outside of your company to host your website?
   a. yes
   b. no
   c. I do not know

55. Do you utilize server statistics (Ex: web page hits)?
   a. Yes
   b. No
   c. I do not know

56. What do you want to add about your Web site or operation that this survey has not addressed?


Thank you for taking time to complete this important questionnaire. Your answers are extremely valuable to the success of this study.
AppenDix C
 INITIAL WEB SURVEY CONTACT

Dear LPC Publication Member,

My name is Emily Rhoades; I am a master’s student in the Department of Agricultural Education and Communication at the University of Florida. I am conducting research relating to agricultural publications and their current uses of the Internet. The purpose of the study is to determine the use of the Internet by your publication to collect and disseminate information to your audiences. Along with the support of the LIVESTOCK PUBLICATIONS COUNCIL this study will increase the knowledge of how agricultural media is utilizing the Internet in today’s computer age. With your permission we would like to ask for your participation in this research.

Participants will complete a questionnaire to measure how your publication is run in terms of the Internet. The questionnaire will be completed online via a web-based form. If you are unable to complete the web-based form, a paper version will be made available to you. The total time to complete the survey will be 10 minutes. Your participation is completely voluntary. There is no penalty for not participating. You can stop any time without penalty and you do not have to answer any question you do not wish to answer.

All answers are confidential to the extent provided by law. There are no known risks associated with this study and there is no compensation or other direct benefit to you for participation.

Please Copy the following number, as you will need it to send the survey:

By clicking on the link below I agree that I have read the procedure described above. I agree to participate in the procedure, and have received a copy of this information. I will be now forwarded to the study.


Please print a copy for your records.

Thank you for your time with this important study!

The results of this study will be provided to you at the LPC yearly meeting in conjunction with the Ag Publications Summit in Tampa, Fl. If you have any questions about this
research please contact the study supervisor, Dr. Tracy Irani or myself. The campus address is 305 Rolf’s Hall, PO Box 110540, Gainesville, and Fl 32611-0540. The phone number is (352) 392-0502. Questions about your concerns or rights can be directed to the UFIRB office, PO Box 112250, University of Florida, Gainesville, Fl 32611-2250. IRB #2003-U-900
Dear LPC member:

A few days ago you received an e-mail message from myself requesting your participation in a Web-based survey on your publication’s use of the Internet. If you have already completed the survey, I would like to take this time to thank you for your help in this study.

If you have not had a chance to fill out the survey, perhaps you would do so sometime today. The survey can be completed quickly and efficiently, and your response is very important to the success of this study.

Feel free to contact me if you have any questions or difficulties with the survey or would like to receive a paper version. My e-mail address is ebbisdorf@ifas.ufl.edu, or you can reach me at 352-392-0502 ext 226.

PLEASE COPY THE FOLLOWING NUMBER, AS YOU WILL NEED IT TO SEND THE SURVEY «M_1000»

By clicking on the link below I agree that I have read the procedures described below. I agree to participate in the procedure, and have received a copy of this information. I will be now forwarded to the study.


Thank you for your time with this important study!

Your participation is completely voluntary. There is no penalty for not participating. If you choose to participate, you will answer items on a confidential survey that will take about 10 minutes to complete.

You can stop any time without penalty and you do not have to answer any question you do not wish to answer. All answers are confidential to the extent provided by law. There are no known risks associated with this study and there is no compensation or other direct benefit to you for participation.

If you have any questions about this research please contact the study supervisor, Dr. Tracy Irani or myself. The campus address is 305 Rolf’s Hall, PO Box 110540, Gainesville, and Fl 32611-0540. The phone number is (352) 392-0502. Questions about
your concerns or rights can be directed to the UFIRB office, PO Box 112250, University of Florida, Gainesville, Fl 32611-2250. IRB #2003-U-900

Emily Rhoades
Dear LPC Publication Member,

My name is Emily Rhoades, I am a master’s student in the Department of Agricultural Education and Communication at the University of Florida. I am conducting research relating to agricultural publications and their current uses of the Internet. The purpose of the study is to determine the use of the Internet by your publication to collect and disseminate information to your audiences. Along with the support of the Livestock Publications Council this study will increase the knowledge of how agricultural media is utilizing the Internet in today’s computer age. With your permission we would like to ask for your participation in this research.

Participants will complete a questionnaire to measure how your publication is run in terms of the Internet. The questionnaire is also available in a web-based form.

If you wish to take the form Online go to http://www.clicksurvey.com/Survey.asp?surveyid=YDCHSR

You will be required to insert the following number ________.

The total time to complete the survey will be 15 minutes. Your participation is completely voluntary. There is no penalty for not participating. You can stop any time without penalty and you do not have to answer any question you do not wish to answer. All answers are confidential to the extent provided by law. There are no known risks associated with this study and there is no compensation or other direct benefit to you for participation.

Please return a signed copy of the consent form and the completed survey in the provided envelope by December 23rd.

The results of this study will be provided to you at the LPC yearly meeting in conjunction with the Ag Publications Summit in Tampa, Fl. If you have any questions about this research please contact the study supervisor, Dr. Tracy Irni or myself. The campus address is 305 Rolf’s Hall, PO Box 110540, Gainesville, and FL 32611-0540. The phone number is (352) 392-0502. Questions about your concerns or rights can be directed to the UFIRB office, PO Box 112250, University of Florida, Gainesville, and FL 32611-2250.

Thank you for your participation,

Emily B. Rhoades
APPENDIX F
LIVESTOCK PUBLICATIONS COUNCIL NEWSLETTER ENCOURAGING STUDY PARTICIPATION
LPC TURNS 30!

Logo Contest - Prize of $100!

Next year LPC will turn 30 and plans are being made to celebrate the event throughout the year. The first event discussed at the recent LPC board meeting is to have a contest to “freshen up” or do a complete overhaul of the LPC logo. As we all know from our Marketing 101 classes a logo is a very important part of the image of any company. With that said, LPC has held onto its design for the better part of 30 years.

The deadline for entries is January 31 and a staff member of any LPC member is eligible including students. The logo needs to be submitted in .pdf format to the LPC office.

Two things to take into consideration are the ability to use it in both black and white and four color. It's also encouraged to add a 30th anniversary angle which can be updated each year thereafter.

If you have any questions, please contact the LPC office. Prize money is $100 and bragging rights to the one winner!

ATTENTION PUBLICATION MEMBERS:

Many of you may have received an e-mail or letter containing a survey being conducted by the University of Florida’s Department of Ag Education and Communication. The survey has been developed to assess the use of the Internet for news collection and dissemination purposes. Your participation in this study is very crucial to its success. If you have any questions about the study you can contact Emily Rhoades at 352/392-5092 ext 226, or eebisdorf@fas.ufl.edu.

FORREST BASSFORD STUDENT AWARD
APPLICATIONS DUE FEBRUARY 15

Scholarship applications for the Forrest Bassford Student Award sponsored by LPC and the Chicago Mercantile Exchange are now available. This $2500 scholarship will be awarded in Tampa at the 2004 Ag Publications Summit (APS). Also, up to four travel scholarships will be awarded to deserving students who must be able to attend the APS. This year’s travel scholarships will now be $500 each rather than $500 as in previous years. This change was made at the recent board of directors meeting. If you need an application, go to the LPC web site at: www.livestockpublications.com or contact the LPC office. For questions, contact: Angie Denton, committee chairman 800/821-5478, ext 211. Deadline for applications is February 15, 2004.
APPENDIX G
WEB SURVEY REMINDER (WAVE 3)

Dear LPC member:
Sorry to continue to bother you; however a few days ago you received an e-mail message from myself asking you to participate in a Web-based survey. Your participation in this survey is very crucial to the success of this study. The results will not only help LPC to better serve you, but it will also help colleges and universities to prepare students to work in your field. The results of this study will be provided to you at the LPC yearly meeting in conjunction with the Ag Publications Summit in Tampa, Fl.

If you have not had a chance to fill out the survey, perhaps you would do so sometime today. The survey can be completed quickly and efficiently, and your response is very important.

Feel free to contact me if you have any questions or difficulties with the survey or would like to receive a paper version. My e-mail address is ebbisdorf@ifas.ufl.edu, or you can reach me at 352-392-0502 ext 226.

PLEASE COPY THE FOLLOWING NUMBER, AS YOU WILL NEED IT TO SEND THE SURVEY
1076

By clicking on the link below I agree that I have read the procedures described below. I agree to participate in the procedure, and have received a copy of this information. I will be now forwarded to the study.

Thank you for your time with this important study! Your participation is completely voluntary. There is no penalty for not participating. If you choose to participate, you will answer items on a confidential survey that will take about 10 minutes to complete. You can stop any time without penalty and you do not have to answer any question you do not wish to answer. All answers are confidential to the extent provided by law. There are no known risks associated with this study and there is no compensation or other direct benefit to you for participation.

If you have any questions about this research please contact the study supervisor, Dr. Tracy Irani or myself. The campus address is 305 Roll's Hall, PO Box 110540, Gainesville, and Fl 32611-0540. The phone number is (352) 392-0502. Questions about your concerns or rights can be directed to the UFIRB office, PO Box 112250, University of Florida, Gainesville, Fl 32611-2250. IRB #2003-U-900

Emily Rhoades
Dear LPC Publication Member,

A few days ago, I sent you a questionnaire asking about your current use of the Internet in your magazine’s production. If you have completed and returned the questionnaire, I would like to take this opportunity to thank you for helping with the survey.

If you have not had a chance to return the survey yet, please do so as soon as possible. Because there is a small number of LPC members being asked to participate, it is important that each person complete the questionnaire.

If you prefer to fill the survey out Online you can go to http://www.clicksurvey.com/Survey.asp?surveyid=YDCSHR
You will need the following number to submit the Online version:

Thank you for your participation
Sincerely,

Emily B. Rhoades
University of Florida
Dear LPC member:
Sorry to bother you; however now that the holidays are over, I was hoping you might have some time to participate in a Web-based survey I e-mailed you about recently. Your participation in this survey is very crucial to the success of this study, which I am conducting as part of my master's thesis. The results will not only help LPC to better serve you, but it will also help colleges and universities to prepare students to work in your field. The results of this study will be provided to you at the LPC yearly meeting in conjunction with the Ag Publications Summit in Tampa, Fl.

If you have not had a chance to fill out the survey, perhaps you would do so sometime today. The survey can be completed quickly and efficiently, and your response is very important.
Feel free to contact me if you have any questions or difficulties with the survey or would like to receive a paper version. My e-mail address is ebbisdorf@ifas.ufl.edu, or you can reach me at 352-392-0502 ext 226.

PLEASE COPY THE FOLLOWING NUMBER, AS YOU WILL NEED IT TO SEND THE SURVEY 1117

By clicking on the link below I agree that I have read the procedures described below. I agree to participate in the procedure, and have received a copy of this information. I will be now forwarded to the study.

Thank you for your time with this important study! Your participation is completely voluntary. There is no penalty for not participating. If you choose to participate, you will answer items on a confidential survey that will take about 10 minutes to complete. You can stop any time without penalty and you do not have to answer any question you do not wish to answer. All answers are confidential to the extent provided by law. There are no known risks associated with this study and there is no compensation or other direct benefit to you for participation.

If you have any questions about this research please contact my study supervisor, Dr. Tracy Iraji or myself. The campus address is 305 Rolf's Hall, PO Box 110540, Gainesville, and Fl 32611-0540. The phone number is (352) 392-0502. Questions about your concerns or rights can be directed to the UPIRB office, PO Box 112250, University of Florida, Gainesville, FL 32611-2250. IRB #2003-U-900

Emily Rhoades
APPENDIX J

FINAL PRINT SURVEY COVER LETTER SENT TO ALL NONRESPONDING PARTICIPANTS

Dear LPC Publication Member,

Hello, I am sorry to bother you, but we still have not heard from you on the LPC MEMBER SURVEY. It is very important to the success of the study that everyone participates. The purpose of the study is to determine the use of the Internet by your publication to collect and disseminate information to your audiences. Along with the support of the Livestock Publications Council this study will increase the knowledge of how agricultural media is utilizing the Internet in today’s computer age. If you have already participated please let me thank you at this time; however, if you still haven’t had a chance to fill out the survey I ask that you take a few moments to help us out.

The questionnaire is also available Online via a web-based form. If you wish to take the survey Online go to:


You will be required to insert the following number ________.

The total time to complete the survey will be 15 minutes. Your participation is completely voluntary. There is no penalty for not participating. You can stop any time without penalty and you do not have to answer any question you do not wish to answer.

All answers are confidential to the extent provided by law. There are no known risks associated with this study and there is no compensation or other direct benefit to you for participation.

Please return the completed survey in the provided envelope by February 2nd.

The results of this study will be provided to you at the LPC yearly meeting in conjunction with the Ag Publications Summit in Tampa, Fl. If you have any questions about this research please contact the study supervisor, Dr. Tracy Irani or myself. The campus address is 305 Rolf’s Hall, PO Box 110540, Gainesville, and Fl 32611-0540. The phone number is (352) 392-0502. Questions about your concerns or rights can be directed to the UFIRB office, PO Box 112250, University of Florida, Gainesville, Fl 32611-2250. IRB #2003-U-900

Thank you for your participation,

Emily B. Rhoades
LIST OF REFERENCES


Maddox, S.J. (2001). *Determining effective communication strategies for agricultural organizations to provide agricultural producers the knowledge necessary to promote change in the 21st century*. Doctoral Dissertation NC State University Raleigh, NC.


BIOGRAPHICAL SKETCH

The author was born Emily Brin Bisdorf on October 1, 1980, in Columbus, Ohio. She grew up in Centerburg, Ohio, a small rural town in central Ohio, where she graduated from Centerburg High School in 1998. Her love for livestock and agriculture stemmed from many years exhibiting sheep through 4-H and FFA.

Emily’s college career began in August of 1998 at The Ohio State University while serving as the Ohio FFA State Treasurer. While pursuing her Bachelor of Science degree in agricultural communications she spent a summer studying abroad at the Prague College of Agriculture in the Czech Republic. Emily spent her time working as an editorial and exhibit design intern while working on her undergraduate degree. She graduated in March, 2002, as a top ten senior in the College of Food, Agriculture, and Environmental Sciences at The Ohio State University.

After completing her bachelor’s degree, Emily married her husband Aaron Rhoades and moved to Gainesville, Florida, to pursue her Master of Science in agricultural communications. While completing her degree, Emily worked as a research assistant on several grant projects, team taught a Web and print production course, and served as the editor for the CALS Connections newsletter.

Emily is a member of the Agricultural Education and Communication Graduate Student Association, Alpha Tau Alpha, Gamma Sigma Delta Honorary, Agricultural Communicators in Education, Agricultural Communicators of Tomorrow, and the American Horse Publications Council.