Using Focus Groups to Assess Educational Programming Needs in Forestry

Abstract
Extension professionals are continually faced with the challenge of effectively communicating relevant information to an ever-evolving audience with diverse interests. Using focus group data, this article highlights specific educational programming needs of nonindustrial private forest landowners (NIPFs) in Mississippi. Findings indicate NIPFs are more likely to adopt new ideas if educational programming is tailored to their specific needs, consequently indicating the need to group the audience by their interests. Data also emphasize the importance of employing new technology as means for communicating more efficiently.

Introduction
Eighty-nine percent of the South's 214 million acres of forestland is privately owned, while in Mississippi, 13 million acres (65%) of the state's forestland are held by 300,000 private landowners (Wear & Greis, 2002; Smith, Miles, Perry, & Pugh, 2009). Clearly, nonindustrial private forest landowners (NIPFs) are important factors in southern timber supply and sustainability. Forestry Extension (henceforth, Extension) is a valuable resource for NIPFs, but ongoing research is necessary to provide the most effective outreach possible. To effectively reach landowners, their needs, interests, and the best method for providing information must be understood.

The study reported here explores how NIPFs adopt new knowledge and tools to engage in sustainable forest management. Focus groups are used to explore landowner attitudes related to: (1) educational contact and delivery; (2) topical interests; and (3) land transfer. The outputs document how technology transfer to southern forest landowners is changing and how Extension can address those changes.
Background

Southern NIPFs tend to be male, college educated, retired, and live within one mile of their forestland (Birch, 1997; Butler & Leatherberry, 2004). The majority own their land for reasons other than timber production, including aesthetics, family legacy, and privacy (Butler & Leatherberry, 2004; Smith et al., 2009).

Tract size in southern private forests is decreasing (Butler & Leatherberry, 2004; Wear & Greis, 2002). Parcelization occurs when land is divided among heirs and/or subdivided for financial gain (DeCoster, 1998; Gustafson & Loehle, 2006). Considering many landowners own land to transfer it to heirs, the potential for parcelization in Mississippi appears high (Butler & Leatherberry, 2004).

Landowners with small ownerships are less likely to participate in Extension programs than landowners with larger holdings (DeCoster, 1998). This is, in part, because per acre forest management costs are greater for smaller landholdings (DeCoster, 1998). Programs using a train-the-trainer model like Woods in Your Backyard can convey the importance of forest stewardship to smaller landowners (Downing, Kays, & Finley, 2009).

A new perspective on outreach is particularly important given many NIPFs fail to receive information from Extension (Measells et al., 2005). Extension has reached a point where adjustments in educational delivery methods are critical—educational outreach can be improved by better defining goals, improving marketing efforts, being creative with funding, and more efficiently communicating with the audience (Diem, Hino, Martin, & Meisenbach, 2011). For instance, Extension clientele are receptive to video short courses, allowing broader topic delivery (Londo & Gaddis, 2003). Still, these adjustments can be difficult because Extension personnel may be fearful of losing current clientele by adopting new outreach methods (Diem et al., 2011).

Lack of awareness is a primary reason landowners do not attend Extension programs; therefore, programs should be marketed to landowners not currently participating (Measells et al., 2005). New participants should be identified who are not actively managing their land, but share similar attitudes and characteristics with owners who are (Butler et al., 2007). These landowners may be reached through volunteer-led programs such as Vermont Coverts, VIP/Coverts in Pennsylvania, the New York Master Forest Owner program, and Mississippi’s extensive network of county forestry associations, all of which have successfully disseminated information through peer-to-peer learning (Finley & Jacobson, 2001; Allred, Goff, Wetzel, & Luo, 2011). Forest landownership is changing in Mississippi and across the South. Extension must understand these changes and the needs of associated clientele groups. In turn, Extension can ensure successful adoption and diffusion of up-to-date sustainable forestry knowledge and tools.

Framework

We approached the research using Rogers's (2003) classic diffusion model of technology transfer. The framework is anchored by four pillars describing the acceptance and transfer of new ideas: (1) innovation; (2) communication channels; (3) time; and (4) social system. We focus on innovation and communication because Extension can most easily effect change by providing information on a
variety of forestry-related topics through both personal and impersonal communication channels (Downing et al., 2009). The adoption process begins with knowledge of a new idea and depends on the attitude regarding it (Rogers, 2003). Both of these pillars in the adoption process are dependent upon how the innovation is communicated. Therefore, ensuring the relevancy of innovations and understanding how to best convey new ideas to landowners can benefit Extension as it promotes new practices.

**Data Collection**

The study reported here used focus group sessions, which are an ideal method for the initial identification and exploration of attitudes and behaviors (Mitra & Lankford, 1999). As used in the study, the method is not intended to statistically represent the larger population. Rather, focus groups are appropriate in situations where highly efficient data collection is necessary (Berg, 2004). A major benefit of focus groups is the spontaneity and exchange among participants, which enables participants to consider their own views in the context of the views of others (Mitra & Lankford, 1999). The number of sessions is primarily determined when the researcher stops receiving new information (i.e., saturation). Four to six groups is typical of small projects, and group size should be kept to no more than about seven participants (Morgan, 1996).

Ten focus groups were held during January 2012 in Lauderdale, Lamar, Marshall, Oktibbeha, Prentiss, Scott, Sharkey, Washington, and Wilkinson Counties in Mississippi. At least two meetings were held in each of the four Mississippi Extension districts. The two sessions conducted in Sharkey and Washington Counties focused on the Mississippi Delta, which is dominated by row-crop agriculture but has an expanding forest cover (MIFI 2009). In contrast to the pine forests found across much of the state, the Delta exclusively contains bottomland hardwood forests. It is important to note that, although the study included perspectives from the Delta, our objective was not to compare Delta and non-Delta counties.

Researchers worked with county Extension personnel to compile a list of potential participants. Effort was made to include participants with a wide variety of experiences and perspectives. Participants from each of the following categories were invited to each meeting: 1) forest landowner with less than 100 acres; (2) forest landowner with 100-500 acres; (3) forest landowner with more than 500 acres; (4) absentee landowner; (5) forest landowner who does not participate in Extension programs; (6) landowner with non-timber forest product as primary objective; (7) consulting forester; and (8) public forester. These categories were not mutually exclusive, and women and minorities were specifically included. To ensure an adequate representation of minority landowner perspectives, one focus group hosted in Oktibbeha County specifically included African American owners. Once the lists were compiled, all potential participants were invited to attend.

Seven questions were asked, along with follow-up questions to clarify and expand on emergent concepts. Based on the study objectives and literature review, questions covered: (1) ownership objectives; (2) how the property was acquired; (3) knowledge and use of management practices; (4) assets; (5) landowner perception of Extension; (6) educational needs; and (7) preferred methods for teaching and advertising programs. Questions were open-ended to encourage discussion (Creswell, 2009). With participant approval, sessions were recorded to complement the facilitator's
notes. Sessions were transcribed, coded, and analyzed line-by-line for emergent themes (Creswell, 2009). Key themes that materialized are presented below.

**Findings**

**Participant Characteristics**

Table 1 summarizes participant characteristics. Eighty-three participants attended; 72.3% of participants were white males, 14.5% were African American males, 9.6% were white females, 2.4% were males of other races, and one (1.2%) was an African American female. Their ages ranged from 24 to 83 years, with a median of 58. In addition, 15.7% owned or managed less than 100 acres, 33.7% owned or managed 100-500 acres, 43.4% owned or managed more than 500 acres, while the remaining 7.2% gave no response.

**Table 1.**

**Combined Focus Group Participant Characteristics**

*(N=83)*

<table>
<thead>
<tr>
<th>Gender and Race</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Black Female</td>
<td>1.2%</td>
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<tr>
<td>Black Male</td>
<td>14.5%</td>
</tr>
<tr>
<td>Other Male</td>
<td>2.4%</td>
</tr>
<tr>
<td>White Female</td>
<td>9.6%</td>
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<tr>
<td>White Male</td>
<td>72.3%</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Acres Owned or Managed</th>
<th>Percentage</th>
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</thead>
<tbody>
<tr>
<td>&lt;100</td>
<td>15.7%</td>
</tr>
<tr>
<td>100-500</td>
<td>33.7%</td>
</tr>
<tr>
<td>&gt;500</td>
<td>43.4%</td>
</tr>
<tr>
<td>No response</td>
<td>7.2%</td>
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</tbody>
</table>
Ownership Objectives

Participant ownership goals included: family enjoyment, passing land to future generations, investment/income, wildlife, and recreation. The majority of participants said their ownership objectives were multi-faceted. In all sessions, strong attachments to the land emerged through activities conducted on the property: "I've got a beech tree in one of those hollows where I carved my initials, October, 1954. It's still there and I hope it's still there in 50 years."

Delta participants emphasized the value of recreation and wildlife habitat in forest ownership, but no participant from those meetings considered income from timber harvest a primary objective. However, most participants agreed earning income from timber would aid in paying for wildlife habitat enhancements: "I'm way more towards growing the wildlife than I am the profit from the trees."

Participants from the African American focus group primarily used their land for hay production, but were interested in active forest management if it would bring an economic return: "Most of my land is in hay production...some of it could be used for forestry also." Many said more information would allow them to make better decisions regarding their ownership and its best uses.

Landowner Educational Needs

Most participants stated that Extension could help them better realize their objectives. Marketing timber was a topic of interest at all sessions, although specific concerns varied by location and landowner objectives. For example, Oktibbeha County landowners were interested in identifying specialty markets for a particular species, whereas landowners statewide expressed interest in new market potential, such as biomass: "I'm looking for new ideas. I'm trying to find what we can do that's cost effective and what are the advantages of it?"

Landowners in all counties except one expressed concern over mill closures and the challenges this creates for timber harvesting. Many participants also believed that Extension could help landowners by providing more localized timber price reports than the quarterly statewide reports currently provided. Landowners in southwest Mississippi were concerned about mineral rights on their land and thought it would be useful to learn about how property rights to forest resources could be affected by selling mineral rights to oil companies: "Are they going to take our trees to put the oil wells in?"

Another topic of interest was cost-share programs. Landowners, especially those managing smaller
properties with limited budgets, expressed lack of awareness about these programs. One consultant said, "I am staying abreast so I can advise my landowners, but if I was a landowner it would be mind-boggling to figure out what's out there because there is nowhere to go to find it." As well, this quote reflected comments in the Delta with the increasing forest acreage driven by federal conservation programs.

Another major theme concerned intergenerational transfer of land. The majority of participants were concerned with increasing parcelization of forestland. They noted this created challenges for landowners pursuing active forest management: "You can get into a point of fragmentation where it's an unmanageable forest." Participants expressed their belief that involving younger generations in land management decisions and networking with other landowners result in stronger attachments to the land. One participant said, "I am guilty...I have 3 boys and I am a member of the forestry association, and I have never carried them to a meeting. Part of it is that their lives are so busy... but I am going to do that." Others planted trees with their children to teach them that the land would be theirs in the future.

Nonetheless, some participants thought the financial benefits of selling forestland could be more important than the family attachment to the land, depending on the situation: "I have tried to educate my children that, as much as you may love the particular piece of land, when it comes time for it to realize the best return, that is what you should do and start your own legacy somewhere else." This quote focuses on areas subject to intense development and suggests that educational programs are needed to make landowners more aware of their options given profit motives and equally important emotional attachments.

**Contact and Delivery Preferences**

The majority of participants believed Extension sufficiently publicized and provided useful educational programs; however, landowners from the African American and Delta focus groups felt that there was a lack of programs suited to their needs. Similarly, county forestry associations (CFAs) were mentioned in connection with Extension programs in all meetings except the African American and Delta focus groups. It is important to note that CFAs were only recently formed in the Delta in response to a dramatic increase in forestland driven largely by federal conservation programs.

Landowners who had participated in Extension programs said their primary information source regarding upcoming programs was traditional mailings. With few exceptions, the majority of participants had email access. However, participants from only two counties reported receiving forestry information from their county Extension office by email. One participant said, "Most people have email. Shoot them an email. That doesn't cost anything." This quote illustrates that some landowners believed email was convenient and could increase awareness and participation in Extension programs, while others said they were receiving too many emails from other outlets and therefore ignored additional emails. Similarly, opinions varied with regard to Extension using the Internet (e.g., videos and webinars) to provide educational resources. Participants from a range of ages believed the Internet was a tool that could reach the younger generation and promote their interest and involvement in forest management, while others suggested all ages could use the Internet to learn about forestry: "It's hard to beat YouTube. Everybody knows how to use that."
According to some landowners, a useful characteristic of posted videos is that they can be watched and reviewed at any time.

Most participants agreed that proximity and scheduling conflicts played an important role in attendance. Most stated that weekends were not a viable option, short programs were more effective than long ones, and meals help to increase attendance and interest in the program.

**Discussion**

Effectively communicating with landowners is challenging for Forestry Extension across the South, often because the educational information provided by Extension fails to fully reach its intended audience. Our findings suggest Extension programs should consider targeting landowners based on their interests.

For example, the changing landscape in the Mississippi Delta provides new opportunities for Extension programming. Delta landowners were focused on hardwood management for wildlife habitat; thus, Extension should tailor its programming in this way. Including information about wildlife in forestry programs may help to create more positive attitudes toward sound forest management practices, which can lead to their adoption by clients.

African Americans would also benefit from a targeted approach. Results from the focus groups showed that many of these landowners are interested in forestry, but are not currently taking part in active forest management. In order to efficiently communicate with this group of landowners, Extension must understand the barriers these landowners face and effectively teach this group about the benefits of forest management. One way to reach this group may be to appeal to their attachments to the land.

The lack of awareness of local CFAs by both African American and Delta landowners highlights the importance of broadening the outreach approach. Peer-to-peer learning opportunities through already established landowner associations should be strengthened. Strategically selected volunteers can be trained to demonstrate and promote management practices in communities Extension cannot easily reach. Involving volunteer landowners in forestry outreach could promote awareness of newly formed CFAs and social networks in the Delta and impact the rate at which forestry practices are adopted.

Landowners with small tracts of forestland often have different educational needs than landowners with large tracts of forestland. Recognizing these landowners face different challenges in forest management and communicating new ideas to them will increase the relevancy of Extension to a broader clientele. In turn, they will be more likely to participate in programming. Employing a program like Woods in Your Backyard in Mississippi would address this need, which will become increasingly important as land is divided through intergenerational transfer.

Extension must recognize there are NIPFs in the South facing challenges different from those of its traditional audience. Because of this, attention should be given to not only the information presented, but also the communication methods. Extension must consider the need to earn the trust of these less-involved groups. Audiences who feel they were left out before may better respond to face-to-face programming specifically tailored to their interests.
Our findings suggest forest owners are more likely to adopt management practices if Extension is sensitive to the attachments many landowners have towards their property. Extension should communicate in a way that assures landowners their land represents more than a commodity, while acknowledging the importance of income. Emotional attachment is likely the reason that many landowners considered passing land to heirs an important reason for owning land. This suggests programming should also incorporate estate and succession planning. Planning for the future of forestland affects all landowners regardless of current management practices or size of property.

Finally, Extension must effectively reach busy landowners and bridge generational gaps by using multiple communication channels. Our research shows the Internet is a popular tool used by forest landowners, and an opportunity exists for Extension to provide educational information through Web pages, posted videos, and webinars. The Internet also affords the opportunity to inexpensively market and educate through email. However, Extension must recognize not all landowners are ready for email and ensure those individuals are not left behind. Similarly, resources provided using the Internet must only be supplementary to face-to-face communication still appreciated by many landowners.

**Conclusion**

Extension must acknowledge that effective outreach is accomplished when the material is relevant and the methods of communication are appealing to the audience. How new ideas are presented to landowners plays an important role in the development of attitudes regarding a subject, and this greatly affects the likelihood of the adoption of innovations. A fast and effective tool to assess relevant innovations and communication is the focus group. For specific clientele groups and the general population, this tried-and-true technique can assist Extension educators in remaining up-to-date with their audience.

**References**


