

The Status of Mississippi Forest Landowners

by

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Abstract

Forest resources are important economic assets to Mississippi; however, many landowners do not realize the full benefit of their forestland. It was believed that few landowners were being served by the many forestry-related educational programs or other relevant activities. Therefore, Mississippi forest landowners were surveyed to determine their served status. Fifteen hundred surveys were mailed statewide to landowners owning 10 or more acres of forestland. A total of 375 surveys were returned for an adjusted rate of return of 29.8%. Landowners' served status was determined by their responses to questions concerning use of a professional forester, information previously received pertaining to forestry, membership in a forestry-related organization, and attendance at forestry-related educational programs. Based on the responses to those questions, 70% of Mississippi's forest landowners were underserved. This indicated a need for more comprehensive outreach efforts to target this underserved audience. Respondents reported marketing, insects/diseases, and best management practices as topics of paramount interest. Top methods for informing landowners about future programs included newsletters, pamphlets/brochures, and letters. Improved marketing skills and increased use of sustainable forestry practices could provide additional family income, help sustain the forest resource, and improve the quality of life for affected landowners and communities.

Key Words: educational needs, surveys, underserved landowners

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Introduction

Forestry and forest products are important economic components for Mississippi. In 1999, the total forest industry impact on the state's economy was \$14 billion and accounted for almost 142,000 jobs, or 9% of all jobs within the state (Munn and Henderson 2003). Forestland is one of the major land uses, and offers both environmental and economic opportunities for landowners. These opportunities are the result of an extensive forestland base, forest ownership dominated by approximately 341,000 nonindustrial private forest (NIPF) landowners, highly productive forests, diverse timber markets, and opportunities for fee hunting, pine straw production, agroforestry, and other alternative land use enterprises (Powell et al. 1994, Birch 1997, Hubbard 1999, Jones et al. 2001).

Unfortunately, most NIPF landowners are not realizing the full benefit of their forestland. Landowners with small- to mid-sized tracts of land generally lack forestry knowledge and training, thus making their lands less productive and more often neglected than other ownership categories. It has been hypothesized that this situation is particularly acute among minorities, females, and other landowners not generally served by current federal, state, and local programs. Landowners are frequently unfamiliar with the maze of federal and state agencies and/or programs available, and thus make limited use of these resources. Additionally, landowners are either unaware of, or perceive that they cannot afford to pay for, private consulting services. For the purpose of this project, "underserved forest landowners" were defined as those who had not obtained assistance from forestry professionals or attended available forestry-related educational programs.

Fortunately, the factors that prevent landowners from realizing the full potential of their forestland are related to a lack of willingness, capital, knowledge, and consequent passive management strategies more so than unproductive land. Knowledge can be gained and landowners can adopt active management strategies if they so desire. Additionally, knowledge will enable landowners to adopt sustainable forestry practices that will contribute to the economic success of current and future generations. Sustainable forestry practices will also improve environmental quality by maintaining or improving water quality, reducing soil erosion, and enhancing wildlife habitat. This monetary and environmental windfall will have a positive, rippling effect on the economies and communities in which these landowners reside.

Improved marketing and production practices from underserved landowner forests could provide additional, and often immediate, family income, create new employment in all sectors of the economy, and improve the quality of life in rural communities. In addition, the value of conservation practices to our environment is at least as important as the economic benefits. A variety of natural resource-based enterprises, from fee hunting to agroforestry to pine straw

management, represent an opportunity for landowners to realize additional income while protecting and enjoying their land.

Researchers studying forest landowners have found that there is no “one-size-fits-all” solution for problems faced by southern forest landowners. The primary reason for owners acquiring and holding forestland varies with, among other things, tract size (Birch 1997). Small landowners tend to own forestland for amenity values (e.g., residence, enjoyment), whereas larger landowners place a greater value on commodity production (e.g., timber). This is best demonstrated by the fact that the most frequently cited reason by landowners in the South for owning forestland was "as part of a residence" (38% of respondents), although these landowners held only 8% of the forestland acreage. Conversely, the percentage of landowners citing timber production as the principle reason for ownership was very low (4% of respondents), but these landowners held 35% of the forestland acreage (Birch 1997).

Regardless of tract size or ownership objectives, most landowners can benefit from minor improvements in their management. Evaluations and case studies by Extension Forestry Specialists show that changes in timber market strategies from passive (i.e., timber sold to someone who makes a “reasonable” offer) to active (i.e., timber marketed by a professional forester) often doubles the income from a timber sale. In addition, such a change protects the land because a good written contract includes provisions on Best Management Practices (BMPs), weather restrictions, and other aspects critical to sustaining long-term productivity.

Developing effective educational and outreach efforts requires knowing more about NIPF landowners. While Birch (1997) surveyed private forest landowners in the South, little is known about their socio-demographics. These landowners and their lands are extremely diverse, and represent a wide spectrum of social, economic, and environmental conditions. Few landowners have large ownerships, possess considerable forestry expertise, or actively manage their forestland. Many landowners have small acreages of forestland, own land “in common” with other family members, do not realize their forests’ economic potential, and are less likely to implement environmental protection practices.

Projected demands for timber indicate that these small forestland ownerships provide opportunities for monetary benefits and sustainable production (Cubbage 1998). Rural economies in the South, in particular, are dependent upon forest resources (Hubbard 1999). However, information is needed on the perceived needs of underserved landowners and the most effective ways to encourage them to act, thereby realizing this opportunity.

Objectives

The primary objective was to assess Mississippi NIPF landowners, their underserved status, as well as their forestry-related educational needs. This required knowledge of their past forestry-related experiences and future educational desires. This knowledge will lead to development and implementation of more effective programming techniques designed to meet the needs of this target audience. Improving landowners’ basic forestry knowledge will lead to enhanced economic viability of forest landowners and an improved quality of life for individuals and families as well as the communities where they reside.

Methodology

The project utilized both focus groups and a mail questionnaire. Responses to each focus group session, coupled with professional judgment from the research team, provided content material for the mail questionnaire. After questionnaire development, approximately 21 landowners from educational workshops across Mississippi were asked to carefully review, complete, and make suggestions for improving the questionnaire. After reviewing these pilot-tested questionnaires, the instrument was refined. The final questionnaire was four pages and contained 44 questions.

Forest landowner databases consisting of all landowners owning 10 or more acres of uncultivated agriculture land were obtained from county tax roll data. Thirty percent of Mississippi's 82 counties (n=25) were randomly selected. Landowners were then randomly selected from each county for a total of 1,500 landowners. This methodology is similar to that used by Kluender and Walkingstick (2000) in their study of Arkansas landowners. Multiple mailings were used in the questionnaire implementation (Dillman 1978, Salant and Dillman 1994). A reminder postcard was sent to non-respondents one week after receipt of the initial mailing. One follow-up mailing consisting of a cover letter and questionnaire was sent to those who had not responded after the third week. A business reply return envelope addressed to Mississippi State University was included in all questionnaire mailings. All data was statistically analyzed using the Statistical Package for the Social Sciences (SPSS).

Results and Discussion

Three moderated focus group sessions were held across the state and involved 21 landowners. Each focus group session was moderated by the same person, audio recorded, and transcribed. Information gathered during focus group sessions was used to develop a refined mail questionnaire.

One thousand five hundred mail questionnaires were sent to randomly selected landowners from randomly selected counties. A total of 375 completed questionnaires were returned. After accounting for the undeliverable surveys, deceased landowners, and landowners who did not own forestland, the adjusted rate of return was 29.8%. This return rate was comparable to studies of other NIPF landowners such as Kluender and Walkingstick (2000), Arano et al. (2002), Bovee and Holley (2003), and Newsom et al. (2003).

Certain key socio-demographic results bear mentioning. Landowners ranged in age from 23 to 91 years with the average age of 62.8. Forty-five percent (n=169) of landowners reported a total household income less than \$60,000, while 27% (n=102) reported total household income between \$60,000 and \$120,000, and 10% (n=38) indicated a total household income greater than \$120,000. The remaining 18% (n=66) did not report total income. Forty-nine percent (n=185) of landowners reported having a college degree (Associate or higher). Only 8% (n=30) received less than a high school education, slightly higher than Kuhns et al. (1998) reported for Utah (4%) and Indiana (6%) landowners. Seventy-one percent (n=267) of respondents were Caucasian, 10% (n=38) African American, 12% (n=46) Native American, and 2% (n=8) reported other. Four percent (n=16) of landowners did not report ethnic background. Females comprised 24% (n=89) of respondents while males encompassed 74% (n=276). Only 3% (n=10) did not reveal their gender.

For this project, underserved forest landowners were defined as those who had not obtained assistance from forestry professionals or attended available forestry-related educational programs. On this account, a series of questions were asked to determine the underserved status of landowners. Responses to these four questions were averaged to determine the overall underserved status of Mississippi forest landowners. It was calculated that 70% of respondents could be classified as underserved. Eighty-five percent (n=320) of landowners do not belong to a forestry-related organization. Forty-two percent (n=157) of landowners had previously used a professional forester, which is slightly higher than the 35% used by Minnesota landowners (Baughman et al. 1998) and the 39% of Oklahoma landowners (Bovee and Holley 2003) yet lower than the 58% usage by Alabama landowners (Zhang et al. 1998). Also, 50% (n=189) of respondents reported they had not previously received information on forestry. Correspondingly, 83% (n=310) had never attended a forestry-related educational program, which is slightly more than 80% of Alabama landowners who had neither formal nor informal forestry training through educational programs or meetings (Zhang et al. 1998). The data indicated that a majority of Mississippi landowners are not taking full advantage of the numerous programs and activities available, which is similar to other states.

Overall, 82% (n=306) of landowners had a somewhat positive to a positive attitude toward forestry. Ninety-five percent (n=357) of respondents felt owning forestland was a good investment. In addition, 85% (n=320) believed forest management was a good investment on their land. Sixty-eight percent (n=254) were not familiar with government cost-share programs and 80% (n=301) were not aware of government tax incentives for forest landowners. Only 26% (n=98) of landowners had previously used either government cost-share programs or tax incentives.

Respondents reported owning a total of 132,465 acres. Of this amount, 73,579 acres (56%) were reported as forestland. Ninety percent (n=337) of landowners reported having a clear title to their property and 61% (n=229) had a written will. The majority (83%, n=312) felt they had an obligation to manage their forestland responsibility. Only 9% (n=34) of landowners reported having a written forest management plan. This is higher than the 5% reported by Birch (1997) for southern forest landowners, comparable to the 9% Bovee and Holley (2003) reported for Oklahoma landowners, and lower than the 16% of Minnesota landowners with a written plan (Baughman et al. 1998). Trees had been harvested by 68% (n=255) of landowners while 51% (n=192) plan to harvest trees in the future and 30% (n=114) said they may eventually harvest trees. The top objectives for owning forestland included as an estate to pass on to children or heirs (55%), investment purposes (44%), and for hunting or fishing (43%) (Table 1). These objectives were similar to the top responses found in Birch (1997), Baughman et al. (1998), Kuhns et al. (1998), and Wicker (2002).

Landowners were also asked which topics would be of greatest interest to them at future educational programs or activities. Munn and Rucker (1994) pointed out most landowners lack adequate experience and knowledge in forest management and timber marketing. Likewise, Mississippi respondents' topics of most interest were marketing timber (44%), insects/diseases

Table 1. Mississippi forest landowners' objectives for owning forestland as reported in a 2002-2003 mail survey.

Objective	Number	Percent
As an estate to pass on to my children/heirs	207	55.2
Investment purposes	165	44.0

For hunting or fishing	160	42.7
Family tradition	146	38.9
A place to relax/privacy	141	37.6
Part of my residence/farm	139	37.1
Income generation (e.g., forest products, fee hunting)	122	32.5
Wildlife viewing	106	28.3
To enjoy beauty or scenery/aesthetics	106	28.3
To protect the land	102	27.2
For recreation (other than hunting or fishing)	47	12.5
As an estate to pass on to an organization	4	1.1
Other	4	1.1
No answer	23	6.1

(41%), BMPs (38%), harvesting (38%), and wildlife management (38%) (Table 2). The top responses were similar to those reported by Birch (1997) and Baughman et al. (1998). Also, since 49% (n=153) of respondents who had not previously attended educational programs and activities because they were unaware of these programs, it was important to determine their desired methods to be informed about future programs. The top methods for informing landowners included newsletters (49%), pamphlets/brochures (40%), and letters (33%) (Table 3).

Conclusions

Mail questionnaire responses provided insights about underserved forest landowners, their needs and desires, and appropriate methods for promoting effective programs covering desired topics for this target audience. Overall, approximately 70% of Mississippi's NIPF landowners were underserved; however, they had positive attitudes toward forestry and believed forest management is a good investment on their property. Therefore, it is paramount that forestry professionals be proactive and flexible in educating NIPF landowners. If the forestry community pursues educational programs and activities to reach the underserved landowners, landowners can become more knowledgeable on ways to realize the full range of benefits from owning forestland, which should have a positive effect on them and their communities and lead to adoption of technologies and administrative steps addressing the sustainable management of

Table 2. Mississippi forest landowners' topics they would be interested in learning more about at forestry-related educational programs as reported in a 2002-2003 mail survey.

Topic	Number	Percent
Marketing timber	165	44.0
Insects/diseases	155	41.3
Best Management Practices	144	38.4
Harvesting	143	38.1
Wildlife management	143	38.1
Prices	140	37.3
Pine management	130	34.7
Cost-share programs	130	34.7
Regeneration	124	33.1

Hardwood management	124	33.1
Assistance programs/services available	103	27.5
Laws concerning forestry	97	25.9
Forest management planning	88	23.5
Contracts	82	21.9
Estate planning	82	21.9
Tree identification	62	16.5
No answer	60	16.0
Financial planning	55	14.7
Economics	53	14.1
Recreation/fee hunting	48	12.8
Chemicals	46	12.3
Consultant availability	44	11.7
Other	17	4.6

Table 3. Mississippi forest landowners' methods by which they would like to be informed about future forestry-related educational programs as reported in a 2002-2003 mail survey.

Method	Number	Percent
Newsletter	182	48.5
Pamphlet/brochure	150	40.0
Letter	123	32.8
No answer	60	16.0
Newspaper	59	15.7
Magazine	54	14.4
E-mail	50	13.3
Television	28	7.5
Word-of-mouth	25	6.7
Presentation	22	5.9
Radio	20	5.3
Internet	13	3.5
Church	8	2.1
Other	8	2.1

their forests. An area in need of additional study is to determine, through a follow-up mail questionnaire, how many landowners have crossed the line from being “underserved” to now utilizing some of the technical, financial, and educational resources available to them.

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