



*Values, Attitudes,  
and Perceptions  
of  
Forest Industry  
Constituency Groups*

by

Stephen C. Grado  
Marcus K. Measells  
Rachel B. Habig  
Louis M. Capella

**R e s e a r c h B u l l e t i n**  
F o r e s t a n d W i l d l i f e R e s e a r c h C e n t e r

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## Authors

Stephen C. Grado is an associate professor in the Department of Forestry at Mississippi State University. His primary research interest is economics of multiple-use forestry management. Marcus K. Measells is a research/extension associate and Rachel B. Habig is a graduate research assistant, both in the Department of Forestry at Mississippi State University. Louis M. Capella is a professor in the Department of Marketing, Quantitative Analysis, and Business Law in the College of Business and Industry at Mississippi State University.

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Mississippi State University

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# Introduction and Methods

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Today, forestry practices face many difficult challenges ranging from public concerns for harvesting practices, soil erosion, and water quality to the implications of these practices on wildlife habitat, particularly tree species diversity and understory composition. Further, these practices are constantly being assessed and questioned by the general public and special interest organizations. The continuing success of commercial forestry as a leading economic activity in Mississippi depends, in part, on a successful communication and education program by the forestry community for constituency groups and the general public. Such a program should describe science-based forestry practices and their goals and applications. This should eliminate false information and counterproductive activities that undermine the profession and the livelihood of those employed in it.

Any plan of action to promote forestry education should be undertaken by the entire forestry community; that is, large private corporations, smaller firms, public agencies and organizations, non-governmental organizations, and universities. In light of market pressures for "green" wood products and activities opposing appropriate forest practices in other regions of the nation and the world, Mississippi's forestry community should be proactive in its relations with constituencies to minimize further constraints on forestry activities in the state. The forestry community must develop new partnerships with its constituencies to facilitate the way it does business in the future.

An industry funded study conducted by the Department of Forestry identified the values, attitudes, and perceptions of constituents regarding forestry and the forest industry in Mississippi. These constituencies included teachers, public agencies, loggers, nonindustrial private forest landowners, conservation/environmental groups, bankers, and legislators. These groups were chosen after a thorough review of the literature in combination with knowledge on the part of the researchers of the current relationships between the forestry community and other state entities. The study also

investigated the appropriate communication methods and messages preferred by each constituency group when receiving information about forestry.

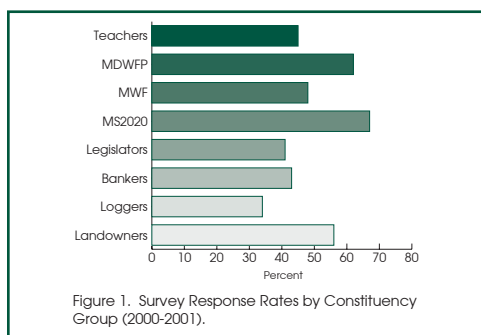
Fifteen focus group sessions were conducted with constituency groups in Mississippi to discuss issues relating to forestry and the forest industry. The focus group distribution was teachers (n=4), public agencies (n=3), loggers (n=2), nonindustrial private forest landowners (n=2), conservation/environmental groups (n=2), bankers (n=1), and legislators (n=1). Information derived from these sessions was used to develop a unique mail questionnaire for each group. In general, all groups were responsive with the exception of some environmental groups. One prominent environmental group participated in a focus group session, however, for various reasons several environmental groups declined to participate in the mail surveys.



*A student makes paper at the Wood Magic Science Fair.*

# Results

Survey results for each constituency group summarizes mail questionnaire response rates (Figure 1) on perceptions of forestry and forest industry and its employees, attitudes toward forestry and forest industry, preferred communication methods and messages for constituencies, and their thoughts on the Sustainable Forestry Initiative (SFI). SFI is a forest certification program initiated by the American Forest and Paper Association. In addition, the constituency groups provided a series of recommendations for action on the part of the forest community.



## Public School Teachers

Mississippi public school teachers were sent mail questionnaires (n=1,515) in August 2000. Twelve surveys were returned as undeliverable. Of the remaining 1,503 questionnaires, 676 were returned for a response rate of 45%. Results of teacher responses were summarized as a group and by each of the following grade categories: pre-kindergarten through 3rd grade, 4th through 8th grade, 9th through 12th grade, and other categories (i.e., 4-12th grade, administrators, and special educators).

**Perceptions.** Teachers (n=676) were asked to associate themes with forestry and forest industry. All 676 teachers provided a response. Themes receiving the most responses were "Timber/trees" (97%), "Harvesting/logging" (89%), and "Timberland" (82%) (Appendix 1). Theme associations for pre-kindergarten through 3rd were the same as teachers overall. The three themes identified most frequently by 4th through 8th grade teachers were the same but also included "Replanting" and "Paper products."

For teachers of 9th through 12th grades, the top two choices were identical but the remaining themes were "Tree farms," "Timberland," and "Replanting."

Teachers were asked to select workers they associated with the forest industry. All 676 teachers responded. Overall, associated workers included "Foresters" (94%), "Harvesters/loggers" (93%), and "Tree farmers" (92%) (Appendix 2). By grade category, associated workers were the same for 9th through 12th grade. However, associated workers identified by 4th through 8th grade were "Harvesters/loggers," "Foresters," "Tree farmers," "Tree planters," and "Forest managers." For pre-kindergarten through 3rd, it was "Tree farmers," "Foresters," "Harvesters/loggers," "Tree planters," and "Forest managers."

**Attitudes.** Most teachers (n=669 or 99%) expressed their personal attitudes toward forest industry (Figure 2). Overall, teachers had either a "Positive" attitude (45%) or a "Somewhat positive" attitude (25%) while 27% had a "Neutral" attitude. The remaining teachers had a "Somewhat negative" (2%) or "Negative" (1%) attitude. Of the pre-kindergarten through 3rd grade teachers (n=129) who expressed their attitudes, 46% had a "Positive" attitude, 23% had a "Somewhat Positive" attitude, 28% had a "Neutral" attitude, 2% had a "Somewhat negative" attitude, and 1% had a "Negative" attitude. Of the 4th through 8th grade teachers (n=244), 45% had a "Positive" attitude, 25% a "Somewhat Positive" attitude, 27% a "Neutral" attitude, 3% a "Somewhat negative" attitude, and less than 1% a "Negative" attitude. Of the 9th through 12th grade teachers (n=222), 44% had a "Positive" attitude, 26% a "Somewhat Positive" attitude, 27% a "Neutral" attitude, 2% a "Somewhat negative" attitude, and 1% a "Negative" attitude.

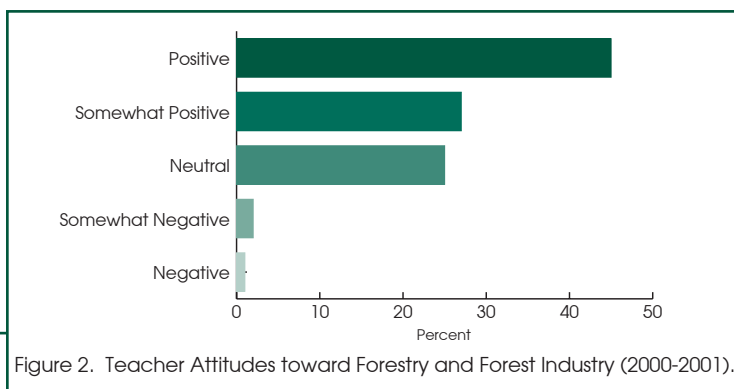


Figure 2. Teacher Attitudes toward Forestry and Forest Industry (2000-2001).

### Preferred Communication Methods and Messages.

All teachers (n=676) responded to a question concerning appropriate methods for communicating information on forestry and the forest industry to teachers. Overall, "School visits" (80%), "Provide educational materials" (77%), and "Partnerships with schools" (73%) were the most recommended methods (Appendix 3). By grade category, these preferences were the same for pre-kindergarten through 3rd. For 4th through 8th, the recommendations were "Provide education materials," "School visits," "Partnerships with schools," "Educational programs/materials," and "Industrial tours/field trips." For 9th through 12th, the recommendations were "School visits," "Partnerships with schools," "Provide educational materials," "Educational programs/materials," and "Industrial tours/field trips."

A majority of teachers (n=640 or 95%) responded to the question concerning materials or activities they would use or request to tell the forest industry story to students. Overall, teachers desired "Field trips" (73%), "Videos" (71%), and "Educational materials" (66%). By grade category, pre-kindergarten through 3rd grade listed "Field trips," "Videos," "Hands on materials," "Educational materials," and "Books." Fourth through 8th listed "Field trips," "Videos," "Hands on materials," "Educational materials," and "Guest lecturers." Ninth through 12th listed "Field trips," "Videos," "Guest lecturers," "Educational materials," and "Hands on materials."

Teachers (n=676) believed forest industry should include a wide variety of issues in media messages targeted to teachers about forestry. Overall, the "Environment" (74%), "Wildlife habitat" (71%), and "Wildlife" (58%) were topics that received the highest priority (Appendix 4). These topics were the same for 4th through 8th and 9th through 12th. For pre-kindergarten through 3rd, the top four topics were identical but the fifth was "Do the right things."

Most teachers (n=632 or 94%) thought it would be beneficial to tell the forest industry story to students. By grade category, 98% of pre-kindergarten through 3rd grade, 98% of 4th through 8th, and 93% of 9th through 12th felt it would be beneficial.

**SFI.** Most teachers (n=654 or 97%) responded to the question pertaining to knowledge of SFI. SFI was recognized by only 3% of teachers while the remaining 97% had never heard of the program (Figure 3). One percent of pre-kindergarten through 3rd grade teachers were aware of SFI while 3% of 4th through 8th and 6% of 9th through 12th were aware.

Most of the teachers (n=19) that had heard of SFI provided an opinion on what they thought were SFI goals. Responding to an open-ended question on these goals, teachers generally thought they revolved around forest and protection.

Of these teachers, 41% believed industry was currently meeting SFI goals while 36% felt industry was not meeting these goals and 23% did not respond (Figure 4). Fifty percent of 9th through 12th and 38% of 4th through 8th felt industry was meeting SFI goals.

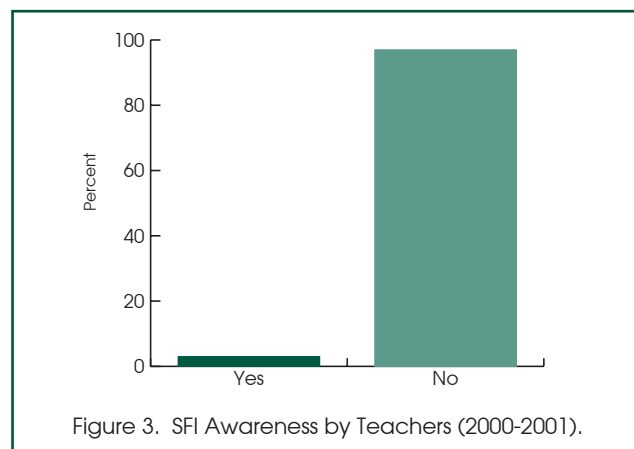


Figure 3. SFI Awareness by Teachers (2000-2001).

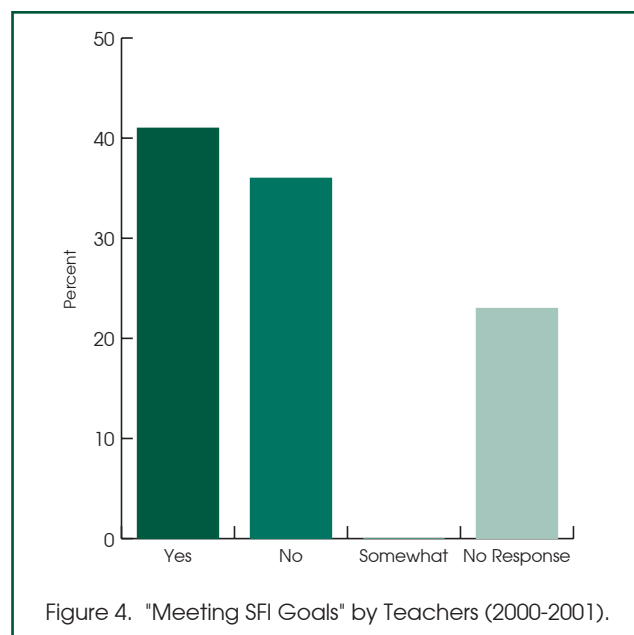


Figure 4. "Meeting SFI Goals" by Teachers (2000-2001).

## Mississippi Department of Wildlife, Fisheries and Parks (MDWFP)

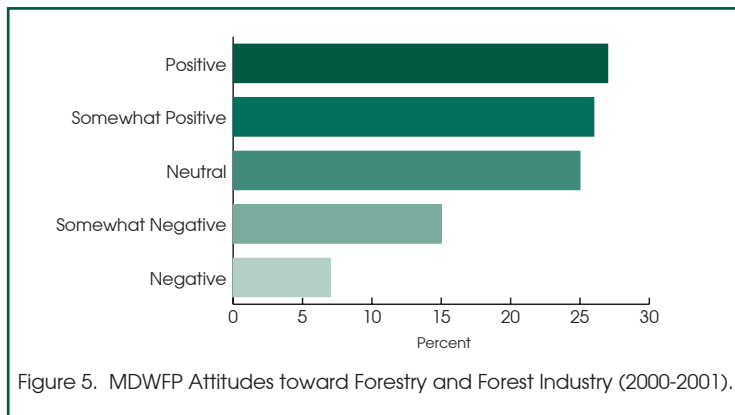
Mail questionnaires (n=382) were sent to MDWFP personnel in November 2000. Two surveys were returned as undeliverable. Of the remaining 380 questionnaires, 236 were returned for a response rate of 62%. Results for MDWFP personnel are summarized as a group and by category (i.e., administrators, technical staff or wildlife biologists, and conservation officers).

**Perceptions.** MDWFP personnel (n=236) were asked to associate themes with forestry or forest industry. Overall, the themes receiving the most responses were "Timber/trees" (92%), "Harvesting/logging" (89%), and "Clear-cutting" (75%), (Appendix 1). Theme associations were similar for conservation officers to the agency as a whole. Technical staff listed "Timber/trees," "Harvesting/ logging," "Paper mills," "Clear-cutting," and "Sawmills." Administrators listed "Timber/trees," "Harvesting/ logging," "Replanting," "Clear-cutting," and "Timberland."

All personnel (n=236) provided responses about types of employees they associated with forest industry. Overall, the top associations included "Harvesters/loggers" (94%), "Foresters" (91%), and "Tree planters" (82%) (Appendix 2). By job description, the top employee associations were the same for conservation officers and the agency. However, the technical staff associated "Foresters," "Harvesters/loggers," "Tree planters," "Timber buyers," and "Forest managers." Administrators associated "Harvesters/loggers," "Foresters," "Tree farmers," "Tree planters," and "Timber buyers."

**Attitudes.** Overall, most individuals (n=233 or 99%) expressed their personal attitude toward forest industry (Figure 5). Few (27%) had a "Positive" attitude while 26% had a "Somewhat positive" attitude. Twenty-five percent reported a "Neutral" attitude while 15% had a "Somewhat negative" attitude and the remaining 7% had a "Negative" attitude. Of the conservation officers (n=180) reporting attitudes, 30% had a "Positive" attitude, 30% had a "Somewhat Positive" attitude, 24% had a "Neutral" attitude, 11% had a "Somewhat negative" attitude, and 5% had a "Negative" attitude. Of the 38 technical staff, 18% had a "Positive" attitude, 11%

had a "Somewhat Positive" attitude, 24% had a "Neutral" attitude, 34% had a "Somewhat negative" attitude, and 13% had a "Negative" attitude. Of the 14 administrators, 22% had a "Positive" attitude, 7% had a "Somewhat Positive" attitude, 50% had a "Neutral" attitude, 7% had a "Somewhat negative" attitude, and 14% had a "Negative" attitude.



### Preferred Communication Methods and Messages.

Of the respondents (n=219 or 93%), felt it would be beneficial for forest industry to communicate information on their timber and wildlife management practices to the MDWFP. All administrators (n=15) reported it would be beneficial while 95% of technical staff and 93% of conservation officers felt the same way.

All personnel (n=236) indicated industry should use communication methods and activities such as "Educational programs/materials" (56%), "Partnerships with the MDWFP" (55%), and "Workshops" (53%) to communicate with the MDWFP in general (Appendix 3). The top four communication methods for administrators were the same while the fifth was "Newspaper articles." However, the top methods for conservation officers were "Educational programs/materials," "Workshops," "Partnerships with the MDWFP," "Presentations," and "Industrial tours/field trips." The top methods for technical staff included "Partnerships with the MDWFP," "Truth in advertising," "Educational programs/materials," "Industrial tours/field trips," and "Workshops."

All respondents (n=236) indicated the topics they believed forest industry should incorporate into education and communication activities. The top media topics recommended were "Wildlife habitat" (93%), "Wildlife" (81%), and "Environment" (56%)

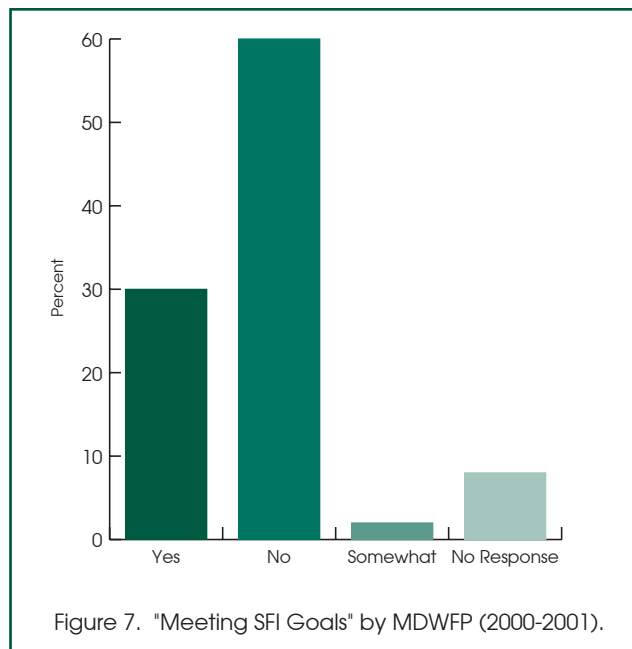
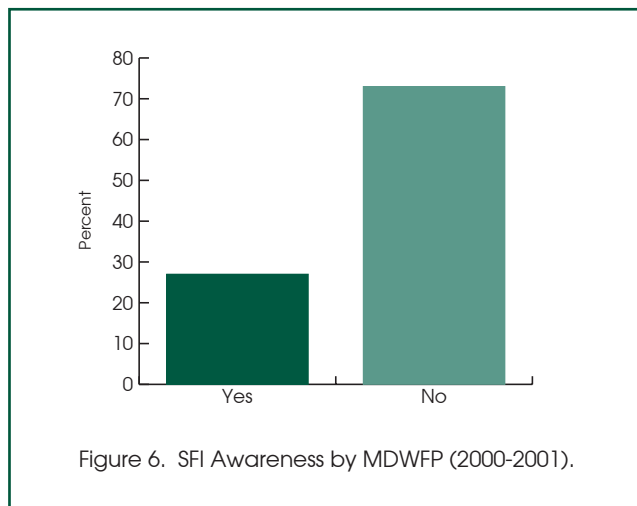


(Appendix 4). The top three topics were the same by job description. However, the fourth and fifth categories for conservation officers were "Harvesting" and "Regeneration." Likewise, the technical staff also listed "Water quality" and "Biodiversity," and administrators listed "Water quality" and "Do the right things."

**SFI.** Of the personnel (n=225) responding to the query of their knowledge of SFI, it was recognized by 27% while 73% were unaware of the program (Figure 6). Those aware of SFI included 19% of the conservation officers, 59% of technical staff and 40% of administrators.

MDWFP personnel (n=63) with knowledge of SFI indicated what they thought were the basic principles of SFI. Overall, the top principles were "Sustainable forestry" (79%), "Responsible practices" (73%), "Forest health and productivity" (70%), "Public relations" (60%), and "Continual improvement" (51%). The top principles were the same for administrators. However, conservation officers listed "Sustainable forestry," "Forest health and productivity," "Responsible practices," "Continual improvement," and "Use of new technologies." The technical staff listed "Public relations," "Sustainable forestry," "Responsible practices," "Forest health and productivity," and "Continual improvement."

Of the individuals (n=63) with an awareness of SFI, 30% believed forest industry was currently meeting SFI goals, 60% felt goals were not being met, 2% felt goals were somewhat being met, and 8% did not respond (Figure 7). Fifty-three percent of conservation officers, 82% of technical staff, and 75% of administrators did not believe SFI goals were being met.



### Mississippi Wildlife Federation (MWF)

Mail questionnaires (n=1,000) were sent in March 2001 to the MWF, a hunting, fishing, and conservation organization with 3,592 members in the state. Twenty-four surveys were undeliverable, and 470 completed surveys were returned for a response rate of 48%.

**Perceptions.** All MWF members (n=470) responded when asked to make associations with forest industry. The themes receiving the most responses were "Timber/trees" (96%), "Harvesting/logging" (92%), and "Timberland" (86%) (Appendix 1).

All members (n=470) responded to the question concerning employees they associated with forest industry. "Harvesters/loggers" (97%), "Foresters" (94%), and "Tree planters" (89%) were the top job types associated with forest industry (Appendix 2).

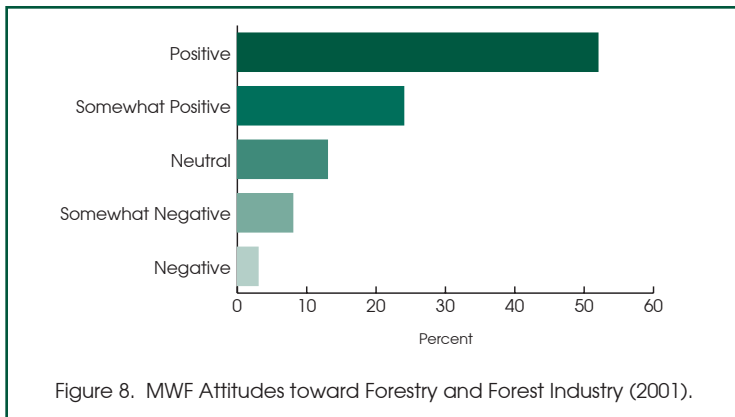
**Attitudes.** Members of MWF were asked their personal opinions of the forest industry (Figure 8). Most members (n=465 or 99%) answered this question. The majority of MWF members, 51%, had a "Positive" attitude and an additional 24% had a "Somewhat positive" attitude. Thirteen percent had "Neutral" feelings, 8% listed a "Somewhat negative" attitude, and 3% had a "Negative" attitude.

### Preferred Communication Methods and Messages.

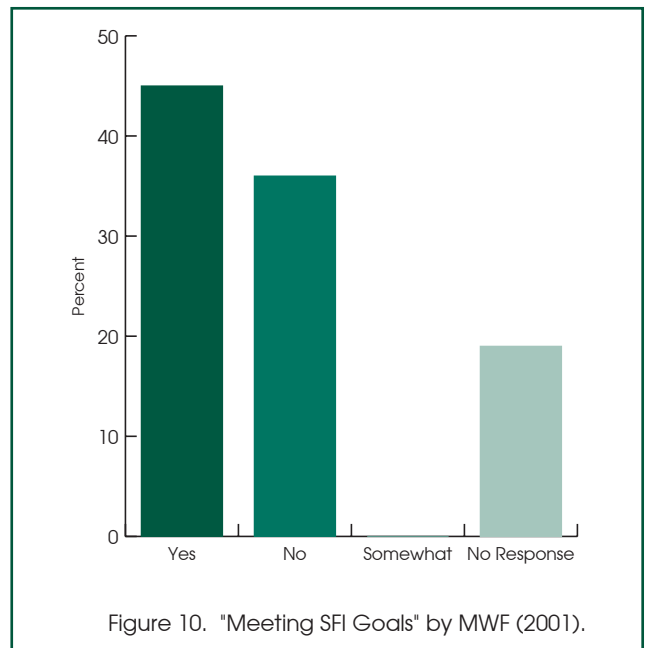
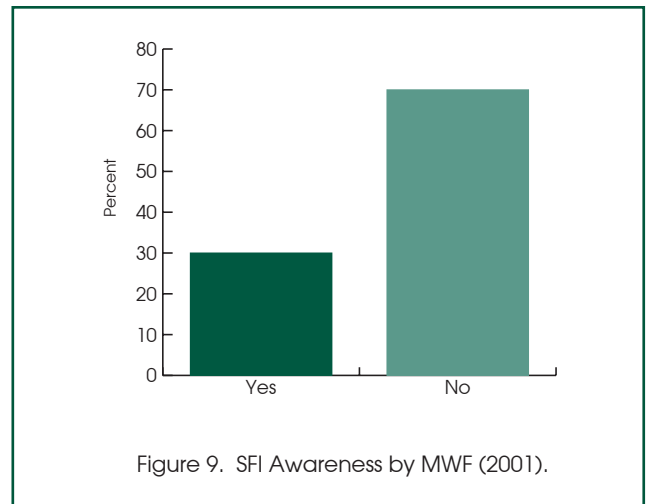
Most members (n=442 or 94%) responded to the question asking if it would be beneficial for forest industry to communicate their timber and wildlife management practices to the group. The answer was "Yes" for 91%. Only 9% felt it would not be beneficial.

All members listed methods that forest industry could use to communicate with MWF in general. The most frequent replies were "Educational programs/materials" (47%), "Partnerships with MWF" (47%), and "Magazine articles" (46%) (Appendix 3).

All MWF members listed potential messages for use in communications. "Wildlife habitat" (86%) was chosen most often. "Wildlife" (76%), and "Environment" (61%) were the others most frequently listed (Appendix 4).



**SFI.** Most MWF members (n =446 or 95%) answered the question on whether they had heard of SFI (Figure 9). Of these, 30% answered "Yes," while 70% had not heard of SFI. MWF members (n=133 or 29%) who were aware, gave their idea of the basic SFI principles. The most chosen principles were "Sustainable Forestry" (85%) followed by "Responsible practices" (70%), "Forest health and productivity" (69%), "Continual Improvement" (48%), and "Use of new technologies" (47%). MWF members (n=109 or 23%) also gave their opinion of whether industry was meeting SFI goals (Figure 10). Forty-five percent felt that SFI goals were being met while 36% did not and 19% did not respond.



### Mississippi 2020 (MS 2020)

Mail questionnaires (n=197) were sent in April 2001, to members of MS 2020, a grass roots organization concerned with overall sustainability. Of these, three surveys were undeliverable. Of the remaining 194 surveys, 129 were returned for a response rate of 67%.

**Perceptions.** All members (n=129) responded to the query on what "Forest industry" meant to them. They listed "Harvesting/logging" (97%), "Timber/trees" (92%), and "Tree farms" (89%) as themes receiving the most response (Appendix 1).

When asked to associate jobs with forest industry, all 129 members answered. They chose "Harvesters/loggers" (97%), "Tree farmers" (92%), and "Foresters" (88%) as the top associated jobs (Appendix 2).

**Attitudes.** Most members (n=127 or 98%) of MS 2020 responded to the question asking for their attitudes toward forest industry (Figure 11). Seventeen percent expressed a "Positive" attitude and 12% had a "Somewhat positive" attitude. Twenty-five percent had a "Neutral" attitude, 29% had a "Somewhat negative" attitude, and 17% had a "Negative" attitude.

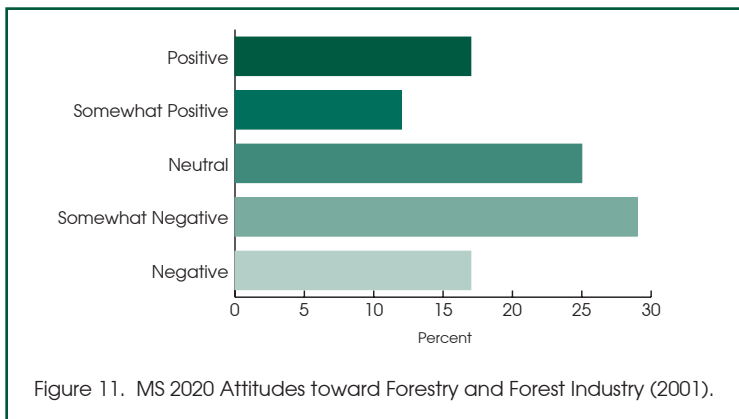


Figure 11. MS 2020 Attitudes toward Forestry and Forest Industry (2001).

**Preferred Communication Methods and Messages.**

A question on whether it would be beneficial for forest industry to share information on their timber and wildlife management practices was answered by 119 members. A majority (93%) answered "Yes" and 5% answered "No." Two percent were unsure.

MS 2020 members were asked to indicate their preferred methods of receiving information pertaining to forest industry. All members (n=129) responded. "Partnerships with MS 2020" were most popular, with 58% choosing this method. "Educational programs/materials" (55%), and "Industrial tours/field trips" (47%) were the next two choices (Appendix 3). All 129 members responded to the question relating to messages forest industry should address. These included the "Environment" (73%), "Wildlife habitat" (70%), and "Ecological processes" (62%) (Appendix 4).

**SFI.** Most members (n=123) responded to the question on whether they had heard of SFI (Figure

12). Of these, 27% had heard of SFI, 72% were unfamiliar with the term, and 1% were unsure.

The question concerning the basic principles of SFI was answered by 34 members. "Sustainable forestry" (94%) was the top principle cited. "Forest health and protection" (76%), "Responsible practices" (74%), "Continual improvement" (68%), and "Use of new technologies" (62%) were other categories most frequently chosen. Thirty members answered the question concerning whether forest industry was meeting SFI goals (Figure 13). Few believed industry (18%) was currently meeting SFI goals. In contrast, 70% thought the stated goals were not being met and 12% did not respond.

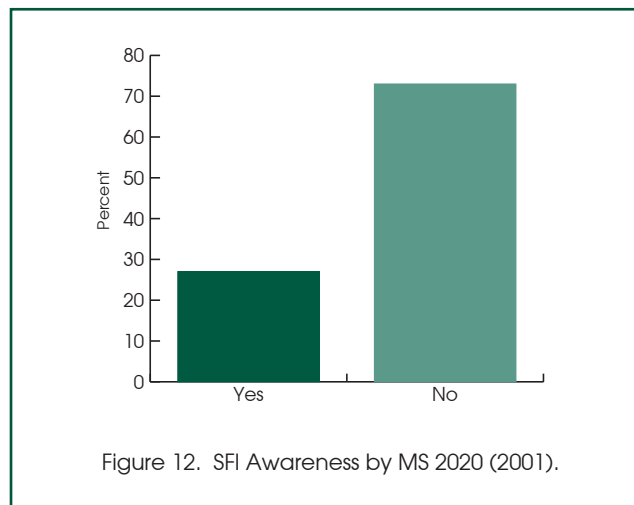


Figure 12. SFI Awareness by MS 2020 (2001).

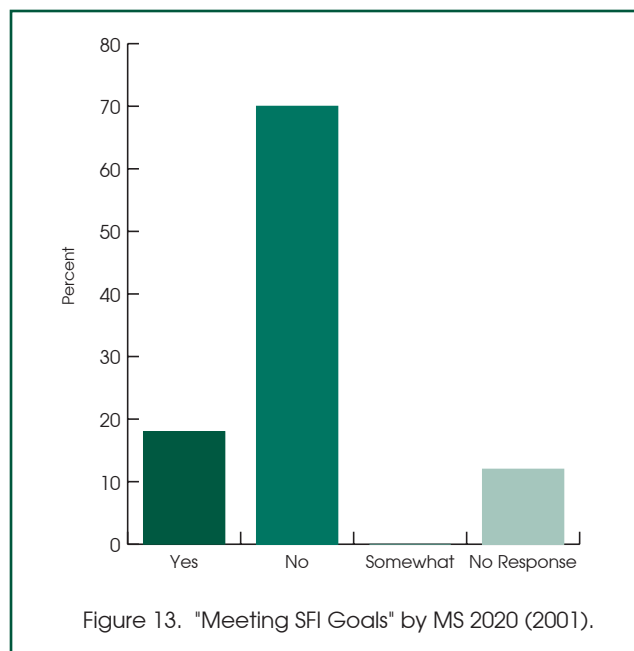


Figure 13. "Meeting SFI Goals" by MS 2020 (2001).

## Legislators

Mail questionnaires (n=174) were sent to the Mississippi Legislature during May 2001. Seventy-two surveys were returned for a response rate of 41%.

**Perceptions.** Legislators (n=72) were asked to make theme associations with forestry and forest industry. Legislators listed "Timber/trees" (99%), "Harvesting/logging" (94%), and "Tree farms" (90%) as top choices (Appendix 1).

All legislators (n=72) listed employees they associated with forest industry. The top employee categories were "Harvesters/loggers" (97%), "Foresters" (94%), and "Tree planters" (90%) (Appendix 2).

**Attitudes.** Personal attitudes toward forest industry were expressed by all legislators (n=72) (Figure 14). Seventy-five percent had a "Positive" attitude, 18% had a "Somewhat positive" attitude, and 7% had a "Neutral" attitude. No one reported a "Somewhat negative" or a "Negative" attitude.

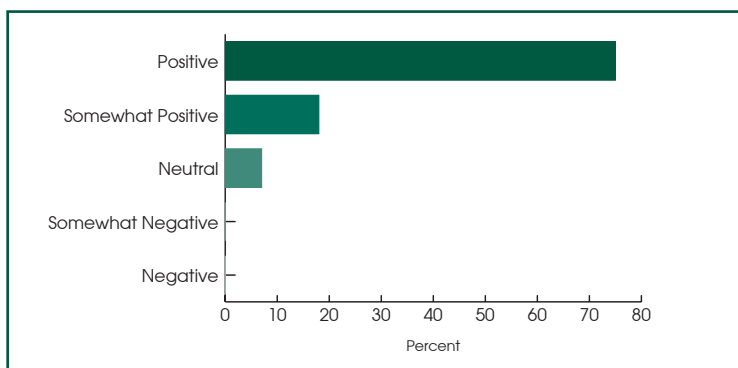


Figure 14. Legislators Attitudes toward Forestry and Forest Industry (2001).

## Preferred Communication Methods and Messages.

When asked if it would be beneficial for forest industry to communicate information about their timber and wildlife management practices to the Mississippi Legislature, 96% felt it would be beneficial while 3% said it would not and 1% were undecided.

All legislators (n=72) responded to the question about communication methods. They recommended forest industry use "Presentations" (43%), "Meetings" (40%), and "Industrial tours/field trips" (40%) to communicate with Mississippi legislators (Appendix 3). All legislators (n=72)

responding provided topics they felt forest industry should use in messages targeted toward them. The most recommended topics were on "Regeneration" (51%), "Harvesting" (50%), and "Wildlife habitat" (49%) (Appendix 4).

**SFI.** Legislators (n=70) responded to the question pertaining to knowledge of SFI (Figure 15). Only 37% had knowledge of SFI while 63% were not aware. The legislators (n=26) with knowledge of SFI indicated what they believed were the basic principles of SFI. The top principles were "Sustainable forestry" (89%), "Responsible practices" (89%), "Continual improvement" (69%), and "Use of new technologies" (54%). Of the legislators (n=26) who were aware of SFI, 38% believed industry was meeting SFI goals, 38% felt it was not, 12% felt it was meeting the goals somewhat, and 12% did not respond (Figure 16).

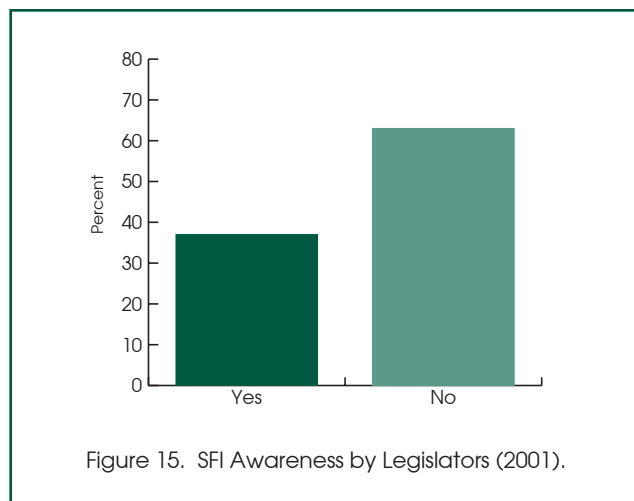


Figure 15. SFI Awareness by Legislators (2001).

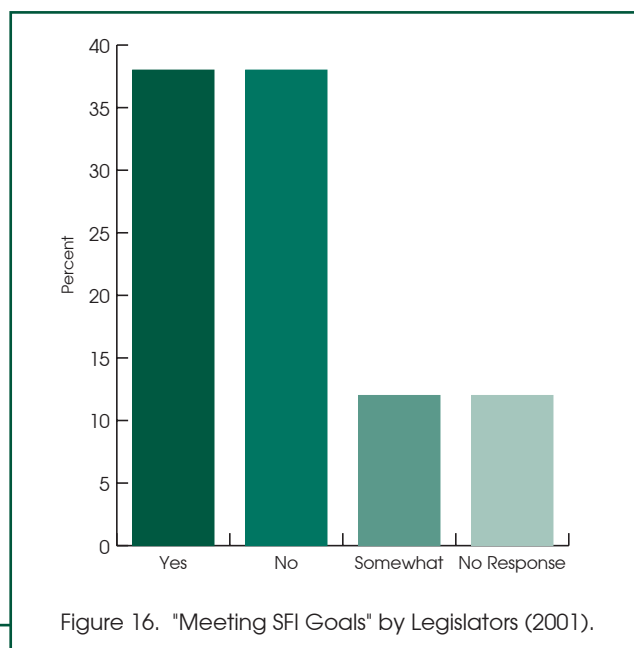


Figure 16. "Meeting SFI Goals" by Legislators (2001).



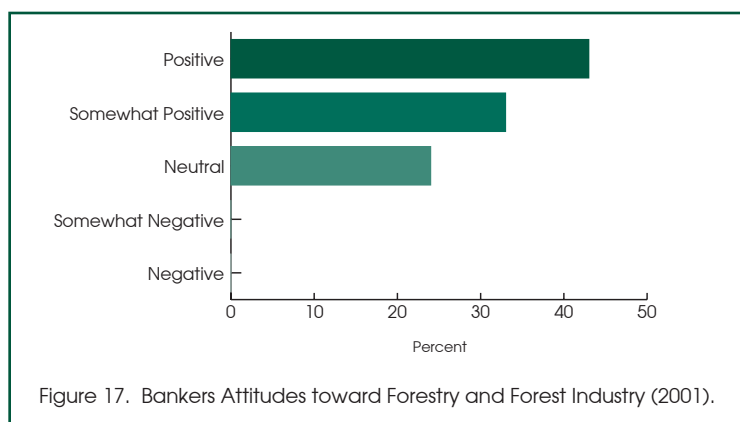
## Bankers

Mail questionnaires (n=500) were sent to Mississippi bankers during May 2001. Fifty-nine were undelivered due to insufficient addresses. Of the remaining 441 surveys, 189 were returned for a response rate of 43%.

**Perceptions.** All bankers (n=189) made theme associations with forestry and forest industry. Bankers listed "Timber/trees" (96%), "Timberland" (85%), and "Harvesting/logging" (83%) as top choices (Appendix 1).

All bankers (n=189) listed employees they associated with forest industry. The top employees were "Harvesters/loggers" (88%), "Foresters" (88%), and "Tree farmers" (86%) (Appendix 2).

**Attitudes.** All bankers (n=189) expressed their personal attitudes toward forest industry (Figure 17). Forty-three percent had a "Positive" attitude while 33% had a "Somewhat positive" attitude and 24% had a "Neutral" attitude. Of note, no bankers reported a "Somewhat negative" or a "Negative" attitude.



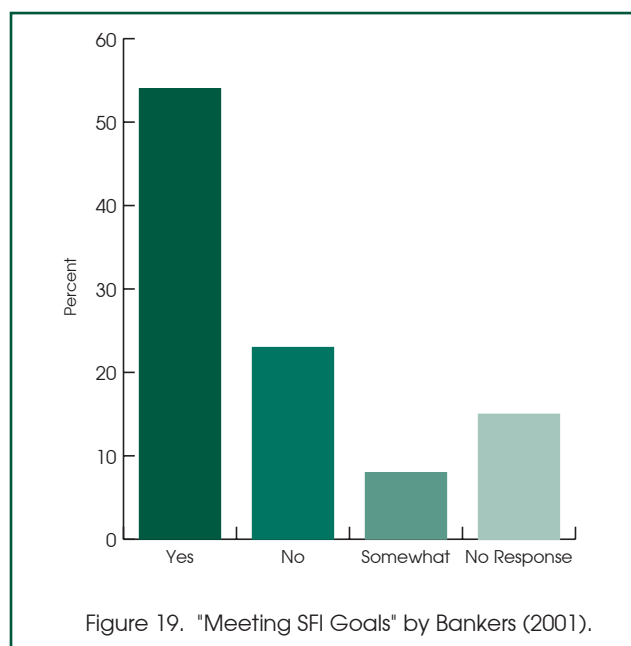
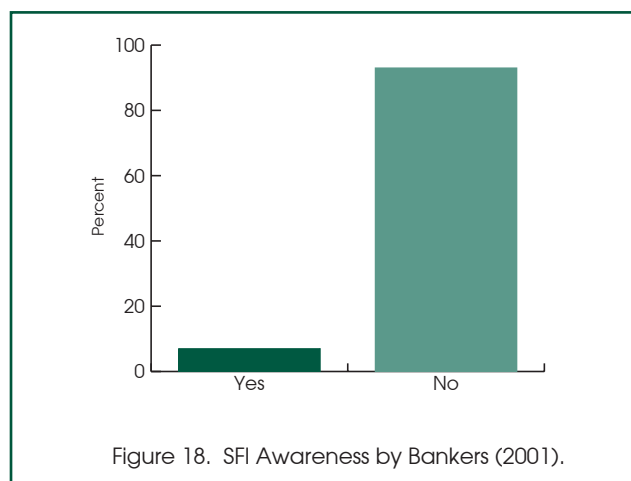
### Preferred Communication Methods and Messages.

Most bankers (n=181) responded to the question of whether it would be beneficial for forest industry to communicate information about their timber and wildlife management practices to bankers. A majority (82%) felt it would be beneficial while 18% said it would not.

Bankers (n=148) who thought it would be beneficial, recommended forest industry use "Pamphlets/brochures" (41%), "Presentations" (39%), and "Meetings" (37%) to communicate with

Mississippi bankers (Appendix 3). All bankers (n=189) provided topics they felt forest industry should use in messages targeted toward bankers. The most recommended topics were "Markets" (50%), "Business Diversification" (46%), and "Environment" (44%) (Appendix 4).

**SFI.** A majority of bankers (n=177) responded to the question pertaining to knowledge of SFI (Figure 18). Seven percent had knowledge of SFI while 93% were not aware. The bankers (n=13) with knowledge of SFI indicated what they believed were the basic principles of SFI. The top principles were "Sustainable forestry" (85%), "Forest health and productivity" (69%), "Responsible practices" (54%), and "Public relations" (39%). Of the bankers (n=13) who were aware of SFI, 54% believed industry was meeting SFI goals. Twenty-three percent felt industry was not, 15% did not respond, and 8% were neutral (Figure 19).



## Loggers

Mail questionnaires (n=588) were mailed to Mississippi Loggers Association members in October 2000. Of these mailings, 68 surveys were undeliverable, due in part to logging firm failures. Of the remaining 520 surveys, 177 were returned for a response rate of 34%.

**Perceptions.** Loggers were asked to list themes they associated with forest industry. All loggers (n=177) responded to the question and listed "Harvesting/logging" (91%), "Sawmills" (83%), and "Paper mills" (83%) as the top responses (Appendix 1).

Loggers (n=177) were asked which jobs they associated with forest industry. They selected "Loggers" (99%), "Timber buyers" (92%), and "Foresters" (92%) as the top categories (Appendix 2).

**Attitudes.** Most loggers (n=174 or 98%) responded to the question regarding their attitude toward forest industry (Figure 20). Over half (54%) had a "Positive" attitude, 18% had a "Somewhat positive" attitude, and 17% expressed a "Neutral" attitude. Six percent had a "Somewhat negative" attitude and 5% had a "Negative" attitude.

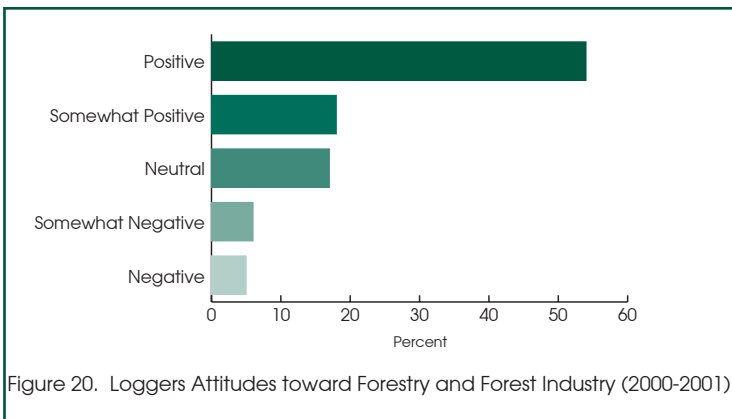


Figure 20. Loggers Attitudes toward Forestry and Forest Industry (2000-2001).

### Preferred Communication Methods and Messages.

Loggers (n=177) were asked to indicate their preferred methods of receiving information pertaining to forest industry and its practices. "Educational programs/materials" were most popular with 60% choosing this method. "Publications/magazines" (53%), and "Workshops" (48%) were the remaining top choices (Appendix 3).

All loggers (n=177) responded to the question

relating to communication messages. Loggers felt messages should be designed to include information on the "Social approval of logging" (69%), "Harvesting" (60%), and messages indicating that industry would "Do the right things" (57%) (Appendix 4).

**SFI.** Most loggers (n=174) responded to the question on whether they had heard of SFI (Figure 21). Ninety-five percent had heard of SFI while 5% were unfamiliar with the concept.

Loggers (n=164) addressed the question concerning the basic principles of SFI. "Responsible practices" were believed by 67% to be the top principle. "Sustainable forestry" (64%), "Public relations" (59%), "Forest health and productivity" (54%), and "Continual improvement" (47%) were others most frequently chosen.

Loggers (n=162) also voiced their opinion about whether SFI goals were being met (Figure 22). Sixty percent believed forest industry was meeting SFI goals. In contrast, 36% did not believe SFI goals were being met by industry, and 4% felt they were being met to some degree.

Loggers (n=164) gave their opinions of the most beneficial aspects of SFI training. A majority (68%) felt the Best Management Practices (BMP's) portion of SFI training was the most beneficial aspect to their profession while 54% felt the "Business management" portion would benefit them. Loggers (n=165) responded to a question asking about the future effectiveness of SFI. Thirty-three percent thought it will be "Somewhat effective," 32% "Moderately effective," 18% "Very effective," and the remaining thought it will have "Little effect" (13%) or "No effect at all" (4%).

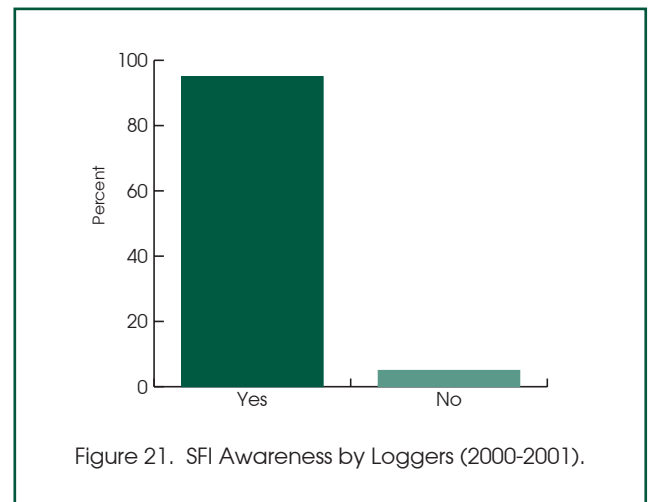


Figure 21. SFI Awareness by Loggers (2000-2001).

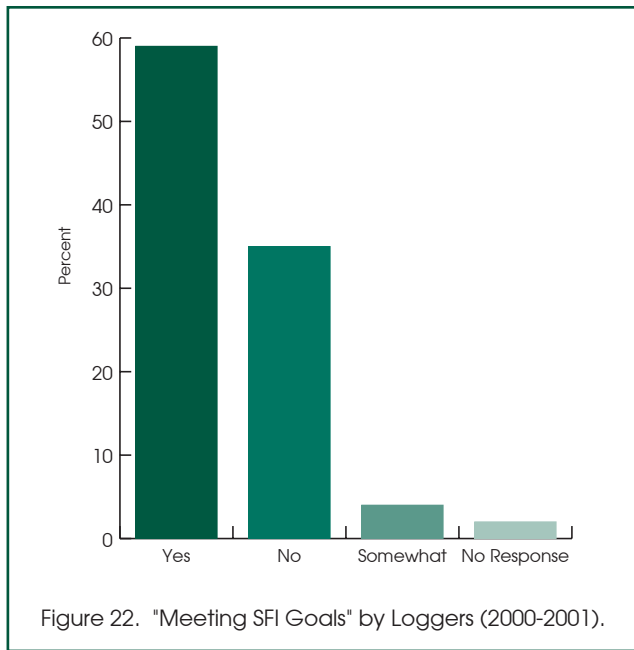


Figure 22. "Meeting SFI Goals" by Loggers (2000-2001).

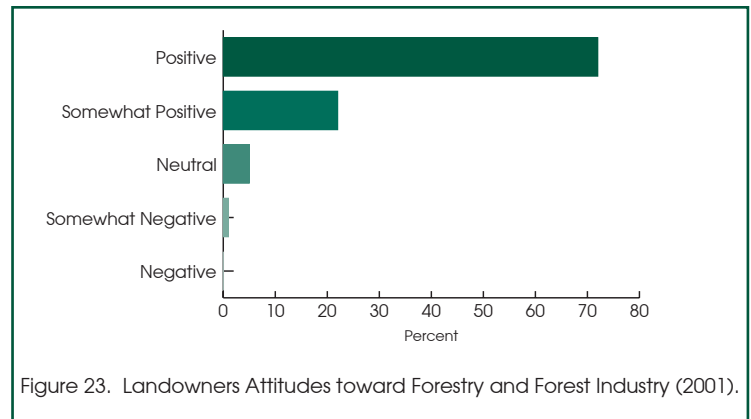


Figure 23. Landowners Attitudes toward Forestry and Forest Industry (2001).

## Landowners

Mail questionnaires (n=1,001) were sent to members of County Forestry Associations (CFA's) in June 2001. Twenty surveys were undeliverable and 549 surveys were returned for a response rate of 56%. Of these, 491 were forest landowners. Only 11% did not own forestland.

**Perceptions.** Landowners (n=491) were asked to make associations with forest industry. The most common choices were "Timber/trees" (91%), "Harvesting/logging" (84%), and "Timberland" (83%) (Appendix 1).

All (n=491) reported employees they associated with forest industry. "Harvesters/loggers" (95%), "Foresters" (91%), and "Tree planters" (86%) were the other top choices (Appendix 2).

**Attitudes.** Landowners (n=491) were asked their personal attitudes toward forest industry (Figure 23). Of the responses to this question, 72% had a "Positive" attitude and 22% had a "Somewhat positive" attitude. Five percent had a "Neutral" attitude, and 1% had a "Somewhat negative" attitude. Only one landowner had a "Negative" attitude (<1%).

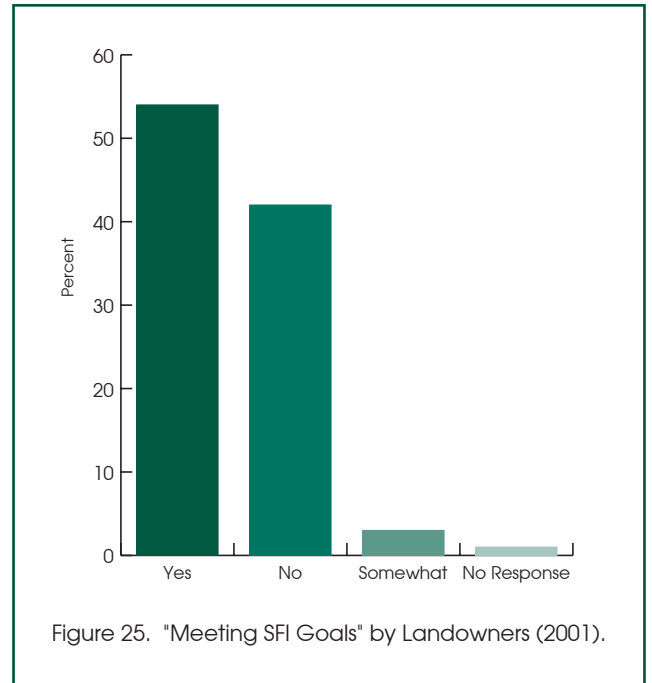
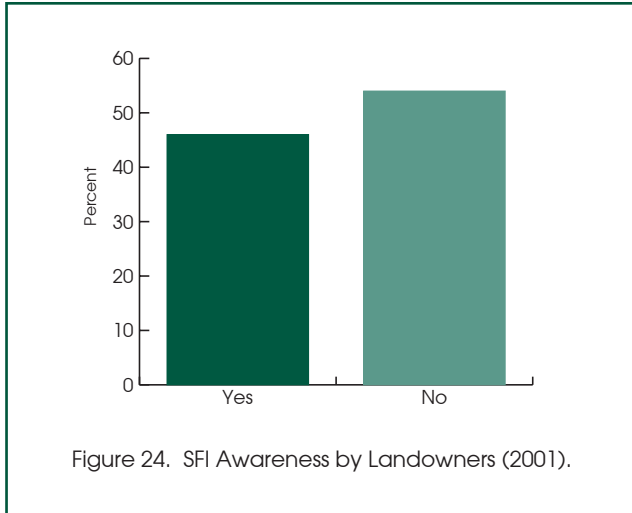
## Preferred Communication Methods and Messages.

Of the landowners (n=467) responding, 91% felt it would be beneficial for forest industry to communicate their timber, wildlife, and procurement practices to landowners.

All landowners (n=491) responded to the question relating to the most preferred method of communication for landowners in general. Top choices were "Workshops" (58%), "Educational programs/materials" (55%), and "Industrial tours/field trips" (52%) (Appendix 3).

Landowners (n=491) listed potential messages for use in communication efforts. "Regeneration" (71%) was the most popular choice. "Harvesting" (67%), and "Wildlife habitat" (61%) were the other top choices (Appendix 4).

**SFI.** Landowners were asked if they were familiar with SFI (Figure 24). Of the landowners responding (n=468), 45% had heard of SFI while 55% had not. Landowners (n=212) responded to the question concerning SFI principles. Eighty-nine percent considered "Sustainable forestry" the top principle. Other top responses included "Responsible practices" (85%), "Forest health and productivity" (72%), "Continual Improvement" (68%), and "Public relations" (57%). When landowners (n=204) were asked if forest industry was meeting its stated goals, 54% thought industry was successful, 42% thought industry was not successful, 3% were unsure, and 1% did not respond (Figure 25).



## *Recommendations*

Each constituency group will require unique communication and education efforts. In some cases, sub-groups within a constituency group will require varying approaches. In general, these efforts must address any false perceptions already held. Each group must be viewed in the context of what they believe is factual information. Those beliefs may need to be contrasted with reality.

Communication and education efforts are not intended to be implemented all at once. Constituency groups need to be prioritized in terms of which group requires the most attention. Hopefully, communication and education will translate into more permanent and lasting changes in the ways industry does business and communicates their activities to each group, communities, and the general public.

### **Public School Teachers**

Teachers perceived forestry and forest industry on a broad scale and were not as aware of the benefits of production forestry (e.g., employment) as

they were of its effects. However, this study indicated Mississippi public school teachers had an overall positive attitude toward forestry and forest industry. Future communication and educational programs should be aligned with communication methods preferred by teachers and concentrate on those areas teachers view as troublesome or in which they are uninformed. They need to be informed about the circular "ecological" and production processes of forestry (This idea can be infused into the themes and methods for all groups.).

Partnerships with other organizations as well as public schools will be key in effectively communicating the benefits associated with forestry and forest industry to Mississippi's public school teachers and students. This important constituency group currently has positive attitudes towards forest industry. The forestry community must take advantage of positive teacher attitudes and increase its efforts to provide materials and/or activities to maintain and improve them. Media campaigns and activities should be joint ventures



between corporate forest industry and organizations such as the Mississippi Forestry Commission, the U.S. Forest Service, the Mississippi Department of Wildlife, Fisheries and Parks, and Mississippi State University's Forest and Wildlife Research Center. These partnerships are important because Mississippi public school teachers listed them as credible sources of information. Also, these organizations have the ability to disseminate forestry-related information to various groups throughout the state. It is apparent from previous studies that there were instances in which the forestry community has not been actively involved in educational programming resulting in an unbalanced curriculum relating to forestry issues. The forestry community also needs to do a better job informing teachers about positive forestry activities that have benefited education. For instance, no mention was made in the focus groups or the survey results about the contributions of 16th-section lands to the funding of education in Mississippi.

Communication methods and messages should be on a grade-specific level to effectively communicate to students. For instance, younger students would not be interested in the economic benefits of forest industry and related employment while high school students may be more interested in that information. A comparison between communication methods for 4th through 8th and 9th through 12th grade teachers indicated similarities in that both groups prefer "Field trips" and "Videos" as the preferred classroom methods for use with students. However, differences between these two groups appeared in the order of preference for the remaining communication methods. Fourth through 8th grade teachers preferred "Hands on materials," "Educational materials," and "Guest lecturers" while 9th through 12th grade teachers preferred "Guest lecturers," "Educational materials," and "Hands on materials." Materials for students should be relevant and flexible for different teaching styles.

The forestry community also needs to focus its communication and education efforts to reach those teachers who had negative or neutral attitudes. While the majority of teachers had a positive attitude toward forest industry, and felt certain forest-based activities were done well, they also believed there were a number of activities that

could be improved. In general, teachers believed forest industry does a good job of "Replanting/regeneration" (73%), "Conservation" (63%), and "Harvesting" (58%). However, they felt "Habitat destruction" (49%), "Erosion" (46%), and "Environmental destruction" (45%) were activities in need of improvement. Teachers with negative attitudes felt "Environmental destruction" (100%), "Regeneration" (60%), "Watershed protection" (60%), and "Tree species diversity" (60%) were activities in need of improvement.

Interestingly, activities in need of improvement also were the same as environmental problems Mississippi public school teachers in general associated with forest industry. These environmental problems were "Habitat destruction" (71%), "Erosion" (58%), and "Ecosystem destruction" (41%). These activities have impacts on both the flora and fauna associated with forest ecosystems that teachers believed were important areas in need of special protection. Many of these ideas may emanate from the fact that public school teachers strongly associated "Harvesters/loggers" with forestry and forest industry. The performance and well-being of this group, "Harvesters/loggers," appeared to influence, either positively or negatively, upon the industry with teachers.

The forestry community also needs to do a better job promoting SFI, or forest certification in general, to public school teachers. It was believed that if more teachers were aware of this, their attitudes and knowledge level toward the forestry community would improve. If attitudes do not improve with awareness, perhaps programs may need adjustment.

## **Mississippi Department of Wildlife, Fisheries and Parks**

Overall, the majority of MDWFP personnel had neutral to positive attitudes toward forest industry. The administrators reported mixed feelings about forest industry while technical staff members were more negative and conservation officers more positive. The mail survey indicated that 93% felt it would be beneficial for forest industry to communicate with the agency.

Agency members reported few activities they believed the industry did well such as "Replanting/

regeneration" (69%), "Harvesting" (62%), and "Timber management" (61%). Their belief that harvesting is done well was, in some ways, a criticism of its efficiency.

MDWFP personnel voiced many areas of concern with forest management practices. As expected, they were concerned over activities that have direct and indirect impacts on wildlife. The key areas of concern for the agency were "Hardwood management" (75%), "Wildlife management" (65%), "Erosion" (64%), "Streamside Management Zones" (62%), "Habitat degradation" (60%), and "Buffer zones" (59%). Hardwood management relates in large part to its absence, as well as the conversion of hardwood and mixed pine-hardwood forests to pine plantations. MDWFP also had a strong impression of forest industry that relates mainly to harvesting and clear-cutting. It is important for the forestry community to consider these areas if relations with this agency are to improve.

MDWFP personnel were discouraged by past radio and television advertisements used by forest industry feeling such advertisements were not believable. For example, they doubted the wildlife-related activities that forest industry promotes. Agency members believed that future advertisements should include messages on "Wildlife habitat" and "Wildlife" that are more truthful and meaningful.

The SFI program is an example of where the relationship between forest industry and the agency has been inadequate at best. It is apparent that forest industry has not effectively been communicating with the MDWFP regarding the SFI program and industry's willingness to voluntarily implement it. Based on survey results related to SFI, it appears that the forestry community needs to more effectively communicate the goals and principles of SFI with this agency.

The agency is willing to work with forest industry on areas relating to wildlife issues that affect forest management activities. The forestry community should embrace this willingness and incorporate agency intentions into cooperative endeavors. The MDWFP personnel believed forest industry should implement activities on the ground before their attitudes will change. The forestry community needs to communicate and work with the MDWFP to

improve their relationship. This could potentially involve both a change in forest-based activities that affect wildlife and communicating and educating MDWFP personnel to address the perceptions that industry is as negative a force for wildlife as they believe it is.

### **Mississippi Wildlife Federation**

In terms of employees comprising forest industry, MWF members most often thought of "Harvesters/loggers" and "Foresters." Members of MWF commonly thought of "Timber/trees" and "Harvesting/logging" more than "Timber management" and "Sawmills" when asked about forest industry. Like other groups in this study, these were common themes. As members of MWF tend to be hunters and anglers, they spend time outside and, more specifically, in the woods. Efforts should be made to remind them of existing forests in Mississippi, not just of their removal and utilization.

Members of MWF felt industry does well in the areas of "Timber management" (73%), "Replanting" (72%), and "Harvesting" (61%). They thought industry needs to improve upon "Harvest clean-up" (64%), "Erosion" (62%), "Repairing roads" (55%), and "Clear-cutting" (53%). Members of MWF attributed environmental problems such as "Erosion" (72%), "Habitat degradation" (52%), "Water quality" (45%), and "Poor aesthetics" (34%) to forest industry. Communication programs should address these issues.

Only 30% of survey respondents had heard of SFI. Forty-five percent of those felt the goals of SFI were being met. Low awareness on the part of this large, influential conservation group does not bode well for SFI's future success, especially since MWF is intricately involved with natural resource issues in the state.

MWF members who responded to the survey (51%) had positive or somewhat positive views of the industry. When asked if it would benefit MWF to learn more about industry's timber and wildlife management practices, 90% said yes. Members chose "Educational programs/materials," "Partnerships with MWF," "Magazine articles," and "Newspaper articles" pertaining to forestry and forest industry as possible communication media. The most important topics to MWF were "Wildlife habitat,"

"Wildlife," "Environment," "Water quality," and "Regeneration."

Results suggested that MWF wants to learn more about forestry practices and to have some form of two-way communication with the industry. They also wanted to read more articles pertaining to forest industry in popular publications. The attitudes of this group and their willingness to communicate with forest industry suggests the potential for a favorable relationship with the forestry community.

## Mississippi 2020

One important finding from the MS 2020 survey was that members were not really aware of SFI. When asked if they were familiar with the term, only 27% answered "Yes." Of the 33 people who were aware of SFI, 80% felt that its goals were not being met. This shows that members of this organization need to be informed about SFI and forest certification. Since SFI attempts to mitigate the effects of harvesting on water quality and erosion, an important issue with this group, informing them about SFI could improve their attitudes.

Members wanted to be reached by forest industry. Ninety-three percent of respondents requested that industry communicate their timber and wildlife management practices to the organization. Their preferred communication method was "Partnerships with MS 2020." They also favored "Educational programs/materials," "Industry tours/field trips," and "Newspaper articles." Topics of communication should include the "Environment," "Wildlife habitat," "Ecological processes," "Water quality," and "Biodiversity."

This group currently relies on the Sierra Club and Nature Conservancy for information about forestry and forest industry, although over 40% did not list a credible source for information. This presents an opportunity for forestry. To reach this group, two-way communication needs to be established between MS 2020 and the industry. MFA should take the lead in establishing a partnership with this group to help them better understand the industry, as well as listening to the concerns of this grassroots organization. This group is typical of many small, unknown environmental organizations cropping up around the nation. It is important, especially with this group, to concentrate on facts and scientific

research findings to retain credibility.

## Legislators

Legislators had overwhelmingly positive attitudes towards forest industry. However, they were concerned about landowner rights and the economic impact forestry has in Mississippi. They felt that forest industry could improve activities such as "Erosion" (50%), "Repairing roads" (47%), "Harvest clean-up" (44%), and "Clear-cutting" (42%). The forestry community needs to address these areas of concern to maintain these positive attitudes. Mississippi legislators are willing to promote forest industry to keep it a leading economic entity in the state.

Legislators suggested topics they felt industry should use in communication efforts such as "Regeneration," "Harvesting," "Wildlife habitat," "Environment," and "Markets." Legislators also recommended that forest industry use "Presentations," "Meetings," "Industrial tours/field trips," and "Demonstrations" to communicate with the Mississippi Legislature. These methods are interactive in nature, meaning legislators want to work with industry personnel. Such activities can be held in conjunction with other forestry-related organizations such as the Mississippi Forestry Association, County Forestry Associations, Mississippi Forestry Commission, and Mississippi State University's Forest and Wildlife Research Center. Legislators listed these organizations as credible sources of information pertaining to forestry and forest industry.

As with other groups, forest industry needs to promote SFI to legislators. Sixty-three percent were not aware of SFI. Areas of concern, as pointed out by legislators, are covered under SFI guidelines. Thus promoting SFI could maintain or further enhance legislator attitudes.

One important point related to the legislators is the need to increase awareness of the benefits to the state from forestry and forest activity. In this way legislators not directly concerned with forestry, will still look upon the industry and profession favorably. This nurturing of legislator attitudes can only help maintain or increase the stature of forestry, particularly in the public policy arena.

## Bankers

Mississippi bankers had positive attitudes toward forest industry. Bankers believed forest industry needed to improve "Harvest clean-up" (45%), "Repairing roads" (43%), "Clear-cutting" (42%), and "Erosion" (37%). Bankers also were concerned about issues relating to the economics of forestry. The top five issues were "Timber prices" (65%), "Market stability" (61%), "Price stability" (55%), "Loss of employment" (52%), and "Mill closings" (50%).

Communication campaigns, as suggested by bankers, should include messages about "Markets," "Business diversification," "Environment," "Harvesting," and "Regeneration." These messages should be geared toward the monetary aspects of forestry. Bankers suggested forest industry use "Pamphlets/ brochures," "Presentations," "Meetings," "Industrial tours/field trips," and "Partnerships with the Mississippi Bankers Association" to communicate with bankers. As with legislators, these efforts involve a personal link between forest industry and the banking community. Credible sources of information were Mississippi State University Extension Service, County agents, Mississippi State University, Mississippi Forestry Association, and the Natural Resource Conservation Service. Forest industry should collaborate with these organizations when conducting future communication efforts with bankers.

SFI was not well known within the banking community as only 7% of the bankers had knowledge of this program. It would be beneficial for forest industry to provide bankers more information relating to SFI. Such information will provide bankers with a better understanding of the program and forest industry in general. This may increase their comfort level when they do business with the industry.

## Loggers

One of the most obvious trends to come out of the logger survey is that loggers considered themselves a part of forest industry. Ninety-eight percent of loggers held that opinion. As expected, they thought of logging and harvesting first when they think of forest industry. While they considered themselves a part of the industry, 68% felt that "industry," in this case wood consuming firms, had

not adequately addressed issues affecting loggers and logging. Sixty-one percent of loggers felt that logging is a sustainable business enterprise. This was alarming because almost 40% of respondents do not see logging as sustainable.

Loggers were asked to identify issues in need of resolution. Not surprisingly, contract rates were the major issue. Another area of concern was the lack of communication between mills and loggers. Loggers also felt they should be compensated for SFI training and implementation. They now have additional duties, often times benefitting landowners, but receive no benefit themselves for added work or compensation at additional cost. They also wanted a clarification of responsibilities related to SFI. They felt that the implementation of SFI was an issue needing resolution.

Loggers prefer "Educational programs/materials," "Publications," "Workshops," "Industrial tours/field trips," and "Truth in advertising" as appropriate methods of communication. An important characteristic of "Workshops," "Industrial tours/field trips," and "Educational programs" is the interactive component. "Publications" and "Educational materials" would provide information and knowledge loggers seek. They wanted these methods to be convenient, easily understood, and interesting.

Topics of communications, according to loggers, should include the "Social approval of logging," "Do the right things," "Safety," and "Develop a set of standards." Loggers felt that they work in a profession that is not accepted by society, thus advertisements and communication should convey that loggers act responsibly or "Do the right things" and that logging is as safe as it can be given the resources available. Forty percent of loggers felt that industry had not developed a set of standards based on performance and this is an issue that industry needed to address. It might also be necessary to develop a code of conduct and practices between loggers and other facets of forest industry. Currently, loggers that are doing the right things in the field are not being compensated for this effort.

Ninety-five percent of loggers had heard of SFI. This means that 5% of working loggers, who were supposed to be trained and practicing SFI guidelines



to deliver wood to the mill, were not familiar with the term. Sixty percent of loggers felt that industry was meeting the goals of SFI. They thought that SFI will eventually be somewhat to moderately effective at meeting their stated goals. These figures indicate a lukewarm faith in the SFI program and industry's ability to implement it.

## Landowners

As seen in the other groups, landowners thought of "Harvesters/loggers" before "Foresters." They also thought of "Harvesting/logging" before "Timberland," "Tree farmers," or "Sawmills." This reinforces the common belief that loggers and logging are a part of forest industry.

Landowners thought forest industry needed to improve upon "Harvest clean-up" (58%), "Repairing roads" (51%), "Erosion" (49%), "Hardwood management" (40%), and "Clear-cutting" (40%). Choices such as "Repairing roads" and "Harvest clean-up" were popular possibly because it is landowners that must look at the harvesting site and their roads after harvest. In addition, landowners thought "Erosion" (62%), "Rutting/soil compaction" (51%), "Habitat degradation" (29%), "Water

pollution/quality" (25%), and "Poor aesthetics" (25%) were environmental problems connected with forest industry.

When asked if they were familiar with BMP's, 67% answered "Yes." Of these, 76% used them in managing their own lands. Similarly, when asked about Forest Certification, 46% were familiar with the concept. Eight percent of all landowners had certified land, and the American Tree Farm system had certified 31 landowners. One was certified under FSC and one under SFI. Increased awareness of Forest Certification and BMP's would be beneficial to landowners, as they involve specific management activities.

Industry should provide "Workshops" and "Industrial tours/field trips" as interactive means of communicating with forest landowners. Visits to logging operations, for example, would allow landowners some idea of what to expect on their land. Landowners would like to see more "Direct mail" and "Newspaper articles" about forest industry. These mailings and articles could better explain the realities of perceived problems such as "Water quality" and "Erosion" and inform them about what is already being done to improve them.

# Conclusions

As a result of this research, key members of various organizations and agencies within the Mississippi forestry community (e.g., MFA, corporations, smaller firms, Mississippi State University's Department of Forestry, Mississippi Forestry Commission, Mississippi Loggers Association) are more aware of the issues of concern for forestry. They must now meet, strategize, and take action on these issues. All members of the "team" are on the same page and media and education-based resources will be focused in the same direction. The Mississippi State Implementation Committee for the Sustainable Forestry Initiative was the initiator for this action. The next step is to examine the priorities on various issues for immediate action. This is being done by MFA's Communications Committee. The results of this report reveal those issues and provide a prioritized plan for action. Partnering with various

organizations and agencies will also distribute responsibilities and costs associated with developing and implementing appropriate activities.

## Key Priorities for Immediate Action

Many problems attributed to forestry were associated with harvesting and loggers, yet none of the benefits (i.e., employment, fiber procurement) were attributed to this group. This imbalance takes on an even greater cause for concern since all constituency groups strongly associated "Harvesters/loggers" with forest industry. Therefore, the relationship between loggers and forest industry needs to improve. This is a primary way in which the perceptions of loggers and logger performance can gain acceptance by the general public and forestry corporations. If loggers look bad, so does the industry and the forestry profession. Loggers want

public messages designed to include information on the "Social approval of logging" (69%), "Harvesting" (60%), "Do the right things" (57%), "Safety" (53%), and "Develop a set of standards" (42%). These items can be brought into the public consciousness by first using those communication techniques and media that other constituency groups prefer. For teachers in the classroom, this means videos, or for the MDWFP this may include field trips or workshops on loggers and harvesting. Educational programs and materials and Internet-based links can also be used to inform all constituency groups about the plight of the logger. There also needs to be a "meeting of the minds" in the state between the Mississippi Loggers Association and industry representatives to discuss, in good faith, the economic problems of the logging community. Cooperative efforts on both sides are warranted.

Teachers appear, at this time, to be a very receptive group when it comes to their willingness to engage the "forest industry." Six hundred thirty-two teachers (94%) thought it would be beneficial to tell the forest industry story to students. Overall, teachers desired "Field trips" (73%), "Videos" (71%), and "Educational materials" (66%) to tell the forest industry story to students. While field trips may be cost prohibitive on a large scale-level, videos and educational materials present a relatively inexpensive opportunity to reach a large number of young people in Mississippi. Groups such as the MDWFP and MWF could be brought into the development process of educational materials and program activities.

Issues of concern relating to the "Environment," "Wildlife," and "Wildlife habitat" exist for almost every constituency group. One step that can help alleviate these concerns is to reach out to the one agency that has a presence and influence throughout the state, the Mississippi Department of Wildlife, Fisheries and Parks. It is apparent that the forestry community has not effectively been communicating with the MDWFP. A start would be to rejuvenate efforts with the technical staff or wildlife biologists who have a strong voice in this state. The top communication methods for technical staff included "Partnerships with the MDWFP," "Truth in advertising," and "Educational programs/materials." Given this information, key

members of the technical staff could be invited to MFA or other forestry-related events as speakers or given representation on committees. An effort was made to ask the MDWFP to fill their vacant seat during MFA's SIC meetings. This effort was reported as successful. Special meetings could take place with members of the "team" to address the content of advertising and educational media. Again, this group, as well as key environmental/conservation groups (e.g., MWF, Nature Conservancy) and Mississippi State University's Department of Forestry can be used as partners in educational outreach activities about forestry and forest industry.

Other actions can be taken to reach the public at a relatively low cost. For example, static or mobile displays or kiosks on forestry, forest industry, and SFI can be set-up in the Mississippi Agriculture and Forestry Museum as well as the Natural Science Museum, both in Jackson. SFI links should exist on all relevant forestry, wildlife, and other natural resource related web sites. Since "School visits" are highly desirable for teachers, and bankers desire "Presentations," a Speaker's Bureau should be set up so individuals could make on-site visits to schools or attend banker's meetings. Mobile displays should be used at banker meetings or in conjunction with activities relating to the Legislature. Additionally, key newspapers could be asked to create a column to report on positive "events" for forestry on a regular basis, much like the presence of hunting and fishing articles in newspapers. They could also discuss issues such as SFI, BMP's, and forest certification.

A key outcome of this research is that MFA is in the process of hiring a Communications Director. Part of the responsibilities for this position will be to address recommendations of this study. Another impact is that the success of this study has led to a planning grant from the Sustainable Agriculture Research and Education group which will provide funding to educate interested parties (e.g., universities, forestry commissions) in the other southern states on the methodology used to acquire information and strategies specific to their state.

## Future Research

After the above recommendations have been implemented, future survey efforts could be used to track improvements (e.g., in attitudes among various

constituency groups, SFI awareness). Since the basic surveys, unique to each constituency group, have already been developed, a modified version of each questionnaire could be used again. In addition, there may be other issues that will surface as a result of this research effort or in the public arena that would need to be explored in the future.

Appendix 1. Constituency group themes associated with the forest industry by order of importance (2000-2001).

Theme	Teachers	MDWFP	MWF	MS2020	Legislators	Bankers	Loggers	Landowners
	%	%	%	%	%	%	%	%
Timber/Trees	97	92	96	92	99	96	81	91
Harvesting/Logging	89	89	92	97	94	83	91	84
Timberland	82			86		85		83
Tree Farms	82				90	78		83
Replanting	79							
Clear-cutting		75						
Sawmills		73		83	89		83	82
Paper mills		73			88		83	
Timber Management				84		73		
Lumber Companies							78	

Appendix 2. Employees associated with the forest industry by each constituency group by order of importance (2000-2001).

Employee	Teachers	MDWFP	MWF	MS2020	Legislators	Bankers	Loggers	Landowners
	%	%	%	%	%	%	%	%
Foresters	94	91	94	88	94	88	92	91
Harvesters/Loggers	93	94	97	97	97	88	99	95
Tree Farmers	92	78	86	92	89	86	81	84
Tree Planters	91	82	89		90	82	82	86
Forest Managers	88		88	81				83
Timber Buyers		81		85	90	85	92	

Appendix 3. Communication methods each constituency group would prefer when receiving information pertaining to forestry or forest industry by order of importance (2000-2001).

Methods	Teachers	MDWFP	MWF	MS2020	Legislators	Bankers	Loggers	Landowners
	%	%	%	%	%	%	%	%
School Visits	80							
Provide Educational Materials	77							
Partnerships	73	55	47	58		32		
Educational Programs/Materials	68	56	47	55			60	55
Industrial Tours/Field Trips	63	37		47	40	37	46	52
Workshops		53					48	58
Presentations		39			43	39		
Magazine Articles			46				53	
Newspaper Articles			41	46				46
Videos			36					
Data from Outside Sources				45				
Meetings					40	37		
Demonstrations					34			
Pamphlets/Brochures					33	41		
Truth in Advertising							46	
Direct Mail								48



Appendix 4. Communication topics each constituency group suggested the forest industry use to communicate with their group by order of importance (2000-2001).

Methods	Teachers	MDWFP	MWF	MS2020	Legislators	Bankers	Loggers	Landowners
	%	%	%	%	%	%	%	%
Environment	80	56	61	73	47	44		55
Wildlife Habitat	77	93	86	70	49			61
Wildlife	73	81	76					53
Air Quality	68							
Ecological Processes	63			62				
Harvesting		42			50	41	60	67
Water Quality		42	54	62				
Regeneration			52		51	41		71
Biodiversity				61				
Markets					47	50		
Business Diversification						46		
Social Approval of Logging							69	
Doing the Right Things							57	
Safety							53	
Develop a Set of Standards							42	

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*kbrasher 05/02*