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College of Business
College of Forestry

Studies in Management and Accounting for the FOREST PRODUCTS INDUSTRY

PERCEPTIONS OF THE FOREST PRODUCTS INDUSTRY

Jean Mater

**Monograph Number 44
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Jean Mater

Jean Mater is the Vice President of the Forest Products Marketing Services Division of Mater Engineering in Corvallis, Oregon, a consulting firm providing engineering, management, and marketing services for the forest products industry throughout the world.

She has earned a world-wide reputation for her work on the impacts of public perception on the forest industry. The Ontario Forest Research Institute in Canada called her "*the leading thinker, writer, and practitioner in the area of public involvement in forestry, . . . with a thorough understanding of the interaction between public values and economic issues.*" Geza Ifju, head of the department of wood science and forest products at Virginia Tech declared: "*She has made a greater impact on the forest products industry than any individual I know.*" and Darius Adams, professor of forest economics at Oregon State University said in an interview that she played a key role in advancing the forest industry's marketing strategy.

She received her PH.D. degree from OSU and currently serves on the OSU Business Advisory Council.

Her work is helping to create a new public perception of the wood products industry. Her just-published and fifth book, *Reinventing the Forest Industry* was funded by a grant from the MacArthur Foundation. A strong advocate for the industry and for the environmental benefits of wood products, she is a much sought after speaker and consultant.

A Fellow of the Society of American Foresters and recipient of the Forest Products Research Society's prestigious Gottschalk award, she has served on Advisory Committees to the U.S. Secretary of Agriculture and Defense and is involved in State Committees on Job Training, Welfare, and Energy.

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PERCEPTIONS OF THE FOREST PRODUCTS INDUSTRY

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The public's image of the forest industry has affected the economy of the industry for the past 30 or more years. In the early 1970s the Biblically-based paradigm of man's dominion over the earth, which granted man use of the world's resources, shifted to the environmental paradigm of caring for the earth, which called for preserving its' resources. The forest industry's use of a highly visible resource subjected its activities to intense public scrutiny. The public's new environmental awareness did not approve of what it saw and its reaction to forest industry activities turned negative. A "greedy" industry acquired a reputation for "devastating," "deforesting," and "despoiling" forests in order to make short-term profits. As the American culture evolved from "progress is our most important product" and "better things for better living through chemistry" to preserving the environment, the forest industry was included in the public revulsion against pollution and perceived or real environmental insults of all types.

Although public opinion polls in the 1970s did not consider the forest industry as damaging a polluter as the chemical and oil industries, a bias against many forestry activities developed (Erskine, 1971). based on the use of chemicals. In 1990 The U.S. Environmental Protection Agency (EPA) listed chemicals as the worst industrial polluters. The forest industry's liberal application of herbicides, insecticides, and other chemicals led to severe criticism of its role in causing pollution. (U.S.EPA, 1991)

As an institution perceived to contribute to the deterioration of the environment, the forest industry shares the distrust of the many Americans who consider themselves environmentalists. Earth Day in 1970 marked the beginning of the shift to caring for a "fragile" earth. Twenty years later, by Earth Day in 1990, opinion polls showed that public concern for the environment had reached unprecedented high levels.

Public attitudes about the environment

The forest industry has become uneasy about the public's negative opinion. Both the industry and environmental organizations have commissioned numerous polls and surveys to test the public opinion waters. The results of most of the surveys and polls conducted in the last few years confirm that the environmentally-concerned public has negative feelings about the forest industry. The National Wildlife Federation compiled a paper on "Public Attitudes Towards Environmental Issues 1995-1996" which they presented at the Seventh American Forest Congress held in Washington, D.C. in February 1996. The paper consisted of summaries of a series of surveys. The source and date of each survey was cited without reference to the population questioned or methodology used. Some of the findings related to specific concerns about the environment and forests are abstracted from their Report:

- A 1989 a Gallup Survey showed that 76 percent of the respondents considered themselves environmentalists. (Gallup Report, 1989.) In the same survey 85 percent of the respondents said they worry about the loss of natural habitat a fair amount to a great deal.
- In a Hart & Teeter Survey of March 16, 1995, 77 Percent of respondents said that government regulation makes the environment a much cleaner and safer place than it would be if businesses were left to their own devices.
- In an August 15, 1995 Wirthlin poll, 72 percent of respondents believed that protecting the environment is so important that continuing improvements must be made regardless of costs.
- A Roper/Times Mirror survey in May 1995, showed that 63 percent of those polled concluded that if the choice must be made between environmental protection and economic development they would choose protection over development. In this survey 61 Percent said they would not support a logging company harvesting high-quality timber in its own forest if it would harm a threatened bird. Another finding of the Roper/Times Mirror Survey is that 65 percent of people now believe that cost should be considered in saving species and 66 percent think government should compensate landowners for land devalued by wetlands.

- A 1992 survey revealed that 67 percent of those polled buy environmentally sound products and 83 percent tried to reduce energy consumption.

Polls and surveys communicate public opinion, but they report, rather than generate, the public's attitudes and beliefs. Content analysis methodology is useful in identifying opinion trends and the formed opinions of communicators. Reading and scanning printed and broadcast media, letters to the Editor, speeches by leaders, testimony at public hearings, and actions of activists also reveal the opinions of newsmakers. These opinions frequently catalyze the formation of an image, especially in instances of employment of manipulative techniques.

Attitudes on the environment are significant barometers of pending behaviors. Research examining the effect of environmental attitudes on behavior in protecting the environment and political activism concludes that attitude and environmental behavior are closely linked. (Steel 1996) Other research indicates that citizen participation in the environmental policy process is greatest among people with high incomes, high levels of education, and employment in prestigious occupations. Women are more likely to engage in environmentally protective behavior than men. (Steel, 1996).

Content analysis and source analysis useful in discerning public perception trends includes examination of:

- A. Reports of actions or activities related to public or individual decisions, such as
 - Public hearings
 - Public speeches
 - Letters to the Editor
 - Activist actions
 - Flyers, pamphlets, advertisements
 - Celebrity surrogates
 - Marches, protests, parades
 - Litigation

B. These actions may be covered in:

1. Print media

- Industry trade journals
- Environmental organization publications
- Newspapers
- General magazines
- Reports and Theses
- Appropriate Books

2. Broadcast media - TV and Radio

3. Worldwide web, internet, and e-mail

4. Videotapes

Some examples illuminate the impact of several of these processes on the public's perception of the forest industry:

- Activist actions - Earth Day, one of the most successful manipulative actions sponsored by environmental organizations, (Mater, 1997) raised the awareness of Americans about caring for the earth and helped shift the forest utilization paradigm from exploitation to preservation.
- Flyers, pamphlets, and advertisements distributed to develop public opinion and encourage action: the environmental campaign against the recent "salvage rider" was supported by a barrage of pamphlets and advertisements in an effort to coalesce public opinion and influence Congress to cancel the rider.
- Books, such as the Sierra Club's 1993 table-top book, the profusely illustrated, *Clearcut - the Tragedy of Industrial Forestry*, and the 1970 *Ecotactics* have had a powerful influence on the public's perception of the forest industry.
- Celebrity surrogates are as effective in creating public opinion as the use of sports and other celebrities to create markets for products. Robert F. Kennedy, Jr. is the celebrity surrogate for the Clayoquot Sound (Vancouver Island, British Columbia) environmental battle to save the old

growth rainforest from clearcut logging by MacMillan Bloedel. Kennedy's appearance and statements win media attention and support. Compare the appeal to the heart by Kennedy with MacMillan Bloedel's appeal to the rational in its pamphlet on the Clear-Cutting issue.

- The use of the World Wide Web is illustrated by the Sierra Club's action letters urging the public to protect the environment, including negating timber sales. The April 9, 1997 e-mail from the Sierra Club includes this diatribe about road subsidies in the national forests: "...One of the ways we subsidize the timber industry's destruction of our forests is by basically reimbursing industry..."

The American Forest & Paper Association landmark survey

A survey on public perception of the forest industry conducted by the American Forests & Paper Association (AF&PA) in 1992 led to a landmark change in industry practices of the 200 member companies of AF&PA. Although the number of AF&PA member companies represents only a fraction of total establishments in the forest industry, AF&PA members now account for 84 percent of paper production, approximately 50 percent of solid wood production, and 90 percent of the industrial timberland in the United States (1997 AF&PA presentation). In 1992 AF&PA commissioned an independent public opinion firm to conduct interviews with forest industry CEOs, politicians, and representatives of media, academia, environmental organizations, and other groups that are influential in setting public policy. Survey questions addressed issues on replanting trees, sustainable forestry, protecting air quality, lakes, streams, wildlife, and forests; conserving resources, recycling, protecting forests, and providing for forest recreation. Specific questions asked in the surveys and focus groups are not available to the public. Published results are graphically depicted in Figures 1-4.

The respondents were asked to identify the highest priority elements, how well the forest and paper companies do in meeting those priorities, and the relationship between priorities important to the public and industry's performance. (AF&PA 1997 presentation)

Scott Wallinger, Senior vice president, Westvaco Corporation, and Chair of the Sustainable Forestry Taskforce, writing in the January 1995 *Journal of Forestry*, (Wallinger, 1995) described the surveys as "an 18 month effort to identify those forest benefits most important to the public and to set a course to better provide them." He described AF&PA at that time as representing 425 forest and paper

companies who accounted for approximately 95 percent of the paper production, and 65 percent of the solid wood production.

Results of the survey

One of the significant findings of these surveys was the gap in perception between industry CEO's and other groups. Wallinger stated: "The CEOs attributed the weakness to a lack of public knowledge - a communication problem. Each of the other groups believed industry did not have a communications problem, but rather a behavioral problem that reduced credibility with the public and legislators."

The research showed that "sustainable forestry is a potentially powerful proof-of-performance theme {and that} objective third-party involvement would significantly enhance the public's perception of industry commitment to behavioral change."

The survey found some comfort in findings that the public's perception of the forest industry was relatively strong compared with other resource industries and other institutions. (Wallinger, 1995)

Those conclusions are substantially similar to those reached in an informal, non-scientific sampling survey of both forest industry and non-forest industry conference attendees. A majority of respondents in this survey believed that the public has a negative opinion about the industry. One of the major reasons for negativity, they thought, is the visible practise of clearcutting forests. Clearcutting has been a bone of contention with the forest industry since clearcut forested areas were exposed to large numbers of people who could afford the time and costs of travel.

The survey further showed a generational difference in attribution of the reasons for the negative perception. "Older" forest industry members were more likely to believe that the negative image was a communications problem and the negative perception was due to the media; younger respondents schooled in the environmental culture believed the negative image was due to forest practices, especially clearcutting (identified as a "behavioral problem" by AF&PA).

An analysis in the November 1996 issue of *American Demographics* called "Burning Issues- then and Now" comparing the percent of young and elderly adults who think the government spends too little on the environment confirms the generational difference of opinion on the environment. Figure 5 illustrates that in

1994 about 70 percent of younger adults believed that the government spends too little on the environment, while less than 40 percent of the older cohort think that the government spends too little on the environment. (Larson)

Canadian Vegetation Management Alternative Program (VMAP) Survey

North of the border, the public's perception of the Canadian forest industry shares many of the perceptions of the American public. The British Columbia environmental public views its forest industry as "exploiters" and "desecrators" just as the American environmental public. The intensity of the negativity decreases as one goes East, similar to the United States..

Therefore, the survey conducted for the Canadian Vegetation Management Alternatives Program (VMAP) in 1993 to identify public views and attitudes on vegetation management and herbicide use in forestry has value to Americans in understanding public attitudes.

Herbicide application in Canadian forests has generated conflict for more than 20 years. Twelve focus group discussions in Ontario, Canada, attended by representatives of environmental and other interest groups, and professional foresters, concluded that public views are now as important as science in influencing decisions about many aspects of forest management. The survey also found that the majority of the public would like to see the use of herbicides in forestry reduced or eliminated and feel that chemicals used in forest management pose a hazard to human health and the environment. The surveys showed interest in a greater focus on environment, sustainability, natural regeneration, biodiversity, and a shift away from timber production to amenities from the forest. (VMAP, 1993)

The Forest Industry Response to the Public's Perception

These survey results have been filtered through a typical spectrum of response: first, denial that the perception is negative; then acceptance of the public verdict; and, finally, to creation of programs to improve the public's perception. An informal denial response uttered at the International Forest Products Society meeting in Portland, Oregon in 1995 expressed a common industry attitude: "We can't pay attention to every crackpot." Other industry interpretations assume that the public will alter its perception if it is better informed about the rationale for

industry practices. Massive public relations and education programs based on that hypothesis have attempted unsuccessfully to reverse the negative perception.

In recent years the Forest Products Society has acknowledged the significance of the environmental view with the organization of a *Wood and the Environment* Technical Interest Group. Industry trade association meetings are beginning to add some papers on environmental considerations to their traditional program topics. The Western Wood Products Association, in concert with other major associations, developed the *Wood Works* program to demonstrate the environmental life-cycle superiority of wood. Recycling and promotion of wood as the only renewable major construction material, and other environmental claims have been largely ineffective in enhancing the public perception of the industry.

Realization that better explanations of unpopular practices - such as clearcutting - will not win public support has prompted the forest industry to embrace behavioral changes to meet the demands for new environmental policies in forest management. Sustainable forest management, a concept amenable to the environmental community, the public, and industry, responds to the injunction to "change what you do, not what you say." The United States forest industry has embraced sustainable forest management as a behavioral change. Three independent systems have been developed:

(1) Certification by third-parties in general accordance with the international Forest Stewardship Council requirements for sustainable forest management, (2) adherence to the Sustainable Forest Initiative of the American Forest & Paper Association (AF&PA), and (3) compliance with the International Organization for Standardization's new ISO 14,001, an environmental management system (EMS).

THE FOREST STEWARDSHIP COUNCIL

The Forest Stewardship Council (FSC) has made inroads into third-party certification - a process whereby a neutral, objective organization certifies that a forest meets accepted standards of a well-managed forest. Third-party certification has the support of environmental non-governmental organizations (NGOs), such as the World Wide Fund for Nature (WWF), a driving force in the organization of the Forest Stewardship Council. Certification addresses the social, ecological, and economic aspects of forest management. To notify or assure environmentally-aware customers that the wood products they are buying come from a certified sustainable or well-managed forest, the certifying organization issues an ecolabel to be applied to the product.

Third-party certification is emerging as a viable market force in the forest industry and marks a significant step in the industry's efforts to gain credibility with the public. Collins Pine Company, whose forests and manufacturing plants are in California and Pennsylvania, and Menominee Tribal Enterprises in Wisconsin are two of the increasing number of independent companies conforming to FSC certification standards.

FSC functions by accrediting third-party certifiers. Two U.S. Certifiers qualified by FSC now in operation are Smart Wood (a non-profit) and Scientific Certification Systems (a for profit company). FSC is also in the process of establishing regional standard-setting initiatives in the United States.

Two States, Pennsylvania and Minnesota, are currently assessing their state-owned public forests for FSC based third-party certification. A United States Department of Defense material acquisition request is now specifying wood from logs certified by SmartWood or Scientific Certification Systems.

A Forest Products Buyers Group (FPBG) has been started in the U.S. to facilitate and increase the purchase, sale and use of forest products independently certified to come from well-managed forests. The objectives of the FPBG include a commitment to raising public awareness of forest certification, the FSC, and the FSC trademark, and advocating the purchase of independently certified forest products. Major manufacturers of wood end products (i.e. Anderson Corporation, Ethan Allen), large furniture retailers (i.e. IKEA), general retailers (i.e. Home Depot, Eddie Bauer, The Gap), Universities (i.e. Yale, Tufts), and major suppliers (i.e. Weyerhaeuser, Champion) have expressed interest in the FPBG.

Considerable funding to support the FSC program has come from private foundations such as The MacArthur Foundation, Pew, Heins, Rockefeller, and Ford Foundations. The MacArthur Foundation recently funded a project documenting bottom-line impacts of sustainable forestry practices through a series of business case studies. The growing interest in sustainable forestry is spurring the demand for skilled professionals in this field and the first course in the country on ecologically-friendly forest management was initiated in April 1977 at Oregon State University. Students included 35 percent from industry, 22 percent from academia, 13 percent from state foresters, and the balance from forest owners and managers. These percentages indicate broad interest in the certification program.

THE AF&PA SUSTAINABLE FOREST INITIATIVE

The AF&PA Sustainable Forest Initiative (SFI) begun in 1994 is a response from the major industries to the negative public perception revealed by surveys conducted on AF&PA's behalf. The SFI promotes, monitors, and reports continuous improvement of all forestlands in the United States that comply with its 10 environmental principles and 8 Implementation Goals. A self-assessed internal measure of conformance to the guidelines is reported to AF&PA annually and audited by a panel of external experts. An Annual Progress Report is published to inform the public on the progress made by AF&PA members in meeting their commitments to the SFI. Adherence to the guidelines became a condition of continuing AF&PA membership. As a major player in the forest industry, AF&PA's Sustainable Forest Initiative could form a positive assurance to the public that forest industry policies are now geared to environmental principles. AF&PA members assess their conformance and make public reports.

The SFI Implementation Guidelines are shown in Figure 6. Although the AF&PA survey indicated that third-party involvement is most persuasive to the public, the SFI does not incorporate objectively-trained third party certifiers. Third-party comments come from academicians, natural resource organizations, and technical professionals. AF&PA's original presentation of the SFI to its members and the public concluded: "No matter how well we have done in forestry, we have not given the public the assurance it wants...Our mission is to change behavior and report our results. This will greatly reduce the negative images that have diminished our past good work. We will create more positive results." The success in accomplishing this objective with reporting internal assessments, rather than certifying results, has been questioned. (Mater, 1997)

AF&PA has instituted a national program to train local foresters and loggers in logging practices for sustainable forest management. Working closely at the state level with state forestry associations, logging contractors and associations, and government agencies, AF&PA is carrying the message of sustainable forestry to the field.

THE ISO 14,001 ENVIRONMENTAL MANAGEMENT SYSTEM

The ISO 14,001 is an Environmental Management System (EMS) developed by the International Organization for Standardization. This organization has developed many standards, including the well-known ISO 9000 quality management series. ISO 14,001 is not a compliance program; rather, it is a management system. The commitment to implement an ISO 14,000 EMS is a significant undertaking and can be expensive. However, many companies believe that it is becoming a necessity to participate in international trade. Cost is a major consideration for the majority of forest products industry establishments as more than 80 percent of these businesses have fewer than 20 employees and are classified as small businesses. Not many of these are engaged directly in international trade, either.

ISO 14,001 was one of the outcomes of the Canadian Standards Association's development of sustainable forest management system standards for Canada introduced in 1996. The Canadian "Z" standards (CSA - Z808-96 and CSA - Z809-96) include environmental, economic, cultural, and social considerations and requirements for auditing.

Until recently, the competition for industry and public support among the three methods has been low-key. Within the past few months, the strong emergence of the Forest Stewardship Council as the voice of sustainable forest management has raised the level of visibility of FSC certification to a point that other systems can no longer ignore.

Responding to the FSC surge in leadership, AF&PA has taken the gloves off and is seizing the initiative. In March 1997 AF&PA released a White Paper addressing FSC certification and labeling. The White Paper addresses the validity of Forest Stewardship Council claims and methods. The 7-page White Paper recommends that the "U.S. forestry community should work to ensure that all forestry related initiatives: (1) have a goal of sustainable forestry, (2) are scientifically sound, (3) are cost effective, (4) are consistent with U.S. laws and regulations, (5) promote renewable wood and paper products, (6) respect landowner rights, (7) encourage forestry as an economically and environmentally sustainable land use, and (8) do not create barriers to the free and open trade of wood and paper products."

In all of these 8 points the FSC is deficient, according to the AF&PA White Paper.

If this White Paper inspires counter-charges, the struggle to enhance the credibility of the forest industry through sustainable forest management may be mired in internal controversy, unless all segments understand that the programs are compatible and can be mutually supportive. The waters of environmental certification will be muddied until a leader emerges to pull together the entire industry in a cohesive program that is meaningful to consumers who care about the environment. (Mater, 1997)

A solution to some of the problems challenging the forest industry's present and future is proposed in the new book *Reinventing the Forest Industry*, which was written under a grant from The MacArthur Foundation. The proposal recognizes that the industrial nations of the world, including the United States, have adopted an environmental culture that demands industry practices markedly different from those acceptable in the prior expansive industrial era. The prime driver of the environmental thrust to caring for the planet has been the population growth of the past half century. The population in the United States alone has doubled in this period, adding conflict to the use of space and natural resources.

New social and economic factors combined with more people vying for benefits from the same forests have stressed the relations between the forest industry and the public to the point of jeopardizing the entire industry. Conflict has become the norm consuming time and money without benefit to the forests of the future.

A proposed solution reinvents the approach to the use of the forests. Recognizing that timber production is necessary for human well being, but that timber harvesting as it has been practised conflicts with many of the other uses of the forest, allocation of forests for specific purposes can minimize the growing conflicts. If forests are allocated into sections devoted to timber production, for recreation, for aesthetics and ecological purposes (endangered species, biodiversity, habitat, etc.) stability not now available could be developed. The present system leaves owners and users in a precarious position. The public appears to be fighting over each tree, each ski lift, each harvest. Sections allocated for timber production (plantations) would be free to practise intensive growing and harvesting. Homes adjacent to or in forests would have a measure of safety they do not enjoy at the present.

The immediate reaction to the allocation proposal is the conflict between the rights of private ownership and the public good. Those rights have already been abridged as the numerous laws regulating activities on private land proliferate. A coordinated system aimed at providing for the necessities of the present and

future rather than disciplining the forest industry could bring immeasurable benefits to the public and the industry.

In order for the forest industry to provide leadership and use its knowledge, education, and investment capacities for the purpose of allocation, it is essential that it gains the public trust. The sustainable forest management movement is a reinvention of the industry that could be the vehicle for winning this trust. Developing the leadership to speak with one voice is one of the urgent industry requirements. The forest industry has not made a case for the uniqueness of each tree species, the value of all forests, and the inability of each forest to serve all purposes simultaneously.

The forest industry has in the recent few years taken steps to come to terms with the new social, economic, and environmental challenges. The industry needs to walk the next mile, acknowledge responsibility to society as the stewards of the forest, and shift to practices more appropriate for the current environmental culture.

Figure 3
Third Party Involvement Can Enhance Expectations

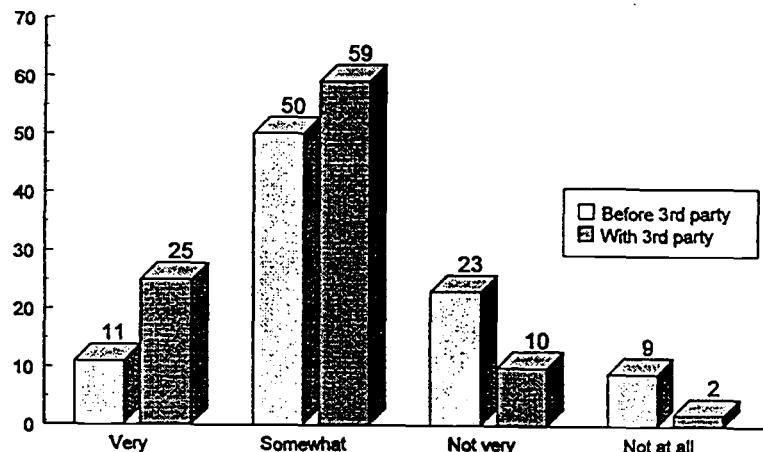
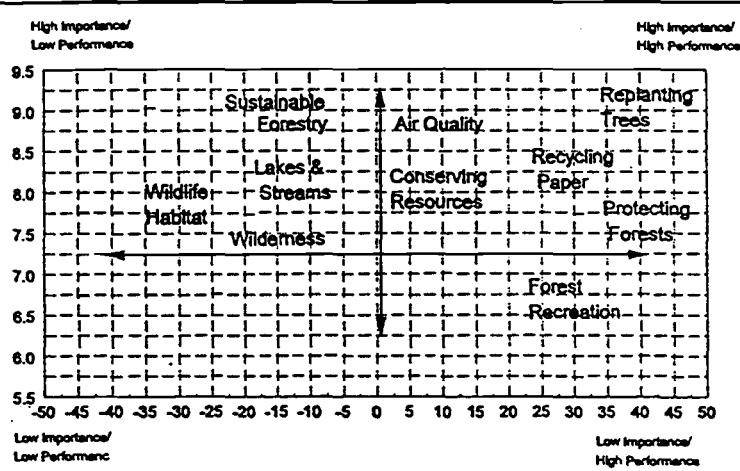


Figure 4
Relationship Between Importance & Perceived Industry Performance



Journal of Forestry

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Figure 5

Sustainable Forestry Implementation Guidelines

Objectives and Performance Measures

Implementation Guidelines for Sustainable Forestry on AF&PA Members' Forests

Objective 1. Broaden practice of sustainable forestry

- Define company programs, policies, and plans
- Support research

Objective 2. Prompt reforestation

- Specific reforestation timetable
- Report success

Objective 3. Protect water quality

- Meet or exceed existing laws
- Protect all perennial streams and lakes
- Involve experts
- Support research

Objective 4. Enhance wildlife habitat

- Define company programs, policies, and plans
- Support research

Objective 5. Minimize impact on visual quality

- Define company programs, policies, and plans
- Manage clearcut size
- Green-up requirement

Objective 6. Protect special sites

- Identify and manage appropriately
- Involve independent experts

Objective 7. Contribute to biodiversity

- Support research
- Adaptive management

Objective 8. Continue to improve utilization

- Employ appropriate technology

Objective 9. Continue prudent use of forest chemicals

- Meet or exceed all legal requirements

Implementation Guidelines for Sustainable Forestry by AF&PA Members in the Procurement of Wood and Fiber from Loggers and Other Landowners

Objective 10. Broaden the practice of sustainable forestry

- Information from companies to landowners
- Logger training and education programs in place by January 1, 1996
- Annually report progress
- Communicate commitment throughout company
- Each member plans inventory and procurement policies
- Support and promote other landowner education efforts

Implementation Guidelines for AF&PA Member Companies for Public Reporting and Involvement in the Practice of Sustainable Forestry

Objective 11. Publicly report performance

- Members annually report to AF&PA
- AF&PA issues annual report
- Independent expert review of report

Objective 12. Public and Forestry Community Participation

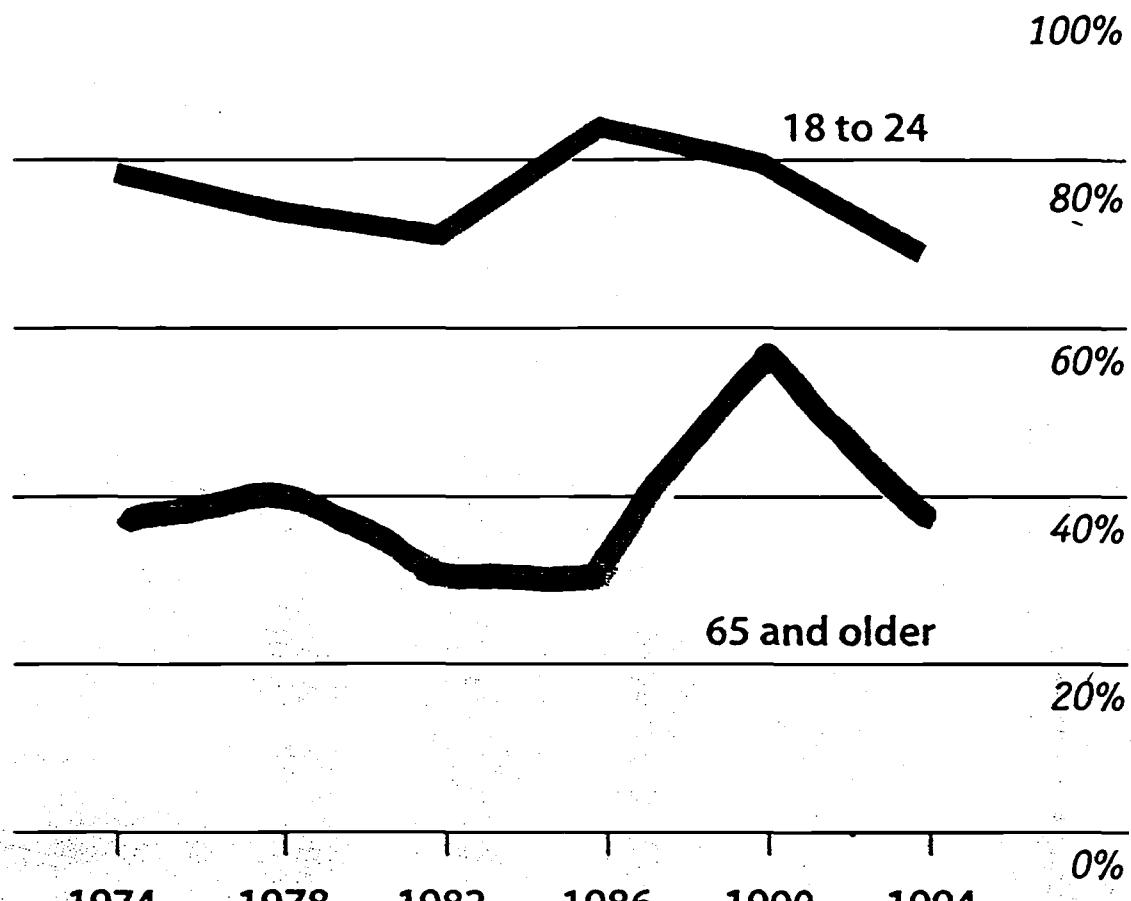
- Support and promote appropriate mechanisms for public outreach
- Appropriate program funding at state level to address concerns
- National forum of loggers, landowners, and member companies

AF&PA Public Policy Goals for Sustainable Forestry on All Private and Public Land in the United States

1. Increase forest growth, quality, and productivity
2. Ecosystem management on federal lands
3. Reduce the risk of and suppress wildfires
4. Promote and utilize integrated pest management
5. Encourage forest health and productivity
6. Encourage continuing education
7. Recognize excellence
8. Protect ability of private landowners to manage forestland in a sustainable manner

LACK OF AGREEMENT

(percent of young and elderly adults who think the government spends too little on the environment)



Source: General Social Survey, NORC

Even at their most agreeable in 1990, the youngest and oldest adults haven't come too close on their attitudes toward environmental spending over the past 20 years.



STUDIES IN MANAGEMENT AND ACCOUNTING IN THE FOREST PRODUCTS INDUSTRY

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<u>No.</u>	<u>Monograph Title</u>
*1	"The Rush to LIFO: Is It Always Good for Wood Products Firms?" (1976).
*2	"Accounting and Financial Management in the Forest Products Industries: A Guide to the Published Literature," (1977 and 1981).
3	"A Decision Framework for Trading Lumber Futures," (October 1975).
4	"Capital Gains Tax Treatment in the Forest Products Industries," (June 1976).
5	"Measurement Difficulties in the Log Conversion Process," (June 1976).
6	"Capital Budgeting Practices in the Forest Products Industry," (March 1978).
7	"A Reporting and Control System for Wood Products Futures Trading Activities," (July 1978).
8	"Selected Issues of Financial Accounting and Reporting for Timber," (November 1978).
9	"Pool Log Transfer System," (August 1979)
10	"Fundamentals of Financial Major Timber Acquisitions," (February 1980)
11	"LIFO Inventories in the Forest Products Industry," (July 1980).
12	"Accounting Controls for a Forest Products Firm," (January 1981).
13	"Log Inventory Controls," (April 1981).
14	"Accounting Treatment for Wood Products Futures Trading Activities," (October 1981).
15	"A Reporting and Planning System for a Wood Products Operation," (November 1981).
16	"Boise Cascade's Productivity Improvement Program," (January 1982).
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34	"Education in Business: A Tool and a Responsibility," (May 1991).
35	"Family Firms in the Forest Products Industry," (February 1992).
36	"JIT At Oregon Cutting Systems," (March 1992).
37	"A Survey and Analysis of Cost to Value Allocation Practices of Solid Wood Product Manufacturers," (December 1992).
38	"Unique Financial Reporting Considerations for Readers of Financial Statements of Forest Products Companies," (October 1993).
39	"Control Process for Smaller Forest Products Companies," (December 1993)
40	"Drug Testing in the Workplace," (November 1994).
41	"Conventional Financing of Timber and Timberlands in the 1990's" (July 1995).
42	"Inventory Costing Allocations: A Case Study," (March 1996).
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44	"Perceptions of the Forest Products Industry" (June 1997)

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