ATTITUDES OF SOUTHERN INDUSTRIAL FORESTERS TOWARD INFORMATION AND EDUCATION PROGRAMS

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Abstract: This study examined attitudes of southern industrial foresters toward the public, media and information and education (I&E) programs. Questionnaires consisting of demographic data, I&E attitude statements and ranking of I&E tasks were mailed to 896 industrial foresters in 6 southern states. Respondents were found to hold discernible attitudes on the need for I&E programs, implementation of such programs and their public image. Field foresters tended to be more favorable toward I&E implementation than staff/administrative foresters. Both groups perceived a need for I&E as a result of public ignorance about forestry. Foresters felt their public image was incorrect but disagreed as to whether the image itself was good or bad. Those with I&E training appeared to be more media conscious, sympathetic to the public and knowledgeable of I&E than non-I&E trained foresters. Recommendations included forester I&E training and forester involvement in local, uncomplicated and monitored I&E programs.

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The rapport, or lack of such, between the public and the forestry profession has been a factor in regulation and allocation of forest resources during the past half century (Sayers 1966). Recently, use of our natural resources (particularly our forests) has generated considerable controversy. As a result, the profession has become aware of the vital role of information and education programs concerning the country's forest resources.

Problems arising between environmental organizations and foresters are often the result of misinformation on the part of both. For example, Plumb (1973), in his analysis of a Gallup poll concerning forest lands, found that the public was uninformed as to size, location and ownership of the nation's forests, as well as the management role of industrial foresters. He also concluded that hostility towards forest industry apparently resulted from industrial depletion of forests and contribution to air and water pollution. In east Texas, Powers (unpubl. data) polled rural and urban residents, and found that similar attitudes concerning air and water pollution were held toward forest industry.

To combat the profession's poor public image, a number of foresters have suggested extensive public relations campaigns, in the form of information and education (I&E) programs. However, such campaigns as noted by Connaughton (1967), must begin as "grass roots" movements in the profession. In the same vein, Mackinnon (1972) suggested that the forester, by virtue of his expertise, is best equipped to influence and to inform the public. Communications should be an integral part of the forester's formal education (Fazio and Gilbert 1973.)

But a forester's performance in information and education can only be as effective as his attitude will allow. The conception that a forester is concerned only with his immediate environment (i.e., more comfortable with trees than with people) should be tested. Although some attitude surveys of foresters have been attempted (Bond and Mawson 1968), they have dealt primarily with perception of the profession; attitudes toward the public were treated only tangentially.

The principle objective of this study was to identify orientation and attitudes of southern industrial foresters toward I&E programs. In line with the general objective, this study should suggest answers to the following questions:

1. What is the southern forester's concept of public attitudes toward forestery?

2. How does the southern forester view treatment of his profession by the various mass media?

3. What are his attitudes toward I&E programs?

4. What is the extent of background, education, and participation of the southern forester in I&E work?

METHODS

Questionnaire

A 3-part questionnaire was used in this study. Part A requested demographic information, as well as including questions on the respondent's background and participation in I&E work. Part B tested attitudes, using a Likert scale (Oppenheim 1966). These statements concerned attitudes on: 1. the public's conception of forestry; 2. treatment of the forestry professional by various mass media; and 3. I&E programs. Part C required the respondent to rank 13 randomly arranged I&E activities.

This questionnaire was pretested on 30 practicing professional foresters employed by Southland Paper Mills, Inc. of Lufkin, TX. It was then revised and shortened.

Study population

It was decided to inventory industrial foresters in Alabama, Florida, Georgia, Louisiana, Mississippi and Texas. Inventory was limited to practicing professional foresters employed by industries which produce a primary wood product, and own a minimum of 100,000 forested acres in the area surveyed.

Industries were selected from *Pulpwood Production and Timber Harvesting's 1977 Edition* [*Wood and Woodlands Directory*]. A letter, requesting names and addresses of foresters, was mailed to 47 forest industries.

Use of Society of American Foresters (SAF) or similar state organization membership rosters to select foresters was rejected since "non-joiners" would have been systematically eliminated. Licensing lists were considered impractical, since not all the inventoried states license foresters.

The sample population consisted of 870 foresters. A 50% response rate was determined to be the acceptable level at which no follow-up was needed in a particular state (Burton 1971).

Data file management and analysis of data

All data were stored in the data file management system available through the Statistical Package for Social Sciences (SPSS) (Nie et al. 1975). The hypothesis that southern industrial foresters have definite attitudes toward I&E programs was tested by factor analysis. Factors were limited to 3. A 2 group (field foresters and supervisors[a]) stepwise discriminant function analysis (Nie et al. 1975) was used to identify discriminating variables for these 2 groups. These same groupings were used in analyzing ranking for I&E task preferences. Stepwise discriminant function analysis for 2 additional groups (I&E educated and non-I&E educated foresters) was also conducted using attitude statements and task preferences separately and combined. Descriptive statistics were computed for all data. The 0.05 level of acceptance was used throughout the analysis.

RESULTS AND DISCUSSION

Characteristics of southern industrial foresters.

Fifty-seven percent of the questionnaires distributed were returned in useable form. Percentage return by state is given in Fig. 1.

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[a]The "supervisor" category refers to all non-field foresters (staff, research, special area, administrative or executive).

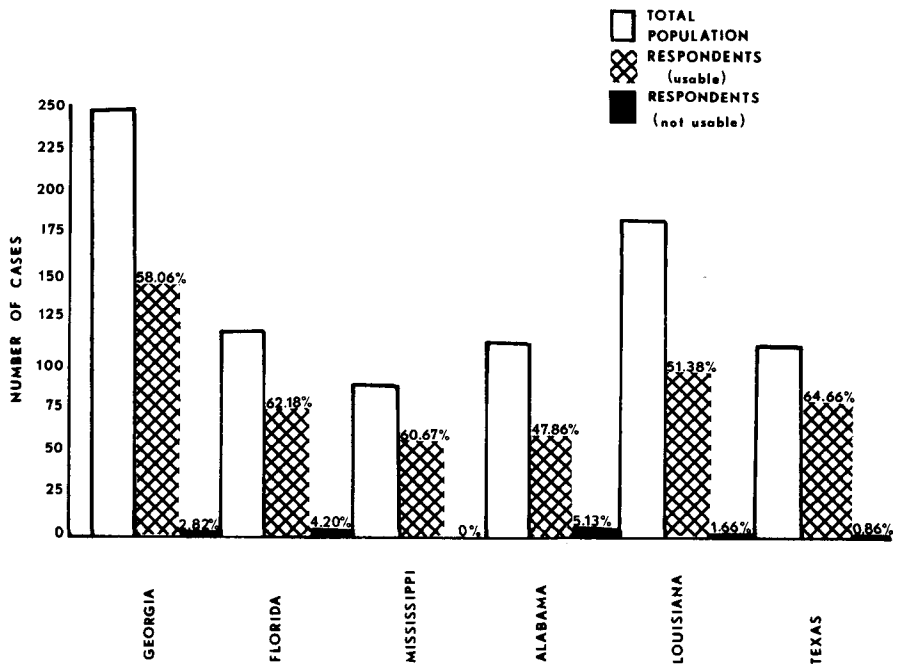

Fig. 1. Questionnaire response rate of southern industrial foresters by state.

The majority of respondents were male, ranging in age from 21 to 64 years. Responses concerning number of years employed in the profession emphasized the youth of the population. Although a range of 1-43 years of employment was indicated, the mean was only 13.9 years.

Approximately 66% of the respondents were employed as field foresters (Fig. 2) as opposed to 26.8% employed as staff/research/special area foresters. The differentiation here was based on the distinction of field work from staff, research or special emphasis work. The former category included management and procurement foresters, etc., while the latter category covered staff, research, I&E and wildlife foresters, as well as budget coordinators, forest engineers and directors of seed orchards of nurseries. Executive/administrative foresters (vice-president, heads of departments and divisions, etc.) accounted for only 5.6% of the sample.

Respondents were relatively well exposed to I&E training (Fig. 3). Nearly half had 1 or more courses on the college level in journalism, communication, etc. Others had training provided by short courses and a few had high school or trade school training. However, 42.1% had no I&E coursework at any level.

Activities

The tendency of foresters to remain primarily within their professional environment is reflected by their participation in I&E activities (Fig. 4). Nearly two-thirds of the respondents conducted tours of their work area, a relatively simple and familiar activity. Slightly more complex and unfamiliar activities, such as participating in civic activities (fairs, clinics, contests, etc.) and visiting schools or civic groups, were engaged in by less

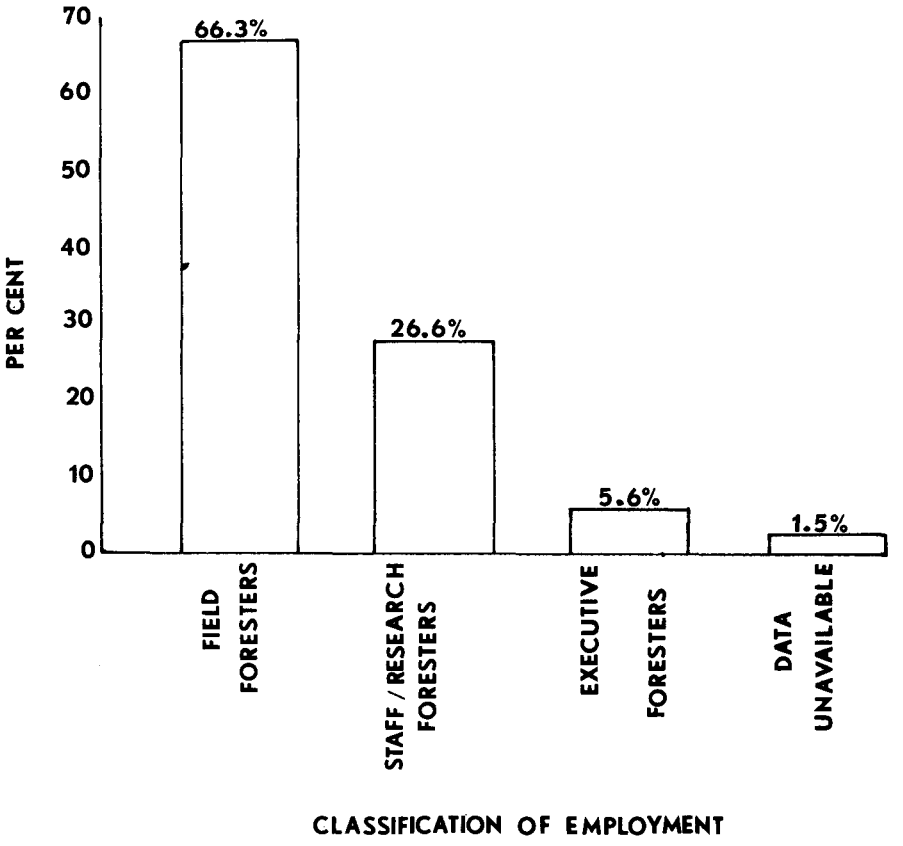

Fig. 2. Distribution of southern industrial foresters by job classification.

than half. A third handled public complaints, a difficult, yet familiar, activity. Relatively complex functions, often requiring ventures into non-professional environments, were performed by few foresters. These activities included writing news releases and columns and engaging in radio or TV programs. Thus, as the complexity and unfamiliarity of the task increased, the number of participating foresters decreased. A substantial percentage (17.5%) did not engage in any I&E activity.

I&E task preferences of southern industrial foresters

Results indicated that southern industrial foresters prefer less complex and more familiar I&E work. The modes of preference ascend nearly numerically as the difficulty/unfamiliarity of the tasks increase (Table 1). Also, medians place highly technical tasks in low preference groups (9-11), with the majority of activities falling into medium preference groups (4-8). Only 1 task, conducting a tour of a working area, was clearly favored, with 52.2% of respondents ranking it as the most preferred I&E job. Two highly personal, complex and potentially hostile tasks received lowest preferences; handling individual complaints was ranked 13th by 28.6% of respondents and engaging in TV interview was ranked 13th by 27.6%.

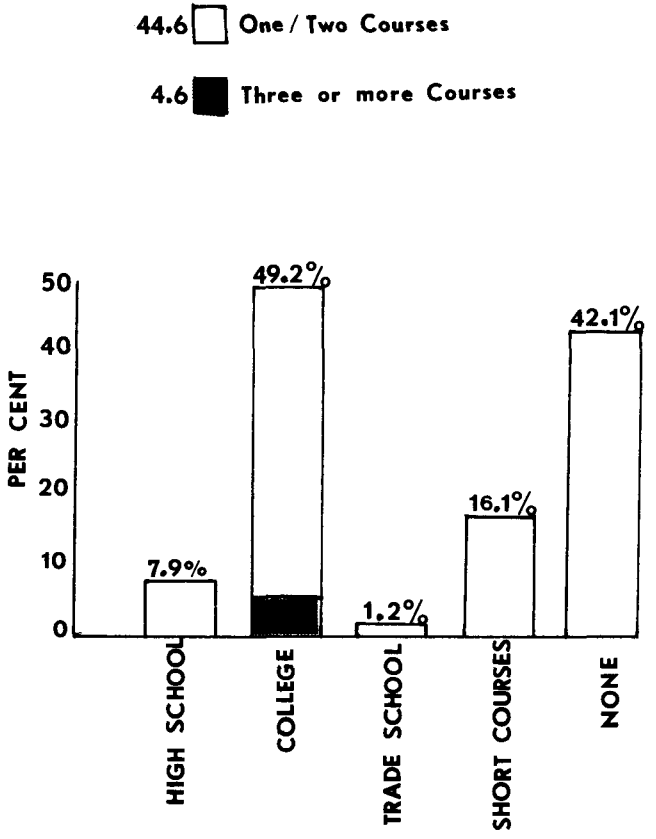

Fig. 3. Information and education training of southern industrial foresters.

Attitudes of southern industrial foresters

Factor analysis indicated that southern industrial foresters do indeed have definite attitudes concerning I&E programs. Three attitudes were apparent: need for I&E, I&E action, and professional image.

The "need" attitude concerns whether there is a need for industry I&E, due to public ignorance and misunderstanding. This attitude was best defined by statements concerning public understanding of the profession and the resource and the desirability of public education and public relations.

The action, or "What should we do about it?", attitude concerns if and how industry and/or the profession should implement I&E programs. It is best described by statements indicating industry and the profession's obligation to provide public information and service, as well as the desirability of cultivating the media.

Lastly, the image attitude encompasses whether the profession (and its accompanying primary resource) has a favorable public image.

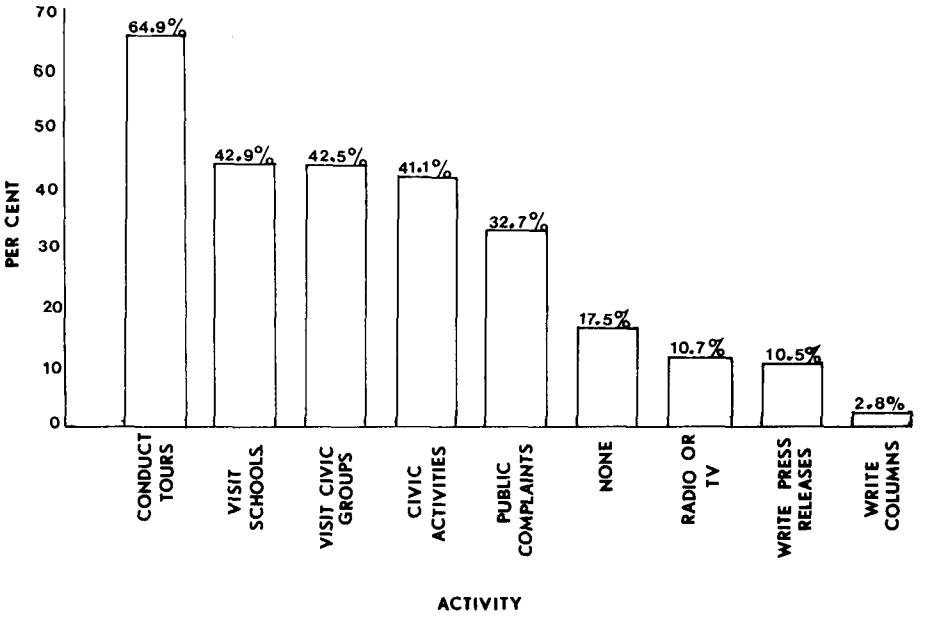

Fig. 4. Information and education activities in which southern industrial foresters participate.

Thus, southern industrial foresters appear to hold 3 basic I&E attitudes: whether there is a need for industrial and professional I&E, how industry and the profession should respond to this need, and whether the professional image is positive or negative.

Each attitude as related to job level was investigated. Job levels were designated as either field or supervisory (*cf.*, Footnote a, page 4). While both groups had a wide range of opinion on professional image (positive to negative) and a narrower range on the need for I&E (fairly positive), there were definite differences in attitude concerning I&E action and implementation. Field foresters as a group appeared to be more positively oriented and enthusiastic toward industry action in I&E.

Responses of southern industrial foresters as differentiated by job.

Discriminant function analysis of attitude responses by field foresters (Group I) versus supervisors (Group II) indicated that 12 attitude statements ($P < 0.001$) resulted in a prediction function correct classification 64.5% of the time. Basic differences in attitude between these groups fell into 4 areas: media, public ignorance, industry I&E, and personal I&E.

Supervisors tended to be more media conscious than field foresters. They felt more strongly that media are generally biased, with electronic media being more so than printed media. Both groups expressed a desire for a closer relationship between media and the profession, yet supervisors agreed more strongly.

While both groups felt the public is ignorant about the profession, field foresters expressed stronger agreement. Field foresters also seemed to be more I&E oriented. They agreed more emphatically that industry should provide services to the public and publicize them as a means of building goodwill.

Table 1. Southern industrial forester preferences of I&E tasks.[a]

Task	*Modal Response*	*Median Response*
Conduct a tour of your work area	1 (259)[b]	1
Participate in a local civic activity	2 (70)	7
Give a presentation to your peers	2 (58), 6 (58)	7
Give a presentation to a juvenile group	3 (86)	4
Give a presentation to a school	4 (71)	5
give a presentation to a male group	5 (70)	6
Give a presentation to a female group	7 (59)	7
Give a presentation to an environmental group	8 (67)	8
Handle individual complaints	13 (142)	11
Write a news release	10 (77)	9
Be interviewed on radio	12 (82)	10
Write a column or feature article	11 (72)	10
Be interviewed on TV	13 (137)	11

[a]The higher the numerical value the less preferred the task.

[b]Number of respondents choosing that rank.

However, supervisors seemed to feel more strongly than field foresters that the industry does not engage in enough I&E activity. This may reflect lack of confidence in current efforts of groups and a feeling that a coordinated effort is necessary.

Differences were apparent in conceptions of who should undertake I&E programs. Field foresters felt that they were capable of I&E operations, and disagreed that a non-forestry educated public relations specialist could successfully conduct I&E programs. Thus, they seem to be more personally I&E oriented.

Just where this orientation lies is evident in discriminant analysis of potential I&E tasks. Six tasks proved significant ($P < 0.001$) in discriminating between field foresters and supervisors, with a correct prediction rate of 62.2% (Table 2).

Three relatively non-threatening tasks were especially favored by field foresters; conducting tours, participating in local civic activities, and visiting schools. These activities, familiar and unsophisticated, were less sought after by supervisors. They, in turn, seemed to be more willing to undertake some of the more threatening tasks: presentation to peers, column and feature article writing, and talks to ladies' groups. Thus, they appear to gravitate toward the less mundane and more challenging tasks.

Table 2. I&E task preferences significant in discriminating between southern industrial field foresters and supervisory foresters.[a]

Task	*Classification Attributing the Task a Higher Rank*	
	Field Foresters	*Supervisors*
Give a presentation to your peers.		X[b]
Participate in a local civic activity.	X	
Give a presentation to a school.	X	
Write a column or feature article.		X
Conduct a tour of your work area.	X	
Give a presentation to a ladies group.		X

[a]In order of descending significance.

[b]"X" indicates group attribution of a higher rank.

Differences in I&E training.

Discriminant anlysis of responses to attitude statements indicated that selected statements were significant ($P < 0.001$) in discriminating between I&E trained and non-I&E trained foresters. These statements were accurate in discriminating between groups 64.5% of the time.

Basic differences between groups again fell into 4 areas: media, the public, industry I&E and personal I&E.

Both groups agreed that local media are fairer to the profession than are national media; however, I&E trained foresters agreed less strongly. They also felt more strongly that contact with the media should be encouraged.

In viewing the public, non-I&E trained foresters possessed more negative attitudes. They were more likely to feel the public is ignorant about the wood resource and views the profession negatively. They were less likely to agree the public is concerned about preservation of natural resources or even that the public has a "right-to-know" about forest policies and practices.

Industry I&E drew a positive response from non-I&E trained foresters. They were more apt to feel that industry is not presently engaging in enough I&E.

I&E educated foresters tended to be more conscious of personal I&E work. As well as agreeing more strongly that foresters need some training in communication, they agreed with the concept of forester I&E). Oddly enough, I&E trained foresters were not as vehemently opposed as their non-trained counterparts to I&E work conducted solely by public relations specialists. These responses indicate that while non-I&E foresters may be confused about the extent of their own roles in I&E, they are quite negative about implementation of programs by non-foresters.

Significance of other variables.

A Kruskal-Wallis one way analysis of variance test was run on attitude scores related to the following groups: age (< 35, > 35), years employed in the profession (< 9, > 9)[a], professional group membership versus environmental group membership and I&E training (one course or more in journalism, communication, etc.) versus no I&E training. None approached the 0.05 level of significance except the last variable.

CONCLUSIONS AND RECOMMENDATIONS

Southern industrial foresters are not as silent or withdrawn as the prevalent literature implies. While somewhat bound by their own environment and distrustful of outsiders (the public), they are nevertheless aware of I&E needs and supportive of I&E programs.

They seem to possess both the willingness and the awareness to engage in I&E programs. In addition, they have the technical knowledge and an interest and concern for forestry that I&E specialists often may not have. Unfortunately, these same foresters often lack all but the most rudimentary communicative skills. Thus, the following recommendations are made:

1. *Foresters should have some type of I&E training, preferably at the college level, with occasional short courses after graduation.* One communication course, while useful, is hardly sufficient. There should be an extensive concentration on formulating basic communication skills (both verbal and written) at the university level. Afterwards workshops and short courses can serve to polish these skills, as well as update participants on current I&E programs and procedures. Such courses can only serve to benefit the profession. Most foresters eventually engage in I&E work. To send them into these programs unprepared and unskilled is a disservice to the forester, the profession, and the audience.
2. *Foresters should be encouraged, both on the company and the supervisory levels, to engage in local, uncomplicated I&E programs, both within and outside their professional environment.* Such programs should serve to reduce fear, distrust, and misunderstanding on the part of the forester as well as the public. In such a manner, foresters would have an opportunity to move from their often isolated, adversary positions into interaction with the public.
3. *Forester I&E programs should be carefully planned and monitored to avoid tendencies toward lecturing and preaching.* Most southern industrial foresters feel the public is uninformed on forestry issues. However true this might be, preaching or instruction will be unproductive with the public. Foresters should be encouraged to work with the public through casual, uncomplicated programs.

From such implementation, perhaps forester awareness, concern and interest can be translated into an active grassroots I&E program.

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